

National Pandemic Influenza Exercise

Exercise Cumpston 06
Report

Australian Government
Department of Health and Ageing
Office of Health Protection

National Pandemic Influenza Exercise- Exercise Cumpston 06 Report

ISBN: 1-74186-320-1

Online ISBN: 1-74186-321-X

Publications Number: P3 -2142

Copyright Statements:

Paper-based publications

(c) Commonwealth of Australia 2007

This work is copyright. Apart from any use as permitted under the Copyright Act 1968, no part may be reproduced by any process without prior written permission from the Commonwealth. Requests and inquiries concerning reproduction and rights should be addressed to the Commonwealth Copyright Administration, Attorney-General's Department, Robert Garran Offices, National Circuit, Barton ACT 2600 or posted at <http://www.ag.gov.au/cca>

Internet sites

(c) Commonwealth of Australia 2007

This work is copyright. You may download, display, print and reproduce this material in unaltered form only (retaining this notice) for your personal, non-commercial use or use within your organisation. Apart from any use as permitted under the Copyright Act 1968, all other rights are reserved. Requests and inquiries concerning reproduction and rights should be addressed to Commonwealth Copyright Administration, Attorney-General's Department, Robert Garran Offices, National Circuit, Barton ACT 2600 or posted at <http://www.ag.gov.au/cca>

Foreword

The community expects government to provide leadership in preventing disease outbreaks and, in the event of an outbreak, to respond and assist recovery quickly and effectively.

Exercises provide a means to train, practise and confirm necessary capabilities in a less risky environment and to identify and address any gaps. As well as allowing individuals and teams to demonstrate and apply knowledge, skills and abilities, they enable government and its non-government and private sector partners to test plans, policies and procedures, and to trial new approaches.

Exercise Cumpston 06 was the first major event of its kind conducted by the Department of Health and Ageing. The aim was to exercise the capacity and capability of the Australian health system to prevent, detect and respond to an influenza pandemic. The methodology employed was to create a simulated pandemic situation to assess and strengthen Australia's preparedness planning, publicly demonstrate the response capability of the health system, enhance the interoperability of jurisdictional response arrangements and contribute to global preparedness.

Planning involved a number of challenges, not least of which was the unknown epidemiology of an emerging disease. Australia's federal system, with a number of Commonwealth agencies responsible for developing the policy framework to support a coherent national response, and all state and territory agencies responsible for implementation, raises particular challenges. A practical constraint was the limited time to plan and conduct the exercise.

That these challenges were addressed in *Exercise Cumpston 06* is testament to the commitment, cooperation and professionalism of all 1,500 participants and control staff. The exercise demonstrated that a very diverse range of government and non-government agencies and their private sector partners can work together in the face of a potentially catastrophic threat to the health of individuals and Australia's social and economic fabric.

Exercise Cumpston 06 was extremely successful in terms of meeting its objectives. The exercise instilled confidence that implementation of the lessons learned, reinforced by the commitment of exercise participants and other stakeholders, makes Australia well-placed to respond to a 'real' pandemic situation.

Mary Murnane
Deputy Secretary

Contents

Foreword	iii
List of Acronyms	vi
1. Executive Summary	1
1.1 Key recommendations	3
1.2 Report outline and scope	5
1.3 Acknowledgments	5
2. Aims and Objectives	7
2.1 Aim	7
2.2 Objectives	7
2.3 Scope	8
3. Current Preparedness and Planning	9
3.1 Preparedness arrangements	9
3.2 Preparedness plans	10
4. Exercise Activities	13
4.1 Preliminary activities	13
4.2 Main activity	14
5. Exercise Outcomes	23
5.1 Decision making	23
5.2 Planning and coordination	29
5.3 Public communications	34
5.4 Surveillance	40
5.5 Public health	45
5.6 Emergency response	55
6. Exercise Lessons Learned	59
6.1 Exercise development	59
6.2 Jurisdictional involvement	59
6.3 Exercise control	60
6.4 Observer program	60
6.5 The lessons	61
7. Conclusion	63
Annex – Managing Exercise Cumpston 06	65

List of Acronyms

AHPC	Australian Health Protection Committee
AHMPPPI	Australian Health Management Plan for Pandemic Influenza
APEC	Asia Pacific Economic Cooperation
AusAID	Australian Agency for International Development
BSS	Biosecurity Surveillance System
CALD	Culturally and linguistically diverse
CDNA	Communicable Diseases Network Australia
CHO	Chief Health Officer
CMO	Chief Medical Officer
COAG	Council of Australian Governments
COMRECEPLAN	Commonwealth Government Reception Plan
DISCEX	discussion exercise
DoHA	Australian Government Department of Health and Ageing
DSTO	Defence Science and Technology Organisation
EAG	CMO's Expert Advisory Group
GP	general practitioner
HAN	Health Alert Network
ICT	information and communications technology
IDC	Commonwealth Government Deputy Secretaries' Inter-departmental Committee on Influenza Pandemic Prevention and Preparedness
NAP	National Action Plan for a Human Influenza Pandemic
NEP	National Emergency Protocol
NHEMRN	National Health Emergency Media Response Network

NHSL	National Health Security Legislation
NIPAC	National Influenza Pandemic Action Committee
NIR	National Incident Room
NMS	National Medical Stockpile
NPEC	National Pandemic Emergency Committee
OHP	Office of Health Protection
PHLN	Public Health Laboratory Network
PM&C	Australian Government Department of the Prime Minister and Cabinet
PIET	Pandemic Influenza Exercise Taskforce
PPE	personal protective equipment
RBWH	Royal Brisbane and Women's Hospital
SEC/CEOs	Secretary and Health Chief Executive Officers' Committee
SARS	Severe Acute Respiratory Syndrome
TOR	terms of reference
WHO	World Health Organization

Executive Summary

1

Exercise Cumpston 06 was the largest health simulation exercise ever undertaken in Australia and the first major exercise conducted by the Australian Government Department of Health and Ageing (DoHA). The aim was to exercise and validate the capacity and capability of the Australian health system to prevent, detect and respond to a pandemic in accordance with the Australian Health Management Plan for Pandemic Influenza (AHMPPI) and allow any gaps to be identified and addressed. It also exercised governance aspects of the National Action Plan for a Human Influenza Pandemic (NAP) and state and territory plans. Six national objectives relating to the policies, response actions and governance arrangements were addressed.

Exercise Cumpston 06 was successful in meeting its objectives and confirmed the capability of the Australian health system to respond to a pandemic. It confirmed that the AHMPPI and governance aspects of the NAP provide a sound and appropriate policy framework for the health response to an influenza pandemic. It is also clear, however, that specific aspects of the plans will need up-dating. In addition, the capacity to sustain such a response over a prolonged period was not fully tested.

The exercise comprised eight activities: a series of seven preliminary activities, conducted between April and August 2006 and a main activity conducted from 16 to 19 October. The preliminary activities addressed border control, inter and intra-government decision-making, deployment of the National Medical Stockpile (NMS), the national health emergency response and public communications.

The main activity involved all levels of government and decision making, including the Council of Australian Governments (COAG), Federal Cabinet, and Commonwealth agencies, in a whole-of-government context. This participation was mirrored in the states and territories. All jurisdictions participated in the exercise in a desktop setting. Operational deployments and activities were notional except in Queensland, where five live drills were conducted to validate operational procedures.

The exercise play which resulted from the scenario confirmed that Australia's emphasis on a strategy of containment, as described in the AHMPPI, is valid and achievable. The evolution to maintenance of essential services was, however, only partly considered and should be the focus of future exercises.

While the trigger points for action by different levels of government and agencies were generally well understood, a major lesson was the requirement for agencies to shift from routine operations to emergency management mode. This requires

streamlining the usual procedures for decision making and policy development, to allow rapid decision making in a crisis situation. The need for further clarification and communication of the roles and responsibilities of a complex network of advisory and decision making committees was also clearly demonstrated.

The exercise enabled public health measures to be assessed and validated. Recommendations relating to surveillance arrangements, contact tracing, the deployment of the NMS, the collection and dissemination of epidemiological data and the operation of the National Incident Room (NIR) in Canberra are contained in the report. The urgent need for an integrated national surveillance system was confirmed.

Exercise Cumpston 06 was the first comprehensive test held in Australia of elevated public health border measures at an international airport. Effective international surveillance enabled timely border measures to be put in place to slow the spread of the virus in Australia. These included a change to positive pratique for arriving international aircraft, the issuing of health declaration cards for arriving passengers, thermal screening of arriving passengers, deployment of border nurses, isolation and transfer of suspect cases to hospital and quarantine of contacts. The outcomes of this test have provided valuable lessons which will be shared across agencies and jurisdictions.

The importance of a coordinated and national public information program was confirmed. The use of existing networks, including the National Health Emergency Media Response Network (NHEMRN), proved their value. Recommendations relating to public communications are provided.

The management of *Exercise Cumpston 06* by the Pandemic Influenza Exercise Taskforce (PIET) within the Office of Health Protection (OHP) of DoHA worked well. A key to the success of exercise planning, writing and conduct was the full and early involvement of specialist advisers, such as epidemiologists, relevant Commonwealth agencies and all the states and territories. The approach used for *Exercise Cumpston 06* provides a valuable model for future exercises of a similar scale.

The outcomes of *Exercise Cumpston 06* have been invaluable in strengthening Australia's preparation for the health response to an influenza pandemic. It is important the impetus gained is maintained and an ongoing program of exercising, discussions and workshops be continued.

1.1 Key recommendations

Recommendation 1:

Usual decision-making structures and consultative processes need to be streamlined to ensure timely responses in an emergency.

Recommendation 2:

National pandemic plans (the Australian Health Management Plan for Pandemic Influenza, the National Action Plan and other relevant plans) need updating to provide for a more flexible layering of preparedness and response measures according to the severity of the pandemic and available response capacity.

Recommendation 3:

Health electronic communications systems, including the Health Alert Network and the Department of Health and Ageing website, need to be further developed and exercised.

Recommendation 4:

There is an urgent need for improved whole-of-government and cross-jurisdictional communications mechanisms to ensure consistent and coordinated delivery of public messages.

Recommendation 5:

The concept and operation of public health policies, such as social distancing, need to be explained to the public with public communication messages and strategies prepared ahead of time.

Recommendation 6:

A nationally agreed framework for pandemic influenza surveillance should form an annex to the Australian Health Management Plan for Pandemic Influenza, and should be underpinned by operational plans and improved information and communications technology.

Recommendation 7:

Individual jurisdictions should ensure operational lessons learned from exercise activities are shared with all state and territory health departments and other relevant groups.

Recommendation 8:

Further clarification of Commonwealth quarantine and state and territory public health and health emergency legislation is needed to ensure smooth operational interaction. This will include detailed operational procedures for triggering and applying the relevant powers.

Recommendation 9:

The Australian Health Management Plan for Pandemic Influenza needs further updating and fleshing out in some policy areas to ensure nationally consistent and streamlined approaches, including to border quarantine, social distancing, access to antivirals and vaccines and influenza assessment centres.

Recommendation 10:

General practitioners, community pharmacies and other primary care providers need to be better integrated into detailed plans at the national and jurisdictional level.

Recommendation 11:

Procedures for health incident rooms and operations centres need to be reviewed to ensure seamless support for decision making and experience of command, control and coordination in emergencies are built in.

Recommendation 12:

The exercise did not test Australia's whole-of-government capacity to respond over an extended period. Further work is needed to ensure responses can be sustained over a prolonged period through planning for workforce training and surge capacity, scenario-based contingency planning and a continuing program of pandemic preparedness exercises.

1.2 Report outline and scope

This report has been prepared for the Australian community, governments, professional and industry stakeholders, and those directly involved in the development and implementation of pandemic preparedness plans. It is also intended to assist international health organisations and other countries with the global response.

Exercise aims, objectives and scope are addressed in Section 2. An outline of Australia's current response arrangements and plans is provided in Section 3. Exercise activities, including the preliminary and main activities, are described in Section 4. Exercise outcomes and recommendations are discussed in Section 5. Section 6 reports the lessons learned to assist DoHA and others with future exercises. Exercise management and the conduct of the main activity are outlined in an Annex.

Related documents, including the AHMPPI, exercise project plan, and evaluation and public communications strategies are available at the website: <http://www.health.gov.au/pandemic>

Participating jurisdictions, agencies, organisations and committees have conducted debriefings to identify the lessons learned from *Exercise Cumpston 06*. These lessons will be used to refine their preparedness plans and procedures and to assist with training. The debriefings considered the exercise outcomes at a greater level of functional detail than provided in this report.

1.3 Acknowledgements

DoHA would like to acknowledge the contribution of participating jurisdictions, agencies and organisations. The evaluation has drawn on reports prepared by each participating jurisdiction and the Defence Science and Technology Organisation (DSTO), as well as insights from the team of seventy evaluators who observed activities across Australia. A list of participating agencies is available on the exercise website: <http://www.health.gov.au/pandemic>

Aims and Objectives

2

In December 2005, the Commonwealth Government announced it would conduct a national exercise in 2006 to demonstrate the health system's preparedness for an influenza pandemic involving human-to-human transmission of a new strain of the influenza A virus.

The exercise, *Exercise Cumpston 06*, was named after Dr John Howard Lidgett Cumpston, an epidemiologist, and the first Director-General of the Commonwealth Department of Health, from 1921 to 1945. Previously, as the Commonwealth Director of Quarantine, he was largely responsible for containing the spread of Spanish Influenza in Australia in 1919.

Exercise Cumpston 06 followed *Exercise Eleusis 05* in which DoHA participated. Conducted in November 2005, *Eleusis* involved a simulated avian influenza outbreak in poultry with limited transmission to humans. While successfully demonstrating that Australia's response arrangements for animal health incidents are robust, the exercise provided limited scope to assess preparedness for a pandemic involving human-to-human transmission.

2.1 Aim

The aim of *Exercise Cumpston 06* was to exercise and validate the capacity and capability of the Australian health system to prevent, detect and respond to a pandemic in accordance with the AHMPPI and allow any gaps to be identified and addressed. It also exercised governance aspects of the NAP and state and territory plans.

2.2 Objectives

Six objectives, relating to pandemic preparedness policies, response actions and governance arrangements, were identified from the AHMPPI. These were:

Objective 1: To assess cross-portfolio and cross-jurisdictional decision making.

Objective 2: To assess pandemic preparedness planning and coordination arrangements within and between jurisdictions.

Objective 3: To assess public communications strategies.

Objective 4: To assess pandemic influenza surveillance arrangements.

Objective 5: To assess public health measures.

Objective 6: To assess health care emergency response arrangements.

