
The Parliament of the Commonwealth of Australia

Diseases have no borders

Report on the inquiry into health issues across international borders

House of Representatives
Standing Committee on Health and Ageing

March 2013
Canberra

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Foreword

The movement of people across international borders is increasing rapidly.

As the numbers travelling to and from Australia rises, so too does the risk for transmission of infectious disease across international borders. One thing is certain: infectious diseases do not respect international borders. What is less certain is whether Australia is equipped to respond to emerging infectious disease threats of national concern.

Infectious diseases take many forms and spread in many different ways. In a rapidly changing environment, it is difficult to predict when the next pandemic will occur, how severe it will be or how long it will last. Based on available evidence, countries around the world, including Australia, are preparing to respond to another influenza pandemic. Other emerging disease threats of national and international concern are slower to progress, but equally of concern to infectious disease experts. Such threats include the emergence of antimicrobial resistant diseases both in Australia and abroad, such as multi-drug resistant tuberculosis in Papua New Guinea. In this inquiry, the Committee considered how Australia responds to the challenges posed by emerging infectious disease threats. The Committee reviewed health screening measures implemented at Australia's borders; Australia's ability to respond to a national or global health crisis; and Australia's role in controlling the spread of infectious disease within the Asia-Pacific region. The Committee also considered the porous border between the Torres Strait Islands and Papua New Guinea, and how this impacted on Australia's ability to control the spread of infectious disease from international sources.

Lastly, the Committee debated a question looming large among infectious disease experts in Australia – should Australia have a national centre for communicable disease control? In attempting to answer this question, the Committee considered what role such a centre would play, what structure the centre could take, and how such a centre could improve national oversight of infectious disease issues.

On behalf of the Committee, I extend thanks to all of the roundtable participants. Your insights and knowledge of emerging disease threats in Australia was invaluable in assisting the Committee with its inquiry.

The Committee thanks representatives of DIAC, the Christmas Island Hospital and IHMS for providing the Committee with a tour of the health facilities at the hospital and within the immigration detention centres on Christmas Island. A number of these individuals also took time away from their busy schedules to participate in the roundtable discussion.

The Committee also thanks the Administrator of the island, Mr Jon Stanhope, Councillor Kelvin Kok Bin Lee and other representatives of the Shire of Christmas Island for their assistance regarding the Committee's visit to the island and participation in this inquiry.

Ms Jill Hall MP
Chair



Membership of the Committee

Chair Mr Steve Georganas MP (*to 27/11/12*)

Ms Jill Hall MP (*from 27/11/12*)

Deputy Chair Mr Steve Irons MP

Members Mr Mark Coulton MP

Mr Geoff Lyons MP

Ms Deborah O'Neill MP

Mr Ken Wyatt MP

Committee Secretariat

Secretary Dr Alison Clegg

Inquiry Secretary Ms Renee Toy

Research Officer Ms Belynda Zolotto

Administrative Officers Ms Fiona McCann

Ms Kathleen Caruso



Terms of reference

Increasing globalisation and climate change pose unique challenges for population health. Growing global interconnectedness and close proximity to regional neighbours increases Australia's exposure to imported infectious diseases and to the risk of epidemic or pandemic disease outbreaks.

Recognising the need to protect Australians, the Committee will inquire into and report on screening, surveillance and control practices for infectious diseases, with a particular focus on:

- a) screening, surveillance and control processes that are applied to:
 - i. Australians travelling to and returning from overseas;
 - ii. international visitors entering Australia, including asylum seekers;
- b) Australia's preparedness to respond to a national or global health crisis involving the spread of infectious disease, including:
 - i. how Australia's planning processes compare with World Health Organisation standards and recommendations;
 - ii. how Australia plans and manages drug and vaccine stockpiles to respond to epidemic or pandemic infectious disease outbreaks;
 - iii. Australia's role and responsibility for coordinating with regional neighbours and other countries to prepare for and respond to the threat of epidemic or pandemic infectious disease outbreaks.

In examining each of these issues, the Committee will consider the roles and responsibilities of Commonwealth, state and non-government agencies and coordination of their activities.



List of recommendations

2 Infectious disease policy framework

Recommendation 1

The relevant government agencies that have a significant role in managing the biosecurity threat develop a coordinated approach which addresses the health threats to Australians and recognises the impact on the economy.

3 Screening, surveillance and control of infectious disease

Recommendation 2

The Department of Health and Ageing review the existing evidence base to evaluate the cost-effectiveness of its policy to use heat scanners at ports of entry as a measure to mitigate the risk of infectious disease importation.

Recommendation 3

The Australian Department of Health and Ageing work with the states and territories to provide a uniform notifiable diseases list across Australia, with consistent reporting requirements across each state and territory and consistent public health information on infectious diseases disseminated to the public. This work should be a priority of Australian Health Ministers' Advisory Council (AHMAC).

Recommendation 4

The Australian Government work with the state and territory governments to assess the viability of providing a centralised refugee and migrant health service in each state and territory, which would automatically refer people who move from immigration detention into the wider Australian community.

Recommendation 5

The Royal Australian College of General Practitioners provide resources and training to general practitioners on the complex health needs of migrants and refugees, with a focus on identifying infectious diseases which are notifiable in Australia, or diseases which are of specific concern to refugee and migrant communities.

Recommendation 6

The Australian Government, coordinated by the Department of Health and Ageing and in consultation with the wider Australian community, develop a national public awareness campaign to better inform and engage the travelling public about infectious disease issues.

This campaign should cover the risks associated with travelling overseas, preventative measures that can be undertaken to minimise these risks, and screening measures used at the border to prevent the importation of infectious disease.

Subject to consumer input and feedback, this campaign could include a range of materials and platforms, including:

- videos, which could be published via YouTube, Smartraveller, international flights and/or other relevant access points;
- reading material such as brochures which can be provided at travel agencies, passport offices, on international flights and other relevant access points; and
- targeted ongoing engagement with consumers via social media and on travel websites.

4 International cross-border issues

Recommendation 7

Having regard to the terms of the Torres Strait Treaty, the Department of Health and Ageing, Queensland Health, AusAID and the Papua New Guinea Government:

- establish a set of protocols and procedures for the identification and treatment of tuberculosis and other infectious diseases in Papua New Guinea and the Torres Strait Islands; and
- consider what clinical services should be available in both Papua New Guinea and Australia for the identification and treatment of tuberculosis and other infectious diseases.

Recommendation 8

The National Health and Medical Research Council, in conjunction with key stakeholders, work collaboratively to provide more support for initiatives to increase international infectious disease research collaborations and build research capacity, particularly with neighbouring countries in the Asia-Pacific region.

5 Pandemic planning and preparedness

Recommendation 9

The Australian Government test Australia's ability to respond to a widespread outbreak of infectious disease other than influenza, by undertaking a pandemic exercise across the relevant Commonwealth, state and territory government agencies.

Recommendation 10

The Australian Government, in consultation with consumers and other relevant federal, state and territory agencies, develop a national communication strategy for consumers to be used in the event of an infectious disease outbreak.

Recommendation 11

The Australian Department of Health and Ageing consult with members of the general public or representatives of health consumers in the pandemic planning process, including in pandemic exercises designed to test the ability of government to respond to a pandemic event. Consumer involvement should include testing the ability of any communication strategy designed to inform and engage consumers about a pandemic event.

Recommendation 12

The Commonwealth Government support the growth of vaccine development and production capacity for vaccines in Australia, to enhance Australia's preparedness to respond to outbreaks of infectious disease in Australia, and in particular, pandemic influenza.

Recommendation 13

The Australian Government coordinate the development of a highly skilled workforce which can respond effectively to a sustained pandemic in Australia.

6 Does Australia need a national centre for communicable disease control?

Recommendation 14

The Australian Government, in consultation with state and territory governments, conduct a comprehensive national audit and mapping exercise to:

- identify all of the agencies (not limited to those within the health portfolio) and expert committees/working groups involved in managing infectious disease risks;
- clarify roles, responsibilities and map hierarchies and lines of communication;
- identify all relevant infectious disease policies and plans, explain how these operate in relation to one another;
- identify any duplication and present options for streamlining; and
- identify any policy or response gaps that need to be addressed.

The outcomes of the audit and mapping exercise should be made publically available.

Recommendation 15

The Australian Government, in consultation with state and territory governments, commission an independent review to assess the case for establishing a national centre for communicable disease control in Australia.

The review should outline the role of a national centre and how it might be structured to build on and enhance existing systems. It should examine different models, considering a range of options for location, governance and staffing. The review should incorporate a cost-benefit analysis for each of the models presented.

The outcomes of the review should be made publically available.

Many issues are realised when dealing with complex infection challenges across borders. We need to remember that with infectious diseases we are dealing with something a little bit different to other areas in the health sector. We are dealing with the intersection of the environments and the lifelines of at least two different organisms. This creates complexity.¹

Background to the inquiry

A globalised society

1.1 In an increasingly globalised society, protecting Australians from the spread of infectious disease across international borders is a complex task for the Commonwealth Government, state governments, non-government entities, and individual consumers.

1.2 The Department of Health and Ageing (DoHA) told the Committee that international travel is on the rise:

International movement of people is becoming easier, quicker and increasingly desired by the people of the rapidly growing economies of Asia. The volume of arrivals into Australia through air travel is forecast to increase by 22.7 per cent over the next five years.²

1.3 Due to its proximity to neighbouring countries and the nature of the border between the Torres Strait Islands and Papua New Guinea,

1 Professor Adrian Sleight, Professor of Epidemiology and Population Health, Australian National University, *Official Committee Hansard*, Canberra, 25 May 2012, p. 2.

2 Ms Megan Morris, First Assistant Secretary, Office of Health Protection, Department of Health and Ageing (DoHA), Transcript of Evidence, Canberra, 20 March 2012, p. 1.

Australia faces a unique challenge in preventing exposure to imported infectious diseases and epidemic or pandemic disease outbreaks.

- 1.4 Professor Tania Sorrell, of the Sydney Institute for Emerging Infectious Diseases and Biosecurity, told the Committee:

When we think about emerging infectious diseases within Australia, we are thinking about what we can do within our own borders—to detect them, to control them et cetera. But we need to recognise that the Asia-Pacific region is quite an important incubator for emerging infectious diseases and for increasing antimicrobial resistance.³

What is infectious disease?

- 1.5 ‘Infectious’ means ‘capable of spreading disease or a disease that is capable of spreading (also known as communicable)’.⁴

- 1.6 In this inquiry, the terms ‘infectious disease’ and ‘communicable disease’ are used interchangeably.

- 1.7 According to the World Health Organization (WHO):

Infectious diseases are caused by pathogenic microorganisms, such as bacteria, viruses, parasites or fungi; the diseases can be spread, directly or indirectly, from one person to another.⁵

- 1.8 An outbreak of an infectious disease could be triggered by a range of factors, including poor population health, poor hospital and medical procedures, contamination of water and food supplies, international travel and trade, and changing climatic conditions.⁶

3 Professor Tania Sorrell, Director, Sydney Institute for Emerging Infectious Diseases and Biosecurity, *Official Committee Hansard*, Canberra, 25 May 2012, p. 4.

4 Australian Health Management Plan for Pandemic Influenza, updated December 2009, <http://www.flupandemic.gov.au/internet/panflu/publishing.nsf/Content/ahmppi-2009-l>, viewed on 7 January 2013, p. 90.

5 World Health Organization, *Infectious Diseases*, http://www.who.int/topics/infectious_diseases/en/, viewed on 27 February 2013.

6 Prime Minister's Science, Engineering and Innovation Council (PMSEIC) Expert Working Group, *Epidemics in a Changing World*, 5 June 2009, <http://www.innovation.gov.au/Science/PMSEIC/Pages/PapersandPublications.aspx>, Appendix B Tabled document 5.

- 1.9 An epidemic is 'an outbreak or unusually high occurrence of a disease or illness in a population or area'.⁷ A pandemic is an 'epidemic on a global scale'.⁸
- 1.10 Professor Adrian Sleigh, of the Australian National University, told the Committee that infectious disease outbreaks are complex:
- The situation may be quite unstable and expansive, creating an explosive epidemic such as when we were confronted with SARS and avian influenza, or it may be stable and constrained and be a habitually present problem like tuberculosis in Papua New Guinea. It often has an ecological dimension and often involves predilection for people in poor situations, so that the poor are particularly afflicted.⁹
- 1.11 Infectious disease outbreaks of recent or current global concern include:
- Avian Influenza (referred to as H5N1 or bird flu) – first infected humans in 1997 and continues to pose a threat to public health¹⁰
 - Severe Acute Respiratory Syndrome (SARS) outbreak – 2003¹¹
 - Pandemic influenza (referred to as H1N1 or swine flu) – 2009¹²

7 Department of the Prime Minister and Cabinet, *National Action Plan for Human Influenza Pandemic*, p. 19, <http://www.dpmc.gov.au/publications/pandemic/index.cfm> viewed 7 January 2013.

8 Department of the Prime Minister and Cabinet, *National Action Plan for Human Influenza Pandemic*, p. 19, <http://www.dpmc.gov.au/publications/pandemic/index.cfm> viewed 7 January 2013.

9 Professor Adrian Sleigh, Professor of Epidemiology and Population Health, Australian National University, *Official Committee Hansard*, Canberra, 25 May 2012, p. 2.

10 World Health Organization, *Avian Influenza*, http://www.who.int/mediacentre/factsheets/avian_influenza/en/index.html viewed 26 February 2013.

11 World Health Organization, *Severe acute respiratory syndrome (SARS)*, http://www.who.int/csr/don/archive/disease/severe_acute_respiratory_syndrome/en/index.html viewed on 11 February 2013. See also Department of Health and Ageing, *Severe acute respiratory syndrome (SARS)*, <http://www.health.gov.au/internet/main/publishing.nsf/Content/health-sars-index.htm> viewed 11 February 2013.

12 Department of Health and Ageing, *History of pandemics*, <http://www.flupandemic.gov.au/internet/panflu/publishing.nsf/Content/history-1#2009> viewed 11 February 2013. See also *Pandemic (H1N1) 2009*, <http://www.who.int/csr/disease/swineflu/en/index.html> viewed 11 February 2013.

Adoption of inquiry

- 1.12 One of DoHA's primary objectives in 2010-2011 was:
- ... [to] strengthen the nation's capacity to identify, monitor and implement effective and sustained responses to health threats or emergencies, thereby protecting public health. This includes mass casualty events, communicable disease outbreaks, terrorism, natural disasters and environmental hazards.¹³
- 1.13 After reviewing DoHA's 2010-2011 annual report, the Committee resolved, pursuant to Standing Order 215(c), to inquire into and report on *Health issues across international borders*.
- 1.14 To support its inquiry, the Committee convened a series of roundtable discussions to learn about the challenges for population health in Australia.
- 1.15 The Committee reviewed Australia's screening, surveillance and control practices for infectious diseases, having regard to the roles and responsibilities of Commonwealth, state and territory governments and non-government entities, and coordination of their activities in Australia and across regional borders.
- 1.16 Terms of Reference for the inquiry (p. x) were developed to encourage wide-ranging discussion and to allow full exploration of all relevant issues.

Related inquiries

Delegation to Papua New Guinea and the Solomon Islands

- 1.17 On Thursday 18 March 2010, the Australian Parliamentary Committee Delegation to Papua New Guinea and the Solomon Islands tabled its report on the roundtable forum on regional health issues entitled *Regional health issues jointly affecting Australia and the South Pacific*.¹⁴
- 1.18 The report detailed a visit by a delegation of members from the House of Representatives Standing Committee on Health and Ageing, to Papua New Guinea (PNG) and the Solomon Islands, where discussions

13 Department of Health and Ageing, *Annual Report 2010-2011*, p. 327.

14 House of Representatives Standing Committee on Health and Ageing (HAA), *Regional health issues jointly affecting Australia and the South Pacific: Report of the Australian Parliamentary Committee Delegation to Papua New Guinea and the Solomon Islands*, March 2010, http://www.apph.gov.au/Parliamentary_Business/Committees/House_of_Representatives_Committees?url=haa/./pacifichealth/report.htm

canvassed a range of regional health issues jointly affecting Australia and the South Pacific.

1.19 Chair of the delegation, Mr Steve Georganas MP, observed:

The delegation afforded a unique and valuable opportunity for parliamentarians to learn more about the health system and health services delivery in neighbouring countries and to strengthen the bilateral relationship with two countries with which we have longstanding and important ties.¹⁵

1.20 A number of infectious disease issues facing the Torres Strait Islands, PNG and the Solomon Islands were identified during the visit. The Committee considered Australia's role in preventing the spread of infectious disease within these countries and across regional borders, noting the frequent cross-border movements between PNG and the Torres Strait Islands, and Australia's proximity to PNG and the Solomon Islands.

1.21 The Committee determined to explore these themes further as part of the current inquiry into *health issues across international borders*, with a focus on the infectious disease issues faced by PNG and the Torres Strait Islands, and the impact of free movement of people between these regions.

Senate inquiry into antimicrobial resistance

1.22 On 29 November 2012, the Senate referred the following matter to the Senate Finance and Public Administration Committees for inquiry and report: *Inquiry into the progress in the implementation of the recommendations of the 1999 Joint Expert Technical Advisory Committee on Antibiotic Resistance*.

1.23 Terms of Reference to the inquiry are:

- Progress in the implementation of the recommendations of the 1999 Joint Expert Technical Advisory Committee on Antibiotic Resistance, including:
 - ⇒ examination of steps taken, their timeliness and effectiveness;
 - ⇒ where and why failures have occurred;
 - ⇒ implications of antimicrobial resistance on public health and the environment;
 - ⇒ implications for ensuring transparency, accountability and effectiveness in future management of antimicrobial resistance; and
 - ⇒ any other related matter.

15 HAA, *Regional health issues jointly affecting Australia and the South Pacific: Report of the Australian Parliamentary Committee Delegation to Papua New Guinea and the Solomon Islands*, March 2010.

- 1.24 The Committee notes that the subject of antibiotic resistance and its implications for the public health of Australians has been canvassed during the course of this inquiry, in the broader context of learning about the challenges for population health in Australia.
- 1.25 Although the Committee has considered antibiotic resistance during this inquiry (particularly in relation to tuberculosis), it does not propose to separately discuss this in detail.
- 1.26 The Committee notes that the Senate Committees on Finance and Public Administration is due to report on 10 May 2013.¹⁶

Conduct of inquiry

- 1.27 On 20 March 2012, the DoHA provided the Committee with a private briefing on international cross border health initiatives. The Committee subsequently authorised the publication of the transcript of this briefing, so that the evidence could be utilised in this inquiry.
- 1.28 The Committee conducted a series of public roundtable discussions for this inquiry:
- Friday, 25 May 2012, Canberra;
 - Thursday, 2 August 2012, Cairns;
 - Wednesday, 8 August 2012, Perth;
 - Friday, 24 August 2012, Canberra; and
 - Wednesday, 21 November 2012, Christmas Island.
- 1.29 On 21 November 2012, the Committee also undertook inspections of the health facilities at the Christmas Island Hospital and the immigration detention centres on Christmas Island.
- 1.30 The Committee did not call for written submissions, but instead relied upon the evidence provided during the roundtable discussions. Participants included infectious disease physicians and nurses, medical practitioners, epidemiologists, microbiologists and academics from various related fields, Commonwealth public servants and representatives of relevant peak bodies.
- 1.31 A full list of roundtable discussions and participants is outlined at Appendix A.

16 Australian Parliament House, *Senate Standing Committees on Finance and Public Administration*, http://www.apf.gov.au/Parliamentary_Business/Committees/Senate_Committees?url=fapa_cte/index.htm viewed on 5 March 2013.

- 1.32 During the roundtables, some participants provided the Committee with additional documents, including discussion papers, research material and other relevant reports.
- 1.33 A full list of these documents is outlined at Appendix B.

Committee comment

- 1.34 The Committee chose to receive evidence to this inquiry via a series of roundtables held in various locations around Australia, rather than calling for written submissions.
- 1.35 Participation in the roundtable discussions was by invitation from the Committee.
- 1.36 The Committee thanks all of the individuals and agencies who participated in the roundtable discussions for their valuable contribution.
- 1.37 The Committee heard from a range of infectious disease experts during the roundtable discussions. The format was designed to encourage interactive discussion between participants on a wide range of pertinent issues.
- 1.38 Given the breadth of this inquiry, the Committee did not intend that the evidence gleaned from these roundtables would cover the field. The Committee appreciates that there are many other government agencies, non-government organisations and individuals around Australia who could have made a valuable contribution to the roundtable discussions.
- 1.39 The Committee did not seek to identify all infectious disease issues of relevance to Australians in this report. References to infectious diseases were intended to illustrate some of the issues, rather than forming an exhaustive list of diseases to be managed in Australia and across international borders.
- 1.40 Due to time and resource constraints, the Committee was not able to conduct roundtable discussions in all Australian states and territories. Accordingly, this report is not illustrative of all infectious disease issues faced in each jurisdiction across Australia.