2.3 Scope

Exercise Cumpston 06 comprised eight activities:

- a series of seven preliminary activities, conducted between April and August 2006, that addressed border control, inter and intra-government decision making, deployment of the NMS, the national health emergency response and public communications (Section 4.1 refers).
- a main activity over four days in October which involved all levels of government and decision making, including the Federal Cabinet, COAG, and Commonwealth agencies in a whole-of-government context. This participation was mirrored in the states and territories. All jurisdictions participated in the exercise in a desk top setting and real operational deployments and activities were notional (Section 4.2 refers). In conjunction with these desk top activities, Queensland undertook five related drills (Section 4.2.1 refers).

States and territories conducted related activities during the main activity to exercise particular aspects of their plans, for example, *Exercise Perinthus* was conducted by the Department of Health in Western Australia to exercise the functions involved in establishing an influenza assessment centre.

The approach enabled a comprehensive assessment of Australia's preparedness with minimal disruption to the health system and other vital infrastructure.

Some response measures were ruled out-of-scope, because they involved broader issues than the health response. Out-of-scope activities included the broader socio economic impacts, relief and recovery, terrorism and animal-to-human transmission.

Current Preparedness and Planning

3

3.1 Preparedness arrangements

Australia is considered a global leader in pandemic preparedness. It is a priority for all Australian governments with substantial resources invested in planning and in establishing response arrangements. Over \$AUD610 million has been invested by the Commonwealth Government alone since 2003 to help prevent and prepare for a pandemic. Initiatives include:

- establishing the OHP within DoHA, to develop and coordinate health preparations and to be ready to coordinate emergency responses;
- building the NMS of antiviral medicines, PPE and other stores likely to be needed in large quantities in a pandemic;
- strengthening health surveillance and laboratory diagnostic capacity, to help detect early signs of a pandemic both overseas and in Australia and to be ready to direct the early response;
- establishing contracts with influenza vaccine manufacturers for a guaranteed supply of pandemic vaccine to protect the Australian population and accelerate the development of a vaccine against the current H5N1 influenza virus;
- providing significant funding to accelerate research on influenza and pandemics;
- cooperating internationally with the World Health Organization (WHO), assisting the Asia Pacific Economic Cooperation with the development and delivery of the *APEC Pandemic Response Exercise 2006*, and providing assistance to regional countries to prepare for and respond to a pandemic;
- developing a communications strategy to inform and advise health professionals, businesses and the general public; and
- establishing effective coordination arrangements within the Commonwealth Government and with state and territory governments.

3.2 Preparedness plans

Plans have been, and are being, prepared to underpin a cohesive and coordinated national response. The principal plans are listed below.

Australian Health Management Plan for Pandemic Influenza

The Australian Health Management Plan for Pandemic Influenza (AHMPPI) sets out, from a health perspective, what the Commonwealth is doing, and what the health sector, key stakeholder groups, the community and individuals can do to prepare for a pandemic. It draws on the latest epidemiological advice and was produced following extensive consultations with the health sector, industry and the community. Annexes provide guidelines on matters such as infection control and clinical management.

National Action Plan for a Human Influenza Pandemic

The National Action Plan for a Human Influenza Pandemic has been developed under the auspices of COAG. Released in July 2006, this whole-of-government planning framework outlines the responsibilities, authorities and mechanisms to prevent and manage an influenza pandemic and its consequences. It describes how Commonwealth, state, territory and local governments, and their departments and agencies will work together on prevention and preparedness, response and recovery.

National Emergency Protocol

The National Emergency Protocol (NEP) was released by COAG in February 2006. It provides a framework to ensure that in the event of an emergency agreed to be of national significance, Australia's national, state, territory and local government leaders can be contacted and are able to confer at all times, and that leaders agree to coordinate key messages to the public. Aspects of the NEP were exercised in *Exercise Cumpston 06*.

Commonwealth Government Action Plan for Influenza Pandemic

The Commonwealth Government Action Plan for Influenza Pandemic sets out how Commonwealth agencies are working together to protect Australia against the threat of an influenza pandemic and preparing to respond quickly and decisively should one occur. Developed by the Commonwealth Government Deputy Secretaries' Inter-departmental Committee on Influenza Pandemic Prevention and Preparedness, it provides a resource to assist Commonwealth Government agencies to develop individual agency plans.

Being Prepared for a Human Influenza Pandemic: A Business Continuity Guide for Australian Businesses

A Business Continuity Guide for Australian Businesses has been produced by the Department of Industry, Tourism and Resources to help businesses consider the impact of a human influenza pandemic and to take measures to ensure they are in the best possible position to manage the effects and recover as quickly as possible.

Commonwealth Government Reception Plan

The Commonwealth Government Reception Plan (COMRECEPLAN) is used by Emergency Management Australia to coordinate the reception of persons evacuated into Australia following an overseas event.

State and Territory Plans

States and territories have prepared pandemic influenza plans and procedures. These are primarily operational, reflecting their responsibilities for health service delivery and emergency management. The plans have been developed within the AHMPPI policy framework to ensure national consistency, while taking into account local needs and service delivery arrangements.

Exercise Activities

4

4.1 Preliminary activities

A series of seven preliminary activities was conducted between April and August in the lead-up to the main activity. They included discussion exercises (DISCEX), workshops and drills. These activities had several functions, including to:

- engage a broader group than would directly participate in the main activity;
- provide an opportunity for those participating in the main activity to focus on the capacities and capabilities they would exercise;
- provide information to develop the scenario for the main activity;
- assist in refining the evaluation strategy; and
- identify and address gaps in preparedness or policy issues prior to the main activity.

Whereas the main activity provided a picture of the operation of people and procedures on a given day in a defined scenario, the discussion format of the preliminary activities enabled a broader consideration of issues likely to occur over the expected duration of a pandemic. They used similar situations to those exercised in the main activity as their starting point.

The preliminary activities were:

- **Border Control DISCEX**, Melbourne, 19 April 2006. This activity engaged senior decision makers and policy advisers in a strategic level discussion of border control measures to prevent or delay the entry of a pandemic, including the implications for Australia's international relationships.
- **NMS Drill**, Sydney and Canberra, 19 May 2006, which exercised processes involved in activating the NMS and deploying assets.
- **Crisis Communications Workshop**, Canberra, 6-7 June 2006. The two-day workshop considered the role of public communications in promoting awareness of infection prevention and building community resilience; in supporting health professionals; in managing public expectations of what governments can realistically be expected to do; and in managing public anxiety by providing timely, consistent and accurate messages.

- ***Inter and Intra-government Decision Making and Coordination DISCEX***, Sydney, 16 June 2006. This activity involved a strategic level assessment of Australia's inter and intra-jurisdictional decision-making processes and coordination arrangements as part of a strategy of containment.
- ***Border Control DISCEX***, Brisbane, 22 June 2006, which enabled border control managers and staff to consider measures to prevent or delay the entry of a pandemic from an operational perspective.
- ***National Health and Emergency Response Workshop***, Sydney, 5-6 July 2006. This activity assessed national, state and territory health and emergency response preparedness. The workshop focussed on the adequacy of current operational plans and procedures in supporting a coherent national response.
- ***Inter and Intra-government Decision Making and Coordination DISCEX***, Sydney, 17 August 2006, which assessed policy considerations for the evolution from containment to a maintenance strategy.

Approximately 100 decision makers, policy advisers, health and emergency services administrators, academics and representatives of the government, non-government and the private sectors participated in each activity.

The issues raised in the preliminary activities are discussed in Section 5.

4.2 Main activity

The main activity of *Exercise Cumpston 06* was conducted from 16-19 October 2006. The scenario included a simulated pandemic situation overseas to pave the way for international surveillance prior to the introduction of the disease into Australia. The simulation subsequently exercised border control and other containment measures across Australia. The main activity concluded with an examination of issues relating to the evolution from containment to maintenance of social functioning in an on-going pandemic situation.

In designing the main activity care was taken to create a realistic scenario that would prompt appropriate responses by participants. This involved simulation of the international emergence and progression of the pandemic using sound epidemiological data and realistic assumptions.

Two fictitious countries, Acamar and Bellatrix, were created to establish the origin of the disease. Detailed geographic, demographic, economic and health system profiles were developed for these countries and made available to participants via country 'fact books' and the exercise website. This enabled consideration of the development of the pandemic outside Australia without compromising international relationships.

The National Incident Room (NIR), a secure location in DoHA in Canberra, was activated to monitor and coordinate the national health response. Various state, territory and regional health emergency operations centres were also activated (Section 5.6.1 refers).

4.2.1 Supporting drills

The main activity involved a three-level desktop simulation of an outbreak of pandemic influenza at the national political level, involving Commonwealth agencies and all states and territories. The simulation was supported by five live drills in Queensland. While designed and conducted as part of the scenario for the main activity, their primary purpose was to validate particular operational procedures. The five activities were:

- **Brisbane Airport:** A drill was conducted to exercise border control measures at Brisbane International Airport, on Tuesday 17 October (Sections 4.2.6 and 5.5.1 refer).
- **Royal Brisbane and Women's Hospital (RBWH):** Hospital arrangements to receive and manage a potentially large number of infectious patients were assessed, including admission procedures and infection control (Sections 4.2.6 and 5.5.4 refer).
- **General practice activity:** A suspected pandemic influenza case presented to a Brisbane general practice and isolation and infection control procedures were demonstrated against the practice's pandemic plan (Sections 4.2.7 and 5.5.5 refer).
- **Logan Influenza Assessment Centre:** An influenza assessment centre ('fever clinic') was established at the Logan Entertainment Centre where concerned members of the public, including those presenting with possible symptoms, could go to minimise the spread of the virus and reduce workload for hospitals and general practitioners (GPs). Reception, triage and treatment, including distribution of antivirals and PPE, were practised (Sections 4.2.7 and 5.5.3 refer).
- **Coopers Plains Laboratory:** The laboratory was designated to analyse potential influenza samples provided by local public health units, influenza assessment centres, hospitals and GPs (Sections 4.2.7 and 5.4.6 refer).

4.2.2 Lead-in activities to set the scene

The unfolding situation in Acamar and Bellatrix required a number of national committee meetings and decisions prior to 16 October 2006. In order to maximise involvement by senior decision makers and to enable agencies to position themselves to participate fully, these activities were undertaken in the period from 28 September to 15 October 2006.

The scenario involved the infection of people in different locations in Acamar, with the WHO formally confirming clusters with likely human-to-human transmission on 15 October 2006. Clusters in Bellatrix were also confirmed by the WHO on 15 October, with cases under investigation in Canada (including one with a connection to Acamar).

With avian influenza guaranteed to attract the world's media, news of the emerging situation became the lead story in Acamar and received extensive coverage in other countries. Official media statements by the Acamar Ministry of Health and the WHO subsequently confirmed media reports.

Embassies monitored developments and reported to their governments. In addition, an extensive network of informal contacts provided information. An example was an Australian epidemiologist seconded to the WHO's assessment team in Acamar.

4.2.3 Lead-in decision-making activities

A number of whole-of-government and health sector committees met to be briefed on the emerging international situation. Some met to make decisions and others to provide technical advice.

Decision making committees

- The *Australian Health Protection Committee (AHPC)*, which provides a coordinated cross jurisdictional response to public health emergencies. Chaired by a Deputy Secretary from DoHA, membership includes the Chief Medical Officer (CMO), the Chief Health Officers (CHO) of the states and territories, and representatives of key Commonwealth Government organisations involved in emergency management and response. Its responsibilities include facilitating the development of national health protection policies, guidelines and standards, and coordinating national health emergency operational activity.
- The *National Pandemic Emergency Committee (NPEC)*, which supports COAG by operating as a high level strategic advisory body on issues requiring a national approach. (It met daily after the commencement of the main activity on 16 October.)
- The *Commonwealth Government Deputy Secretaries' Inter-departmental Committee on Influenza Pandemic Prevention and Preparedness (IDC)*, which advises Federal Cabinet on strategic matters relating to pandemic prevention and preparedness measures and response and recovery strategies. It comprises representatives of Commonwealth agencies.
- The *Secretary and Health Chief Executive Officers' Committee (SEC/CEOs)*. This ad hoc committee was convened during the main activity to enable Commonwealth, state and territory health department heads to discuss exercise conduct issues. (It met daily after the commencement of the main activity on 16 October).

Technical advisory committees

- The *Chief Medical Officer's (CMO) Expert Advisory Group (EAG)*, which provides medical, scientific and epidemiological advice to the CMO on the level of risk. Members are drawn from NIPAC, the CDNA, and DoHA.

- The *Communicable Diseases Network Australia (CDNA)*, a sub-committee of the AHPC which provides communicable disease and epidemiological advice to the AHPC, establishes methods for national surveillance of cases and contacts, including case definitions, and operational resources for the investigation and control of outbreaks of pandemic influenza. Membership comprises representatives from the Commonwealth, state and territory governments and from organisations in the communicable diseases field, as well as academic experts.
- The *Public Health Laboratory Network (PHLN)*, a sub-committee of the AHPC which provides advice and shares expertise to enhance the national capacity for laboratory-based detection and surveillance activity. It comprises representatives of the major public health laboratories in all the states and territories.
- The *National Influenza Pandemic Action Committee (NIPAC)*, which provides scientific and clinical advice to the CMO and DoHA. Membership comprises Commonwealth and state and territory officials, academic experts and representatives of professional associations.

Public communications

- The *National Health Emergency Media Response Network (NHEMRN)* which coordinates the public communications response to health emergencies. It comprises media liaison managers in Commonwealth, state and territory agencies, the medical colleges and professional associations. (It met after the commencement of the main activity.)

Besides participating in national committees, exercise participants from states and territories also attended jurisdictional health and whole-of-government committee meetings convened prior to 16 October to consider the unfolding international situation and to prepare jurisdictional responses.

4.2.4 'Real time' exercise activity

'Real time' events occurred from 16-19 October. They involved three inter-related components to exercise particular aspects of Australia's preparedness and response planning, including decision making (Section 4.2.5 refers), border protection (Section 4.2.6 refers) and containment measures (Section 4.2.7 refers).

4.2.5 Decision making

The NAP describes the agreed whole-of-government decision-making and communication paths. They are described in Section 4.2.3 and shown in Figure 1. The health decision-making and communication paths are described in the AHMPPI. They provide for decisions on health aspects to be made by the Minister for Health and Ageing and the CMO on the advice of expert technical committees. The health committee network is described in Section 4.2.3 and shown in Figure 2 (Section 5.1.1).