Structure of the report

- 1.41 This report comprises six chapters.
- 1.42 Chapter 2 sets out the policy framework upon which this inquiry is based, including an outline of the role of relevant Commonwealth agencies in developing and administering public health policies related to infectious disease issues.

- 1.43 Chapter 3 discusses the screening, surveillance and control of infectious disease in Australia and across international borders, including a review of border control measures and health screening of travellers, migrants, refugees and asylum seekers arriving in Australia.
- 1.44 Chapter 4 identifies international cross-border issues, including the challenges posed by the Torres Strait-Papua New Guinea border, and Australia's role in assisting neighbouring countries respond to emerging infectious disease threats.
- 1.45 Chapter 5 discusses Australia's preparedness to respond to a national or global health crisis involving an infectious disease outbreak on an epidemic or pandemic scale.
- 1.46 Chapter 6 considers how Australia manages infectious disease issues at a Commonwealth, state and territory level, and how these issues are coordinated across portfolios and between the tiers of government. The Committee considers whether a national centre for communicable disease control is needed.

Infectious disease policy framework

- 2.1 The way in which the Commonwealth Government and state and territory governments respond to threats of imported infectious disease is influenced by a global policy framework, led by the World Health Organization (WHO).
- 2.2 The Commonwealth plays an important role in coordinating public health at a national level. Although the Department of Health and Ageing (DoHA) has a coordination role, there are also a number of Commonwealth agencies in other portfolios that are likely to be involved in responding to an outbreak of infectious disease.
- 2.3 As part of Australia's constitutional arrangements, states and territories have primary responsibility for public health issues, including identifying, treating and controlling infectious diseases in their jurisdiction.¹ Each state and territory operates under its own public health legislation.
- 2.4 These three policy frameworks are discussed in further detail below, with the main focus of this inquiry being the national management of infectious disease issues.

Global policy framework

- 2.5 In its response to infectious disease threats from international sources Australia aims to follow the global public health framework. This

¹ Ms Megan Morris, First Assistant Secretary, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 25 May 2012, p. 49.

framework underpins pandemic planning in Australia and the surveillance activities that are undertaken nationally.²

- 2.6 Australia is an active member of the WHO. The WHO provides a framework for discussions between countries regarding public health issues of global importance. Through the WHO, Australia has committed to various initiatives which aim to prevent the spread of infectious disease across international borders, including the:
- International Health Regulations; and
 - Millennium Development Goals³

International Health Regulations (IHR)

- 2.7 As a member of the WHO, Australia is a signatory to the International Health Regulations (IHR), an international legal instrument which aims to:
- ... help the international community prevent and respond to acute public health risks that have the potential to cross borders and threaten people worldwide.⁴
- 2.8 As one of 194 signatories to the IHR, Australia is required to report certain disease outbreaks and public health events to the WHO, and strengthen its capacity for public health surveillance and response at a national level.⁵

Millennium Development Goals

- 2.9 Through the Australian Agency for International Development (AusAID), the Commonwealth Government has committed to implementing the Millennium Development Goals (MDGs), which are agreed targets set by the world's nations to reduce poverty by 2015.⁶
- 2.10 Goal six of the MDGs is to combat HIV/ AIDS, malaria and other diseases. Specifically, this goal is to:

2 Ms Maria Jolly, Assistant Secretary, Health Protection and Surveillance Branch, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 20 March 2012, p. 7.

3 Ms Maria Jolly, Assistant Secretary, Health Protection and Surveillance Branch, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 20 March 2012, p. 7. See also Ms Megan Morris, First Assistant Secretary, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 20 March 2012, p. 1.

4 World Health Organization, *What are the international health regulations?* <http://www.who.int/features/qa/39/en/index.html>, viewed on 27 February 2013,

5 World Health Organization, *What are the international health regulations?* <http://www.who.int/features/qa/39/en/index.html>, viewed on 27 February 2013,

6 AusAID, *Millennium Development Goals*, <http://www.ausaid.gov.au/aidissues/mdg/Pages/home.aspx>, viewed on 27 February 2013,

- Have halted by 2015 and begun to reverse the spread of HIV/AIDS
- Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it
- Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases.⁷

Pandemic planning

2.11 The WHO also assists its member countries plan for a possible pandemic event. It is currently focussed on guiding countries to plan appropriately for pandemic influenza. An influenza pandemic occurs when:

- a new subtype of influenza virus emerges which most people haven't been exposed to, and are therefore highly susceptible;
- the virus has the potential to cause disease in humans; and
- the virus is easily and rapidly spread between humans, infecting large numbers of people worldwide with the potential for widespread mortality.⁸

2.12 In its 2005 report, *Responding to the Avian Influenza Pandemic Threat*, the WHO states:

Since late 2003, the world has moved closer to a pandemic than at any time since 1968, when the last of the previous century's three pandemics occurred. All prerequisites for the start of a pandemic have now been met save one: the establishment of efficient human-to-human transmission. During 2005, ominous changes have been observed in the epidemiology of the disease in animals. Human cases are continuing to occur, and the virus has expanded its geographical range to include new countries, thus increasing the size of the population at risk. Each new human case gives the virus an opportunity to evolve towards a fully transmissible pandemic strain.⁹

7 AusAID, *Millenium Development Goals*, viewed on 27 February 2013, <http://www.ausaid.gov.au/aidissues/mdg/Pages/home.aspx>

8 Department of the Prime Minister and Cabinet, *National Action Plan for Human Influenza Pandemic*, p. 4, <http://www.dpmc.gov.au/publications/pandemic/index.cfm>, viewed 7 January 2013.

9 World Health Organization, *Responding to the Avian Influenza Pandemic Threat*, 2005, p. 3.

- 2.13 To minimise the impact of a future influenza pandemic, the WHO has provided a framework to guide member countries in advance planning and preparedness for an influenza pandemic.¹⁰
- 2.14 The WHO provides a number of documents to assist countries in their pandemic planning, and encourages each country to develop their own national influenza preparedness and response plans.¹¹
- 2.15 Based on the WHO framework, the Commonwealth Government and each state and territory government has created a comprehensive pandemic influenza plan to respond to an influenza pandemic.
- 2.16 Australia has its own list of pandemic phases based on the WHO model, but tailored to describe the situation in Australia and guide the national response to a pandemic.¹²
- 2.17 The Australian pandemic phases are:
- PHASE 1: ALERT
 - ⇒ Being alert to the risk of a pandemic and preparing for a pandemic
 - PHASE 2: DELAY
 - ⇒ Once the pandemic virus emerges overseas, keeping the virus out of Australia
 - PHASE 3: CONTAIN
 - ⇒ Once the pandemic virus does arrive in Australia, limiting the early spread
 - PHASE 4: PROTECT
 - ⇒ Protecting vulnerable people and those who care for them from the virus
 - PHASE 5: SUSTAIN
 - ⇒ Sustaining the response, while we wait for a pandemic vaccine
 - PHASE 6: CONTROL
 - ⇒ Controlling the pandemic spread with a vaccine
 - PHASE 7: RECOVER
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10 World Health Organization, *Pandemic Influenza and Preparedness Response*, 2009, http://www.who.int/influenza/resources/documents/pandemic_guidance_04_2009/en/index.html, viewed on 28 February 2013.

11 World Health Organization, *Pandemic Influenza and Preparedness Response*, 2009, p. 9, http://www.who.int/influenza/resources/documents/pandemic_guidance_04_2009/en/index.html, viewed on 28 February 2013,

12 Department of Health and Ageing, *FLUBORDERPLAN*, February 2009, Attachment A, <http://www.flupandemic.gov.au/internet/panflu/publishing.nsf/Content/fluborderplan>, viewed on 9 January 2013.

⇒ Once the pandemic is under control, returning to normal, while remaining vigilant.¹³

2.18 The influenza pandemic plans in place in the Commonwealth, state and territories are outlined further in this chapter.

Commonwealth policy framework

2.19 At a Commonwealth level, responsibility for managing Australia's exposure to imported infectious diseases and the risk of epidemic or pandemic disease outbreaks is shared by numerous agencies, in differing capacities. These agencies include:

- The Department of the Prime Minister and Cabinet (PM&C);
- The Attorney-General's Department (AGD);
- The Department of Health and Ageing (DoHA);
- The Department of Immigration and Citizenship (DIAC);
- The Department of Agriculture, Fisheries and Forestry (DAFF);
- The Australian Agency for International Development (AusAID);
- The Department of Foreign Affairs and Trade (DFAT);
- Australian Customs and Border Protection Service (Customs); and
- The Department of Defence.

2.20 In the event of a pandemic or other national health emergency, a whole-of-government approach is employed to respond to the emergency. Mr Gregory Saphin of DIAC illustrated how Commonwealth agencies would work together to respond to a pandemic:

Yes, we are involved, with most other agencies in Canberra it seems, when the pandemic flag goes up, as it were. There are multiple whole-of-government meetings about ensuring that pandemic plans are in place. That is not just within the government agencies but also within the broader community. Again, they are run by the Department of Health and Ageing, as the lead agency. We have a major role in coordinating our

13 Australian Health Management Plan for Pandemic Influenza, updated December 2009, <http://www.flupandemic.gov.au/internet/panflu/publishing.nsf/Content/ahmppi-2009-l>, viewed on 7 January 2013, p. 17 and pp. 26-32. See also: Department of Health and Ageing, *FLUBORDERPLAN*, February 2009, Attachment A, <http://www.flupandemic.gov.au/internet/panflu/publishing.nsf/Content/fluborderplan>, viewed on 9 January 2013.

response at the border, particularly with DAFF, Customs et cetera. We do that in a coordinated way.¹⁴

- 2.21 How Australia responds to a pandemic event or infectious disease issue of national concern is addressed in Chapter 5 of this report.

Committee comment

- 2.22 The Committee appreciates that the above list of agencies does not present an exhaustive list of all Commonwealth agencies involved in responding to infectious disease issues in Australia.
- 2.23 Due to the scope and nature of this inquiry, the Committee was unable to hear from all relevant Commonwealth agencies in these roundtable discussions.
- 2.24 Representatives of DoHA, DAFF/AQIS, DIAC and AusAID participated in the roundtable discussions for this inquiry. PM&C declined an invitation to participate in one of the roundtable discussions.
- 2.25 The roles of the PM&C, AGD, DoHA, DIAC, DAFF, AusAID and the state and territory governments are discussed further below.

Department of Prime Minister and Cabinet (PM&C)

- 2.26 The Committee was informed through correspondence that PM&C had responsibility to support the Prime Minister where a national response was required for an influenza pandemic.¹⁵
- 2.27 In this capacity, PM&C produced the National Action Plan for Human Influenza Pandemic (NAP). The NAP is outlined further below.
- 2.28 In the event of a crisis requiring national coordination, the Committee was told that PM&C may convene the Australian Government Crisis Committee (AGCC) to coordinate a whole-of-government response. The AGCC has broad membership including representatives from key Commonwealth departments and agencies with responsibility for emergency management. There is also capacity for PM&C to convene a National Crisis Committee which would supplement the AGCC with representatives of the states and territories.¹⁶

14 Mr Gregory Saphin, Director, Business Continuity and Incident Response Section, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 25 May 2012, p. 27.

15 Sourced from correspondence provided to the Committee secretariat from the Department of the Prime Minister and Cabinet, in an e-mail dated 18 July 2012 from Linda Geddes, Assistant Secretary, Cyber Policy and Homeland Security Division, Department of Prime Minister and Cabinet.

16 Sourced from correspondence provided to the Committee secretariat from the Department of the Prime Minister and Cabinet, in an e-mail dated 18 July 2012 from Linda Geddes, Assistant

- 2.29 The PM&C advised the Committee that apart from its coordination role in the event of an influenza pandemic, PM&C does not have a defined coordination role for other infectious disease outbreaks. This responsibility would lie with relevant departments, with the AGCC able to assist should a higher level of coordination be required.¹⁷

National Action Plan for Human Influenza Pandemic (NAP)

- 2.30 The NAP outlines the roles and responsibilities of the Commonwealth, states and territories and local governments in the event of an outbreak pandemic human influenza. It sets out the coordination arrangements for the management of such an outbreak and its likely consequences.¹⁸
- 2.31 The NAP was originally endorsed by the Council of Australian Governments (COAG) at its meeting of 14 July 2006, and updated in April 2009, April 2010 and September 2011.¹⁹
- 2.32 The NAP builds on the health response to pandemic influenza threat outlined in the Australian Health Management Plan for Pandemic Influenza (AHMPPI)²⁰, equivalent state and territory health plans and other emergency management plans.²¹
- 2.33 The NAP was updated in light of the lessons learned from the response to pandemic (H1N1) 2009.²²
- 2.34 The NAP covers the following:
- Framework

Secretary, Cyber Policy and Homeland Security Division, Department of Prime Minister and Cabinet.

- 17 Sourced from correspondence provided to the Committee secretariat from the Department of the Prime Minister and Cabinet, in an e-mail dated 18 July 2012 from Linda Geddes, Assistant Secretary, Cyber Policy and Homeland Security Division, Department of Prime Minister and Cabinet.
- 18 Department of the Prime Minister and Cabinet, *National Action Plan for Human Influenza Pandemic*, <http://www.dpmc.gov.au/publications/pandemic/index.cfm>, viewed on 7 January 2013.
- 19 Department of the Prime Minister and Cabinet, *National Action Plan for Human Influenza Pandemic*, <http://www.dpmc.gov.au/publications/pandemic/index.cfm>, viewed on 7 January 2013.
- 20 The Australian Health Management Plan for Pandemic Influenza (AHMPPI) is the national health plan for responding to an influenza pandemic developed by DoHA's Office for Health Protection in consultation with peak bodies, advisory groups and experts in pandemic influenza.
- 21 Department of the Prime Minister and Cabinet, *National Action Plan for Human Influenza Pandemic*, <http://www.dpmc.gov.au/publications/pandemic/index.cfm>, p. 3, viewed on 7 January 2013.
- 22 Department of the Prime Minister and Cabinet, *National Action Plan for Human Influenza Pandemic*, <http://www.dpmc.gov.au/publications/pandemic/index.cfm>, p. 3, viewed on 7 January 2013.

- ⇒ Purpose
- ⇒ Assumptions and considerations
- ⇒ Context
- ⇒ Prevention, preparedness, response and recovery
- ⇒ Key milestones in a national influenza pandemic
- Roles and responsibilities
 - ⇒ Division of roles and responsibilities
 - ⇒ Determination and announcement of key milestones in a national influenza pandemic
- National coordination
 - ⇒ National coordination mechanisms
 - ⇒ Workplace planning
- Public information coordination
 - ⇒ National announcement and messages²³

Attorney-General's Department (AGD)

- 2.35 The Attorney-General's Department (AGD), through Emergency Management Australia (EMA), is responsible for emergency management at a Commonwealth level, including developing policy and plans to respond to and minimise the effects of all natural disasters or crises. Circumstances which might require a national emergency management response are broad, and could include a pandemic event.²⁴
- 2.36 EMA maintains a number of Australian Government emergency management plans, including the Australian Emergency Management Arrangements (AEMA), which provides an overview of how Federal, state, territory and local governments collectively approach emergency management, including catastrophic disaster events.²⁵
- 2.37 The AGD oversees the Commonwealth response to any national emergency through the emergency management framework (if a

23 Department of the Prime Minister and Cabinet, *National Action Plan for Human Influenza Pandemic*, <http://www.dpmc.gov.au/publications/pandemic/index.cfm>, p. ii, viewed on 7 January 2013.

24 See Attorney-General's Department, *Emergency Management* <http://www.ag.gov.au/EmergencyManagement/Pages/default.aspx>, viewed on 7 January 2013.

25 Attorney-General's Department, *Australian Emergency Management Arrangements*, p. 5, <http://www.em.gov.au/Emergencymanagement/Preparingforemergencies/Plansandarrangements/Pages/AustralianGovernmentEmergencyManagementPlans.aspx#aema>, viewed 7 January 2013.

Commonwealth response is required). Where the emergency is health related, DoHA coordinates with AGD and other agencies to implement a whole-of-government response.²⁶

- 2.38 The Committee considers the role of DoHA, as the leading agency in a national health emergency, below.

Department of Health and Ageing (DoHA)

- 2.39 DoHA works closely with other Commonwealth agencies, the states and territories, infectious disease experts and international agencies to develop Australia's communicable disease prevention and preparedness strategies.²⁷
- 2.40 DoHA also has primary responsibility for coordinating a national response to any health emergency.²⁸ Planning and responding to a national health emergency is discussed further in Chapter 5.
- 2.41 The Office of Health Protection (OHP) within DoHA is responsible for public health on a Commonwealth level. The mission of OHP, in partnership with key stakeholders, is:
- ... to protect the health of the Australian community through effective national leadership and coordination and building of appropriate capacity and capability to detect, prevent and respond to threats to public health and safety.²⁹
- 2.42 OHP's primary goals are to:
- identify, analyse and prioritise health threats requiring national intervention;

26 Dr Jennifer Ruth Firman, Principal Medical Adviser, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 20 March 2012, p. 6.

27 Ms Megan Morris, First Assistant Secretary, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 20 March 2012, p. 2.

28 Ms Megan Morris, First Assistant Secretary, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 20 March 2012, p. 2. The terms 'emergency' and 'disaster' are used nationally and internationally to describe events which require special arrangements to manage the situation. 'Emergencies' or 'disasters' are characterised by the need to deal with the hazard and its impacts on the community. The term 'emergency' is used on the understanding that it also includes any meaning of the word 'disaster'. See The Attorney-General's Department, *Australian Emergency Management Arrangements*, p. 5, footnote 2, <http://www.em.gov.au/Emergencymanagement/Preparingforemergencies/Plansandarrangements/Pages/AustralianGovernmentEmergencyManagementPlans.aspx#aema>, viewed 7 January 2013.

29 Department of Health and Ageing, *About the Office of Health Protection*, <http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-about.htm>, viewed 29 November 2012.

- prevent health threats through implementation of national strategies and effective regulation;
 - support national health readiness through the development of plans, capacities and capabilities; and
 - coordinate health responses to emergencies and other threats.³⁰
- 2.43 Ms Megan Morris, of the OHP, explained the Commonwealth's public health role:
- What we do, and what you have just heard described for a while, is that we both recognise and respect the role and the capability of states in public health, and the Commonwealth plays a coordinating and, where appropriate, a value-adding or leadership role.³¹
- 2.44 As part of its role in national coordination role, DoHA oversees the following, which are discussed further below:
- The National Notifiable Diseases Surveillance System;
 - National expert committees on infectious disease control; and
 - The Australian Health Management Plan for Pandemic Influenza.

National Notifiable Diseases Surveillance System (NNDSS)

- 2.45 Each state and territory has public health legislation which lists 'notifiable' diseases that individual clinicians and laboratories are required by law to report to the authorities when they are detected. This data is shared with the Commonwealth (through DoHA) under the Nationally Notifiable Diseases Surveillance System (NNDSS).³²
- 2.46 The NNDSS was established in 1990 through the Communicable Diseases Network Australia (CDNA). 65 communicable diseases must be reported through the NNDSS by the states and territories, although not all 65 diseases are notifiable in each jurisdiction.³³
- 2.47 Data obtained through the NNDSS is made available to the public in several ways:

30 Department of Health and Ageing, *About the Office of Health Protection*, <http://www.health.gov.au/internet/main/publishing.nsf/content/ohp-about.htm>, viewed 22 February 2013.

31 Ms Megan Morris, First Assistant Secretary, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 25 May 2012, p. 49.

32 Dr Jennifer Ruth Firman, Principal Medical Adviser, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 20 March 2012, p. 45.

33 Department of Health and Ageing, *Surveillance Systems*, http://www.health.gov.au/internet/main/publishing.nsf/content/cda-surveil-surv_sys.htm#nndss, viewed on 14 January 2013.

- data is updated daily on DoHA's website;
- a summary report and data table are published each fortnight; and
- the data is published in *Communicable Disease Intelligence*³⁴, a quarterly publication of DoHA.³⁵

National expert committees

2.48 DoHA, like the Commonwealth more broadly, draws on a pool of expertise in communicable disease control and related fields, through a number of national networks and working groups.

2.49 These groups report to and advise the Commonwealth about emerging infectious disease risks of national significance, as well as providing input into public health decisions, policy and programs.³⁶ Such groups include (but are not limited to):

- Australian Health Ministers' Advisory Council (AHMAC);
- Australian Health Protection Committee (AHPC);
- Australian Health Protection Principal Committee (AHPPC);
- Communicable Diseases Network Australia (CDNA);
- Public Health Laboratory Network (PHLN);
- National Health Emergency Management Subcommittee (NHEMS);
- National Pandemic Emergency Committee (NPEC);
- Commonwealth Government Deputy Secretaries' Inter-departmental Committee on Influenza Pandemic Prevention and Preparedness (IDC);
- Secretary and Health Chief Executive Officers' Committee (SEC/CEOs);
- Chief Medical Officer's Expert Advisory Group on Pandemic Influenza (EAG);
- National Influenza Pandemic Action Committee (NIPAC);
- National Tuberculosis Advisory Committee (NTAC);
- Australian Technical Advisory Group on Immunisation (ATAGI); and
- Seasonal Influenza Surveillance Strategy Working Group (SISSWG).

34 Department of Health and Ageing, *Surveillance Systems*, http://www.health.gov.au/internet/main/publishing.nsf/content/cda-surveil-surv_sys.htm#nndss, viewed on 14 January 2013.

35 Department of Health and Ageing, *Surveillance Systems*, http://www.health.gov.au/internet/main/publishing.nsf/content/cda-surveil-surv_sys.htm#nndss, viewed on 14 January 2013.

36 Department of Health and Ageing, *Communicable diseases information*, <http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-communic-1>, viewed 21 February 2013.

- National Arbovirus and Malaria Advisory Committee (NAMAC)
- 2.50 The Committee was told that the CDNA, PHLN and AHPC have key roles to play regarding a potential or actual communicable disease outbreak of national significance in Australia. These committees are discussed further below.

Communicable Diseases Network Australia (CDNA)

- 2.51 The CDNA was established in 1989 as a joint initiative of the National Health and Medical Research Council (NHMRC) and AHMAC.³⁷ The CDNA is a sub-committee of the AHPPC.³⁸
- 2.52 The CDNA provides national public health coordination on communicable disease surveillance, prevention and control, and offers strategic advice to governments and other key bodies on public health actions to minimise the impact of communicable diseases in Australia and the region.³⁹
- 2.53 The CDNA aims to oversee:
- the coordination of national communicable disease surveillance;
 - the response to communicable disease outbreaks of national importance; and
 - field training of communicable disease epidemiologists.⁴⁰
- 2.54 Members of the CDNA include the head of each public health unit in the state and territory governments and additional experts from a range of associated areas.⁴¹
- 2.55 Dr Jennifer Firman, Principal Medical Adviser of the OHP, explained how the CDNA would mobilise in the event of an emerging health threat in Australia:

When an event like that occurs, CDNA would quickly meet and look at what sort of information is required for a coordinated

37 Department of Health and Ageing, <http://www.health.gov.au/internet/main/publishing.nsf/content/cda-cdna-cdna.htm>, viewed 19 April 2012.

38 Department of Health and Ageing, <http://www.health.gov.au/internet/main/publishing.nsf/content/cda-cdna-cdna.htm>, viewed 19 April 2012.

39 Department of Health and Ageing, *Communicable Diseases Network Australia*, See also <http://www.health.gov.au/internet/main/publishing.nsf/content/cda-cdna-cdna.htm>, viewed on 10 January 2013.

40 Department of Health and Ageing, <http://www.health.gov.au/internet/main/publishing.nsf/content/cda-cdna-cdna.htm>, viewed 19 April 2012.

41 Dr Jennifer Ruth Firman, Principal Medical Adviser, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 25 May 2012, p. 39.

national response so that all the states and territories, who will actually be doing the work on the ground.⁴²

2.56 Dr Firman said that once the group was mobilised, they would undertake the following tasks:

- develop a case definition to assist with diagnosis;
- consider what surveillance systems were needed to detect the disease quickly; and
- liaise with the PHLN to determine the laboratory capacity and laboratory issues associated with the disease.⁴³

2.57 Dr Firman noted that while the states and territories were responsible for providing the nurses and doctors who treated and managed any outbreak of infectious disease in the hospitals, the CDNA had the major coordinating role.⁴⁴

2.58 Dr Paul Armstrong, of the Western Australia Department of Health, told the Committee that CDNA was a key network and part of an effective system of managing cross border infectious disease issues:

If there were any type of national emergency, the CDNA can be very quickly convened by teleconference and the risk analysed. There is a national incident room at the Department of Health and Ageing where incidents such as the one you described – where, say, a measles case comes in through an infectious passenger who is on a plane travelling from Europe to Singapore to Perth to Sydney – we can quickly gather that information and feed it to the national incident room. From a national point of view, things are coordinated from there. So I think we do have a fairly effective system for managing those cross-border infectious disease issues.⁴⁵

Public Health Laboratory Network (PHLN)

2.59 The PHLN is a collaborative group of laboratories which have expertise in, and provide services for, public health microbiology. It aims to provide

42 Dr Jennifer Ruth Firman, Principal Medical Adviser, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 25 May 2012, p. 39.

43 Dr Jennifer Ruth Firman, Principal Medical Adviser, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 25 May 2012, p. 39.

44 Dr Jennifer Ruth Firman, Principal Medical Adviser, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 25 May 2012, p. 39.

45 Dr Paul Armstrong, Director, Communicable Disease Control Directorate, Department of Health, Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, pp. 7-8.

leadership in all aspects of public health microbiology and communicable disease control.⁴⁶

2.60 Dr David Smith, clinical virologist and Chair of the PHLN, advised:

The Public Health Laboratory Network was formed about 15 years ago to bring together major public health laboratories within the country to play a leading role in the laboratory aspects of public health microbiology control of infectious diseases. All of the jurisdictions are represented on that, with senior members from each of the laboratories. Most of us are medical practitioners who have specialised in microbiology in infectious diseases. Most of us also have associations with universities and with hospitals as well.⁴⁷

2.61 The PHLN is a subcommittee of the AHPC.⁴⁸

Australian Health Protection Committee (AHPC)

2.62 During any health emergency, the Australian Health Protection Committee (AHPC), a subcommittee of the Australian Health Ministers' Advisory Council (AHMAC), is convened. The AHPC is chaired by the Commonwealth Chief Medical Officer and comprises the chief health officers from each state and territory, and representation from the Department of Defence and Emergency Management Australia.⁴⁹

2.63 Ms Megan Morris, of the OHP, told the Committee that the AHPC could be convened within half an hour's notice.⁵⁰

2.64 The Committee was told that the CDNA, as a subcommittee of AHPC, provided advice to the AHPC and assisted in coordinating and leading the response to any national emergency.

2.65 Dr Firman told the Committee that the processes of the AHPC and CDNA had been tried and tested:

I think that the processes that we went through in terms of CDNA and AHPC are tested, tried and true. They work every time. In

46 Department of Health and Ageing, *Public Health Laboratory Network*, <http://www.health.gov.au/internet/main/publishing.nsf/content/cda-cdna-phln-phln.htm>, viewed on 22 February 2013.

47 Dr David William Smith, Chair, Public Health Laboratory Network of Australia, *Official Committee Hansard*, Canberra, 25 May 2012, p. 35.

48 Department of Health and Ageing, 'Overview of the Public Health Laboratory Network (PHLN)' <http://www.health.gov.au/internet/main/publishing.nsf/content/cda-cdna-phln-phln.htm>, viewed 29 November 2012.

49 Ms Megan Morris, First Assistant Secretary, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 20 March 2012, p. 6.

50 Ms Megan Morris, First Assistant Secretary, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 20 March 2012, p. 6.

terms of the review post the pandemic [the flu pandemic], we looked back to say what we could do better just like every country in the world did and the WHO did. That issue about severity and having your response flexible was one of the key things to come through. We would set up systems whereby we could really assess that severity more efficiently than we did last time, so that we can get that information as quickly as possible. We have it clear that we have a plan that is quite flexible, that can respond to different levels of severity.⁵¹

- 2.66 The coordination between the national expert committees and the Commonwealth regarding infectious disease issues is discussed further in Chapter 6.

The Australian Health Management Plan for Pandemic Influenza (AHMPPI)

- 2.67 The AHMPPI is a national health plan for responding to an influenza pandemic, based on international best practice and evidence. It was developed by the OHP in consultation with peak bodies, advisory groups and experts in pandemic influenza.⁵²
- 2.68 The AHMPPI provides an overarching framework for preparedness and response activities within the health sector.⁵³ It was updated in December 2009 to reflect the lessons learnt from the H1N1 influenza pandemic.⁵⁴
- 2.69 The AHMPPI provides clear links with whole of government planning and outlines where advice from the health sector would feed into whole of government decision making.⁵⁵
- 2.70 The AHMPPI covers the following:
- Australia's Health Plan for Pandemic Influenza
 - ⇒ What is pandemic influenza
 - ⇒ The strategy for responding to an influenza pandemic

51 Dr Jennifer Ruth Firman, Principal Medical Adviser, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 20 March 2012, p. 40.

52 Australian Health Management Plan for Pandemic Influenza, updated December 2009, <http://www.flupandemic.gov.au/internet/panflu/publishing.nsf/Content/ahmpipi-2009-l>, viewed on 7 January 2013, p. 11.

53 Australian Health Management Plan for Pandemic Influenza, updated December 2009, <http://www.flupandemic.gov.au/internet/panflu/publishing.nsf/Content/ahmpipi-2009-l>, viewed on 7 January 2013, p. 15.

54 Australian Health Management Plan for Pandemic Influenza, updated December 2009, <http://www.flupandemic.gov.au/internet/panflu/publishing.nsf/Content/ahmpipi-2009-l>, viewed on 7 January 2013, p. 16.

55 Australian Health Management Plan for Pandemic Influenza, updated December 2009, <http://www.flupandemic.gov.au/internet/panflu/publishing.nsf/Content/ahmpipi-2009-l>, viewed on 7 January 2013, p. 15.

- ⇒ Key actions to achieve operational objective
- How individuals can help control the spread of the virus
 - ⇒ Preparing your household for an influenza pandemic
 - ⇒ Infection control – general advice
 - ⇒ What happens if I have influenza
 - ⇒ If an infected person is being cared for in the household
 - ⇒ Psychological and mental health aspects
 - ⇒ Advice for individuals in the workplace
- More information for Decision Makers and Health Professionals
 - ⇒ Decision making structures
 - ⇒ Assumptions
 - ⇒ Looking to the future⁵⁶

2.71 The AHMPPI describes the purpose of pandemic planning as follows:

The purpose of pandemic planning within the health sector is to ensure that we are ready whenever the pandemic occurs - ready to assess the situation, ready to make decisions quickly, ready to take action and most importantly ready to work together to reduce the impact and recover as quickly as possible. A coordinated response across all levels of government namely, Australian, state, territory and local, and across all sectors (for example, transport, power, food, telecommunications, welfare) is required to effectively respond to an influenza pandemic. Health is just one of many sectors that will be involved in the response. The health sector, however, plays a pivotal role within a whole of government response.⁵⁷

2.72 The AHMPPI is designed to be read in conjunction with state and territory pandemic plans, whole of government pandemic plans (such as the NAP, outlined above) and broader emergency response strategies.⁵⁸

56 Australian Health Management Plan for Pandemic Influenza, updated December 2009, <http://www.flupandemic.gov.au/internet/panflu/publishing.nsf/Content/ahmpipi-2009-1>, viewed on 7 January 2013, pp. 4-6.

57 Australian Health Management Plan for Pandemic Influenza, updated December 2009, <http://www.flupandemic.gov.au/internet/panflu/publishing.nsf/Content/ahmpipi-2009-1>, viewed on 7 January 2013, p. 14.

58 Australian Health Management Plan for Pandemic Influenza, updated December 2009, <http://www.flupandemic.gov.au/internet/panflu/publishing.nsf/Content/ahmpipi-2009-1>, viewed on 7 January 2013, p. 16.

The Department of Immigration and Citizenship (DIAC)

- 2.73 The Department of Immigration and Citizenship (DIAC) plays an important role protecting Australians from the importation of infectious diseases.
- 2.74 With four to five million visitors from overseas arriving in Australia each year, DIAC acknowledges that they cannot screen all people. Over 90 per cent of cross border arrivals are Australian residents returning after a short absence overseas or short-term visitors to Australia. The remainder are permanent or long-term arrivals.⁵⁹
- 2.75 The following factors are used to determine which visitors are screened and what examinations they might undergo:
- the risk of tuberculosis (or multi-drug resistant tuberculosis) in the person's country of origin;
 - what people are coming for, how long they are coming for and whether there is any special significance around that particular visit;
 - if the person is arriving as part of a special humanitarian refugee; and
 - if the person is an irregular maritime arrival (ie a person without a valid visa arriving in Australia by boat).⁶⁰
- 2.76 Applicants for Australian visas have to meet health requirements set out in migration law. Dr Paul Douglas of DIAC advised that the purpose of the health requirement was to protect the Australian community from public health and safety risk and to contain public expenditure.⁶¹
- 2.77 Under the *Migration Act 1958*(Cth), there are two specific public health criteria:
- the applicant must be free from tuberculosis; and
 - the applicant must not be a public health threat or danger to the Australian community.⁶²
- 2.78 DoHA provides DIAC with advice as to what is considered to be a public health threat or public health risk.⁶³

59 Australian Bureau of Statistics, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Previousproducts/3401.0Feature%20Article1Dec%202012?opendocument&tabname=Summary&prodno=3401.0&issue=Dec%202012&num=&view=>, viewed 7 March 2013.

60 Dr Paul Douglas, Chief Medical Officer and Global Manager Health, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 25 May 2012, p. 20.

61 Dr Paul Douglas, Chief Medical Officer and Global Manager Health, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 25 May 2012, p. 20.

62 Dr Paul Douglas, Chief Medical Officer and Global Manager Health, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 25 May 2012, p. 20.

- 2.79 Before being granted a visa, some migrants and refugees may be required to enter into a 'Health Undertaking', if this is deemed necessary by the assessing Medical Officer.⁶⁴
- 2.80 Entering into a Health Undertaking requires the visa holder to undergo any medical treatment requested by the relevant state or territory jurisdiction. While TB control remains the primary condition of concern, Dr Douglas emphasised that the Health Undertaking applies more broadly:
- That health undertaking means that, when a client turns up onshore, they have to present themselves to a public health service within each of the state jurisdictions and undergo any treatment that state jurisdiction says. It does not just relate to TB; it relates to other public health diseases – communicable diseases such as hepatitis, HIV, leprosy, to name a few.⁶⁵
- 2.81 People who have entered into a Health Undertaking can be tracked through a central database. Dr Douglas advised that if an individual on a Health Undertaking does not contact DIAC within 28 days of their arrival into Australia, they will be followed up by DIAC.⁶⁶
- 2.82 DIAC works with state and territory-run clinics which advise whether a person has complied with their Health Undertaking.⁶⁷ Dr Douglas explained the success of this follow up process:
- Initially, we have about a 75 per cent positive contact rate. After that 28 days and the follow-up, we are now sitting at around 97 per cent follow-up and contacting these people.⁶⁸
- 2.83 DIAC undertakes health screening for all people who are placed in immigration detention. Health screening for people in immigration detention consists of a physical examination, blood tests for some blood-borne viruses, and a chest X-ray. Anyone who is found to have active TB

63 Dr Paul Douglas, Chief Medical Officer and Global Manager Health, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 25 May 2012, p. 20.

64 Department of Immigration and Citizenship, *Health Undertakings*, Canberra, 25 May 2012, <http://www.immi.gov.au/allforms/health-requirements/health-undertakings.htm>, viewed 10 December 2012.

65 Dr Paul Douglas, Chief Medical Officer and Global Manager Health, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 25 May 2012, p. 20.

66 Dr Paul Douglas, Chief Medical Officer and Global Manager Health, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 25 May 2012, p. 26.

67 Dr Paul Douglas, Chief Medical Officer and Global Manager Health, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 25 May 2012, p. 26.

68 Dr Paul Douglas, Chief Medical Officer and Global Manager Health, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 25 May 2012, p. 26.

or any other communicable disease is treated by DIAC's contracted health provider, IHMS, under the jurisdiction of whichever state they are in.⁶⁹

- 2.84 In the event of a risk of epidemic or pandemic disease outbreak, DIAC acts in accordance with the appropriate Commonwealth action plans and in conjunction with other agencies, including PM&C, AGD, DoHA, DAFF and Customs.⁷⁰

The Australian Agency for International Development (AusAID)

- 2.85 The Australian Agency for International Development (AusAID) has a role in identifying health issues in the region, strengthening country capacity and, along with other Commonwealth departments, supporting multilateral organisations, like the WHO, with health investments.⁷¹
- 2.86 AusAID works closely with other agencies, particularly DAFF, in undertaking surveillance and monitoring activities in the region, including on diseases that can be transmitted between humans and animals.
- 2.87 In the event of a humanitarian emergency, AusAID would work with other agencies such as DoHA and non-government agencies to respond to the emergency, with a focus on both humanitarian issues and the national interest.⁷²
- 2.88 Ms Jenny Da Rin of AusAID expanded on the breadth of the agency's responsibilities regarding health issues across international borders:

We have an aid policy framework and one of the strategic goals in that policy framework is to save lives. We have a health strategy that sits under that framework and talks about our areas of focus. One of our areas of focus is combating infectious and non-communicable diseases and also strengthening health systems. Probably our biggest investments really are about building partner-government capacity to deal with these issues themselves, to monitor effectively both at the national level and at the subnational level, and to have good data so that they have got a

69 Dr Paul Douglas, Chief Medical Officer and Global Manager Health, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 25 May 2012, p. 20.

70 Dr Paul Douglas, Chief Medical Officer and Global Manager Health, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 25 May 2012, p. 20.

71 Ms Jenny Da Rin, Assistant Director General, Education and Health Branch, AusAID, *Official Committee Hansard*, Canberra, 25 May 2012, p. 19.

72 Ms Jenny Da Rin, Assistant Director General, Education and Health Branch, AusAID, *Official Committee Hansard*, Canberra, 25 May 2012, p. 19.

good understanding of what is going on, and to have effective coordination and control.⁷³

2.89 Ms Joanne Greenfield of AusAID, told the Committee:

So we take a multipronged approach to what we do and we build up a framework around actually building the systems in the countries that we work in to actually deliver the health services to save lives, to control diseases and to prevent maternal and child deaths.⁷⁴

The Department of Agriculture, Fisheries and Forestry (DAFF)

2.90 DAFF manages biosecurity at the border, both for passengers and for imports.⁷⁵ DAFF undertakes most of its work under the *Quarantine Act 1908* (Cth). This Act is co-administered by the Minister for Agriculture, Fisheries and Forestry and the Minister for Health and Ageing.⁷⁶

2.91 At the time of completing this inquiry, the *Biosecurity Bill 2012 (the Bill)* had been introduced into Parliament. The Explanatory Memorandum explains the purpose of the Bill:

The Biosecurity Bill 2012 (the Bill) will provide the primary legislative means for the Australian Government to manage the risk of pests and diseases entering Australian territory and causing harm to animal, plant and human health, the environment and the economy.⁷⁷

2.92 The Explanatory Memorandum notes the Bill will largely reflect the current operation of the *Quarantine Act*, and will provide an improved and modernised regulatory framework.⁷⁸

2.93 DAFF's responsibilities in protecting Australians from infectious disease imported from overseas includes:

- delivering passenger screening services at the border on behalf of DoHA;

73 Ms Jenny Da Rin, Assistant Director General, Education and Health Branch, AusAID, *Official Committee Hansard*, Canberra, 25 May 2012, p. 19.

74 Ms Joanne Greenfield, Senior Health Officer, AusAID, *Official Committee Hansard*, Canberra, 25 May 2012, p. 19.

75 Ms Rona Mellor, Deputy Secretary, Biosecurity, Department of Agriculture, Fisheries and Forestry, *Official Committee Hansard*, Canberra, 25 May 2012, pp. 20-21.

76 Ms Rona Mellor, Deputy Secretary, Biosecurity, Department of Agriculture, Fisheries and Forestry, *Official Committee Hansard*, Canberra, 25 May 2012, p. 21.