At its final meeting (notionally on 15 October) before commencement of 'real time' activity, the AHPC decided the international situation warranted consideration of a move to a higher level of readiness, implementation of border controls and related public health measures. The national decision-making process involved:

- meetings of the AHPC, CDNA and EAG to consider the position to be put to the IDC prior a meeting of Federal Cabinet on 16 October 2006;
- meetings of the IDC to consider the recommendations of the AHPC, to prepare advice to Cabinet and to coordinate briefings to be prepared for Ministers;
- meetings of the NHEMRN to consider and implement media management strategies;
- a briefing for the Minister for Health and Ageing by the CMO and senior DoHA officials and a subsequent briefing for the Prime Minister by the Minister for Health and Ageing, the CMO, DoHA and Department of the Prime Minister and Cabinet (PM&C) officials prior to a Federal Cabinet meeting;
- the Federal Cabinet meeting;
- NPEC meetings to provide strategic policy advice to COAG;
- a COAG teleconference to discuss issues requiring a national approach; and
- national media conferences by the CMO to advise the Australian community.

Parallel to these national decision-making activities, each state and territory undertook its own coordinated decision-making processes. They involved consideration of whole-of-government, public health and emergency response issues, including the updating of first ministers and health ministers, engagement of emergency management agencies and activation of public communications strategies. States and territories also assessed the operational requirements for their emergency health response and other emergency support activities. Health departments played a lead role.

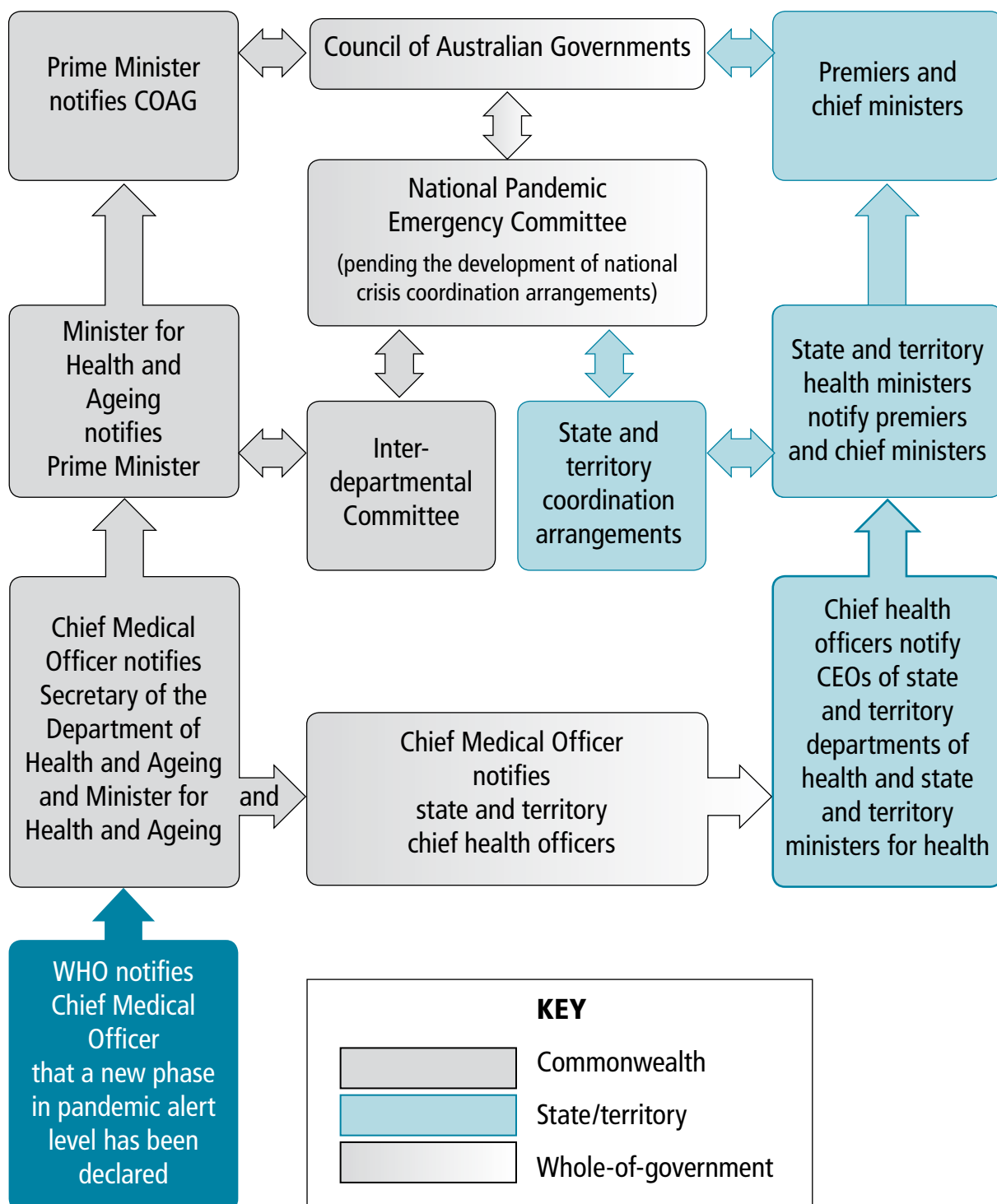
While this section provides a descriptive account of the meetings that occurred in the simulated scenario, their effectiveness is discussed in Section 5.

4.2.6 Border control measures

As an island country, Australia has focussed on strategies to prevent or delay the entry of pandemic influenza. Entry screening and quarantine, travel restrictions, and other border controls, are possible measures that can be applied to take advantage of our geographic position. Such border control measures will need to be put in place early and comprehensively if Australia's response to the development of a pandemic overseas is to be effective.

The arrival of a flight from Acamar at Brisbane International Airport, on Tuesday 17 October, provided an opportunity to assess the operation of the heightened border control measures agreed by Federal Cabinet the previous day, when the airport

Figure 1: National Action Plan for Human Influenza Pandemic – Decision-making and communication paths



operations centre was advised that two passengers were exhibiting influenza like symptoms. The flight carried 155 passengers and crew, with 20 friends and relatives awaiting their arrival.

Measures to manage the situation, involving 15 Commonwealth and state agencies, included:

- passenger screening with a thermal scanner to identify further possible cases;
- deployment of antiviral drugs and PPE to protect border personnel and at-risk incoming passengers;
- quarantine following an assessment by a border nurse and a decision by the Queensland Chief Quarantine Officer ordering the plane and passengers into quarantine;
- isolation of passengers and their transfer to the RBWH for treatment;
- media management and response;
- airport operations, for example, managing waiting relatives and friends and in response to concerns by staff and retailers and requests for access to antivirals; and
- public health and emergency services response and coordination.

4.2.7 Containment within Australia

If an influenza pandemic enters the country, Australia's approach is to contain or slow its spread for as long as possible to buy time for a vaccine to be developed to protect the Australian population.

Prior to the activation of heightened border arrangements implemented on 17 October, seven infected passengers arrived from Acamar on 14 October. Undetected, they travelled to various destinations within Australia. A further two passengers were infected on their return journey to Australia on the same flight.

These cases and some of their contacts throughout Australia subsequently displayed influenza like symptoms. The first positive case was confirmed by a laboratory on the night of Monday 16 October. Simultaneously, overseas developments promoted widespread community concern with numerous media inquiries to public health units, as well as calls from members of the public concerned about possible exposure.

This situation provided an opportunity to activate response measures to contain the spread of the virus. They included:

- public health measures such as the establishment of assessment centres and provision of infection control advice;
- active surveillance and contact tracing in various locations across Australia;

- laboratory testing;
- quarantine arrangements, including the capacity of a national call centre operated by CENTRELINK to monitor people quarantined at home;
- public communications, including proactive public information initiatives and responding to media and public requests for information;
- activation of emergency operations centres nationally and in all jurisdictions;
- activation of whole-of-government decision-making arrangements; and
- consideration of processes for large-scale repatriation of citizens returning home including activation of COMRECEPLAN arrangements to receive and assist incoming passengers.

4.2.8 Evolution to the maintenance phase

A time jump of three months was created to enable consideration of the longer-term effects of a pandemic. The scenario involved a significantly higher level of infection and mortality, spread of the virus to all states and territories (extensively within three states), depleted stocks of antivirals and PPE, and health and emergency services experiencing difficulty in coping with increased demand. Social and economic impacts included high absentee levels and reduced demand for services such as public transport, restaurants and child care.

Health management issues arising from the time jump scenario were the focus of meetings of NIPAC on 18 October and a seminal AHPC meeting on 19 October, after which the exercise concluded.

Exercise Outcomes

5

5.1 Decision making

Objective 1

To assess cross-portfolio and cross-jurisdictional decision-making

Objective 2

To assess planning and coordination arrangements

Objective 3

To assess public communications strategies

5.1.1 National governance and decision making

An effective response to an influenza pandemic will require decision making at all levels of government, in a whole-of-government context. *Exercise Cumpston 06* showed that the governance arrangements outlined in the AHMPPI, the NAP and the Commonwealth Government Action Plan for Influenza Pandemic provide an effective framework for decision making in a multi-agency system, successfully linking health decision making to the broader whole of government context. Two discussion exercises on inter and intra-government decision making and coordination provided valuable consolidation ahead of the main activity. The desktop component of the exercise did demonstrate, however, that further clarity is required regarding specific roles and responsibilities of particular committees and their processes while in emergency mode.

Committees played an important role in the decision-making process, contributing to the process in discrete but also overlapping ways. The whole-of-government decision-making process is described in Section 4.2.3 and shown in Figure 1, and the health process is described in Section 4.2.3 and shown in Figure 2. The structure of health committees was reviewed by the Australian Health Ministers Advisory Committee in late 2005, to give greater clarity to the respective roles of the

committees and to provide clear lines of reporting and accountability. This review took into account the findings of *Exercise Eleusis 05* in relation to committees. *Eleusis 05* demonstrated that while national coordination arrangements are essential, the roles and governance of national committees required a review to optimise decision making and the best use of time. While the post *Eleusis* review led to better functioning of the committees outside of an emergency situation, it was clear during *Exercise Cumpston 06* that some of the fundamental issues for managing committees during a crisis need further refining.

While overall, health and national governance arrangements worked well, there is a need for further clarity in roles across this suite of committees. The roles included:

- Provision of **advice by subject matter experts** and the development of recommendations to inform decision-making bodies and key individuals, such as the CMO. Committees that performed this function were EAG, CDNA, PHLN and NIPAC.
- **Commonwealth, state and territory strategic health sector decision making**, where department representatives, supported by a small number of experts, made decisions about health aspects. These decision-making bodies also performed an **advisory function** for the Minister for Health and Ageing and whole-of-government decision-making bodies. Committees with these roles were AHPC and SEC/CEOs.
- **Commonwealth Government strategic decision making**, where advice was provided to Federal Cabinet on appropriate response actions required by Commonwealth Government agencies. The complementary **advisory function** was performed by the IDC. The IDC was vital in bringing together whole of-Commonwealth Government strategic policy advice and decision making as well as providing a useful information sharing forum for those Commonwealth agencies not directly involved in the decision-making process.
- **Whole-of-government strategic decision making**, where advice was provided to COAG regarding decisions requiring a national approach. The **advisory function** was performed by NPEC operating as a high level strategic advisory body.

The demarcation of these roles was not always clear in practice, and there was overlap. In particular the roles and responsibilities across health advisory and decision-making committees should be clear as to their terms of reference (TOR) and their relationship with other committees to ensure that discussions remain focussed and issues which are properly the domain of other committees are not revisited. Such duplication limited the capacity to actually arrive at decisions in a timely manner.

The need for all health committees to be active for the entirety of a pandemic should be examined. NIPAC's role, for example, could be limited to non emergency situations, with its members to be consulted by other advisory groups as required

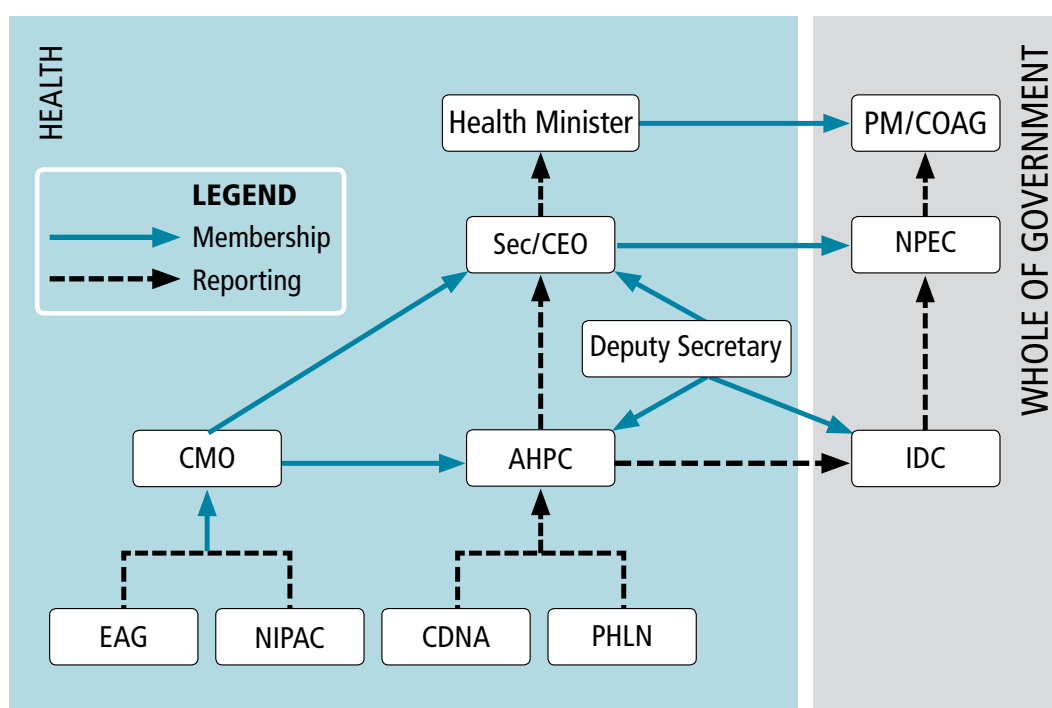
during an emergency. Currently, in the non-pandemic environment, NIPAC's primary focus is the provision of technical advice to support policy development.

In addition to overlap in roles and responsibilities, there is also a degree of overlap in membership, usually senior government decision makers. Their time was spent attending successive meetings, at the cost of disseminating outcomes to facilitate decision making and response management within their own jurisdictions or agencies. The situation was exacerbated for jurisdictional members of national committees who were also required to attend meetings of their own state or territory committees.

An alternative to the reliance on a range of health committees for advice during a crisis could be the establishment of a core group of experts nominated by the existing committees, with membership criteria to be determined by the AHPC. Emergency response management and decision-making skills would be helpful inclusions.