77 *The Parliament of the Commonwealth of Australia – Biosecurity Bill 2012, Explanatory Memorandum.*

78 *The Parliament of the Commonwealth of Australia – Biosecurity Bill 2012, Explanatory Memorandum.*

- managing the Imported Food Inspection Scheme, on behalf of DoHA, under the Australia New Zealand Food Standards Code managed by Food Standards Australia New Zealand (FSANZ), including testing for certain chemicals and diseases within imported food
 - managing all exports going out of the country and certifying that they are safe⁷⁹
- 2.94 DAFF has a focus on animal and plant health, including monitoring zoonoses (diseases which can cross from animals to humans), issuing import permits for the management of goods coming across the border, and managing passenger, vessel and cargo movements.⁸⁰

State and territory policy framework

State and territory legislation

- 2.95 The states and territories retain major responsibility for public health management of communicable diseases.⁸¹
- 2.96 In each state and territory, public health legislation has been implemented which mandates the reporting of certain diseases by medical practitioners, hospitals, and/or laboratories to the relevant state or territory communicable diseases unit.
- 2.97 The relevant state and territory legislation is:
- *Public Health Act 1997* (ACT);
 - *Public Health Act 1991* (NSW);
 - *Notifiable Diseases Act* (NT);
 - *Public Health Act 2005* (Qld);
 - *Public Health Act 2011* (SA);
 - *Public Health Act 1997* (Tas);
 - *Public Health and Wellbeing Act 2008* (Vic); and
 - *Health Act 1911* (WA).⁸²

79 Ms Rona Mellor, Deputy Secretary, Biosecurity, Department of Agriculture, Fisheries and Forestry, *Official Committee Hansard*, Canberra, 25 May 2012, p. 21.

80 Ms Rona Mellor, Deputy Secretary, Biosecurity, Department of Agriculture, Fisheries and Forestry, *Official Committee Hansard*, Canberra, 25 May 2012, p. 21.

81 Department of Health and Ageing website, accessed on 23 October 2012, <http://www.health.gov.au/internet/main/publishing.nsf/content/cda-state-legislation-links.htm>

- 2.98 Notifications are collected at a state/territory level, and then DoHA collates the information into the National Notifiable Diseases Surveillance System (NNDSS) for analysis at a national level.

State and territory pandemic influenza plans

- 2.99 Each state and territory has its own pandemic plan; these include:
- Australian Capital Territory Health Management Plan for Pandemic Influenza
 - NSW Health Influenza Pandemic Plan
 - Northern Territory Special Counter Disaster Plan for Human Pandemic Influenza
 - Queensland Pandemic Influenza Plan
 - South Australia Pandemic Influenza Operational Plan for Health Care Workers
 - Tasmanian Action Plan for Human Influenza Pandemic
 - Victorian Action Plan for Human Influenza Pandemic
 - Western Australian Health Management Plan for Pandemic Influenza⁸³

Committee comment

- 2.100 It is not possible for this report to present a comprehensive overview of Australia's infectious disease policy framework. Rather the Committee prefers to provide an insight into the infectious disease control policy environment and describe the context of some of the key policy initiatives.
- 2.101 In presenting this information in summary form, it has become evident to the Committee just how complex the infectious disease policy framework actually is. For example, the report has listed nine Commonwealth Government agencies that have a significant role in managing infectious disease and biosecurity threats to Australia. The Committee acknowledges that there are may be others agencies that are not included in that list. The report also lists 15 expert committees and working/ advisory groups, and briefly outlines some of major infectious disease management/ response plans. The Committee realises that the list of expert committees and plans is by no means exhaustive.

82 Department of Health and Ageing website, <http://www.health.gov.au/internet/main/publishing.nsf/content/cda-state-legislation-links.htm>, viewed on 23 October 2012.

83 To view each state and territory pandemic influenza plan, see Department of Health and Ageing, *Plans and guidelines*, <http://www.health.gov.au/internet/panflu/publishing.nsf/Content/plans-1>, viewed 9 January 2013.

- 2.102 At a national level, Australia's federal system of government means that responsibility is shared between Commonwealth, and state and territory governments. Australia's national infectious disease policy framework also sits within broader global policy context.

Recommendation 1

- 2.103 **The relevant government agencies that have a significant role in managing the biosecurity threat develop a coordinated approach which addresses the health threats to Australians and recognises the impact on the economy.**
- 2.104 In the remainder of the report the Committee will examine in more detail key issues that have arisen during roundtable discussions. A recurring theme, the need to coordinate Australia's national infectious disease control, is specifically addressed in Chapter 6.

... you can get anywhere in the world in 24 hours. Trying to prevent infectious disease crossing international borders or any borders is a nonstarter in this day and age. It cannot be done. You need another strategy.¹

Screening, surveillance and control of infectious disease

- 3.1 As international travel to and from Australia increases, Australia has a number of screening, surveillance and control measures in place to manage the risk of infectious diseases being imported into the country.
- 3.2 Ms Rona Mellor, of the Department of Agriculture, Fisheries and Forestry (DAFF), told the Committee that government agencies must prioritise the risks that require management at the border:
- The community demand for keeping everything out of the country is quite high. When you are processing 15 million passengers and you are processing several million containers and different arrivals in different ways, you really need to be able to narrow down to the things that matter most. So, there needs to be a continuation of priority setting in the things that matter most both in the broad biosecurity imports side and in the human health side, because we are a trading nation and we need to facilitate it as well as manage it.²
- 3.3 Dr Paul Douglas, of the Department of Immigration and Citizenship (DIAC), advised:

1 Dr Richard Gair, Public Health Medical Officer, Queensland Health, *Official Committee Hansard*, Cairns, 2 August 2012, p. 5.

2 Ms Rona Mellor, Deputy Secretary, Biosecurity, Department of Agriculture, Fisheries and Forestry, *Official Committee Hansard*, Canberra, 25 May 2012, pp. 22-23.

In terms of determining who has what tests, we have four to five million visitors from overseas every year come through the borders. We cannot screen all of them, otherwise we would not have a visitor or business program going on.³

- 3.4 This chapter examines the policies and procedures in place to prevent the importation of infectious disease into Australia.

Screening

- 3.5 The Department of Health and Ageing (DoHA), DAFF and DIAC, in partnership with other Commonwealth agencies, play significant roles in developing and implementing health screening measures at Australia's borders. These roles are outlined in more detail in Chapter 2 of this report.

- 3.6 Dr Gary Lum, of DoHA, told the Committee that DoHA worked closely with other Commonwealth 'border' agencies such as the Australian Customs and Border Protection Service (Customs) and DAFF (through the Australian Quarantine and Inspection Service (AQIS)) to screen people for potential public health risks at the border:

Those border agencies are really important for the work that we do at the border, particularly at airports and seaports. We work very closely with them so that they ask relevant questions of any passenger who volunteers information that they are unwell.⁴

- 3.7 There are a number of measures implemented by these Commonwealth agencies, in conjunction with state and territory agencies, to protect Australians. These measures include:
- entry requirements for visitors or Australians arriving in Australia from overseas, including:
 - ⇒ the completion of an incoming passenger card and arrival screening measures; and
 - ⇒ further questioning and checks if required, based on a health matrix.⁵

3 Dr Paul Douglas, Chief Medical Officer and Global Manager Health, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 25 May 2012, p. 20.

4 Dr Gary Lum, Assistant Secretary, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 25 May 2012, p. 44.

5 Dr Paul Douglas, Chief Medical Officer and Global Manager Health, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 25 May 2012, p. 20. The health matrix assesses the level of TB risk associated with the country that a visa holder is coming from, the duration of their intended stay in Australia and intended activities while in Australia.

- entry requirements for people entering Australia as migrants, refugees and asylum seekers, including:
 - ⇒ health requirements such as pre-migration and pre-departure checks; and
 - ⇒ health screening for irregular maritime arrivals.⁶
- 3.8 In addition to health screening, there are a number of biosecurity processes operating at the border which may also lead to the identification of potential health risks. Biosecurity measures are overseen by DAFF and AQIS and include managing all passenger, vessel⁷ and cargo movements in and out of Australia, overseeing the Imported Food Inspection Scheme and screening imports and exports.⁸
- 3.9 In this report, the Committee has focussed on the health screening measures undertaken for travellers, migrants, refugees and asylum seekers in Australia.
- 3.10 From a health perspective, there are stark differences between the entry requirements in place for the travelling public, and those for migrants, refugees and asylum seekers. These are discussed further below.

Entry requirements for travellers

- 3.11 Health screening measures in place for travellers entering or re-entering Australia consists predominantly of the requirement to complete a passenger card upon entry into and departure from Australia.
- 3.12 Travellers to and from Australia are required to identify themselves and provide certain information to the Commonwealth by completing an incoming or outgoing passenger card.⁹ Samples of the incoming and outgoing passenger cards are shown at Figures 3.1 and 3.2.

6 Dr Paul Douglas, Chief Medical Officer and Global Manager Health, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 25 May 2012, p. 20.

7 In this report, *vessel* is taken to have the definition contained in the *Quarantine Act 1908* (Cth), s.5: (a) a ship, boat or other description of vessel used in navigation by sea; or (b) an aircraft; or (c) an air cushion vehicle; or (d) an off-shore industry mobile unit (being an overseas installation) that is bound for, or is at, a port; and includes a part of any of the above.

8 Ms Rona Mellor, Deputy Secretary, Biosecurity, Department of Agriculture, Fisheries and Forestry, *Official Committee Hansard*, Canberra, 25 May 2012, p. 21.

9 Department of Immigration and Citizenship, *Passenger Cards*, 18 January 2013, <http://www.immi.gov.au/managing-australias-borders/border-security/travel/passenger-cards/>, viewed on 18 January 2013.

Figure 3.1: Incoming passenger card

Incoming passenger card • Australia

PLEASE COMPLETE IN ENGLISH WITH A BLUE OR BLACK PEN

▶ Family/surname

▶ Given names

▶ Passport number

◆ Flight number or name of ship

▶ Intended address in Australia

State

▶ Do you intend to live in Australia for the next 12 months? Yes No

▶ If you are **NOT an Australian citizen**:

Do you have tuberculosis? Yes No

Do you have any criminal conviction/s? Yes No

DECLARATION
The information I have given is true, correct and complete. I understand failure to answer any questions may have serious consequences.

YOUR SIGNATURE _____ Day Month Year

TURN OVER THE CARD English

YOUR CONTACT DETAILS IN AUSTRALIA

Phone ()

E-mail OR

Address OR State

EMERGENCY CONTACT DETAILS (FAMILY OR FRIEND)

Name

E-mail, Phone OR Mail address

PLEASE COMPLETE IN ENGLISH

▶ In which country did you board this flight or ship?

◆ What is your usual occupation?

▶ Nationality as shown on passport

▶ Date of birth Day Month Year

PLEASE X AND ANSWER A OR B OR C

A Migrating permanently to Australia

B Visitor or temporary entrant

Your intended length of stay in Australia Years Months Days OR

▶ Your country of residence

▶ Your main reason for coming to Australia (X one only)

Convention/conference 1 Employment 4 Holiday 7
Business 2 Education 5 Other 8
Visiting friends or relatives 3 Exhibition 6

C Resident returning to Australia

▶ Country where you spent most time abroad

MAKE SURE YOU HAVE COMPLETED BOTH SIDES OF THIS CARD. PRESENT THIS CARD ON ARRIVAL WITH YOUR PASSPORT.

Information sought on this form is required to administer immigration, customs, quarantine, statistical, health, wildlife and currency laws of Australia and its collection is authorised by legislation. It will be disclosed only to agencies administering these areas and those entitled to receive it under Australian law. The leaflet *Safeguarding your personal information* is available at Australian ports and airports.

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Source: Provided by the Department of Immigration and Citizenship

Figure 3.2: Outgoing passenger card

Outgoing passenger card • Australia

PLEASE COMPLETE IN ENGLISH WITH A BLUE OR BLACK PEN

PLEASE **X** AND ANSWER D OR E OR F

D Visitor or temporary entrant departing

E Australian resident departing temporarily

F Australian resident departing permanently

Family/surname

Given names

Passport number

Flight number or name of ship

Country where you will get off this flight

What is your usual occupation?

Nationally as shown on passport

Date of birth

State where you spent most time

Country of Residence

In which State do you live?

In which State did you live?

Intended length of stay overseas

Country where you will spend most time abroad

Main reason for overseas travel (X one only):

Convention/conference 1 Employment 5
 Business 2 Education 6
 Visiting friends or relatives 3 Exhibition 7
 Holiday 4 Other 8

What is your country of future residence?

DECLARATION The information I have given is true, correct and complete.

YOUR SIGNATURE

Day Month Year

TURN OVER THE CARD

English

Are you taking out of Australia AUD\$10,000 or more in Australian or foreign currency equivalent? If answered 'Yes' you must complete a Cross Border Movement – Physical Cash (AUD\$10,000 or more) Report to present with this card.

Note: If a customs or police officer asks, you must report travellers cheques, cheques, money orders or other bearer negotiable instruments of any amount.

Did you know?

You can find any lost superannuation accounts you may have by visiting www.ato.gov.au/superseeker

You will need to provide your Australian tax file number, address and date of birth to access the system.

If you worked in Australia on a temporary resident visa you can claim your superannuation money back. For more information on how to apply visit www.ato.gov.au/departaustralia

Information sought on this form is required to administer immigration, customs, quarantine, statistical, health, wildlife and currency laws of Australia and its collection is authorised by legislation. It will be disclosed only to agencies administering these areas and those entitled to receive it under Australian law. The leaflet *Safeguarding your personal information* is available at Australian ports and airports.

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16 (Design date 11/09)

MAKE SURE YOU HAVE COMPLETED BOTH SIDES OF THIS CARD. PRESENT THIS CARD, ON DEPARTURE WITH YOUR BOARDING PASS AND PASSPORT.

Source: Provided by the Department of Immigration and Citizenship

3.13 Passenger cards are used to assist in a range of issues at the border, relating to immigration, customs and quarantine matters.¹⁰

3.14 Mr Tim Chapman, of DAFF, outlined how the Commonwealth used the information obtained through passenger cards:

As far as the card is concerned, there are essentially two purposes with it. The range of questions on there for immigration, customs and biosecurity purposes, and also for human health purposes, really assists the border agencies in assessing the risk and taking the necessary action. One of the things that occurred as a result – I think it started with SARS and then there were the various influenza concerns – was the additional detail on the back, which

10 Ms Rona Mellor, Deputy Secretary, Biosecurity, Department of Agriculture, Fisheries and Forestry, *Official Committee Hansard*, Canberra, 25 May 2012, p. 22.

is the contact details so that, for example, if somebody arrives and they are quite fine and do not report being sick but they get sick later, we or the department of health can identify what flight they came in on, who they should contact and so forth.¹¹

3.15 Ms Mellor advised that DAFF worked with DoHA to determine how the passenger cards could be useful from a health perspective:

In the screening through the passenger process, the card is used to determine how much intervention a passenger will get – for example, further questioning or inspection et cetera. Some of the countries that we are interested in clearly are ones where there are very infectious diseases that will mostly infect the animal population. But certainly, if we are guided by our colleagues at the Department of Health and Ageing to look for other things, we will do that as a matter of priority.¹²

3.16 Dr Rodney Givney, of the University of Newcastle, told the Committee that the ability to trace a person post arrival through the passenger card was vital, because a person may not feel unwell until after arriving in Australia:

The important thing about those cards is that we get people's contact addresses. The interest arises when one of them gets ill ... Border protection for infectious diseases does not work. We have actually known that since the 1890s. You have to be able to find cases when they appear in your community and then you have to be able to trace back their contacts. So the cards will work in that way.¹³

3.17 DIAC advised that passenger cards are currently processed in the following way:

- The cards are batched into flights at the airport and sent to Canberra for scanning by an outsourced provider;
- The contents of the cards are scanned and the images are made available for DIAC and other authorised agencies;
- Cards are stored for a maximum of 8 weeks depending on receipt date, and destroyed once the ABS publishes their monthly data on overseas arrivals and departures;

11 Mr Tim Chapman, First Assistant Secretary, Quarantine Operations, *Official Committee Hansard*, Canberra, 25 May 2012, p. 22.

12 Ms Rona Mellor, Deputy Secretary, Biosecurity, Department of Agriculture, Fisheries and Forestry, *Official Committee Hansard*, Canberra, 25 May 2012, p. 22.

13 Dr Rodney Givney, Infectious Diseases Physician and Microbiologist, University of Newcastle, *Official Committee Hansard*, Canberra, 12 May 2012, p. 15.

- Typically, the data from the passenger cards is available for retrieval within 24 hours of receipt of the cards. However, the time taken to process cards depends on a number of factors, including the location of the airport where the cards were produced; and
 - Sea arrivals are dealt with in a different manner and there can be a longer delay in processing given the time taken to batch and send the cards through. Once the cards are received, scanning usually takes place within 24 hours.¹⁴
- 3.18 The Committee was told that while there were issues in the past regarding the timely processing of passenger cards, this process had improved over time, and the information from the cards was now available very quickly and urgently if required.¹⁵
- 3.19 During the 2009 influenza pandemic, people entering Australia were required to complete a health declaration card if they were feeling unwell, in addition to completing an incoming passenger card:
- In 2009 we put in place a process of health declaration cards so that, when any aeroplane was descending into Australia or any ship was coming into Australia, the master of that particular vessel would have to ask all of the passengers, through a public address system, whether any of them were declaring themselves unwell. The health declaration card needed to be distributed and handed to all of the passengers that needed to complete them. That is distinct from the incoming passenger card, which is a routine process that the Department of Immigration and Citizenship manage for themselves at the moment.¹⁶
- 3.20 Heat screening was another tool used during the SARS outbreak of 2003 with the aim of assisting authorities to identify people who had a temperature at the border. Dr Givney told the Committee of one of the limitations of heat scanners:
- ... The final limitation of those heat screens is that people with flu are infectious before they have a temperature and before they feel sick at all ...¹⁷

14 Sourced from correspondence provided to the Committee secretariat from the Department of Immigration and Citizenship, in an e-mail dated 29 May 2012 from Mr Miles Henderson, Acting Assistant Secretary, Border Security Policy Branch.

15 See evidence from Mr Gregory Saphin, Director, Business Continuity and Incident Response Section, Department of Immigration, *Official Committee Hansard*, Canberra, 25 May 2012, p. 21.

16 Dr Gary Lum, Assistant Secretary, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 25 May 2012, p. 44.

17 Dr Rodney Givney, Infectious Diseases Physician and Microbiologist, University of Newcastle, *Official Committee Hansard*, Canberra, 12 May 2012, p. 15.

- 3.21 With regard to the SARS outbreak, Professor Adrian Sleight, of the Australian National University, noted that data from Hong Kong airport indicated that heat scanners had only detected one case:

There were statistics kept at Hong Kong when they did the thermal imaging. Something like 36 million people were checked, 1,000 people were detained, 100 people were investigated and maybe one case of SARS was found.¹⁸

- 3.22 Professor Tania Sorrell, of the Sydney Institute of Emerging Infectious Diseases and Biosecurity, advised the Committee that heat scanners were more successful in reassuring the public than providing useful information to the medical profession:

It is true that if someone newly develops a fever it is most likely to be due to infection, but there are other causes of fever, which might be due to disease or a drug reaction. The issue with the scanners in airports is that they are not reliable – they offer more reassurance to the public than they actually do information to the medical profession.¹⁹

- 3.23 Dr Gary Lum, of DoHA, agreed that from a scientific perspective, thermal scanners were not useful. However, Dr Lum suggested that the scanners played a useful role in boosting public confidence when they were used at airports:

There were also the issues at the border where AQIS, as well as state and territory staff, were looking after things such as the thermal scanners. We all recognise that, from a scientific perspective, they were not very useful. From a public confidence perspective, we got a lot of letters from well qualified health professionals telling us that we were wasting money. However, at the same time we were also getting letters from Australians who were saying 'This is fantastic, you should buy more,' or 'Why don't we have one at every gate and in shopping centres?' You can see that, from a public confidence perspective, they really had a role to play.²⁰

- 3.24 The master of any aircraft or ship entering Australia is legally obliged to report any illness on board. AQIS must grant permission (known as 'pratique') for passengers and crew to disembark in Australia from an
-

18 Professor Adrian Sleight, Professor of Epidemiology and Population Health, Australian National University, *Official Committee Hansard*, Canberra, 25 May 2012, p. 14.

19 Professor Tania Sorrell, Director, Sydney Institute for Emerging Infectious Diseases and Biosecurity, *Official Committee Hansard*, Canberra, 25 May 2012, p. 14.

20 Dr Gary Lum, Assistant Secretary, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 25 May 2012, p. 44.

overseas vessel. Permission is only granted if the vessel is free from any quarantinable disease. The vessel and people on board remain subject to quarantine until such time as pratique is granted.²¹

3.25 Mr Chapman explained the pratique process:

In the times of the heightened pandemic awareness, there was a positive obligation on aircraft captains to report for every arrival, but the standard process is that they advise us only in circumstances where they have identified an ill passenger on board. When that occurs, there is a 'traveller with illness' checklist that we go through. We use that to then advise the department of health of the outcomes, and they provide advice back to us. In 2011 there were only 16 such events at international airports around Australia – that is with more than 14 million arriving international passengers.²²

Committee comment

3.26 The Committee has been reminded throughout this inquiry that infectious diseases do not respect international borders. As international travel becomes more frequent and more accessible it is clear that the transmission of infectious diseases across international borders cannot be totally eliminated.