Since *Exercise Eleusis 05*, a more comprehensive whole-of-government structure has been developed for responding to a pandemic. While this has brought a greater depth of expertise and operational capacity to decision making and to response activities, it has also increased the number of committees to be serviced (including attendance by senior staff) and the number of steps in the decision-making chain. Consideration will need to be given as to how the operation of whole-of-government committee operations can be streamlined without losing the valuable input and more authoritative decisions obtained through the whole-of-government process.

Figure 2: Reporting arrangements in Exercise Cumpston 06



5.1.2 Decision-making processes

Many of the committees had not operated together in a crisis situation before under a chain of command arrangement. In a crisis situation they are required to make or support decisions within very tight timeframes and in a highly charged atmosphere. This adjustment in mindset and meeting dynamics evolved slowly over the duration of the exercise.

Committee members were prepared to adapt their operating procedures to respond to changing circumstances and to relate their functions to those of other committees. For example, the AHPC convened an *ad hoc* expert group to address the issue of school closures which had dominated discussion in a number of committees. Similarly, the AHPC included the preparation of recommendations to the IDC as a specific agenda item. This focussed decision making and ensured that health advice to the IDC was clear, concise and relevant.

Initially, the tendency of health committees was to discuss the policy implications of issues, rather than refer to previously agreed policies. A conscious move at one meeting of the AHPC to refer to the AHMPPI for policy guidance increased the decisiveness and speed of decision making. The AHMPPI provides a framework for action and should be used as an operational tool from the start of an influenza pandemic.

Sequencing of national committee meetings also needs to be reviewed. For example, as NPEC is the primary advisory body for COAG, it would be appropriate for NPEC to convene before COAG to assist COAG deliberation. During the main activity the COAG met first because of the availability of the Prime Minister and timing of Federal Cabinet that day. In a real life situation the sequencing of committees should follow a logic based on the need for expert input and the appropriate hierarchy for decision making.

The exercise revealed that a critical issue in a real life emergency will be the need to arrive at a more effective balance between deliberated and rapid decisions.

5.1.3 Communication between committees

The scheduling of meetings could be improved to facilitate the flow of information between committees, by allowing time for members to brief colleagues on outcomes in between meetings.

There is also a need to clarify the relationship between secretariats to ensure the timely communication of decisions. For example, the transfer of outcomes and decision records between the AHPC and NPEC should occur as soon as possible after each meeting to avoid revisiting the same issues in both meetings. (NPEC provides whole-of-government, cross-jurisdictional support to COAG on issues requiring a national approach. AHPC takes decisions and provides advice to NPEC on health matters.)

On the first two days, NIR surveillance reports were not delivered to every committee in time for meetings. The desire of committees to have the latest case count data resulted in meetings commencing with a time-consuming review of cases to update or confirm reports. Committee members also commented on the unnecessary complexity of reports which sometimes made it difficult to easily focus on the key issues or information. The NIR recognised the importance of timely and clear information products and was able to adapt to produce them in time for committee meetings on the third day. The NIR standard operating procedures need to be revised to establish a more effective and timely interface with committees. These issues are further discussed in Section 5.6.

5.1.4 Supporting decision makers

Secretariat resources were taxed in supporting such an extensive committee structure. Accordingly, some committees met without agendas and papers and others did not communicate important decisions. This created problems in information flows and communication. Some information required secure transmission, which challenged the secretariats of the committees to provide papers in a timely fashion.

There would be advantage in a single integrated secretariat team to support the network of health committees to ensure agendas clearly identify tasks and meeting outcomes are recorded and communicated at the end of each meeting (prior to the preparation of formal minutes).

Members of the DoHA Executive chaired or attended the majority of health advisory or decision-making committees. Senior decision makers would benefit from succession planning, as maintaining such a pace would be untenable during an extended crisis situation.

The need for secretariat and technical support by the DoHA Executive was heavier than anticipated. Staff had heavy workloads that restricted their capacity to support the Executive. To ensure the Executive receive dedicated support following relocation to the NIR, executive support staff could be integrated into the NIR for the duration of the crisis or additional staff could be allocated. During the main activity these support tasks were assumed by NIR staff, which distracted them from their core NIR duties. Technical support requirements in a large-scale emergency also need to be reviewed.

Improved use could be made of communications and information technology. Committees would benefit from computer access during meetings to provide real time access to situation reports and other information. Particularly frustrating was the poor quality of teleconferencing facilities, the medium for most committee meetings. The benefit of being around a table, 'face-to-face', was noted several times, although the practicalities of this in an emergency are an obvious limitation.

The greater use of video conferencing as it improves may go a long way to resolving this difficulty.

It is important these issues are addressed, as sustaining a response over the expected duration of a pandemic will not only stretch operational resources, but will require a level of sustained strategic planning and decision making for which there are few precedents in the health or social policy sectors.

Recommendation 1:

Usual decision-making structures and consultative processes need to be streamlined to ensure timely responses in an emergency. This could be achieved by:

- (a) reviewing the roles and governance of national committees, focussing on decision making, delegation of authority and time management;*
- (b) revising the terms of reference of these committees in light of this review to remove any overlap of roles and responsibilities, and to include specific terms of reference for committees for their responsibilities while in emergency mode;*
- (c) considering the need for the formal involvement of all policy and advisory committees in an emergency situation;*
- (d) developing methods for dissemination of key decisions rapidly between meetings;*
- (e) reviewing the secretariat support and technical support requirements of committees and senior government decision makers in emergencies;*
- (f) including all Commonwealth agencies in the Commonwealth Government Deputy Secretaries' Inter-departmental Committee on Influenza Pandemic Prevention and Preparedness during a pandemic;*
- (g) improving secure information transmission for members of the Commonwealth Government Deputy Secretaries' Inter-departmental Committee on Influenza Pandemic Prevention and Preparedness; and*
- (h) improving the interaction between the Australian Health Protection Committee, the Commonwealth Government Deputy Secretaries' Inter-departmental Committee on Influenza Pandemic Prevention and Preparedness and the National Pandemic Emergency Committee secretariats.*

5.2 Planning and Coordination

Objective 2

To assess pandemic preparedness planning and coordination arrangements within and between all jurisdictions

5.2.1 The national policy framework

Considerable progress in policy development was made at all levels of government and in the non-government sector in the lead-up to the exercise. Many agencies fast-tracked their policy development or addressed known policy gaps, and the series of discussion exercises prior to the main activity enhanced cross jurisdictional and cross portfolio communication, thus promoting a nationally consistent approach. As such, *Exercise Cumpston 06* improved Australia's preparedness for pandemic influenza even before the main activity was undertaken.

Making policy during a response will be inevitable as unforeseen situations will arise and circumstances change. However, to the extent possible, situations need to be anticipated and a national policy framework developed to underpin the operational response.

Exercise Cumpston 06 confirmed that both the AHMPPI and governance aspects of the NAP provide a sound policy framework for the national response to an influenza pandemic, but will require revisiting in light of the lessons learned from *Exercise Cumpston 06*. Changes are required firstly to make the national plans more flexible tools, and secondly to address some policy gaps and operational issues identified in the AHMPPI.

The AHMPPI, NAP and state and territory plans codify the various WHO and Australian phases of a pandemic and list key health protection actions and activities for each phase. This has proved to be a useful planning tool, allowing for the triggering of certain actions at different points in the continuum. However, as a response mechanism, the pandemic phases proved to have limitations.

For example, there was considerable pressure to move quickly to escalated levels of response activity ahead of official changes in phase. This was because it was considered that a change in phase should be based on solid evidence that the change was justified, while decision makers and those advising the government felt the need to act quickly on a precautionary basis. The listing of actions at particular phases also does not take into account the reality that containment and maintenance are not discrete events, that actions may overlap phases, and that actions required may depend on the severity of the pandemic and that some actions may need to be

curtailed, modified or ceased according to the resources available. The review of the AHMPPI needs to take account of these limitations and to provide a more flexible tool to allow for these uncertainties.

Declaration of the phases involved a complex process with an announcement by the Prime Minister. In the interim, critical decisions had to be made by national committees while jurisdictions awaited formal notification. It is debatable whether pandemic phases need to be formally announced, especially by the Prime Minister.

Policy issues that need refining in the AHMPPI include a national surveillance framework, access to antivirals, the criteria for social distancing measures, enforcement of quarantine legislation, consistency in influenza assessment centre operations, and engagement of the primary care sector. These are dealt with in detail later sections.

There is also a need for a regular cycle of pandemic policy reviews with agreed milestones and revision points to ensure the currency of policy guidelines.

5.2.2 Building on best practice

The main exercise activity and associated state and territory activities demonstrated the operation of particular plans and procedures. They included: the Brisbane Airport Contingency Plan, developed in preparation for *Exercise Cumpston 06*; the Logan Influenza Assessment Centre procedures; arrangements to receive and manage infectious patients at RBWH; and the Tasmanian Telephone Assessment and Referral Service, which utilised Tasmania's after hours' doctor service to provide a 24 hour first point of contact with health professionals.

The DISCEX identified innovative approaches to respond to a pandemic, for example, initiatives by the Victorian Divisions of General Practice to support general practitioners (GPs) in developing response plans. Queensland Health's engagement with community-based aged care nurses to develop their capacity to support the health response is another example.

The DISCEX highlighted the value of bringing stakeholders together to compare approaches and draw on one another's experiences in developing policy, plans and procedures. In some cases, they provided the first opportunity for a comparative update, sharing of ideas and collaboration in addressing issues. The non government and private sectors are also looking to government for leadership and direction, particularly for guidelines and protocols to ensure a consistent approach on a range of issues. The outcomes of the DISCEX were incorporated into policy and planning, although not all outstanding issues were able to be resolved before the main activity.

5.2.3 Ensuring a consistent national response

The completeness and quality of plans and operational procedures is an important indicator of preparedness. The evaluation confirmed the existence of effective plans in many areas of response management across all jurisdictions. These have been prepared within the national policy framework outlined in the AHMPPI and NAP.

The evaluation revealed that despite operational procedures being in place, in many cases they were not always current or complete or not always utilised. The knowledge level of those who were aware of the plans varied. For example, while plans specified decision makers, players were not always aware of their level of delegation and did not exercise that delegation in all instances. Similarly, there was a lack of understanding of command and control relationships (who is authorised to do what and when), sub optimal communication between agencies and inadequate information flow from decision makers to the operational level, exacerbated by poor information communications technology. This points to a need to better familiarise operational staff with the details of plans.

The AHPC, with its broad membership from Commonwealth, state and territory health and emergency agencies, has striven to establish nationally consistent principles on important policy issues. Such consistent principles are more readily understood and accepted by the general public and the media, even if jurisdictions implement them according to local conditions.

5.2.4 Information and communications technology

A number of information and communications technology (ICT) systems were utilised for information collection and dissemination, including a new secure information sharing network currently under development by DoHA, the Health Alert Network (HAN). This system encountered 'bedding-down' problems, and was new to many users. Lack of familiarity caused a degree of distrust in the system, and to compensate, duplicate systems were used (for example, the same message sent out on normal e-mail and HAN). As a result there was considerable overlap and information overload.

While many users were comfortable with HAN, others complained that the system was not intuitive, that it was cumbersome to use, and that response times were slow. It was apparent that user expectations were not being met, and that training and familiarisation was inadequate. Specific problems encountered with HAN included:

- unacceptable delays incurred in the distribution of alerts;
- alerts not indicating the priority of the content; and
- the system not allowing multiple addressing.

A secure system is always going to be more difficult to access and use than an unclassified one. It may be necessary to consider a more limited range of uses

for HAN or improve its functionality so that it can complement other systems, particularly e-mail.

Rationalisation of information systems and methods is necessary, as is appropriate training to ensure familiarity with their use. HAN is part of the Biosecurity Surveillance System being developed by DoHA, which is further discussed in Section 5.4.3.

The main activity also identified ICT issues relating to the DoHA exercise website that hindered rapid communication among participants. The password-protected website designed for exercise play performed poorly. There were delays, caused by technical problems, of up to several hours in posting materials onto the website, which led to information vacuums at critical points of the response. This caused confusion among participants and pseudo media throughout the main activity.

The main activity reinforced DoHA's need to re-examine the robustness of its IT systems in handling the large volumes of visitors to its website that could be expected during a pandemic. DoHA also needs to examine its website capacity for the downloading of vision and sound files that would be critical in ensuring the media is well served.

Recommendation 2:

National pandemic plans (the Australian Health Management Plan for Pandemic Influenza, the National Action Plan and other relevant plans) need updating to provide for a more flexible layering of preparedness and response measures according to the severity of the pandemic and available response capacity. Specifically:

- (a) the Australian Health Protection Committee should continue to review the Australian Health Management Plan for Pandemic Influenza and complementary jurisdictional health sector pandemic plans;*
 - (b) the revision of the Australian Health Management Plan for Pandemic Influenza should address policy gaps, such as codification of phases (including the concepts of containment and maintenance), a national surveillance framework, access to antivirals, the criteria for social distancing measures such as school closures, enforcement of quarantine legislation, consistency in influenza assessment centre operations, and engagement of the primary care sector;*
 - (c) in reviewing policy, the Australian Health Protection Committee should draw on or commission research to ensure changes are based on the best and most current evidence; and*
 - (d) the revision of the Australian Health Management Plan for Pandemic Influenza and other plans should include a regular cycle of pandemic policy reviews with agreed milestones and revision points.*
-

Recommendation 3:

Health electronic communications systems, including the Health Alert Network and the Department of Health and Ageing website, need to be further developed and exercised.

5.3 Public Communications

Objective 3

To exercise and validate public communication strategies

5.3.1 Public communications networks

The National Health Emergency Media Response Network (NHEMRN) comprises public affairs officers and media managers from Commonwealth, state and territory governments, the national medical professional colleges and associations and private sector bodies directly involved in emergency health management. It was established to provide consistent and coordinated media and public communications responses in a health emergency.

During previous emergencies NHEMRN membership was limited to representatives of Commonwealth, state and territory government health agencies. In the main exercise activity, NHEMRN membership was extended to enable a wider range of stakeholder agencies to be involved. Additional members included six Commonwealth agencies, whole-of-government media centres in Queensland and national medical professional colleges and associations.

This extended membership facilitated more responsive and better coordinated decision making, by enabling stakeholders to participate in determining the response strategy, in developing messages and materials and in coordinating activities by agencies. However, it revealed varying levels of familiarity with the operation and procedures of the NHEMRN.

The NHEMRN, which met five times during the main activity, provided an effective decision making forum. However, when the Chair was unavailable, meetings failed to clearly define national media strategies and tactics. This led to delays in answering media questions and some confusion about who should be making announcements, for example, about the numbers of suspected cases. The pseudo media (a team of media officers assembled to ask scripted and unscripted questions, see Annex, Role Players) were not clear who the lead agency was and who to approach for information. A clear succession plan would address this short-coming.

National health communications strategies need to integrate emergency communications arrangements in each jurisdiction, and ideally should be part of a whole of government strategy. National whole-of-government public communications were not tested during the main activity. While there is currently no equivalent to NHEMRN for whole of government communications, whole-of-government coordination arrangements for public announcements have been agreed

by governments as has the development of the National Crisis Communications Team, led by PM&C. The Team will support and implement announcements by the Prime Minister as well as decisions by the IDC and, where appropriate, the NPEC.

While nationally consistent messages are desirable, state and territory governments, which have responsibility for health delivery and emergency management services, will wish to issue information about their pandemic response arrangements that may differ from approaches adopted by other jurisdictions (for example, the operation of influenza assessment centres).

The pseudo media commented that there did not appear to be an agreed set of messages, nor did media units explain why jurisdictional messages were different. For example, national media releases urged people to contact their GP, while at least one state was asking people to go to assessment centres rather than general practices. This created the impression of an uncoordinated national response.

All state and territory pandemic communications plans should include strategies to advise the community of specific jurisdictional pandemic response arrangements.

State and territory health department media units have well established plans for media operations during infectious disease outbreaks. These plans have been applied successfully many times in response to disease outbreaks. In addition, all state and territory health departments have prepared specific pandemic communications strategies. Many have only recently been developed and, in most cases, *Exercise Cumpston 06* provided their first operational test.

The main activity identified issues with these new pandemic communications strategies, in particular, the working relationship between health-based plans and whole-of-government plans. In some instances, confusion about these arrangements led to delays in providing media responses and difficulty for the pseudo media in being able to contact public health experts.

5.3.2 Interface issues

In designing the NIR, integration of DoHA Communications Branch media officers was considered integral to its effective operation, with space allocated and technical facilities provided. It was acknowledged that media officers must be able to perform media functions within the NIR and work in accordance with NIR procedures, rosters and routines.

This did not, however, occur in practice with media officers hampered by not being integrated sufficiently into the NIR. Communications Branch media officers were not included in briefings or debriefings held by the NIR and worked in virtual isolation of the main effort.

The relationship needs to be clarified in standard operating procedures.

There was difficulty in obtaining rapid clearance of public messages and talking points. NIR procedures required clearance by the Branch Head of the Health Emergency Planning and Response Branch, who was also the Incident Coordinator and commander of the NIR, as well as being required to attend meetings of national committees. This left little time for clearance of public communications materials. Alternative clearance procedures should be considered.

Communication experts were not always present at important committee meetings. A pandemic will be a highly political event with the media both reflecting and fuelling public anxiety and increasing pressure on government decision makers and political leaders. It is therefore important that the agenda for meetings of key decision making committees includes a report on the mood of the public and the media.

5.3.3 Public communications resources

While the communications activity provided many realistic tests, it was impossible to simulate the actual scale of the global media interest a pandemic would generate. Applying such a 'real life' level of media pressure was considered counter-productive as it would overwhelm media officers, limiting the training and systems review opportunities. It would also impinge on the ability of participants to execute particular elements of their plans. As such, real surge capacity requirements for public communications were not fully tested.

The national communications response was managed by media officers with limited experience and training in emergency media management. While the exercise was important in providing exposure and training to these officers, it limited the capacity of the communications response.

Similarly, most state and territory health departments deployed small teams of media officers. In some instances, state and territory media units took advantage of the training opportunity to expose junior staff to a large-scale international crisis situation.

Public communications resource and training requirements need to be reviewed and measures to increase surge capacity identified. Several suggestions were made to address the public communications human resource demands. One example was the development of a national database listing specialist health communications officers trained for deployment in Australia to assist Commonwealth, state and territory media units.

5.3.4 Standard operating procedures

The national communications workshop, conducted in June 2006, highlighted the importance of developing standard operating procedures to implement communications plans. They should state who is in charge, who will do what, when, how and on whose authority.

Standard operating procedures will be particularly important in an influenza pandemic when an intensive level of communications activity will need to be sustained over a prolonged period, when existing corporate knowledge or expertise may be depleted, and to support new or additional staff not familiar with existing networks and procedures.

5.3.5 Press conference performance

Media conferences are an integral part of public communications plans to provide the media with immediate information. Two media conferences were held by the CMO, as designated DoHA spokesperson. Most state and territory health departments staged media conferences by their designated spokespeople. One-on-one interviews with authorised spokespeople were also conducted by the pseudo media team.

Exercise Cumpston 06 demonstrated that Australia's health authorities have a range of talented, qualified and experienced spokespeople to provide comment during an emergency. They were well-served by their media units in preparation for media interviews. Feedback on individual performances will be provided by media units and further media training arranged if required.

The frequency and timeliness of such media conferences throughout a crisis needs to be reviewed, to ensure that a wide range of media have access to media comments from key spokespeople. Ideally, they should occur twice a day, if not with the CMO or CHO, then with other media trained spokespeople. Over-reliance on a limited number of spokespeople reduces media opportunities, for example, to conduct radio interviews.

5.3.6 Public information messages

The scenario for the main activity contained a test of national advertising arrangements to be deployed during a pandemic.

While DoHA placed national infection control posters and scripts for national radio and television commercials on the exercise play website and most state and territory health departments activated their advertising and public communications plans, a lack of artwork, appropriate graphics and consistent information was criticised by the pseudo media. DoHA is currently preparing crisis-ready materials for a range of target audiences using a variety of media that can be rolled-out at particular stages of an outbreak. Social market research is required to ensure the messages are on target.

Information was available for the public and health care workers online, but its existence and how to access it were not well promoted to the public via the pseudo media. Rural and remote communities may have limited access to the Internet and this medium should not be relied upon as the sole means of disseminating public information. There was no information available targeted to Indigenous and culturally and linguistically diverse (CALD) populations.

Communication strategies need to consider the full range of available media and communication tools to manage media demands in a timely manner and maximise coverage while minimising the demands on spokespeople and media resources. For example, it may be possible to issue information up-dates as an alternative to media releases and to provide pre-recorded voice messages for radio.

The national call centre was not promoted widely, either by DoHA or the states and territories. There was little or no information on the call centre's purpose and what type of information or advice it could provide.

Recommendation 4:

There is an urgent need for improved whole-of-government and cross-jurisdictional communications mechanisms to ensure consistent and coordinated delivery of public messages. Measures include:

- (a) that the Department of the Prime Minister and Cabinet continue to develop a communications strategy and network for central agencies and work with the National Health Emergency Media Response Network to develop a whole-of-government communications strategy for use in health emergencies;*
 - (b) demarcation of roles and responsibilities regarding delivery of public messages in a pandemic within communications strategies;*
 - (c) applying flexible membership criteria to enable the National Health Emergency Media Response Network to co-opt additional agencies as required during emergencies, including jurisdictional emergency communications networks;*
 - (d) development of health and whole-of-government public communications standard operating procedures as a priority. Once developed, a national forum should be held to ensure alignment of these procedures;*
 - (e) providing training for members of communications networks in their role in operations centres;*
 - (f) identifying and training alternative spokespeople across sectors (with clear demarcation of roles and responsibilities) to perform media functions when designated spokespeople are unavailable; and*
 - (g) planning for better integration of Department of Health and Ageing media officers into the National Incident Room, once activated.*
-

Recommendation 5:

The concept and operation of public health policies, such as social distancing, need to be explained to the public with public communication messages and strategies prepared ahead of time. Specifically,

- (a) further work is needed to clearly justify and explain key social distancing policies like school/childcare closures; and*
 - (b) governments need to ensure communication messages and strategies are appropriate and address the needs of Indigenous and culturally and linguistically diverse populations.*
-

5.4 Surveillance

Objective 4

To assess pandemic influenza disease surveillance arrangements

5.4.1 Coordination of international and national disease surveillance information

Australia has well-established systems for infectious disease surveillance. The international monitoring and reporting of infectious diseases of importance to Australia is carried out by DoHA and involves close liaison with international health groups such as the WHO.

Domestic disease surveillance is conducted by all state and territory health departments, and nationally coordinated by DoHA through the auspices of the CDNA. While CDNA have developed a number of technical documents for national pandemic influenza surveillance, a comprehensive surveillance framework is lacking. A surveillance annex to the AHMPPI is currently under development by DoHA.

5.4.2 Communication of surveillance information

For *Exercise Cumpston 06*, a national disease surveillance team was activated in the NIR to monitor the course of the virus overseas. Through effective liaison and the interpretation of data, the Surveillance Team captured the unfolding international disease situation, and delivered national surveillance reports.

The NIR also prepared regular national situation reports to stakeholders in the Commonwealth, state and territory governments. A number of automated information systems were used, not always effectively, for information collection and dissemination.

While overall the national situation and surveillance reports served their purpose, in some cases, reports that were issued to stakeholders did not include the most up-to-date data. Multiple information systems contributed to disparate awareness of events and the tempo of the committee process was affected as decision makers had to actively seek data to update information that was late or out of chronological order.

In other cases, information was not pertinent to decision making or emergency management and was open to change, thus difficult to maintain and confusing to communicate. The nature of information to be communicated needs to be reviewed to ensure it is beneficial for users.

Multiple sources of incoming data and the volume of data about cases placed huge demands on the Surveillance Team to produce quality-assured and accurate reports that met the needs of national committees and other personnel in a crisis situation. The timeliness of products was affected by the time required to collect, synthesise and distribute complex information. It was also adversely affected by other factors such as the limited availability of authorised persons to clear products, the time taken to draft products for circulation between teams and a lack of communication during shift handovers. More timely clearance process could be achieved with a dedicated officer to perform this task, who is not involved in other activities at crucial times.

Staff in the NIR Surveillance Team had not previously worked in the NIR as a dedicated team. However, the NIR was able to recognise and effectively adapt to the demands placed upon it. Critical in this flexibility was the corporate knowledge, networks of personal contacts and professionalism of individuals in the NIR.

5.4.3 ICT infrastructure for surveillance

State and territory health departments collected information on cases and their contacts using nationally agreed definitions developed by the CDNA. This information was entered into a single point: a web based outbreak reporting and management system called NetEpi.

While the version of NetEpi maintained by DoHA is an interim system only (with recognised limitations), there were nevertheless criticisms and a lack of national consistency in its use, particularly in relation to data entry and the format of data fields. It should be noted that the version of NetEpi used was not the most current version and subsequent versions have addressed a number of the ICT limitations identified in the main activity. It is essential that there is national agreement in regard to data collection for any web based ICT system to be used effectively for national data collection.

In addition to the use of NetEpi, jurisdictions were encouraged to update the NIR via telephone in regard to critical events, for example, confirmation of cases or deaths. While NetEpi was generally updated within several hours, at some stages there were inevitable discrepancies between current jurisdictional reports at teleconferences, and the NIR reports, which were also delayed at times by clearance processes. In a rapidly changing environment these discrepancies are unavoidable. Criticism of this could be tempered by agreed regular reporting timeframe, so that national data are current up to a determined point, with acknowledgement that individual jurisdictions may hold more up-to-date information.

DoHA is currently improving the infrastructure of national communicable disease surveillance systems. The Biosecurity Surveillance System (BSS) is being developed to provide a more effective and comprehensive surveillance system. Components include enhancement of both HAN (Section 5.2.4 refers) and NetEpi. The lessons learned during *Exercise Cumpston 06* should be applied in the BSS development.

5.4.4 Border screening

Effective international surveillance enabled timely border measures to be put in place to slow the spread of the virus in Australia. These included a change from negative to positive practice for arriving international aircraft, the issuing of health declaration cards for arriving passengers and deployment of border nurses.

Thermal screening of arriving passengers was also undertaken. None of the asymptomatic passengers with thermal anomalies were missed by the Thermal Imaging Team. Logistics and communications in the operation of the process were also tested and found to be effective.

Health information relevant to desired national surveillance operations was collected by border nurses, collated into one document and communicated to state and territory agencies who then communicated it to the NIR in Canberra. This system worked successfully with limited passenger numbers.

Analysis of the effectiveness of public health measures at the border can be found in Section 5.5.1 of this report.

5.4.5 Contact tracing

Public health authorities in the states and territories conducted contact tracing to slow the spread of the virus into the broader community. The aim of contact tracing was to limit secondary transmission by identifying contacts of infected people as early as possible and implement public health interventions to prevent further transmission.

The states and territories developed policies and protocols for contact tracing prior to the main activity. While nationally consistent definitions of both “case” and “contact” were agreed through the national decision-making process to guide contact tracing activities, there were significant issues relating to the case definition. These included sensitivity and specificity, practicability and the frequency with which the definition changed. Some flux is inevitable, as it is difficult to predict ahead of time the epidemiological and clinical characteristics of cases. However, the case and contact definitions should be reviewed in light of the lessons learned from the exercise.

Some participants in the field who were responsible for implementing the CDNA case definitions found them (and the response protocols) confusing, a factor which should be taken into consideration when they are reviewed. Training for surveillance officers at jurisdictional level was minimal and should be accorded a higher priority.

Cultural and linguistic differences also need to be taken into account by the contact tracing process during an actual pandemic.

As contact tracing requirements placed huge demands on state and territory health departments, the sustainability of contact tracing efforts will need to be managed

more effectively. Forecasting the staffing levels required for contact tracing proved difficult due to the potential numbers of contacts being hard to predict. It was noted that contact tracing resources during the containment phase would need to be increased as a pandemic progressed, and a surge capacity drawing on the resources of other agencies would be required. Concerns were also expressed about the capacity of the telephone system to cope with a pandemic.

5.4.6 Laboratory surveillance

Virologic surveillance is an important element of pandemic preparedness and response. Laboratory diagnostic support will be required to confirm the arrival of a pandemic, to identify its type and strain and to determine the virulence and transmissibility of the virus. Laboratory analysis will be a prerequisite for vaccine production.

Laboratory capabilities were exercised at the Cooper's Plains Laboratory in Brisbane. Its role was to analyse samples provided by local public health units, including hospitals and GPs. Evaluation confirmed that, overall, testing and diagnostic functions were performed extremely well, and in accordance with established procedures.

However, samples delivered to the laboratory for analysis often arrived much later than expected, in some cases unnecessarily delaying analysis runs for a number of hours. The delays added a significant amount of time to the process of confirming the sample status with public health units.

The unreliability and unwillingness of couriers to transfer known H5N1 positive biological samples from jurisdictional laboratories to the WHO Collaborating Centre for Influenza Research was identified as a potential cause of late delivery. However, couriers currently handle other hazardous material and this problem could be overcome through better communication protocols and the use of dedicated health couriers.

During an influenza pandemic, the volume of requests for laboratory testing would be expected to increase dramatically with staff required to work long hours. Strategies such as staggered rosters would be required to maintain effective assessment capability.