3.27 The Committee is reassured by the continued efforts of a number of Commonwealth agencies working in collaboration, and with the relevant state and territory authorities, to implement a range of health screening measures to identify infectious disease before it spreads to the Australian population.

3.28 The Committee understands that an incoming passenger card will not necessarily enable detection of an infectious disease at the border. As the Committee heard, a person may have an infectious disease when travelling into Australia, however may not feel ill or show any obvious symptoms until later.

3.29 However, based on evidence the Committee considers that the incoming passenger card is an effective tool for providing the contact information

21 Mr Tim Chapman, First Assistant Secretary, Quarantine Operations, *Official Committee Hansard*, Canberra, 25 May 2012, p. 22. See also Department of Agriculture, Fisheries and Forestry, *Vessel Pratique*, http://www.daff.gov.au/aqis/avm/vessels/quarantine_concerns/human_health/pratique, viewed on 5 December 2012.

22 Mr Tim Chapman, First Assistant Secretary, Quarantine Operations, *Official Committee Hansard*, Canberra, 25 May 2012, p. 22.

necessary to track the spread of infectious disease from that person, if they become ill after entering Australia.

- 3.30 It is evident that lessons have been learned in recent times as the Commonwealth, states and territories have responded to the risks associated with infectious disease outbreaks such as SARS and pandemic influenza. The Committee has been told that in response to increased risk, more stringent measures of infectious disease control were put in place. The Committee is reassured that the relevant Commonwealth, state and territory agencies have the ability to adapt and respond to increased risk when required.
- 3.31 While heat scanners and thermal imaging appear to be an attractive option for mass population screening at ports of entry, the Committee notes the observations of infectious disease experts and DoHA regarding the limitations of this technology. Although the technology is clearly able to detect elevated body temperature, the Committee is aware that a significant limitation is that elevated temperature is not a symptom of all infectious diseases. Even when fever is a common symptom, it may not present at all stages of infection. Fever may be absent during the incubation period where infected individuals are often asymptomatic.
- 3.32 Despite these limitations and data indicating that heat scanners were of little value in detecting SARS during the 2003 outbreak, the Committee was told how the public was reassured by the use of such scanners.
- 3.33 In the Committee's view, this highlights the need for the public to be better informed and educated about the measures in place at the border to mitigate the risk of infectious disease importation, and what practical measures they can take to protect themselves and their families against infectious diseases. The issue of consumer awareness and education is discussed below.
- 3.34 The limitations of heat scanners also calls into question the cost-effectiveness of the widespread deployment of heat scanners at border entry points for mass screening of incoming travellers. While not dismissing outright the potential for heat scanners to contribute to the suite of measures to reduce importation of infectious disease, the Committee believes that cost-effectiveness must be assessed and considered.

Recommendation 2

- 3.35 **The Department of Health and Ageing review the existing evidence base to evaluate the cost-effectiveness of its policy to use heat scanners at ports of entry as a measure to mitigate the risk of infectious disease importation.**

Entry requirements for migrants, refugees and asylum seekers

- 3.36 Migrants, refugees and asylum seekers undergo stringent health screening before being allowed to reside in the wider Australian community. This screening contrasts to the entry requirements for the travelling public.
- 3.37 Migrants who choose to come and live in Australia for economic or other reasons will generally have time to prepare for their relocation. In contrast, refugees and asylum seekers are usually forced to leave their countries of origin with little or no warning.
- 3.38 The vast majority of migrants, refugees and asylum seekers travel to Australia by air with valid visas. With regard to asylum seekers specifically, recent data indicates that although the numbers arriving by boat have increased over recent years, in 2011-12 boat arrivals were about half of Australia's onshore asylum seekers.²³
- 3.39 Noting the differences in pre-travel planning, means of arrival and varying levels of contact with the wider community, a number of policies and practices have been implemented (both pre and/or post entry) to protect the Australian public from risks of infectious disease entering the country via these population groups.
- 3.40 The health requirements for people wishing to migrate to Australia, or who are seeking asylum in Australia as refugees, are set out in Chapter 2. These requirements aim to ensure that those people do not pose a public health risk to the Australian community. Currently, the health requirements focus on ensuring that people with tuberculosis (TB) are identified and treated before entering into Australia or into the wider community.²⁴

23 Parliamentary Library, *Asylum seekers and refugees: what are the facts?* February 2013.

24 Dr Paul Douglas, Chief Medical Officer and Global Manager Health, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 25 May 2012, p. 20.

- 3.41 A waiver of the health requirement is available for certain visa applicants, however this is not available to people considered to be a 'public health risk'.²⁵
- 3.42 As noted earlier, a relatively small population of asylum seekers arrive without valid visas, usually by boat. The Committee visited Christmas Island in November 2012 to learn more about the health screening practices undertaken for so called Irregular Maritime Arrivals (IMAs)²⁶ in immigration detention on the island.
- 3.43 During the visit the Committee inspected the facilities used for health screening at the various detention centres on the island. Following these inspections, the Committee held a roundtable discussion, hearing from representatives of DIAC, International Health and Medical Services (IHMS - DIAC's contracted health services provider), Indian Ocean Territories Health Service (Christmas Island Hospital) and the Shire of Christmas Island.
- 3.44 Health screening on Christmas Island falls under the jurisdiction of the Indian Ocean Territories Health Service and its public health policy is determined by the Western Australian government.²⁷
- 3.45 Depending on how a person arrives on Christmas Island²⁸, initial health screening for IMAs proceeds as follows:
- a public-health-screening assessment for communicable diseases is conducted by a Customs medical officer or health professional from IHMS, before or upon a person's arrival on Christmas Island;
 - a full health induction assessment is conducted within 72 hours of a person entering into immigration detention;
 - new arrivals are separated from the rest of the immigration detention population until the health induction assessment process is complete; and

25 Dr Paul Douglas, Chief Medical Officer and Global Manager Health, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 25 May 2012, p. 20.

26 For further information on IMAs see <http://www.immi.gov.au/ima/>, viewed on 24 January 2013.

27 Dr Paul Douglas, Chief Medical Officer and Global Manager Health, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 25 May 2012, p. 20. See also Mr Paul Windsor, Assistant Secretary, Detention Health Services, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 24 August 2012, p. 2.

28 The Committee was told that some IMAs arrive on the Cocos Islands, and these people were usually processed on Christmas Island. Some IMAs arrived in Darwin, and these people were either screened in Darwin or moved to Christmas Island for screening. Anyone arriving in immigration detention through other means still undergoes similar health screening. See Dr Mark Parrish, Medical Director, Health Services, International Health and Medical Services, *Official Committee Hansard*, Canberra, 24 August 2012, p. 3.

- health-screening relating to infectious disease issues for irregular maritime arrivals includes:
 - ⇒ a medical examination by a GP;
 - ⇒ documentation of the client's full medical history;
 - ⇒ medical observations;
 - ⇒ urinalysis;
 - ⇒ pathology tests including testing for HIV, hepatitis B and syphilis; and
 - ⇒ a public health screen including a TB-screening questionnaire and a chest X-ray, which is reviewed by a radiologist and a GP.²⁹
- 3.46 Mr Paul Windsor, of DIAC, advised the Committee that most communicable diseases identified in immigration detention were pre-existing conditions identified during the health induction assessment.³⁰
- 3.47 Mrs Julie McCaughan, of IHMS, explained the health screening process once people arrived on Christmas Island:
- When the clients arrive on the jetty we attend for observation and clinical assessment of the clients. We are generally looking for clinical signs that the client has a diagnosis or an issue that we need to address acutely and quickly. Following that, they are transported up to the induction centre where we conduct a public health consent. We have a set questionnaire that we ask the clients through interpretation and then we get their consent to be able to deliver their healthcare needs. That is the whole gamut from induction right through the system while they are in detention.³¹
- 3.48 If a person showed symptoms during the initial assessment that required further investigation, that person may be isolated or have to undergo further tests. Mrs McCaughan said that necessary precautions were taken to ensure people were quarantined until testing was complete:
- Should the client through our public health assessment require any additional treatment such as isolation or should we determine that they may have symptoms that we want to investigate further, we may isolate them or start additional investigations of them. Should a client also present clinically, we can also fast-track them

29 Mr Paul Windsor, Assistant Secretary, Detention Health Services, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 24 August 2012, p. 2.

30 Mr Paul Windsor, Assistant Secretary, Detention Health Services, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 24 August 2012, p. 2.

31 Mrs Julie McCaughan, Health Services Manager, International Health and Medical Services, *Official Committee Hansard*, Christmas Island, 21 November 2012, p. 2.

to have a chest X-ray, as an example, and take additional specimens there so that we can send them off and get the results as quickly as possible. Until we get a diagnosis, it is quite difficult for us to determine whether a client needs hospitalisation or full isolation, but we do take the necessary steps to ensure that they are quarantined if need be.³²

- 3.49 Dr Parbodh Gogna, of IHMS, told the Committee that on Christmas Island, IHMS and DIAC worked with the Western Australian Department of Health and the Christmas Island Hospital when infectious disease was identified:

Where we identify infectious diseases we work very closely with the Communicable Disease Control Directorate of Western Australia, as well as the Christmas Island hospital. To manage the care of these patients, we do contact tracing and additional screening when required. These arrangements depend on the cooperation of all parties, which has worked well to date.³³

- 3.50 Mr Windsor explained the process of treating a patient for an infectious disease while in immigration detention more broadly:

In accordance with guidelines established by the relevant centre for disease control, if a client is suspected to be affected by a communicable disease, they are placed into isolation until that condition is confirmed and a treatment plan is established. In these cases IHMS liaises with local public health authorities to ensure that appropriate measures are in place, such as quarantining and treatment to prevent other people from being affected, including in the broader Australian community.³⁴

- 3.51 Where a person is to be transferred from Christmas Island to another detention facility, such as a regional processing centre, that person must have undergone a public health assessment and have been deemed as 'fit to travel'.³⁵

- 3.52 Dr Gogna outlined the health screening process undertaken before a person was transferred to a regional processing centre on Manus Island or Nauru:

32 Mrs Julie McCaughan, Health Services Manager, International Health and Medical Services, *Official Committee Hansard*, Christmas Island, 21 November 2012, p. 2.

33 Dr Parbodh Chandar Gogna, Area Medical Director, Christmas Island, International Health and Medical Services, *Official Committee Hansard*, Christmas Island, 21 November 2012, p. 1.

34 Mr Paul Windsor, Assistant Secretary, Detention Health Services, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 24 August 2012, p. 2.

35 Mr Paul Windsor, Assistant Secretary, Detention Health Services, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 24 August 2012, p. 2.

For the Manus and Nauru transfers, obviously the authorities in Manus and Nauru do not want to have any communicable diseases sent to them, so we have to carefully screen them with dipstick urine you saw at the induction shed this morning, and we will not send carriers of hepatitis B or people infected with hepatitis C. They need specialist intervention and they are given first-world care on the mainland. Patients with HIV we are unable to send. We will not send people with active tuberculosis.³⁶

- 3.53 Mr Windsor told the Committee that there was a minimal risk of infectious disease being transferred into the general Australian population from people living in immigration detention:

There is minimal risk posed to the community by these diseases, as the department ensures that clients adhere strictly to the treatment procedures advised by the relevant state or territory communicable diseases control authority.³⁷

- 3.54 Dr Gogna and Dr Graham confirmed to the Committee that there had been no known instances of transmission of infectious disease from people living in immigration detention to the wider population of Christmas Island.³⁸
- 3.55 DIAC provided the Committee with a table of selected communicable and/or notifiable diseases identified in immigration detention for the period July 2010 until August 2012 (Table 3.1).

36 Dr Parbodh Chandar Gogna, Area Medical Director, Christmas Island, International Health and Medical Services, *Official Committee Hansard*, Christmas Island, 21 November 2012, p. 8.

37 Mr Paul Windsor, Assistant Secretary, Detention Health Services, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 24 August 2012, p. 2.

38 Dr Parbodh Chandar Gogna, Area Medical Director, Christmas Island, International Health and Medical Services, *Official Committee Hansard*, Christmas Island, 21 November 2012, p. 1. See also Dr Julie Leanne Graham, Director of Public Health and Medicine, Indian Ocean Territories Health Service, *Official Committee Hansard*, Christmas Island, 21 November 2012, p. 2.

Table 3.1: Selected communicable and/or notifiable diseases new cases identified in Immigration Detention Facilities

Disease	Jul 2010 - Jun 2011		Jul 2011 - Jun 2012		Jul - Aug 2012	
	All Detention Types	IMAs	All Detention Types	IMAs	All Detention Types	IMAs
Chickenpox	1	1	2	2	1	1
Chlamydia	13	12	29	27	7	7
Gonorrhoea	5	2	16	15	2	2
Hepatitis A	2	2	3	3	1	1
Hepatitis B (incl active and carrier states)	111	30	171	159	45	43
Hepatitis C	13	9	15	12	11	10
HIV/AIDS*	0	0	1	1	3	1
Leprosy	1	1	0	0	0	0
Malaria	1	1	1	1	2	2
Mumps	0	0	1	1	0	0
Pertussis (Whooping Cough)	18	3	1	1	0	0
Syphilis	63	31	40	37	15	13
Tuberculosis - Active	2	2	31	27	10	9
Typhoid	0	0	3	3	0	0
Total	230	94	314	289	97	89

* 2 clients (non-IMA) were known to be HIV+ on arrival in detention (July-Aug 2012).

Source: Provided by the Department of Immigration and Citizenship

3.56 Mr Windsor commented on the number of infectious diseases identified in immigration detention:

I think the numbers that we are seeing are small in light of the overall numbers arriving. My understanding is that, with conditions like TB, we believe that the levels we are seeing are broadly comparable with the source countries from which the people have originated. So, if they are clients who have made the journey ex-Indonesia, then they are broadly comparable with levels in Indonesia. Similarly, if they are coming directly from Sri Lanka, then they are comparable with the levels found there.³⁹

³⁹ Mr Paul Windsor, Assistant Secretary, Detention Health Services, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 24 August 2012, p. 6.

Committee comment

- 3.57 Visiting Christmas Island gave the Committee a valuable opportunity to hear from a number of medical practitioners working on the island, both within the immigration detention network, and in the wider community.
- 3.58 The Committee witnessed firsthand the challenges that DIAC staff, IHMS staff and health workers from the Indian Ocean Territories Health Service face on a daily basis in providing health care services in a remote and largely isolated community.
- 3.59 Adding to this challenge, health service-providers on the island are required to meet the often complex medical needs of IMAs, while protecting the community within immigration detention and the wider community from the risk of spread of infectious disease.
- 3.60 The Committee considers the evidence obtained at Christmas Island within the context of evidence received from a range of infectious disease experts and public health officers throughout the Committee's wider roundtable program.
- 3.61 It is the Committee's view that there are robust screening processes in place to protect Australians from the importation of infectious disease from migrants, refugees and asylum seekers.
- 3.62 On the evidence before the Committee, there are clear protocols in place for pre-arrival health screening of migrants and refugees before they leave for Australia. When deemed necessary by the assessing Medical Officer, people are required to enter into a Health Undertaking, to ensure they adhere to specific treatment or actions regarding their health, while in Australia. There is also a stringent health screening protocol that applies to IMAs once they arrive in Australia and enter the immigration detention network (noting the usual entry point is Christmas Island).
- 3.63 It is evident that the risk of infectious disease spreading to the Australian community from migrants, refugees and IMAs who undergo pre-arrival and/or post-arrival health screening is small.
- 3.64 In stark contrast, an Australian resident or visitor entering Australia via an international airport does not have to undergo this same stringent health screening.
- 3.65 Accordingly, it seems more likely that an infectious disease would be imported into Australia by returning residents or through travellers who are visiting Australia, and who enter the country through one of the international airports or seaports.

Surveillance

- 3.66 How the Commonwealth, state and territory governments identify infectious diseases once they have entered Australia is an important element in protecting Australians from the risk of imported infectious disease.
- 3.67 Surveillance activities are undertaken primarily at a state and territory level, whereby specific diseases are reported by GPs or treating physicians, to the relevant state and territory authority. The Commonwealth is tasked with coordinating surveillance at a national level. These surveillance activities are discussed below.

National Notifiable Diseases Surveillance System

- 3.68 The Commonwealth Government identifies risks of infectious disease outbreak at a national level through the National Notifiable Diseases Surveillance System (NNDSS). The NNDSS is detailed further in Chapter 2.
- 3.69 There are also enhanced surveillance systems in place for particular diseases. For example, comprehensive data is collected on influenza by recording symptoms and other information when a person presents to a GP or hospital.⁴⁰
- 3.70 Dr Firman advised that the surveillance data obtained through the NNDSS and other surveillance processes was reported in annual reports and in a medical journal called *Communicable Disease Intelligence*, which was published quarterly.⁴¹
- 3.71 Professor John McBride, of the James Cook University, said the *Communicable Diseases Intelligence* (CDI) journal was an important source of information regarding communicable disease issues, however it had at one stage been defunded:

It should not have to be about scrimping and begging for resources to maintain what everyone thought was a fantastic idea:

40 Dr Jennifer Ruth Firman, Principal Medical Adviser, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 20 March 2012, p. 45.

41 Dr Jennifer Ruth Firman, Principal Medical Adviser, Office of Health Protection, Department of Health and Ageing,, *Official Committee Hansard*, Canberra, 25 May 2012, p. 45. See also Department of Health and Ageing, *Communicable Disease Intelligence* (CDI), <http://www.health.gov.au/internet/main/publishing.nsf/content/cda-pubs-cdi-cdiintro.htm>, viewed 7 March 2013.

to have a journal of the communicable diseases in Australia. It is great that that is continuing, but it is clearly under threat.⁴²

- 3.72 Dr Paul Armstrong, of the Western Australia Department of Health agreed that the CDI should not have been downgraded, as it is a way of canvassing infectious disease issues of national concern:

There is a journal called Communicable diseases intelligence – CDI, it is called. It is run by the Commonwealth. In recent times it was markedly downgraded in its importance by having its peer reviewed status taken away. This was not done in consultation with the states and territories. It has been reversed now and they are starting to build it up again, but it is really important to have a mouthpiece where communicable disease issues can be voiced. Countries around the world that have very strong communicable disease control systems do have a strong mouthpiece. The classic example is the journal called the [Morbidity and Mortality Weekly Report], which is produced by the CDC in America. That is an internationally renowned journal for communicable disease issues. We need to have a good journal like that here.⁴³

- 3.73 Regarding the surveillance data collected, Dr Firman said that the CDNA met fortnightly to discuss the data:

They look at all the data nationally that is reported for a fortnight and they look at what states have reported. They notify of interesting cases or particular cases from these states. That is discussed further and that is all reported back. Once that data is agreed as valid and correct, that is then posted on a website for public consumption.⁴⁴

- 3.74 Dr Richard Gair, of Queensland Health, told the Committee that effective surveillance allowed authorities to detect and control a disease outbreak before it became widespread:

We need to be able to become aware early of cases coming in. I have to stress the importance of surveillance is becoming aware early because the spread of anything whether it be pertussis or dengue is exponential. One case causes two, which causes four,

42 Professor William John Hannan McBride, Professor of Medicine, Infectious Diseases Physician, School of Medicine and Dentistry, James Cook University, *Official Committee Hansard*, 2 August 2012, p. 17.

43 Dr Paul Armstrong, Director, Communicable Disease Control Directorate, Department of Health, Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 20.

44 Dr Jennifer Ruth Firman, Principal Medical Adviser, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 20 March 2012, p. 45.

and before very long your chances of controlling it diminish rapidly, so you need early detection.⁴⁵

- 3.75 The Committee heard, however, that the success of infectious disease surveillance in Australia was predicated on doctors not only being aware of the notifiable diseases list, but also having the skills necessary to recognise the symptoms of these diseases, including diseases that may be rarely seen in their location.
- 3.76 Dr Armstrong told the Committee that there was strong communication between the Western Australian Government and general practitioners, who are usually a person's first point of call when they are feeling sick:
- From the Western Australian point of view, we have an ability to communicate quite rapidly with general practitioners – by fax, by media release and by, in some cases, email. I think we do have a fairly good system for communicating with GPs.⁴⁶
- 3.77 Dr Armstrong said that clinicians in Western Australia were required to inform the WA Communicable Disease Control Directorate if they considered that a patient had a disease on the notifiable list. However, he noted that the system wasn't perfect:
- Not every case is notified to us by the clinician. However, we have quite a good fall-back position, where in this state it is also mandatory for laboratories to report to us when they have notifiable diseases if they diagnose them from a laboratory point of view. That fall-back position works well. We think we would hear about all notifiable diseases that are tested for and for which there is a laboratory result.⁴⁷
- 3.78 In immigration detention centres around Australia, IHMS is required to report notifiable communicable diseases identified within the immigration detention network to the applicable state or territory health department.⁴⁸
- 3.79 Dr Mark Parrish, of IHMS, told the Committee that each state and territory had different protocols for detection and treatment of infectious disease:
- There are differences in how the states screen, diagnose and, sometimes, treat – less so in the treatment – so we work closely

45 Dr Richard Gair, Public Health Medical Officer, Queensland Health, *Official Committee Hansard*, Cairns, 2 August 2012, p. 11.

46 Dr Paul Armstrong, Director, Communicable Disease Control Directorate, Department of Health, Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 8.

47 Dr Paul Armstrong, Director, Communicable Disease Control Directorate, Department of Health, Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 8.

48 Mr Paul Windsor, Assistant Secretary, Detention Health Services, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 24 August 2012, p. 2.

with the relevant state or territory health authority and communicable disease centre to ensure we put in the appropriate methods.⁴⁹

- 3.80 Dr Gogna, of IHMS, argued that as infectious disease could be easily transported across state borders, there was a need for a nationalised approach to infectious disease control:

We need to have a single body that is giving consistent advice. IHMS as an organisation and DIAC as an organisation have 22 plus immigration detention centres across the whole nation, and we are trying to have protocols and guidelines for our staff that are consistent. It is very hard to do that when a CDC [the state or territory based communicable disease control directorate] in a different state or territory gives you a differing opinion. For example, with latent TB in the Northern Territory the CDC there will ask for sputum to be collected, looked at under a microscope and cultured. That is not what Western Australia is currently advising us to do.⁵⁰

- 3.81 Dr Gogna considered that the creation of a national centre for communicable disease control would assist in the consistent treatment of people with a communicable disease.⁵¹ This concept is discussed further in Chapter 6.

Committee comment

- 3.82 The Committee notes that a national surveillance system for infectious diseases has been created in Australia in an effort to coordinate surveillance at a national level.
- 3.83 The Committee commends the Commonwealth Department of Health and Ageing for supporting national surveillance initiatives such as the publication of a national peer-reviewed journal, *Communicable Disease Intelligence*, to raise the profile of emerging infectious disease issues of national concern. The Committee notes the importance placed on this publication by infectious disease experts, and encourages the Commonwealth to continue supporting its ongoing publication.

49 Dr Mark Parrish, Medical Director, Health Services, International Health and Medical Services, *Official Committee Hansard*, Canberra, 24 August 2012, p. 7.

50 Dr Parbodh Chandar Gogna, Area Medical Director, Christmas Island, International Health and Medical Services, *Official Committee Hansard*, Christmas Island, 21 November 2012, pp. 13-14.

51 Dr Parbodh Chandar Gogna, Area Medical Director, Christmas Island, International Health and Medical Services, *Official Committee Hansard*, Christmas Island, 21 November 2012, pp. 13-14.

- 3.84 However, the Committee has heard that the creation of a national surveillance system for infectious diseases has not translated into uniformity or consistency of surveillance among the states and territories. IHMS, which delivers health services in all of the immigration detention centres across the country, demonstrates this clearly, given they must comply with different reporting requirements in each state and territory.
- 3.85 The Committee is of the view that a national, consistent approach to infectious disease surveillance would greatly assist in the timely and effective detection of relevant infectious diseases across Australia.
- 3.86 Accordingly, the Committee recommends that DoHA work with the state and territory governments to implement a uniform notifiable diseases list across Australia, with consistent reporting requirements across each state and territory.
- 3.87 The Committee views this discussion in the context of considering the national coordination of infectious disease screening, surveillance and control measures in Australia. The concept of national coordination is discussed in more detail in Chapter 6.

Recommendation 3

- 3.88 **The Australian Department of Health and Ageing work with the states and territories to provide a uniform notifiable diseases list across Australia, with consistent reporting requirements across each state and territory and consistent public health information on infectious diseases disseminated to the public. This work should be a priority of Australian Health Ministers' Advisory Council (AHMAC).**

Health follow-up processes for migrants, refugees and asylum seekers

- 3.89 The ability to prevent the spread of imported infectious disease throughout Australia is influenced by the correct and timely reporting of notifiable diseases to the relevant health authority.
- 3.90 However, it is also dependent on whether there are adequate health follow-up processes for migrants, and for refugees and individuals

seeking asylum as they transition through the immigration detention network and move into the community.⁵²

- 3.91 Further, it is dependent on medical practitioners across Australia being equipped to identify infectious diseases, particularly those diseases that may not be endemic in Australia, but may be prevalent in countries of origin for many refugees and migrants who settle in Australia.
- 3.92 Dr Peter Markey, of the Northern Territory Department of Health, told the Committee that health screening for refugees who arrived on the Australian mainland was conducted by state and territory jurisdictions on an ad hoc basis:

Postarrival checks for refugees are only done by jurisdictions on an ad hoc basis. The guidelines have been established just by non-government organisations such as the Australasian Society for Infectious Diseases⁵³. Informal refugee networks have been involved in screening refugees and there has not been an overall coordinated policy approach to postarrival refugee screening.⁵⁴

- 3.93 Dr Markey expanded on this issue further to the Committee:

There is a need for refugees to be checked in the postarrival phase, simply because they have a high prevalence of a lot of other tropical diseases which may affect their health in the future, but also there might be ramifications for the public as well. The other issue is with immunisation; they are often behind in their immunisation, so they have to catch up ... GPs just do not have the time, the inclination, the knowledge or the skills, in a way, to be able to do it. I am aware now that things are better, that there is a Medicare [item] number, which encourages GPs to take on the role of screening. But they are still reluctant to do it and it is probably not enough to cover the amount of time that it takes, because it is a time-consuming thing. Most jurisdictions have used state government money to support clinics, sometimes also assisted with Medicare money.⁵⁵

52 Dr Julie Leanne Graham, Director of Public Health and Medicine, Indian Ocean Territories Health Service, *Official Committee Hansard*, Christmas Island, 21 November 2012, p. 10.

53 See Australasian Society for Infectious Diseases, *Diagnosis, Management and prevention of infections in recently arrived refugees*, <http://www.asid.net.au/Clinical-Guidelines>, viewed 7 March 2013.

54 Dr Peter Gregory Markey, Head of Surveillance Section, Centre for Disease Control, Northern Territory Department of Health, *Official Committee Hansard*, Cairns, 2 August 2012, p. 2.

55 Dr Peter Gregory Markey, Head of Surveillance Section, Centre for Disease Control, Northern Territory Department of Health, *Official Committee Hansard*, Cairns, 2 August 2012, pp. 10-11.

- 3.94 Dr Parrish advised that IHMS, as the contracted health service provider for DIAC, had a number of processes in place for conducting follow-up health checks for people as they transitioned through the immigration detention network:

The process that we have in place is that, once clients have had that initial health screening, we can then identify those that have particular conditions which might need following up. I would put those conditions in three broad categories. They are: the communicable diseases that we are discussing today; all of the diseases and issues that you and I and the general population get that anybody gets; and then there are those, say, mental health issues that we identify in clients. We have a centrally based, electronic medical record which allows us track those clients as they move through the detention system and we can flag clients requiring review in that. For instance, in the case of clients with a communicable disease, we can put flags in our record to say that the individual needs a check-up and a repeat X-ray. Then when patients move from the detention centre into the community, we pass that information on in conjunction with the local GP and the communicable disease centre to make sure that those contacts are continually followed up.⁵⁶

- 3.95 Dr Gogna advised that IHMS undertook a health discharge assessment for people who moved from an immigration detention centre to live in the community. He noted however, that this follow-up system could fail:

We are contracted to provide a level of health discharge assessment information for the community, but there is a richness there that cannot be transposed in a small document and it is more important to provide that richness ...

... If we have them on a recall register, by law we have to make two phone calls and then send a letter to be able to say that we have discharged our medical legal responsibility. There are lots of reasons why that could fail: addresses change, people move, they get lost to follow-up. Your melanoma that you had excised that you should have regular checks on gets missed over a period of time. It requires robust systems in place for recall and, obviously, resources to maintain those registers.⁵⁷

56 Dr Mark Parrish, Medical Director, Health Services, International Health and Medical Services, *Official Committee Hansard*, Canberra, 24 August 2012, p. 3.

57 Dr Parbodh Chandar Gogna, Area Medical Director, Christmas Island, International Health and Medical Services, *Official Committee Hansard*, Christmas Island, 21 November 2012, pp. 10-15.

- 3.96 Ms Joanna Fagan, of the Western Australian Department of Health, told the Committee that Western Australia had a centralised refugee health-screening health service:

Anyone released from detention into WA is linked into our services. We have a relatively good, but not perfect, turnout. We do try to increase the numbers coming to use our services, but it is difficult because they are young men who are very mobile and move from state to state. So it is not perfect. We have also improved our linkages with the health providers within the detention centres to try and identify individuals at risk. We maintain that people cannot be released from detention centres until they have completed their tuberculosis treatment. They remain in detention until completion of therapy or until offshore screening occurs.⁵⁸

- 3.97 Ms Fagan told the Committee that the service would not see about 25 per cent of people in immigration detention in WA who move into the community, as the majority of those people moved interstate. Ms Fagan commented:

WA is one of the only states which have a centralised service. Most refugee screening is done in primary care within the rest of Australia. We have a dedicated service to try and capture these people...

... We provide a holistic service in that we are not only looking for infectious diseases but also doing mental health. We do very thorough health checks – HIV, all the different forms of hepatitis, latent tuberculosis as well as active tuberculosis, chlamydia, gonorrhoea, syphilis and all sorts of general health checks as well.⁵⁹

- 3.98 Dr Graham told the Committee that educating GPs about lesser-known infectious disease issues facing refugees and migrants was an important part of managing the spread of disease, once people moved into the community:

... These are diseases that are not common in Australia, and so symptom recognition by a GP in urban Melbourne may be a prolonged process. By that stage this person may have been sick

58 Ms Joanna Fagan, Clinical Nurse Manager, Public Health and Ambulatory Care, Department of Health, Western Australia, and Western Australian Tuberculosis Control Program, Humanitarian Entrant Health Service, *Official Committee Hansard*, Perth, 8 August 2012, p. 6.

59 Ms Joanna Fagan, Clinical Nurse Manager, Public Health and Ambulatory Care, Department of Health, Western Australia, and Western Australian Tuberculosis Control Program, Humanitarian Entrant Health Service, *Official Committee Hansard*, Perth, 8 August 2012, p. 6.

for quite a while and may have been through several health facilities. Those with lowered immunity are at risk, and so the chance of spread there is an option.⁶⁰

- 3.99 Professor Scott Ritchie, of James Cook University, argued that ongoing training of doctors was necessary to ensure they were equipped to recognise and test for certain infectious diseases:

... quite often we will have a locum doctor from overseas who has never seen dengue before – they have not been trained for dengue. If it comes in, even though it is a notifiable disease, they will not test for it, despite the person maybe even having a travel history. So I would hope in the future that, with computers and stuff, there may be a way, once these symptoms go in, and if someone has a travel history or something, there could be a reminder brought up – 'Query dengue'.⁶¹

- 3.100 Dr Gogna argued that specialist refugee training would assist in ensuring that effective diagnosis and treatment of disease took place:

My advice would be to work with the professional colleges. There are elements of the Royal Australian College of GPs which are devising specific refugee training programs: being able to engage, cultural awareness and culture specific issues. We have had to put a doctors' handbook together to make sure people understand what languages people speak. How does Farsi relate to Hazaragi? How does it relate to Urdu? People's knowledge of these areas needs to be built up. We do not want to be immersed completely in one culture but be able to do enough to ensure that how we approach a situation is construed clearly...⁶²

Committee comment

- 3.101 The Committee considers that for the most part, there are rigorous processes in place to ensure that people being transferred from immigration detention do not pose a public health risk before they are moved into the Australian community.
- 3.102 However, the Committee is concerned to have heard that despite the stringent processes in place to screen and treat people in immigration

60 Dr Julie Leanne Graham, Director of Public Health and Medicine, Indian Ocean Territories Health Service, *Official Committee Hansard*, Christmas Island, 21 November 2012, p. 11.

61 Professor Scott Ritchie, Professorial Research Fellow, James Cook University, *Official Committee Hansard*, Cairns, 2 August 2012, p. 21.

62 Dr Parbodh Chandar Gogna, Area Medical Director, Christmas Island, International Health and Medical Services, *Official Committee Hansard*, Christmas Island, 21 November 2012, pp. 10-16.

detention for infectious disease, the system could fail once individuals were moved into the community, due to a lack of follow-up health services.

- 3.103 Further, the Committee was told that some infectious diseases may not be identified by a medical practitioner in the general community, for instance where someone has contracted an infectious disease overseas that is not prevalent in Australia, and therefore the medical practitioner is not aware of the relevant symptoms of the disease.
- 3.104 The Committee believes there is a need to facilitate a more uniform, national approach to the health screening, follow-up and treatment of migrants and refugees, including individuals moving from immigration detention centres around Australia (and from regional processing centres) into the wider community.
- 3.105 The Committee heard evidence of a successful centralised refugee health program in Western Australia, where people were linked in with the service upon moving into the community from a WA immigration detention centre. However, it does not appear that this is a uniform approach across all states and territories.
- 3.106 In addition, the Committee is of the view that medical practitioners, who are on the front line of identifying infectious disease, should be better educated on the complex health needs of migrants and refugees, and the symptoms of notifiable diseases and diseases of concern that are not endemic in Australia.

Recommendation 4

- 3.107 **The Australian Government work with the state and territory governments to assess the viability of providing a centralised refugee and migrant health service in each state and territory, which would automatically refer people who move from immigration detention into the wider Australian community.**

Recommendation 5

- 3.108 **The Royal Australian College of General Practitioners provide resources and training to general practitioners on the complex health needs of migrants and refugees, with a focus on identifying infectious diseases which are notifiable in Australia, or diseases which are of specific concern to refugee and migrant communities.**

Control

- 3.109 There are two primary approaches used to control the spread of infectious disease within Australia. One is prophylactic or preventive, which aims to reduce the spread of disease by preventing infection in the first place, for example by immunisation. Where immunisation is not compulsory, national levels of immunisation are influenced by factors including public awareness of infectious disease risks and protective factors (including behavioural risk avoidance), accessibility and cost of undertaking measures to prevent infection. This is particularly the case for international travellers.
- 3.110 The second method of control relates to the broader way in which the Commonwealth, state and territory governments mobilise to respond to disease outbreaks, and reduce the spread and impact on the population. This second facet of control is discussed in Chapter 5.
- 3.111 Immunisation and consumer engagement as methods of controlling the spread of infectious disease are discussed below.

Immunisation

- 3.112 Maintaining strong immunisation among the general Australian population builds on Australia's capacity and ability to control outbreaks of infectious disease.
- 3.113 The Committee was told that Australia maintains good vaccination coverage compared to other countries in the world, despite some groups or individuals holding objections to immunisation:

In Australia, we have very good vaccination coverage compared to many other countries in the world. Compared to when we were children, in fact it is probably better than it was then. But we do have some pockets where people, yes, for whatever reasons have some objections to childhood immunisation, but they are relatively small, they are visible and certainly there are other activities to try and improve vaccination rates. I suspect that with the internet we potentially have greater visibility of those pockets of people who have objections to it. But in Australia, because of some of the initiatives involving the Childhood Immunisation Register, we actually have very good coverage.⁶³

- 3.114 Dr Firman explained developing a 'herd immunity' was key to ensuring that a disease doesn't circulate through the population:
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63 Dr Jennifer Ruth Firman, Principal Medical Adviser, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 20 March 2012, p. 9.

With respect to herd immunity, depending on how infectious the disease is, that means you have to vaccinate a greater and greater number of people to achieve a herd immunity, where everybody is vaccinated and the disease will not circulate. For instance, with something like measles, ... but I think around 95 per cent is what you would require to actually develop that herd immunity because it is a very infectious disease. With something like the flu, you can achieve herd immunity with around 30 per cent because it is not as infectious.⁶⁴

- 3.115 Professor Peter McIntyre, of the National Centre for Immunisation Research and Surveillance of Vaccine-Preventable Diseases, explained that Australia leads the world in its national immunisation program:

The areas where Australia is a world leader include the fact that we are the only place, still, that has a national immunisation register that includes all children. This gives us tremendous capacity to track what we are doing. We have also developed over the last 20 years or so a national program, which means that, once a vaccine is on the national program, the delivery of the vaccine right to the point of administration and so on is all covered, and is not at cost to parents or others who might be receiving the vaccine, including the elderly – it is not just children anymore. That means that Australia achieves a very high uptake of vaccines very quickly and that our regional neighbours – and, more broadly, internationally – often look to Australia for early evidence of what is happening with vaccines that are introduced. Recent examples of that include the pneumococcal vaccine and the HPV vaccine.⁶⁵

- 3.116 Dr Peter Markey, from the Northern Territory Department of Health, told the Committee that having a national immunisation program has led to low rates of vaccine preventable diseases. He noted that more could be done regarding adult immunisation:

We have a very low rate of vaccine preventable diseases, with the possible exception of pertussis. This was really a result of when the immunisation program went national in the late nineties. The fact that we had national data collection systems, a national immunisation register and a national approach to immunisation is why we really got on top of things.

64 Dr Jennifer Ruth Firman, Principal Medical Adviser, Office of Health Protection, Department of Health and Ageing,, *Official Committee Hansard*, Canberra, 20 March 2012, p. 9.

65 Professor Peter McIntyre, Director, National Centre for Immunisation Research and Surveillance of Vaccine-Preventable Diseases, *Official Committee Hansard*, Canberra, 25 March 2012, p. 5.

Where we are short now is in fact in adult immunisation – because that program concentrated on childhood immunisation. Now we are short at the adult level because we do not have a national program for adult immunisation...

... That is an example of something where we have done really well at when we have approached it nationally but we can do better by having a national approach to policy and data collection and surveillance.⁶⁶

Committee comment

- 3.117 Australia is a world leader in the area of immunisation, evidenced by the high rates of immunisation of children in Australia, and the eradication of vaccine preventable diseases such as endemic measles and polio in Australia.
- 3.118 It is clear that Australia has achieved its low rates of vaccine preventable diseases through its internationally-recognised national system of immunisation.
- 3.119 The Committee is of the view that while there may currently be a low risk of spread of vaccine preventable diseases in Australia, there is a need for governments, non-government entities and individuals such as medical practitioners, health service providers, and individual consumers to remain vigilant about the ongoing success of immunisation in Australia.
- 3.120 The Committee views the national immunisation program and Australia's ability to maintain nationally low levels of vaccine preventable disease in Australia as an example of strong national coordination between the Commonwealth and state and territory governments.
- 3.121 The Committee considers that the national coordination of immunisation issues should be considered by the Commonwealth as a model for national coordination on infectious disease issues more broadly. This issue is discussed in more detail in Chapter 6.

Informing and engaging the general public

- 3.122 Informing and engaging the general public, and specifically the travelling public, about the risks of infectious disease is seen as an important step in preventing and controlling the importation and spread of infectious disease across international borders.

66 Dr Peter Gregory Markey, Head of Surveillance Section, Centre for Disease Control, Northern Territory Department of Health, *Official Committee Hansard*, Cairns, 2 August 2012, p. 16.