The PHLN has an important role in ensuring timely provision of virological data and expert advice to assist in pandemic monitoring and to inform decision making at Commonwealth, state and territory levels. In a pandemic event, the PHLN will take a lead role in improving diagnostic testing and managing laboratory services (Section 4.2.3 refers).

The PHLN was convened by teleconference three times. Discussion in the first two teleconferences reflected the origins of the committee as a network of individual laboratory directors, whose perspectives vary according to differences in approach

and priorities between jurisdictions. While discussions ranged beyond the set agenda items, by the third meeting discussion was highly focused and members were decisive and action oriented.

Recommendation 6:

A nationally agreed framework for pandemic influenza surveillance should form an annex to the Australian Health Management Plan for Pandemic Influenza, and should be underpinned by operational plans and improved information and communications technology.

Specifically:

- (a) the Communicable Diseases Network Australia should consider the lessons learned regarding case and contact definitions, as well as operational considerations including capacity and sustainability, and revise current surveillance documents accordingly;*
 - (b) state and territory health departments should establish effective notification processes between public health laboratories and public health units and arrangements for the collection and transport of samples enable effective coordination of testing and communication of results;*
 - (c) the Department of Health and Ageing should ensure development of the Biosecurity Surveillance System takes into account the lessons learned in regard to the collection and reporting of surveillance data; and*
 - (d) surveillance reports should be presented in a clear and user friendly format that enable users to easily understand and apply information.*
-

5.5 Public Health

Objective 5

To assess public health measures

5.5.1 Public health management measures at international borders

The heightened public health border measures agreed to by Federal Cabinet were implemented and tested in a major deployment activity at the Brisbane International Airport on 17 October.

These measures were commensurate with an advanced level of border protection, as outlined in the overseas pandemic phase four response in the AHMPPI. They included the introduction of positive pratique for arriving international aircraft, issuing of health declaration cards to all international arrivals, deployment of border nurses to assess arriving passengers for signs of illness and the implementation of thermal screening for arriving passengers. It should be noted that this was the first ever comprehensive test of thermal screening in Australia.

The Brisbane Airport activity demonstrated these measures were effective in identifying and isolating potentially infected patients arriving at our international borders and for placing exposed passengers into home or facility quarantine. Response roles and responsibilities were clearly identified (i.e. border control nurses, thermal screening, customs control and health assessment of suspected cases) with personnel aware of and trained in procedures within their own agencies.

While the border measures were largely effective, some of the current procedures could be improved through more training and familiarisation by airport-based staff. It is also important that the lessons learned are shared with all Commonwealth, state and territory health departments, other relevant agencies, including Australia's other international airports to ensure a cohesive national response.

Exercise Cumpston 06 validated the efficacy of intense border control measures where these are applied to a limited number of passengers whose movement through the airport can be controlled. The arrival of multiple flights, was not tested, nor was the sustainability of procedures over a long period. The capacity to contact trace large numbers of passengers appeared to have been overestimated. The review of the AHMPPI will need to consider the efficacy and practicality of these intense measures in a situation where passenger numbers have not been drastically reduced and the potential source of infection involves more than one overseas location and several domestic airports and/or seaports. The issues involved include staffing levels, adequate stocks of equipment, training for new staff, reception

arrangements to implement repatriation measures and the COMRECEPLAN, and inter-agency training and familiarisation courses.

Border measures were comprehensive and effective, while exit screening was not part of *Exercise Cumpston 06*.

5.5.2 Quarantine legislation

During the Brisbane Airport and the Brisbane Influenza Assessment Centre activities, quarantine orders were issued in accordance with the declaration of a public health emergency under Queensland's *Public Health Act 2005*. These procedures worked well and all passengers and patients were informed about the human quarantine process. Verbal and written information and the documentation was user friendly and sufficient and people were given instructions on where to go for further advice.

Both Commonwealth and state and territory legislation exists for the enactment of human quarantine. State and territory legislation may not be as powerful, but is generally supported by instruments and processes that have been developed carefully and used on a day-to-day basis. However, a concern is that the states and territories currently have differing sets of powers for responding to public health emergencies, some with comprehensive coverage, others with only limited coverage. This may hinder a coordinated national approach to a public health emergency.

The Commonwealth *Quarantine Act 1908* provides the framework for the protection of Australia's borders from biological hazards. While the Act contains very broad emergency powers they may not be sufficient in scope or detail to operate effectively to counter a modern public health emergency. Indeed, the powers are at risk of being read narrowly by the courts on the basis that the exercise of powers interferes with fundamental rights or freedoms of individuals. Also, the Act's emergency provisions can only be used where the emergency derives from a biological source. There is also a concern that the instruments and processes to declare an emergency under the Act are insufficiently developed.

Further work needs to be done to develop the tools to operationalise the use of the Act, and to educate those on the front line as to when and how it should be used.

The Commonwealth is now developing a framework for National Health Security Legislation (NHSL) (in consultation with the states and territories) which seeks to enumerate the emergency powers available to governments in the event of a biological or non-biological public health emergency. The NHSL, which addresses the identified priority areas of: governance, laboratory regulation, surveillance (including enabling Australia to meet its International Health Regulations obligations) and emergency powers, will be supported by complementary inter-jurisdictional operational agreements.

Development of the proposed NHSL provides an opportunity to address the identified issues and gaps arising from the interaction between the *Quarantine Act 1908* and

state and territory legislation and ensure governments are able to respond swiftly and effectively to modern day health threats.

5.5.3 Influenza assessment centres

All state and territory pandemic plans include arrangements for the assessment of people who may have influenza. The aim is to delay the spread of a virus through case isolation, rapid treatment and the provision of antivirals and PPE to those at risk. Assessment centres are also intended to decrease the number of presentations to hospitals (in jurisdictions where separate facilities have been established) and general practices and to minimise the number of health care workers exposed to patients with influenza. Staffing arrangements include medical and nursing, administrative, security and patient assistance staff.

For the purposes of *Exercise Cumpston 06*, an assessment centre was established at the Logan Entertainment Centre in Brisbane where members of the public with influenza like symptoms and those returning from affected countries could be assessed, triaged and treated if necessary.

While the Centre fulfilled its aims, the logistics of transferring hospital staff and equipment to another location proved to be more difficult than anticipated. Site selection and the identification and securing of all necessary equipment needs to be thoroughly planned and occur well in advance. To minimise public confusion and concern, and to ensure consistency, there is a need for clear procedures and training to guide the actions of staff, for example, in managing close relatives, including parents and children, who may need to be separated. The processes for triaging and treating patients were complex particularly for staff likely to be drawn from a broad experience base in a prolonged pandemic. Processes and procedures need to be simplified and a generic training program developed for potential staff.

It emerged at a DISCEX that there is a lack of national consistency regarding assessment centres, notably in terms of naming (some jurisdictions refer to their centres as “fever clinics”) and when they should be established during an outbreak. Such inconsistencies could lead to public confusion and concerns about differences in treatment between states and territories. A first step in addressing this issue would be national agreement on the objectives of influenza assessment centres, to ensure national consistency in their purpose. These issues could be addressed at further multi-jurisdictional fora (Section 5.2.2 refers).

It should be noted that at the Logan City Influenza Assessment centre, as elsewhere, lack of adequate resources to deal with surge capacity was a concern. If resource issues are not addressed, it is doubtful that a prolonged response could be sustained.

5.5.4 Hospitals

The main activity included a drill of arrangements at the RBWH to receive and manage a potentially large number of infectious patients, including admission procedures and infection control policy and practice.

The hospital arrangements performed well. Comprehensive planning and understanding led to good hygiene and infection control practices, matched by effective staff training. There were protocols for the transportation of patients to hospitals and effective mechanisms for isolating sick patients and contacts. Agreed protocols were in place for the use of antivirals, with NMS assets distributed to agreed priority groups in accordance with Commonwealth requirements. Effective communications kept staff aware of developments through updated alert messages.

There is a need to ensure similarly effective arrangements to those demonstrated at the RBWH are in place in all Australian hospitals. For example, that standard operating procedures are developed, that staff are trained in the use of PPE, and that the role of hospitals in surveillance and assessment in relation to community health services is clearly documented.

The hospital drill at RBWH did not address surge requirements during a pandemic when demands on hospital resources are likely to greatly exceed normal capacity, for example, for staffing resources, isolation facilities, intensive care units, assisted ventilation services, hospital beds and medical supplies.

At the DISCEX, representatives of hospital authorities discussed approaches to manage surge demand. Examples included reordering priorities to redeploy staff, increasing the involvement of private practitioners, using medical students and retired GPs, deferring staff leave, and establishing influenza assessment centres to reduce presentations to emergency departments and enable them to continue their core business.

The Victorian Department of Human Services has prepared a health services surge capacity plan which includes mapping capability and capacity, identifying trigger points for demand management, and identifying contingency arrangements at the health service and state levels. Other jurisdictions are also developing surge capacity plans.

5.5.5 Primary care

The presentation of a suspected case at a Brisbane general practice demonstrated the practice's pandemic preparedness plan. The demonstration showed the practice's infection control protocols were able to cope with such a scenario. Reception was appropriate, with the right questions asked for rapid assessment of possible symptoms. An infection control plan was implemented with surfaces cleaned, PPE worn and social distancing put into effect. Contact tracing details were

recorded and steps taken to transfer care of the patient to a designated treatment facility using correct transportation procedures.

International and domestic observers noted that Australia's preparedness planning is more focused on tertiary and public health response models with less involvement by the primary care sector than in other countries. They questioned the physical capacity of influenza assessment centres and influenza designated hospitals to manage distribution of antivirals to potentially very large numbers of people.

The DISCEX noted the need to lift the level of engagement with GPs, community pharmacies and other primary care providers in pandemic planning and to further develop the role of the primary care sector in a response. Particular issues include the development of mechanisms to communicate directly with providers, their role in influenza assessment centres, their role in distributing antivirals and pre-positioning stocks of antivirals to support such a role, reducing administrative requirements to increase practice capacity, increased delegation of functions to practice nurses and providing training in safely taking and dispatching throat swabs to laboratories for analysis.

At the time of the exercise the Primary Care Annex to the AHMPPI, which will assist GPs to prepare for and respond to a pandemic, had not been publicly released.

5.5.6 Patient transport

The main activity highlighted issues concerning patient transport that were not satisfactorily resolved. The transport of ill people with a new form of respiratory virus from remote and isolated areas, where the normal means is by air, is problematic. Many of these areas, particularly in northern Australia, are not accessible by road for some months of the year and some are island communities. Sea transport is slow and not always available. The use of aircraft is governed by the ability to ensure the safety of the crew from infection, which is generally not possible as crew members are unable to operate aircraft while wearing PPE. Further advice is also needed on the requirement for PPE where crews may be taking antiviral medications.

Similarly, if Australians overseas are to be repatriated, the normal method of transport would be by air. Issues arise with crew being unable to operate aircraft while wearing PPE. Sea transport is an alternative; but negative pressure facilities are usually not present on ships.

Suitable transport for highly infectious patients remains an issue, with government agencies considering evacuation arrangements in emergency situations. Options are being developed on a whole-of-government basis.

5.5.7 Mechanisms for antiviral, PPE and vaccine distribution

In the event of a pandemic, the Commonwealth would distribute antivirals and PPE from the NMS to the states and territories. The NMS drill, conducted prior to the main activity, demonstrated that the distribution process was effective.

Deployment of NMS assets was further exercised during the main activity, including consideration about how NMS assets would be used in jurisdictions. Activity at the Logan Influenza Assessment Centre in Brisbane revealed there were policy, operational and clinical issues relating to PPE and antivirals that need to be addressed.

The AHPC needs to ensure that its policy decisions are well understood at the grassroots level, for example, in relation to:

- the use of antivirals and PPE at state and territory level; and
- who should receive antivirals, particularly at the start of an outbreak;

The states and territories need to work with AHPC and its subcommittees to develop communication and training tools to improve understanding of operational issues about which there was uncertainty, such as:

- difficulty in interpreting contact definitions by staff who were unfamiliar with them; and
- lack of training in the use of PPE, particularly masks.

The clinical issues to be addressed related to:

- prophylaxis for children under 13 years;
- the length of prescribing time of antivirals;
- whether antivirals should or should not be taken with food;
- the consumption of alcohol whilst on an antiviral regime; and
- the use and level of PPE at the start of an outbreak.

Some of these issues were resolved during exercise play through discussion among staff. However, the need for better guidance and preparation in advance of asset deployment is illustrated.

Simulated vaccine distribution was not conducted during the exercise, since a vaccine against the H5N1 virus strain is not currently available. The principles which might underpin vaccine distribution and use were considered on the last day of the exercise, and this was noted as an area for further policy development.

5.5.8. Needs of special/vulnerable groups

People placed in isolation or quarantine represent a special needs group, not only in relation to their health, but in regard to a range of physical and psychosocial needs. It is imperative that these needs be met to ensure compliance with quarantine/isolation. The Centrelink Home Quarantine Support System call centre was implemented to pro-actively check on the well-being of passengers from the aircraft after they had been placed into quarantine, and is the first step in the investigation of a broader quarantine support system.

The inclusion of this component in the main activity represented a trial of the telephony technology only, rather than this methodology as a quarantine surveillance system *per se*. Detailed plans are yet to be developed, should a decision be made to use this methodology. Such planning requires extensive consultation with jurisdictions and other sectors, for example, community service agencies. While the technology was activated successfully, there was concern from jurisdictions that were unfamiliar with the nature of the trial. Future work is required to develop a quarantine support system which is integrated with jurisdictional surveillance systems and covers a range of client needs.

The DISCEX highlighted the mental health impact on front line emergency response staff of providing specific influenza services and supporting people directly affected by influenza and its control measures. The sections of the workforce that are at increased risk, such as health care workers, are especially vulnerable due to a real or perceived risk of becoming infected themselves and/or transmitting infection to their friends and families. The effects will increase as the pandemic evolves and may be long lasting. The risk needs to be recognised and addressed in preparedness plans.

Recommendation 7:

Individual jurisdictions should ensure operational lessons learned from exercise activities are shared with all state and territory health departments and other relevant groups. Specifically:

- (a) the mechanism for sharing lessons could be national fora involving government, non government and private sector agencies;*
 - (b) the lessons of the five activities in Queensland (drills involving airport, assessment centre, general practitioner service, hospital and a public health laboratory) should be examined by stakeholders, as well as operational activities undertaken in other jurisdictions; and*
 - (c) the Commonwealth Deputy Secretaries' Inter-departmental Committee on Influenza Pandemic Prevention and Preparedness should ensure whole-of-government input into border control planning. A priority will be managing the volume of traffic, including resources, repatriation arrangements and reducing flight numbers.*
-

Recommendation 8:

Further clarification of Commonwealth quarantine and state and territory public health and health emergency legislation is needed to ensure smooth operational interaction. This will include detailed operational procedures for triggering and applying the relevant powers.