- 3.123 The Committee was told that across the population, many Australians did not have an adequate understanding of health issues, including how to prevent infection:

The latest available data, including the Australian Institute of Health and Welfare's Australia's health 2012 report, showed that only 41 per cent of Australians aged 15 to 74 had a level of health literacy that was adequate or above. That means that almost 60 per cent of Australians do not have adequate health literacy, and the levels of health literacy are much worse for people living in the most disadvantaged areas, those outside of major cities and people with poorer self-assessed health status.⁶⁷

- 3.124 Consumers Health Forum of Australia (CHF) told the Committee that engaging with consumers was key to controlling the spread of infectious disease, observing:

If there is a major threat to health coming across international borders to Australia, it is people, the health consumers, who will be affected. You can have all the strategies you like in place for preventing diseases from entering Australia and preventing diseases from spreading, but ultimately it is consumers and how they act that will have a major impact on the severity of the outbreak and how well that outbreak is controlled.⁶⁸

- 3.125 Ms Carol Bennett, of CHF, told the Committee:

If we want consumers to be active participants in reducing the risks of the spread of infection and the outbreak of disease, we need to inform them about the challenges we face and empower them to be involved and make the right decisions that protect their health and ultimately the health of all Australians.⁶⁹

- 3.126 In correspondence to the Committee CHF commented:

... consumers can be active participants in reducing the risks of the spread of infection and the outbreak of disease, but only if they are

67 Ms Carol Bennett, Chief Executive Officer, Consumers Health Forum of Australia, *Official Committee Hansard*, Canberra, 24 August 2012, p. 9. See also Australian Institute of Health and Welfare, *Australia's health 2012*, Australia's health series no.13, Chapter 5.1 *Health literacy*, <http://www.aihw.gov.au/publication-detail/?id=10737422172>, viewed on 12 December 2012. *Health literacy* is defined at p. 183 of the report as 'the knowledge and skills required to understand and use information relating to health issues such as drugs and alcohol, disease prevention and treatment, safety and accident prevention, first aid, emergencies and staying healthy.

68 Ms Carol Bennett, Chief Executive Officer, Consumers Health Forum of Australia, *Official Committee Hansard*, Canberra, 24 August 2012, p. 9.

69 Ms Carol Bennett, Chief Executive Officer, Consumers Health Forum of Australia, *Official Committee Hansard*, Canberra, 24 August 2012, p. 10.

informed about the challenges Australia faces and empowered to be involved in making decisions that will protect their health, and the health of all Australians.⁷⁰

- 3.127 Dr Armstrong argued that a person's risk of contracting an infectious disease while travelling overseas was largely dependent on the steps that person took to prevent infection. He told the Committee:

People do tend to have an attitude when they go to Bali or other countries that they are on holidays and they let their guard down. They have unsafe sex more often. They wear singlets, T-shirts and thongs without putting mosquito avoidance spray on. Raising the awareness of the public is something we work hard on in this state because 40 per cent to 50 per cent of all people going to Bali from Australia come from Perth or leave from Perth. So we are overrepresented in Bali travellers. One way we can improve things is for governments at the state and federal level to improve the information that is imparted to the public.⁷¹

- 3.128 Dr Armstrong stated that some people did not recognise that travelling to overseas destinations such as Bali held different infectious disease risks than travelling within Australia.⁷²

- 3.129 Ms Bennett argued that people needed to be properly informed about the implications of risky behaviour, so they could make the right choices.⁷³

- 3.130 Ms Bennett said that a challenge to government was to provide consumers with good access to information about the risks of infectious disease:

There are websites like Smartraveller, for instance, that provide some good information, but it is not particularly proactive advice and it is not necessarily consumer friendly. I do not know if it is even tested with consumers and on consumers. But it is about making sure that people know what actually happens, when do people get tested and for what purposes, what happens to them when that happens, what people should be aware of, what are the

70 Ms Carol Bennett, Chief Executive Officer, Consumers Health Forum of Australia, correspondence to the Committee dated 6 September 2012.

71 Dr Paul Armstrong, Director, Communicable Disease Control Directorate, Department of Health, Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 12.

72 Dr Paul Armstrong, Director, Communicable Disease Control Directorate, Department of Health, Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 12.

73 Ms Carol Bennett, Chief Executive Officer, Consumers Health Forum of Australia, *Official Committee Hansard*, Canberra, 24 August 2012, p. 10.

deterrents, when something does happen what are the controls in place? It is all those sorts of things.⁷⁴

- 3.131 The Committee heard that there was not enough information about infectious disease risks for Australians travelling overseas and that people had to proactively seek out the information that was available:

The feedback we get predominantly is that there is not enough information at hand and people have to proactively search it out. Unless you are vaguely aware that there are particular issues in the country you are going to, you may not even be aware that you need to find the information. So I think there need to be more proactive strategies that alert people to the point at which they need to both get the information and then provide quality information access.⁷⁵

- 3.132 The cost of immunisations and other health services was also seen as a potential barrier to people taking preventative steps to reduce the risk of infectious disease. Ms Anna Greenwood of CHF told the Committee that precautionary measures and travel immunisations were expensive:

Travel is much cheaper and more accessible for all sorts of people but they may not be factoring the medical costs into their travel.⁷⁶

- 3.133 While in some circumstances the lack of public information and engagement resulted in an underestimation of risk, under others the perception of risk was elevated.

- 3.134 For example, Councillor Kelvin Kok Bin Lee, of the Shire of Christmas Island, told the Committee that some Christmas Island residents were concerned that boats arriving on Christmas Island could lead to the spread of infectious diseases to the wider population:

Definitely, when the boatloads of people come in here and when they have the tuberculosis detected, it does create some situations where people are fearful. In our community it has been the case for a long time that we have not come across this sort of disease, so it is a bit frightening for a majority of them. Also, in the early days,

74 Ms Carol Bennett, Chief Executive Officer, Consumers Health Forum of Australia, *Official Committee Hansard*, Canberra, 24 August 2012, p. 13.

75 Ms Anna Greenwood, Consumers Health Forum of Australia, *Official Committee Hansard*, Canberra, 24 August 2012, p. 13.

76 Ms Anna Greenwood, Consumers Health Forum of Australia, *Official Committee Hansard*, Canberra, 24 August 2012, p. 13. See also Ms Joanna Fagan, Clinical Nurse Manager, Public Health and Ambulatory Care, Department of Health, Western Australia, and Western Australian Tuberculosis Control Program, Humanitarian Entrant Health Service, *Official Committee Hansard*, Perth, 8 August 2012, p. 12.

when the boat people went to school and they mixed with our kids, they were fearful that it might just carry over to them.⁷⁷

- 3.135 However, Councillor Lee could only recall one instance where a local resident was actually diagnosed with TB, and was unaware of how the disease was contracted. Councillor Lee advised that Dr Graham, on behalf of the Indian Ocean Territories Health Service, usually circulated information to the community regarding infectious disease on the island. Councillor Lee said that it would be helpful if DIAC also communicated more with the community about infectious disease issues, to lessen the fear of the community:

To me it would help if the communicators from the detention centre, especially from those people who are in charge on the other end, could work together with our local doctor in order to provide more information to the community at large; it would lessen the fear.⁷⁸

- 3.136 Mr Troy Sokoloff of DIAC responded to Councillor Lee by stating that DIAC had a very strong program of engagement and inclusion with the Christmas Island community:

We have a community reference group which meets monthly. We also have representatives from the council and shire invited to our daily morning meetings where we discuss issues. We also have regular bulletins that we put out ...

... Certainly on the part of the department we have a very strong sense of working with the community and we are always open to hearing any feedback or responding to any concerns people have. We have a dedicated officer within our team whose primary responsibility is dealing with that. She does a very capable job.⁷⁹

Committee comment

- 3.137 The Committee is of the view that the general public, including the travelling public, could be better informed about infectious disease issues. Such issues include the purpose of screening processes at the border, preventative steps that could be taken to minimise the risk of infection while overseas, and general information about infectious disease issues of concern to the community.
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77 Councillor Kelvin Kok Bin Lee, Shire of Christmas Island, *Official Committee Hansard*, Christmas Island, 21 November 2012, p. 15.

78 Councillor Kelvin Kok Bin Lee, Shire of Christmas Island, *Official Committee Hansard*, Christmas Island, 21 November 2012, p. 15.

79 Mr Troy Sokoloff, Deputy Regional Manager, Department of Immigration and Citizenship, *Official Committee Hansard*, Christmas Island, 19 November 2012, p. 17.

- 3.138 The Committee acknowledges that some information is already available for consumers in the public domain. For example, the Commonwealth website 'Smartraveller' provides a range of health advice for Australians travelling overseas.
- 3.139 The Committee considers that a wider public awareness campaign regarding infectious disease issues is necessary to better inform the general public. For travellers, this campaign could link in with the information already provided on the Smartraveller website. Information should be easy to access and user-friendly.
- 3.140 The public awareness campaign proposed should be developed in consultation with the general public, and could include (subject to consumer consultation and feedback) such features as:
- videos which could be published via YouTube, Smartraveller, international flights and/or other relevant access points, providing general advice to consumers about the general health risks for travellers, including infectious disease issues, and actions which could be taken to reduce these risks;
 - reading material such as brochures which can be provided at travel agencies, passport offices, on international flights and other relevant access points, covering issues such as keeping well overseas and preventive measures to take against infectious disease; and
 - targeted ongoing engagement with consumers via social media and on travel websites.
- 3.141 The Committee notes the evidence from the Shire of Christmas Island suggesting that some Christmas Island residents considered that DIAC did not provide enough information regarding infectious disease risks stemming from the immigration detention processes on the island. The Committee also notes DIAC's response that they engaged regularly with the residents of Christmas Island on these issues.
- 3.142 The Committee encourages DIAC to consult further with the Christmas Island community to ascertain where gaps in information and awareness exist, and how these gaps could be filled.

Recommendation 6

3.143 The Australian Government, coordinated by the Department of Health and Ageing and in consultation with the wider Australian community, develop a national public awareness campaign to better inform and engage the travelling public about infectious disease issues.

This campaign should cover the risks associated with travelling overseas, preventative measures that can be undertaken to minimise these risks, and screening measures used at the border to prevent the importation of infectious disease.

Subject to consumer input and feedback, this campaign could include a range of materials and platforms, including:

- **videos, which could be published via YouTube, Smartraveller, international flights and/or other relevant access points;**
- **reading material such as brochures which can be provided at travel agencies, passport offices, on international flights and other relevant access points; and**
- **targeted ongoing engagement with consumers via social media and on travel websites.**

When we think about emerging infectious diseases within Australia, we are thinking about what we can do within our own borders – to detect them, to control them et cetera. But we need to recognise that the Asia-Pacific region is quite an important incubator for emerging infectious diseases and for increasing antimicrobial resistance. Perhaps we should be looking to develop collaborative interactions with strategic partners in the region so that we can actually anticipate some of these problems and prevent them reaching our borders.¹

International cross-border issues

- 4.1 As discussed in Chapter 3, infectious diseases do not respect international borders. As people become more internationally mobile, so too will the spread of disease.
- 4.2 The Committee heard evidence from a range of infectious disease experts suggesting that infectious disease issues must be dealt with collaboratively and as issues of international importance, rather than national issues which are dealt with in isolation from other countries.
- 4.3 The Committee was told that Australia must engage with its regional neighbours and act as a leader in controlling emerging threats of infectious disease before they spread across borders.
- 4.4 In an article titled *One planet – one health: moving towards sustainable solutions*, presented to the Committee, it was stated:

Infectious diseases will continue to challenge and erode global health initiatives if we cannot address these underlying problems

¹ Professor Tania Sorrell, Director, Sydney Institute for Emerging Infectious Diseases and Biosecurity, *Official Committee Hansard*, Canberra, 25 May 2012, p. 4.

in developing countries, and prevent and control the spread of infections to, and within, them.²

- 4.5 The Asia-Pacific region has been flagged as a significant area regarding emerging threats of infectious disease:

The Asia-Pacific region is an important 'hot spot' for emerging infectious diseases, with favourable climatic conditions, high population densities, livestock intensification and poorly regulated antimicrobial use. Because of extensive international travel and global trade that rapidly bypass geographical and social boundaries, these infections are a global threat.³

- 4.6 Dr Adam Kamradt-Scott, of the University of Sydney, told the Committee that Australia had a self-interest to assist neighbouring countries by strengthening their capacity to respond to emerging infectious disease threats:

... Added to this, the socioeconomic and health disparities between and within countries of the region are profound, ranging from the high-income countries of Singapore and Malaysia to some of the poorest nations such as Laos and Cambodia. Our immediate neighbours – Papua New Guinea, Indonesia and Timor-Leste – also unfortunately fall into this category, each with their own unique challenges. Within this context, there is no denying that we have a clear self-interest to assist our neighbours to strengthen their capacity to deal with health threats before they spread to our shores, whether they arrive by sea or air. Importantly, it is only in developing a two-pronged strategy of helping our neighbours as well as strengthening our own national health systems that we can hope to secure our own health.⁴

- 4.7 Professor John McBride, of James Cook University, explained there was a stark difference in the health care provided in Australia and Papua New Guinea, when the close proximity between these countries was considered:

The difference in health care across the three kilometre stretch of sea is extremely stark. It is antenatal emergencies, or women in obstructed labour, kids with measles or haemophilus influenza

2 Tania Sorrell, Ben Marais, Lyn Gilbert and Michael Ward, *One Planet – one health: moving towards sustainable solutions*, Appendix B Tabled document 3.

3 Tania Sorrell, Ben Marais, Lyn Gilbert and Michael Ward, *One Planet – one health: moving towards sustainable solutions*, Appendix B Tabled document 3.

4 Dr Adam Kamradt-Scott, Senior Lecturer in International Security Studies, Centre for International Security Studies, University of Sydney, *Official Committee Hansard*, Cairns, 2 August 2012, p. 15.

type B and things like that that come across the border and end up being evacuated down to Cairns, costing the Australian taxpayer a lot of money, because there are not even rudimentary health services operating efficiently across the border. A little bit of investment in the healthcare markers and fairly low-cost things happening in Western Province could pay dividends for the Australian taxpayer.⁵

- 4.8 This chapter identifies some of the infectious disease issues facing the Asia-Pacific region, and how these issues may impact on the public health of Australia. Australia's role within the region is also discussed.
- 4.9 The Committee acknowledges the limitations of this report and advises that this chapter was never intended as a comprehensive survey of infectious disease issues in the Asia-Pacific region or in Australia.
- 4.10 In this chapter, the issue of tuberculosis is discussed in some detail. This reflects the fact that the spread of tuberculosis in the Asia-Pacific region (and particularly in the Papua New Guinea/Torres Strait Islands region) was discussed in detail by participants during the roundtable discussions, and is viewed by many of the participants as a significant risk to the future health of Australians.

Torres Strait Islands/Papua New Guinea border

- 4.11 The border between the Torres Strait Islands (TSI) and Papua New Guinea (PNG) is unique.
- 4.12 The Torres Strait Treaty (the Treaty) was established in 1978. The Treaty defines the boundaries between Australia and PNG and establishes a protected zone to manage the common border area and protect the ways of life of traditional inhabitants.⁶
- 4.13 The Treaty allows traditional inhabitants to cross the border for customary purposes, under community guidelines and without passports or visas.

5 Professor William John Hannan McBride, Professor of Medicine, Infectious Diseases Physician, School of Medicine and Dentistry, James Cook University, *Official Committee Hansard*, 2 August 2012, pp. 12-13.

6 House of Representatives Standing Committee on Health and Ageing, *Regional health issues jointly affecting Australia and the South Pacific: Report of the Australian Parliamentary Committee Delegation to Papua New Guinea and the Solomon Islands*, March 2010, p. 18. See also Department of Foreign Affairs and Trade, *The Torres Strait Treaty*, http://www.dfat.gov.au/geo/torres_strait/, viewed on 17 December 2012.

The Department of Foreign Affairs and Trade (DFAT) has overall responsibility for the Treaty.⁷

- 4.14 Mr Tim Chapman, from Department of Agriculture, Fisheries and Forestry (DAFF), outlined the TSI/PNG border zones that were established for quarantine purposes:

When the Torres Strait Treaty was put in place there were amendments to the Quarantine Act. The Torres Strait is divided into two zones for our purposes: There is the Torres Strait Protected Zone, which is the northernmost islands and it is those islands in which the traditional movements take place. Then there is the Torres Strait Special Quarantine Zone, which is those southernmost islands, including Thursday Island and Horn Island, close to the Australian mainland. When people travel from the Protected Zone – the northernmost islands – to the Special Quarantine Zone, they undergo biosecurity clearance.⁸

- 4.15 The Committee's previous report into *Regional health issues jointly affecting Australia and the South Pacific* canvassed the possibility that Australia's border with PNG could become the gateway for further health threats like mosquito-borne diseases, HIV and drug-resistant tuberculosis (TB) entering Australia.⁹
- 4.16 The porous nature of the border between PNG/TSI, having regard to the frequency of traditional movements, poses a unique challenge for Commonwealth agencies responsible for preventing the spread of infectious disease.
- 4.17 The Committee was told that the biosecurity of the protected zone is managed in a number of ways.
- 4.18 Firstly, there are staff members from DAFF present on all inhabited islands in the Torres Strait to identify any emerging biosecurity issues. If traditional visitors are identified as being unwell, they are isolated and treated in the local health clinics.¹⁰

7 House of Representatives Standing Committee on Health and Ageing, *Regional health issues jointly affecting Australia and the South Pacific: Report of the Australian Parliamentary Committee Delegation to Papua New Guinea and the Solomon Islands*, March 2010, p. 18. See also Department of Foreign Affairs and Trade, *The Torres Strait Treaty*, http://www.dfat.gov.au/geo/torres_strait/, viewed on 17 December 2012.

8 Mr Tim Chapman, First Assistant Secretary, Quarantine Operations, Department of Agriculture, Fisheries and Forestry, *Official Committee Hansard*, Canberra, 25 May 2012, p. 29.

9 House of Representatives Standing Committee on Health and Ageing, *Regional health issues jointly affecting Australia and the South Pacific: Report of the Australian Parliamentary Committee Delegation to Papua New Guinea and the Solomon Islands*, March 2010, p. 5.

10 Mr Tim Chapman, First Assistant Secretary, Quarantine Operations, Department of Agriculture, Fisheries and Forestry, *Official Committee Hansard*, Canberra, 25 May 2012, p. 28.

- 4.19 Secondly, traditional visits within the Torres Strait Protected Zone can be curtailed when issues such as infectious disease outbreaks occur.¹¹
- 4.20 Mr Miles Henderson, of the Department of Immigration and Citizenship (DIAC), gave an example of restrictions being placed on traditional movements during a cholera outbreak:
- The arrangements for traditional travel under the treaty are quite treasured and respected. There were still some movements and, except for when there is a stated health reason for a person to be moved off to a clinic, people will make arrangements to turn around as soon as practicable. If a boat arrives we do not turn it around and push it back, but you work with the arrivals to see if there is inclement weather or they have run out of petrol, or whatever. They will return voluntarily as soon as it is practicable.¹²
- 4.21 Mr Chapman agreed that on the whole, there was a high level of community support for enforcement of biosecurity arrangements:
- [Residents] have a very good understanding of the obligations, whether they are biosecurity obligations or whether they are Torres Strait Treaty obligations, and such small communities are actually remarkably effective in making sure that the wrong things do not happen.¹³
- 4.22 The Australian Agency for Aid Development (AusAID) understands that while the Torres Strait Treaty does not allow free movement to Australia for the purpose of seeking health care, residents from PNG Treaty Villages in the Torres Strait have done exactly this for a number of years. AusAID's response has been to support PNG in providing access to high quality health care in PNG, so that PNG nationals will not feel a need to travel to the Torres Strait for treatment.
- 4.23 The issue of PNG nationals accessing health care in Australia is discussed further in this chapter.

11 Mr Tim Chapman, First Assistant Secretary, Quarantine Operations, Department of Agriculture, Fisheries and Forestry, *Official Committee Hansard*, Canberra, 25 May 2012, p. 28.

12 Mr Miles Henderson, Acting Assistant Secretary, Border Security Policy, Department of Immigration and Citizenship, *Official Committee Hansard*, Canberra, 25 May 2012, p. 28.

13 Mr Tim Chapman, First Assistant Secretary, Quarantine Operations, Department of Agriculture, Fisheries and Forestry, *Official Committee Hansard*, Canberra, 25 May 2012, p. 28.

Preventing the spread of tuberculosis (TB)

- 4.24 Tuberculosis (TB) is an infectious bacterial disease which most commonly affects the lungs. It is transmitted from person to person via droplets from the throat and lungs of a person with active respiratory disease.¹⁴
- 4.25 The bacteria that cause TB can develop resistance to antimicrobial drugs. Multi-drug resistant TB, or MDR-TB, does not respond to at least two of the most powerful anti-tuberculosis drugs. Extensively drug-resistant TB, or XDR-TB, responds to even fewer available medicines.¹⁵
- 4.26 One of the primary causes of drug resistant TB is the inappropriate or incorrect use of antimicrobial drugs, or use of ineffective formulations of drugs.¹⁶
- 4.27 Australia has an enviable record of TB control, holding one of the lowest rates in the world. The Committee was told that this record was possible because Australia maintained dedicated TB control programs in each state and territory, and that our government policy and expertise was the best in the world.¹⁷
- 4.28 Professor Tania Sorrell, of the Sydney Institute for Emerging infectious Diseases and Biosecurity, said:
- We know at the moment, that around 80 per cent of our cases of TB are actually imported. There is very little, what we call, endemic transmission – that is to say, transmission within the community once people actually come to Australia.¹⁸
- 4.29 Given the porous border between PNG and TSI, the spread of drug-resistant TB within PNG has raised concern among Australian infectious disease experts that drug-resistant TB may become a wider issue in Australia.
- 4.30 Dr Stephen Vincent, Director of Thoracic Medicine at Cairns Base Hospital, told the Committee that there was an increase of drug-resistant TB in PNG, which was difficult to address:

14 World Health Organization, *Tuberculosis*, <http://www.who.int/topics/tuberculosis/en/>, viewed on 19 December 2012.

15 World Health Organization, *Multidrug-resistant tuberculosis*, <http://www.who.int/features/qa/79/en/index.html>, viewed on 19 December 2012.