Recommendation 9:

The Australian Health Management Plan for Pandemic Influenza needs further updating and fleshing out in some policy areas to ensure nationally consistent and streamlined approaches, including to border quarantine, social distancing, access to antivirals and vaccines and influenza assessment centres. Specifically:

- (a) the Australian Health Protection Committee should conduct regular and methodical reviews of planning and coordination arrangements to ensure there are operational procedures in place to implement these plans;*
- (b) the Department of Health and Ageing should continue to convene regular and ongoing multi-sectorial fora with jurisdictions and relevant non-government and private sector organisations to compare approaches and draw on each others' pandemic preparedness experiences and share already-developed resources;*
- (c) the Australian Health Protection Committee should re-examine the feasibility of quarantining entire planeloads of passengers from influenza affected countries;*
- (d) the Australian Health Protection Committee should develop nationally agreed objectives for influenza assessment centres;*
- (e) the Australian Health Protection Committee should develop protocols for the deployment of, and eligibility for, assets from the National Medical Stockpile, as well as state-owned resources, and ensure operational personnel are familiar with these policies;*
- (f) the Australian Health Protection Committee should develop and disseminate policies and protocols for the use of personal protective equipment and support the provision of appropriate training for all workers expected to be involved in the pandemic response;*
- (g) the Commonwealth Deputy Secretaries' Inter-departmental Committee on Influenza Pandemic Prevention and Preparedness should continue to work with agencies responsible for foreign affairs, migration and transport to address repatriation and patient transport issues (domestic and international);*
- (h) the needs of vulnerable groups should be incorporated into public health response planning; and*
- (i) a single and consistent system for supporting quarantine cases and their contacts is required for both community and border response measures. The system should be integrated with jurisdictional systems, and requires whole-of-government planning to ensure health and other needs of those in quarantine are met.*

Recommendation 10:

General practitioners, community pharmacies and other primary care providers need to be better integrated into detailed plans at the national and jurisdictional level. To achieve this:

- (a) the role of general practitioners, pharmacists and other primary care providers needs to be clarified in preparedness plans following consultation with providers; and*
 - (b) the primary care annex of the Australian Health Management Plan for Pandemic Influenza should be published on the Department of Health and Ageing web as a priority.*
-

5.6 Emergency Response

Objective 6

To assess health care emergency response arrangements

5.6.1 Health emergency operation centres and incident rooms

Exercise Cumpston 06 provided an invaluable experience for those involved in health emergency response within national and jurisdictional health departments. It needs to be recognised that participating in the nationally coordinated response to health emergencies is relatively new for many health departments. *Exercise Cumpston 06* was the first occasion where national, jurisdictional and regional operations centres were activated in concert, and some gaps were apparent. Nonetheless, the exercise showed that clear structures for the coordination of the operational components of a pandemic response are in place, and that the system is adaptive and responsive. The DoHA NIR and various state, territory and regional health emergency operation centres were activated in accordance with response plans and underpinned by standard operating procedures.

The main activity provided the first test of the new NIR and its facilities, which was opened in September 2006. This new NIR is a much larger and better equipped facility than previous incident rooms in DoHA.

Around 50 staff were deployed to the NIR, many of whom had not previously worked on a major emergency or crisis. The exercise experience represented a significant investment in learning for many staff who worked well under pressure in a new and dynamic environment. The NIR adapted its processes during the course of the main activity as the operations team discovered more effective ways of operating and improving functionality. Each shift improved as knowledge of the processes increased. This experience provides a strong foundation from which to move forward and was replicated in many state and territory incident rooms

Evaluation of state and territory emergency response centres indicated there was overlap, duplication and confusion regarding roles, delegations and accountabilities. In many cases, incident room plans and standard operating procedures existed but many were in draft form and require development, especially in relation to specific operational details and role delegation arrangements. At some locations operating procedures were either non-existent or not available to staff who required them.

It is evident that plans and operating procedures in operations centres at all levels of government need to be refined and progressed to make them more functional and streamlined and more staff need to be familiar with them. This emerged as one of the most notable areas for improvement across many incident rooms.

Overall, command, control and coordination arrangements were not clear to all the players in some incident rooms across the nation. The role and functional relationship of state, territory and regional health emergency coordination centres and their interaction with the state and territory whole-of-government system also require clarification. Again, many of these arrangements are new and in some instances were tested for the first time during the main activity.

The main activity indicated the relationship between relevant state and federal legislation relating to emergency powers, including appropriate procedures to apply these powers, is cloudy and requires clarification. The jurisdictions have different sets of legislative powers for responding to public health emergencies which may hinder a coordinated national approach to a public health emergency (Recommendation 8 refers).

5.6.2 Information flow and operational communication

Communication flows between Commonwealth, state, territory and regional health emergency operations centres were sporadic, especially early in the main activity. Communications continued to resemble day-to-day business rather than emergency or disaster management operations. While the flow of information improved over the course of the exercise, further improvements can be made.

Similarly, communication between strategic decision makers and operational areas was not optimal. As noted in Section 5.2.1, notification of phase change was slow to filter down to the state, territory and regional emergency operational centres, resulting in confusion about the officially declared Australian 'phase' of the pandemic. This had practical implications, as some preparation and response at the operational level was phase dependent. Access to strategic level developments and information needs to be expedited and improved communication channels between the strategic and operational levels are required.

Information flow from whole-of-government briefings and other stakeholder forums was also sporadic and dependent on individual representatives. In many cases, key players were not available due to heavy meeting schedules and failure to delegate. This was a source of frustration to those at the operational level, and highlights the need to streamline committee structures and processes, as well as the need to develop succession arrangements when key players are unavailable.

The AHPC is well placed to establish a protocol for emergency operational communications between the decision-making and operational levels to ensure key decisions are communicated to all relevant stakeholders.

5.6.3 Surge capacity and strategic planning

The exercise demonstrated that DoHA would benefit from a formally designated planning team within the NIR, led by an officer at the SES level. Longer-term, proactive approaches need to be developed. Incident rooms around Australia were effective in reacting to exercise situations, but lacked a more strategic view of the pandemic as it unfolded.

Resources to deal with an emergency seemed to be strained to the point where the workload may not be sustainable during an escalating outbreak. At the Logan City Influenza Assessment Centre, for example, staff were often overloaded with administrative tasks. It was evident that greater diversity of staff would be required to deal with tasks such as administration, data entry and security during a pandemic event. Overall, it was not evident that health emergency operation centres would be able to scale up if necessary.

It should be noted that during the main activity agencies performed their normal functions, as well as those generated by the simulated scenario. In a real case situation priorities would be reordered to respond to the additional workload. Contingency planning also includes provision for other agencies to be called upon to provide surge capacity.

5.6.4 Training needs and future exercises

As some health departments are relatively new to emergency management, staff may benefit from additional skill development in emergency management.

Operational centre staff would benefit from further training and exercises that seek to refine how information technologies can support information management and decision-making processes, including the notification of operational staff of key strategic developments from committees.

The technical skills of people working in the NIR should be reviewed to ensure there is an adequate range of abilities, particularly in surge teams. One jurisdiction commented that more communicable disease experts should be located in the NIR during emergencies.

Exercise Cumpston 06 illustrated the value of exercises in training staff, in refining operational procedures and in identifying or testing existing as well as new or different ways of doing things. An ongoing program of exercises, encompassing DISCEX, drills and workshops is an integral part of exercise planning and preparedness.

The main focus of *Exercise Cumpston 06* was validating the containment strategy as outlined in the AHMPPI. The evolution to maintenance of essential services was considered at a DISCEX and by two national committees during the main activity. Given the complexity of the issues involved, and the need for a whole of government approach, the maintenance strategy should be a priority for future exercises.

Recommendation 11:

Procedures for health incident rooms and operations centres need to be reviewed to ensure seamless support for decision making and experience of command, control and coordination in emergencies are built in. Agencies should:

- (a) review their procedures for moving from normal policy formulation roles to emergency management operational roles;*
 - (b) revise or develop standard operating procedures for incident rooms and operation centres and ensure their compatibility and interoperability with the broader emergency management processes;*
 - (c) ensure these procedures clearly delineate emergency management roles, better articulate delegations and accountabilities and clarify functional relationships;*
 - (d) develop mechanisms for access to the outcomes of strategic decision making; and*
 - (e) ensure surge capacity for prolonged emergency operations and review the skill base of workers to ensure the required breadth of capabilities.*
-

Recommendation 12:

The exercise did not test Australia's whole-of-government capacity to respond over an extended period. Further work is needed to ensure responses can be sustained over a prolonged period through planning for workforce training and surge capacity, scenario-based contingency planning and a continuing program of pandemic preparedness exercises.

Exercise Lessons Learned

6

This section outlines the lessons learned in the design and conduct of *Exercise Cumpston 06*. It is intended to assist those conducting similar future exercises. The management of *Exercise Cumpston 06* and design of the main exercise activity are described in the Annex.

6.1 Exercise development

The exercise was conceived, prepared and conducted in eight months. Sufficient funds and resources were provided early which assisted PIET in providing on-time delivery, particularly of the preliminary activities. Delays in accessing an epidemiologist and public communications advisor for PIET exacerbated timing pressures. A longer preparation time would have allowed a more structured approach and permitted a more thorough validation and quality assurance process.

The number of preliminary activities in such a compressed time frame took some toll on the ability of policy makers to pin down important policy or operational issues before the live exercise. While the preliminary activities were invaluable in highlighting issues that needed clarification and/or were not going to be practical in a real life situation, the time spent planning and executing these activities, and the need for high level representation at most of them came at some cost to the ability of decision makers to act to address the issues that arose in the time available.

Nonetheless the exercise was delivered on schedule and many policy and operational issues were addressed in an expedited manner due to the intensity of pre-deployment activities.

A critical success factor was the creation of a detailed epidemiological picture. Participants were brought into the scenario through activities, linked to this epidemiology.

6.2 Jurisdictional involvement

Jurisdictions were actively involved from the beginning of the process. This allowed continuity of personnel which was a subsequent asset to the national Exercise Control Team as most of the jurisdictional representatives in the national Exercise Control had previously been members of the Writing Group. Where jurisdictional representation was not present, activity planning was less complete and did not permit rapid resolution of emerging issues.

6.3 Exercise control

The task of Exercise Control was labour intensive but was successfully managed due to the national structure and training provided. The presence of jurisdictional controllers in the national Exercise Control paired with facilitators in the states and territories and main activity areas, provided strong communication links to each activity area. The use of role players was successful as it allowed national exercise controllers to focus on exercise dynamics whilst permitting participants to access information without delay. So successful was the use of role players that some jurisdictions reported difficulty in gaining access to, at times, overloaded and 'multiple-roled' role players.

A pandemic situation will not appear suddenly, but will evolve over a period of time. For this reason, a lead in process was needed to avoid an overwhelming and unrealistic delivery of information to participants at the commencement of the 'live' phase of the main activity (Section 4.2.2 refers). There were some difficulties encountered with this approach, including uncertainty about the exact timing of activities during 'the long night' of 15 October (in reality from 28 September to 15 October). However, the lead-in approach was seen as worthwhile as the participants and national committees were able to become familiar with the emerging situation and commence preparations in accordance with the AHMPPI and NAP.

6.4 Observer program

Participants in the observer program (Annex refers) considered the main activity a significant event, both nationally and internationally:

- The scope of the activity was considered remarkable in its breadth.
- The support at the highest levels of government (first ministers and Federal Cabinet), Commonwealth and state and territory governments and private industry was considered outstanding.
- The commitment at all levels to learn about and improve processes was always evident.

The observer program was effectively organised and gave all participants the opportunity to experience the main activity from more than one vantage point: the NIR to the disembarkation of passengers at Brisbane Airport. The observers' inclusion at the field activities at Brisbane Airport and the Influenza Assessment Centre directly stimulated observations and feedback. The mix of participants, both international and national, allowed for a constructive exchange of views and practical experiences.

The presentations to the observers were informative and their questions responded to openly and fully. The international participants would have benefited, however, from background information on Australia's complex, and in some cases unique,

health system beforehand, especially as English was not the first language for a number of participants.

There was a degree of frustration with the group's lack of knowledge of the exercise's progress over the course of the four days. Some felt that this made it harder to fully engage and contribute their expertise to the exercise. Update briefings (either once or twice a day) would have assisted the observers to develop a better appreciation of the significance of the various exercise events.

6.5 The lessons

The *Exercise Cumpston 06* experience highlighted the importance of:

- allowing a minimum 12 months development time;
- involving subject matter experts, such as epidemiologists and medical officers at an early stage;
- ensuring jurisdictional representation in the planning and conduct;
- balancing the number of preliminary activities that identify new policy issues with the work required to develop a firm position on new and existing policy issues;
- considering the *Exercise Cumpston 06* exercise control structure as a model; and
- structuring observer programs to give participants the opportunity to directly observe or be briefed on all exercise activities.

Conclusion



Exercise Cumpston 06 was an extremely complex exercise that involved the participation and cooperation of many diverse organisations. It was able to examine and gain insight into its six objectives through a well planned and managed program of activities, both in the main activity and preliminary DISCEX and workshops.

The exercise confirmed the capability of the Australian health system to prevent, detect and respond to a pandemic, albeit the capacity to sustain a response was not fully tested. Not everything went according to plan, but when this was the case there were invaluable insights and lessons.

The observations made, and lessons noted, represent a significant investment in learning and provide a sound platform on which to move forward. Solutions to the gaps identified can be implemented with the degree of cooperation and commitment that was demonstrated in the exercise by all participants.

The resources expended have ensured that Australia is better prepared than ever to respond effectively to a pandemic, whether it is a human form of the bird flu virus H5N1, a new influenza strain or other major infectious disease outbreak. International observers noted that Australia is as prepared as, or better prepared than, comparable countries for an influenza pandemic.

The outcomes have also been invaluable in improving Australia's preparation for a range of other large-scale health emergencies.

It is important that the impetus gained from *Exercise Cumpston 06* be maintained. Australia's preparedness for an influenza pandemic is part of the global effort and we must remain vigilant.

Annex – Managing *Exercise Cumpston 06*

Management and governance

The Pandemic Influenza Exercise Taskforce (PIET) was established within the OHP of DoHA in February to coordinate and support planning, management and evaluation. The Taskforce was led by an Executive Director, supported by a Chief Controller, Chief Evaluator and Director, Media and Communications. Seventeen staff were engaged at the peak of exercise activity, including officers seconded from other agencies and contracted from the private sector to provide technical expertise.

While overall management responsibility rested with the OHP, groups were established to enable stakeholders to participate in decision making and to contribute in planning and conducting the exercise. The groups included the:

- **Steering Group**, with membership, at the Deputy CEO level, from Commonwealth coordination and operational agencies and two states (Queensland and NSW). It provided overall direction.
- **Management Group**, with membership, at program manager level, reflecting the Steering Group plus other Commonwealth agencies and all states and territories. Its charter included implementing Steering Group decisions, managing operations and ensuring coordination, as well as addressing policy issues as they arose.
- **National Writing Group**, comprising technical experts from Commonwealth, state and territory governments. It developed detailed and coherent operational scenarios and scripts that would stand up to rigorous scrutiny.
- **Public Communications Group**, comprising communications experts from Commonwealth, state and territory government agencies. It was responsible for communications aspects of the exercise.

Budget

The Commonwealth Government allocated \$4.1 million over two years for the exercise. As well as meeting the Commonwealth's costs, the budget provided for reimbursement of agreed costs incurred by the states and territories over and above their core activities in responding to a pandemic. Private sector partners, such as QANTAS Airways and the Brisbane Airports Corporation, contributed facilities including an aircraft and use of Brisbane International Airport, as well as logistical and technical expertise.

Observer program

Exercise Cumpston 06, as the first major test of a health system to respond to a pandemic involving human-to-human transmission, attracted a significant interest by international and domestic stakeholders.

Accordingly, sharing the lessons was an important aspect of preparations. Information on the exercise, including the project plan, evaluation strategy and links to the revised AHMPPI was published at an early stage on the exercise website (<http://www.health.gov.au/pandemic>).

Representatives of international agencies, such as the WHO, Asia Pacific Economic Cooperation (APEC) and the United Nations' System Coordinator for Influenza were invited as observers to enable them to draw on the outcomes in developing the global response and to disseminate information to their member states.

Twenty countries were invited to participate in the observer program. Countries were invited having regard to criteria such as their preparedness initiatives, the contribution they could make to *Exercise Cumpston 06* and Australia's overseas aid priorities in relation to pandemic preparedness. Australia's overseas aid agency, AusAID, contributed funding to meet travel and accommodation costs of participants from developing countries.

Representatives of ten national organisations were invited having regard to functions performed by their members. They included GP, pharmacist, nurse, local government and health service consumer bodies. Australian academics whose work is contributing to preparedness planning also participated.

The observer program included briefings on the global situation provided by representatives of international health agencies. Briefings on Australia's health system outlined jurisdictional roles and responsibilities, while academic participants provided information on recent research that underpins the revised AHMPPI.

Participants observed decision making and coordination of the national response in Canberra and travelled to Queensland to assess border measures to manage the aircraft arrival and simulated outbreak scenarios in the community.

Observer numbers were limited to a maximum of fifty to avoid distracting from the actual exercise, resource constraints and logistical limitations at exercise venues.

The observers experienced *Exercise Cumpston 06* as a group to enable them to compare their observations and share information about their countries' or organisations' preparedness activities. The observers contributed to the evaluation in structured debriefing sessions and, subsequently, by providing written reports on their assessment.

The observer program was evaluated to assess its value and provide information for future exercises (Section 6.4 refers).

Public communications

A public communications strategy was developed specifically for *Exercise Cumpston 06*. As well as covering the 'pseudo' media within the exercise, it provided the framework to manage the extensive 'real' media interest and to address any public anxiety or confusion.

The Australian and international media provided extensive coverage which was overwhelmingly positive. It included:

- **Supportive media releases.** Most state and territory health ministries or departments issued media releases. Some also conducted media events to publicise their own pandemic preparedness measures. In addition, the Australian Medical Association and the Royal Australian College of General Practitioners issued media releases or articles promoting their involvement.
- **Print Media.** A total of 27 news stories appeared in the Australian print media, including all major daily newspapers.
- **Radio Coverage.** 233 radio news bulletins and interviews were broadcast in all states and territories. Regional and rural radio networks provided extensive coverage.
- **Television:** 14 news stories were broadcast on Australian television. Television news stories were also syndicated to 76 regional and rural television stations. ABC National TV news presented a comprehensive report of the Brisbane Airport activity, on its 7.00pm national news that was replicated in most states and territories. National TV news broadcasts were also provided by Channel 7 and Sky News Australia.
- **International Media:** Major international news organisations that provided coverage included NHK (Japanese Broadcasting Corporation), the People's Daily in the People's Republic of China, the Voice of America and US-based wire services. Health news websites in Canada, the United States and India also provided coverage.
- **Wire Service Coverage:** The Australian Associated Press national news wire service distributed 11 wire stories.

Evaluation

An evaluation strategy was developed at an early stage to ensure the exercise was designed to robustly test its objectives and produce valid results.

The strategy provided for the validation of components, including endorsement of the scenario by the Steering and/or Management Groups, development of exercise inputs by a multidisciplinary team and review by internal and external technical experts. Exercise participants, observers, and evaluators were also invited to comment on the credibility of the scenario and conduct of the exercise.

Each of the seven preliminary activities was evaluated by a team of four, comprising independent observers and observers with knowledge of the subject areas. The approach was intended to ensure both the integrity of the evaluation process and subsequent conclusions and recommendations.

The evaluation framework for the main activity comprised three elements:

- the six national objectives to assess aspects of the AHMPPI, the NAP and state and territory preparedness plans;
- a set of performance indicators for each objective with examples of evidence to assist the evaluators assess performance against the indicators; and
- a consistent set of basic reporting questions for all objectives (what worked well, what could be improved, and how improvements could be implemented).

Generic checklists were used to collect and record evidence against the performance indicators for each objective. The checklists were developed for each type of activity or location, for example, airport arrivals, influenza assessment centres, home quarantine and public communications.

Seventy evaluators participated in a training program before being allocated to exercise sites across Australia to observe activities. Information was also obtained through post activity, agency, jurisdictional and national debriefings.

The Exercise Taskforce was assisted by officers of the Defence Systems Analysis Division of DSTO, who contributed technical expertise to assist with the design of evaluation tools and assigned a team of ten evaluators to assist with the conduct of the evaluation.

The Australian National Audit Office observed the exercise as part of a performance audit of preparedness and response arrangements to an outbreak influenza pandemic in humans.

Exercise Conduct (Main Activity)

Exercise control

National

The main activity was managed by the Exercise Chief Controller, supported by the Exercise Control Team comprising national and jurisdictional facilitators and controllers (Figure 3). The Team worked from the national Exercise Control room located within DoHA in Canberra. It included personnel from relevant Commonwealth agencies and each state and territory. Their responsibilities included coordination, communication, documentation and media management.

The Exercise Control Team communicated with facilitators and evaluators, monitored progress, determined when corrective action (such as new exercise inputs) was required and provided the materials to enable facilitators to bring the exercise back on track when necessary.

Queensland

A separate Exercise Control was established in Brisbane to manage the Queensland components of the main activity. Located in DoHA's Queensland office, it coordinated facilitation and evaluation at all locations. Each Queensland location and activity, including whole-of-government decision making and public communications, had facilitators and evaluators who had been trained and briefed in the exercise requirements.

Exercise Control in Queensland acted as a conduit for control information between exercise locations and the national Exercise Control in Canberra. It also acted as the controlling and coordinating link between locations.

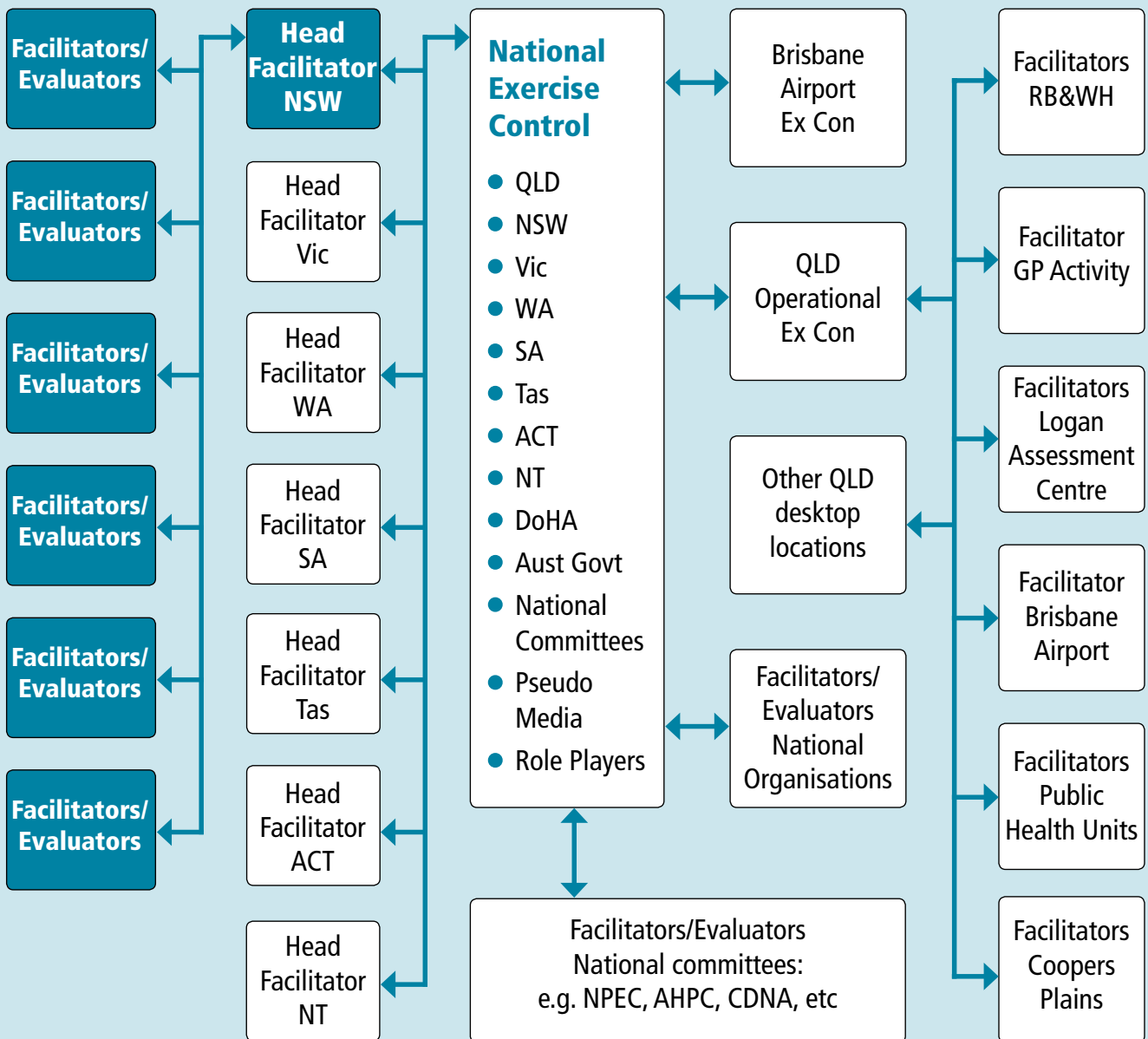
Exercise facilitators and evaluators

Each jurisdiction appointed a head facilitator and head evaluator and additional facilitators and evaluators for sites, functions and decision-making bodies activated during the main activity. In addition, facilitators and evaluators were appointed for all national decision-making committees. In some cases facilitation and evaluation tasks were performed by the same person.

The role of some 30 exercise facilitators was to provide briefings and debriefings for exercise players, provide exercise inputs, monitor progress of the exercise, ensure actions expected from exercise inputs were completed, liaise with the Exercise Control Team, and solve problems arising during the exercise.

The role of 70 exercise evaluators was to observe exercise players, note actions taken against expected actions, assess the performance of systems and personnel, and prepare a report on exercise play in their location.

Figure 3: Design of exercise control



Exercise participants

Around 800 exercise participants were required to perform a range of tasks in response to unfolding events. They included personnel in the Commonwealth, state and territory government agencies that would respond to a real pandemic situation.

Exercise participants worked in their designated incident or operations centres or other normal work areas and responded to exercise inputs. They used their initiative and performed their tasks as they would during an actual pandemic response. Responsibilities of participants are described in the relevant health and emergency response plans and manuals.

Role players

Role players were engaged to represent specific people, companies, and other entities. They included 155 passengers on the flight from Acamar which arrived at Brisbane airport on 17 October and 20 relatives and friends awaiting their arrival. Five of the passengers were transferred to the RBWH. Fifty role players attended the Influenza Assessment Centre at Logan City on 18 October.

A team of 27 role player journalists (pseudo-media) was assembled to test media officers via a series of media questions and requests for information. Senior media officers from Commonwealth, state and territory government agencies and the New Zealand Ministry of Health played the roles of the pseudo media. Of these, 15 were located in Canberra and 12 in the states and territories.

The role players added realism to the main activity.

Briefings and debriefings

Head facilitators conducted a briefing and debriefing with facilitators in their jurisdiction each day before the commencement of the exercise and at the completion of each day's activity.

National Exercise Control conducted daily briefings and debriefings with head facilitators each morning and afternoon of the main activity.

A national debriefing was conducted on 31 October and 1 November 2006 involving invited national and jurisdictional stakeholders. It addressed both the policy outcomes and conduct of the exercise.

Exercise control documentation and databases

Exercise instructions

Exercise instructions were prepared to provide Exercise Control staff with generic exercise information and general instructions. The instructions comprised 24 annexes, including the Master Events List (MEL), preliminary information pack, scheduled inputs, profiles and sequence of events.

Master Events List (MEL)

The MEL was based on the scenario and described timings of events and associated exercise inputs. The MEL was constructed and controlled through a Microsoft Access database designed by PIET. The database, which contained over 1000 entries, facilitated event time management and manipulation of scenario data, providing national Exercise Control with the ability to easily extract subsets of information in a variety of formats.

The MEL was used by national Exercise Control in Canberra to manage exercise events. MEL distribution was restricted to head facilitators in each jurisdiction and the facilitators of national committees.

Profile database

The profile database provided the main resource for role players. It contained detailed scripts and information for characters and other entities mentioned in the MEL. It was used both to provide inputs at a scheduled time to a specified location, and in response to participant enquiries.

The profile database was designed by PIET to facilitate rapid access to profile information. It provided a simple user interface which allowed role players to readily access information pertinent to their roles.

Public communications instructions

A series of face-to-face and telephone briefings was held by the PIET public communications team in September and October 2006 to provide detailed instructions to communications exercise participants. Printed materials and a DVD on the national pandemic communications response and the exercise scenario were presented to ensure all participants were informed about the scenario and their expected roles.