16 World Health Organization, *Multidrug-resistant tuberculosis*, <http://www.who.int/features/qa/79/en/index.html>, viewed on 19 December 2012.

17 Dr Justin Waring, Medical Director, Western Australian Tuberculosis Control Program, Chair, National Tuberculosis Advisory Committee, *Official Committee Hansard*, Perth, 8 August 2012, p. 4.

18 Professor Tania Sorrell, Director, Sydney Institute for Emerging Infectious Diseases and Biosecurity, *Official Committee Hansard*, Canberra, 25 May 2012, p. 4.

The growth of the number of patients coming across from PNG – those being PNG nationals – has exponentially grown to where we have had about 250 cases of drug-resistant TB in the last 10 years. It is a concern because there is a high prevalence of drug-resistant TB in the Western Province – probably about 40 per cent, we predict – and this is not only mono resistance but multidrug resistance, which generally requires at least two years of treatment and five or six different drugs, at great expense.¹⁹

4.31 Dr Vincent said that without effective surveillance and infectious disease control, there was a concern that TB would spread into the Torres Strait from PNG:

... there are grave concerns that, if drug-resistant TB gets into the Torres Strait, it is easy for it to get into Australia because there is a lot of back and forward movement. We suspect that there is multidrug-resistant TB [MDR TB] in the population of the Torres Strait which just has not declared itself yet – but we are looking. Now that there are two cases of [extensively drug-resistant TB] XDR TB, it is a major public health problem. The cost of drug-resistant TB is exponential to that of fully sensitive TB as well, so it is going to be a major cost impact and health impact for the future.²⁰

4.32 In Australia, the surveillance and control of TB is managed on a number of levels, including:

- specific tuberculosis control units or programs run by states and territories; and
- the National Tuberculosis Advisory Committee (NTAC), which provides advice to the Communicable Diseases Network Australia (CDNA), the Department of Health and Ageing (DoHA) and the states and territories.²¹

4.33 Australia primarily provides support for TB management in PNG through AusAID. In February 2012, AusAID committed an initial \$11 million over four years to help PNG manage TB in Western Province. AusAID's strategy for TB management in PNG is based on the WHO's established

19 Dr Stephen Vincent, Director, Thoracic Medicine, Cairns Base Hospital, *Official Committee Hansard*, Cairns, 2 August 2012, p. 5.

20 Dr Stephen Vincent, Director, Thoracic Medicine, Cairns Base Hospital, *Official Committee Hansard*, Cairns, 2 August 2012, p. 5.

21 See Department of Health and Ageing, *National Tuberculosis Advisory Committee*, <http://www.health.gov.au/internet/main/publishing.nsf/Content/cdna-ntac-pubs.htm>, viewed on 21 December 2012.

global standards for an effective TB and MDR-TB response and includes providing both short and long term initiatives, including:

- a custom built 'sea ambulance' (medical boat);
- new infrastructure at Daru, including an interim TB isolation ward at Daru Hospital;
- new infrastructure and clinics around the border area, Sibagadaru and Mabudawan; and
- funding World Vision to deliver its 'Stop TB in Western Province Program', which supports TB specialist staff and trains and manages a network of local health workers.²²

4.34 Ms Caitlin Wilson, of AusAID, told the Committee that one of the difficulties in managing TB in PNG was in ensuring that people diagnosed with TB complied with the rigorous and long term medication regimen:

One of the weaknesses that we have certainly been discussing with health colleagues, with our health specialists in our department, and more broadly with specialists, is the lack of adherence to a protocol as opposed to a lack of ability to actually manage on the PNG side. We have certainly seen good progress in the last six months with an increase in confidence of patients, particularly patients who have returned to PNG for treatment, having been seen in North Queensland over a period of time.²³

4.35 During the public roundtable discussions, the Committee heard evidence of a number of recent policy changes made at a state and Commonwealth level regarding TB management in Australia and in PNG. It was feared that some of these changes could cause increased rates of drug resistant TB in PNG and Australia. Recent policy changes have included:

- the closure of a health clinic on Saibai Island where patients (including PNG nationals) were screened and treated for TB;
- AusAID supporting the development of TB treatment and outreach services in the Western Province area;²⁴ and
- the closure of the main Queensland Tuberculosis Control Centre based in Cairns.²⁵

22 See Ms Caitlin Wilson, Assistant Director-General, PNG and Solomon Islands Branch, AusAID, *Official Committee Hansard*, Canberra, 25 May 2012, pp. 24-25. See also AusAID, *Tackling Tuberculosis in Western Province, Papua New Guinea: a long term approach to ensure effective and sustained TB services*, October 2012.

23 Ms Caitlin Wilson, Assistant Director-General, PNG and Solomon Islands Branch, AusAID, *Official Committee Hansard*, Canberra, 25 May 2012, pp. 24-25.

24 See, for example, Ms Caitlin Wilson, Assistant Director-General, PNG and Solomon Islands Branch, AusAID, *Official Committee Hansard*, Canberra, 25 May 2012, pp. 24-25.

4.36 Dr Vincent said of the former clinic on Saibai Island:

I guess we shot ourselves in the foot by having a good clinic up and running. The people in PNG knew that, if they were sick with a TB type illness, coming to the Saibai chest clinics would be valuable, because 85 per cent of them were cured, 85 per cent of them survived, as opposed to one person dying every two hours in PNG. That type of presentation you are talking about was not uncommon and it is probably still going to occur. The issue is that we actually have no ability to go up there anymore ...

...The worry now is that these people will present quite unwell and infect others and our TB clinics have no presence on Saibai or Boigu whatsoever, as opposed to the situation where every two weeks we had clinics up there.²⁶

4.37 Dr Justin Waring, Medical Director at the Western Australian Tuberculosis Control Program and Chair of NTAC, argued that the best option to control the spread of MDR-TB into Australia and to manage TB in PNG was to combine the two policies: i.e. update the clinic on Saibai Island and support a TB management scheme in Western Province:

The people are going to keep coming and, even if the activity in Western Province were to become successful, with their TB program becoming much more effective, it would take at least 20 to 30 years to get there. In the meantime, you face the prospect of having the people not only coming legitimately across the border – they might be coming for the wrong reasons but they do have the right to cross the border – but coming with drug-resistant TB, which is much worse.²⁷

4.38 Dr Waring said that Australia had to remain vigilant about maintaining low rates of TB by maintaining effective screening and treatment programs:

As a generalisable principle in public health, if you control something well, you get very few cases, and that then prompts administrators to take funding away because it is not a problem anymore. This has happened in New York City and London with TB. It has not happened in Australia, but we are constantly at risk

25 See, for example, Dr Stephen Vincent, Director, Thoracic Medicine, Cairns Base Hospital, *Official Committee Hansard*, Cairns, 2 August 2012, pp. 5-6.

26 Dr Stephen Vincent, Director, Thoracic Medicine, Cairns Base Hospital, *Official Committee Hansard*, Cairns, 2 August 2012, p. 10.

27 Dr Justin Waring, Medical Director, Western Australian Tuberculosis Control Program, Chair, National Tuberculosis Advisory Committee, *Official Committee Hansard*, Perth, 8 August 2012, p. 6.

of it happening. As an example of that, the Queensland government has announced as part of their cost-cutting that they are going to close down their central TB control. So we need to be conscious that we are not just maintaining it to treat the few cases that we get but maintaining it to maintain public health activity, which is all about screening and picking up cases early and making sure that we treat them adequately.²⁸

4.39 As noted earlier in the report, irregular maritime arrivals (IMAs) from countries where TB is still endemic pose another infectious disease risk for Australia.

4.40 Dr Mark Parrish, of International Health and Medical Services (IHMS – the contracted detention health services provider for DIAC), explained that there was a rigorous treatment and follow-up process in place in Australia for any person identified as having active, infective TB when they arrived in immigration detention (usually they would arrive by boat on Christmas Island). Dr Parrish explained that all people on the same boat would be considered to be ‘contacts’ of that individual and they would have a chest x-ray at six, 12 and 18 months after their arrival in Australia. IHMS would also advise the relevant state or territory communicable disease centre.²⁹

4.41 Dr Parrish also advised of the follow-up process once a person moved from immigration detention to the community:

In the cohort of clients that we are responsible for we make sure if they are in the detention system for that six- to 12-month period that they are contact traced and have that screening chest X-ray or further follow-up as required. If they move into the community on a visa we will hand that information over to the local centre for disease control – each state has one of those – and ensure that they have the details of the individual to follow up.³⁰

4.42 Dr Padbodh Gogna, of IHMS, told the Committee that without rigorous screening and ongoing treatment of people with TB, there was a risk that drug resistance could develop:

So, these people will require lifelong screening with drugs that if not taken on a regular basis will end up creating even more failure

28 Dr Justin Waring, Medical Director, Western Australian Tuberculosis Control Program, Chair, National Tuberculosis Advisory Committee, *Official Committee Hansard*, Perth, 8 August 2012, p. 4.

29 Dr Mark Parrish, Medical Director, Health Services, International Health and Medical Services, *Official Committee Hansard*, Canberra, 24 August 2012, pp. 5-6.

30 Dr Mark Parrish, Medical Director, Health Services, International Health and Medical Services, *Official Committee Hansard*, Canberra, 24 August 2012, p. 6.

rates and more resistant forms of TB. It is something we are on the precipice of.³¹

- 4.43 Dr Julie Graham, of the Indian Oceans Territory Health Service, stated that cuts to state and territory-run TB programs around the country had reduced the ability for health service-providers to follow up individuals with TB:

Statistics show that the risk of reactivation of TB becomes more prominent in the first 12 months when someone has resettled in a country and certainly state-based TB programs have had funding cuts to them and so reduced their ability to follow up those individuals who have latent TB or new arrivals into the system. That produces a risk. We know that the rates of TB in the areas that these people are coming from are higher than the rates in Australia. We have seen it before in the Northern Territory where we had people coming down from Timor. Twelve months into that settlement program we were seeing increased rates. So, it is continuing those ongoing healthcare services to these in-settlement programs on the mainland for an extended period of time.³²

- 4.44 Dr Graham proposed that contact tracing for a person diagnosed with TB remain in place for at least a two-year period, rather than 12 months, as was the case in some states and territories:

With TB, as I said, once you have been exposed to it, the bug lies dormant in your system and can be in the system lifelong. There is also the risk of exposure from an acute case in a confined environment over a long period of time – which happens within our centres here and in the centres on the mainland. The initial contact tracing process should be established for a two-year period because the data shows that that is when reactivation of TB is the most likely to occur. In some states that has been reduced down to 12 months.³³

31 Dr Parbodh Chandar Gogna, Area Medical Director, Christmas Island, International Health and Medical Services, *Official Committee Hansard*, Christmas Island, 21 November 2012, pp. 10-11.

32 Dr Julie Leanne Graham, Director of Public Health and Medicine, Indian Ocean Territories Health Service, *Official Committee Hansard*, Christmas Island, 21 November 2012, p. 10.

33 Dr Julie Leanne Graham, Director of Public Health and Medicine, Indian Ocean Territories Health Service, *Official Committee Hansard*, Christmas Island, 21 November 2012, p. 11.

Committee comment

- 4.45 The Committee considers that the concerns expressed by participants following recent policy changes regarding TB control (on a state and Commonwealth level) are based on the following views:
- there is a need to remain vigilant and maintain tight control of TB in Australia, notwithstanding Australia's currently low rate of active TB;
 - Australia has an important role to play in supporting PNG in its management of TB and MDR-TB, and self-interest in managing the risk of spread of TB across the Australian border; and
 - there is a need for a national coordination point for TB control in Australia, to allow for effective notification, surveillance and treatment of TB in Australia, including the ability to "contact-trace" to minimise spread of disease.
- 4.46 The Committee shares these views and will comment further on Australia's role as a leader in infectious disease control in the region, later in this chapter.
- 4.47 The Committee notes that Australia's focus in managing TB in PNG, through AusAID, has been to provide a package of assistance designed to develop PNG's capacity to control TB and minimise its spread. Notwithstanding this commitment, the Committee heard evidence that until PNG's capacity to treat TB was increased, screening and treating PNG nationals on Saibai Island could be an effective line of defence in preventing the spread of disease further into Australia.
- 4.48 During the Australian Parliamentary Committee's Delegation to Papua New Guinea and the Solomon Islands in 2009, the Committee visited Saibai Island. At that time, health clinics were operating at Saibai and Boigu, with referrals made to Thursday Island or Cairns Base Hospital, if necessary. Representatives of the Torres Strait Regional Authority (TSRA) and the Saibai community expressed concern that treating PNG nationals in health clinics in the Torres Strait placed strain on community resources and risked infectious diseases being transferred to Torres Strait Islanders. The Committee was told that approximately 253 people presented at the Saibai clinic in 2008-2009, when the local population was approximately 337 people. The TSRA estimated that less than 4 per cent of traditional movements from PNG involved visits to health clinics in the Torres Strait in 2007-2008.³⁴

34 House of Representatives Standing Committee on Health and Ageing (HAA), *Regional health issues jointly affecting Australia and the South Pacific: Report of the Australian Parliamentary Committee Delegation to Papua New Guinea and the Solomon Islands*, March 2010, pp. 22-24,

- 4.49 The Committee appreciates the concerns expressed by Torres Strait Island representatives that treating PNG nationals for health issues on Saibai Island placed strain on the community's health resources and could lead to the transmission of infectious disease into the Torres Strait.
- 4.50 However, the Committee has heard evidence that shutting down Torres Strait Island clinics could leave some PNG nationals without access to timely medical intervention, which could lead to an increase in MDR-TB. The Committee heard that as traditional movements continue, there is a risk that MDR-TB could move into the Torres Strait. The Committee also heard that without an ongoing presence in the Torres Strait, the ability of Australian public health authorities to track the spread of TB and MDR-TB in the region is reduced.
- 4.51 The Committee considers that conducting health screening of PNG nationals prior to entry to the Torres Strait Islands would be contrary to free movement in the protected treaty zone, which is embedded in the Torres Strait Treaty. Noting the close proximity of Saibai Island to PNG, the Committee is of the view that reinstating the Saibai Island clinic would allow the continuation of free movement between PNG and TSI, while also protecting the risk of spread of MDR-TB within PNG and into the Torres Strait Island communities.

Recommendation 7

- 4.52 **Having regard to the terms of the Torres Strait Treaty, the Department of Health and Ageing, Queensland Health, AusAID and the Papua New Guinea Government:**
- **establish a set of protocols and procedures for the identification and treatment of tuberculosis and other infectious diseases in Papua New Guinea and the Torres Strait Islands; and**
 - **consider what clinical services should be available in both Papua New Guinea and Australia for the identification and treatment of tuberculosis and other infectious diseases.**
- 4.53 The Committee notes that to address the inability of some PNG nationals to access vital TB treatment because of their remote location, AusAID has funded a sea ambulance which conducts outreach clinics throughout the

- South Fly region. AusAID states in its paper, *Tackling Tuberculosis in Western Province, Papua New Guinea*³⁵, published in October 2012, that in five months, 11 outreach visits had been conducted.
- 4.54 The Committee watched with interest, the Four Corners program ‘*The Rise of the Superbugs*’ screened by the ABC on 29 October 2012. The Committee notes comments made in that program that the sea ambulance did not visit some villages regularly enough to allow for effective treatment of TB.³⁶
- 4.55 The Committee was concerned that it appeared in the Four Corners program that appropriate infection control protocols, such as the use of masks and the isolation of patients in TB and MDR-TB isolation units at Daru Hospital, were not being adhered to.
- 4.56 The Committee supports the continued efforts of AusAID in assisting PNG develop stronger management of TB, as Australia has an important role as a leader in health care in the region. The Committee notes that as part of its ongoing commitment to capacity building in PNG, AusAID has committed to undertake regular reviews of its assistance programs, and will revise programs where needed to ensure best practice and that the desired outcomes are achieved.
- 4.57 As part of a robust framework of review, in 2012 the PNG Government commissioned an independent report, *Evaluation of Risks of Tuberculosis in Western Province Papua New Guinea*.³⁷ The report identified several areas for improvement, including the need to develop better TB infection control practices at Daru Hospital. The report also recommended expansion of outreach activities, including increased use of sea ambulance.³⁸
- 4.58 In a joint response to the report, AusAID and the PNG Government agreed to all of the report’s recommendations, outlining the steps to be taken.³⁹
- 4.59 In view of the issues reported on by the Four Corners program, and the stated commitment to ongoing assessment, the Committee expects that

35 AusAID, *Tackling Tuberculosis in Western Province, Papua New Guinea: a long term approach to ensure effective and sustained TB services*, October 2012.

36 ABC Four Corners, *Rise of the Superbugs*, transcript, <http://www.abc.net.au/4corners/stories/2012/10/25/3618608.htm#transcript>, viewed on 21 December 2012.

37 AusAID, *Evaluation of Risks of Tuberculosis in Western Province Papua New Guinea*, September and October 2012, pp. 43-44.

38 *Joint AusAID-PNG Government Response to Evaluation of Risks of Tuberculosis in Western Province*, November 2012.

39 *Joint AusAID-PNG Government Response to Evaluation of Risks of Tuberculosis in Western Province*, November 2012.

further reviews of AusAID's TB control initiatives in PNG will specifically examine and report on the progress toward improving infection control at Daru Hospital, and on the operation of the sea ambulance to ensure that PNG nationals who rely on this service for their TB medication continue to have access to appropriate medication in a timely fashion.

- 4.60 It is clear that one reason why Australia has one of the lowest rates of TB in the world is due to the tireless efforts and expertise of respiratory disease physicians and other experts, running effective control programs across each state and territory.
- 4.61 The Committee heard evidence specifically praising the success and ongoing efforts of staff within the TB control units situated in Western Australia and Queensland. From the evidence before the Committee, some of the important features of these state-based control units include:
- effective surveillance and information-sharing on a state and national level, to monitor the spread of TB;
 - effective and timely contact tracing to ascertain whether other people in contact with the infected person have been infected with TB; and
 - effective treatment of TB, including ongoing follow up with patients to ensure full medication compliance, thereby avoiding the development of drug-resistant TB.
- 4.62 Noting the importance of ongoing effective TB control in Australia, the Committee considers that there is a broader need for a coordinated national approach to infectious disease control. The Committee considers that this national approach would also encompass TB control. The Committee discusses this issue further in Chapter 6.

A global leader and partner

- 4.63 Australia has been a global leader in infectious disease control, in areas such as immunisation, TB control and in its ability to eradicate diseases such as endemic measles and polio.⁴⁰
- 4.64 With a strong capacity in surveillance, treatment and control of infectious disease, it has been argued that Australia has an important contribution to make in the international community, particularly in assisting regional neighbours detect and control infectious disease.

40 Professor Peter McIntyre, Director, National Centre for Immunisation Research and Surveillance of Vaccine-Preventable Diseases, *Official Committee Hansard*, Canberra, 25 May 2012, p. 5.

- 4.65 Dr David Smith, clinical virologist and Chair of the Public Health Laboratory Network of Australia (PHLN), explained that Australia had a strong system of responding to emerging disease threats:

We have a very robust system in Australia that has been able to deal with a number of threats that have come up so far. We now have a greater capacity. I believe you have heard about a number of quite sophisticated technologies that give us a lot more power to identify organisms. When SARS appeared, we knew the infecting organism within a couple of months. A decade or two ago, it would have been months or years before it was characterised. When pandemic flu emerged in 2009, we had tests available for that within two weeks, long before the pathogen ever entered into the country.⁴¹

- 4.66 Dr Laurens Manning, of the University of Western Australia, argued that as diseases were bi-directional, Australia had a responsibility to prevent the spread of infectious disease across its borders to other countries, just as it needed to manage the risk of diseases spreading into Australia from overseas:

I would just like to make the point that these diseases are bidirectional. They go between these countries and Australia but also from Australia back to these countries as well. We have lots of expatriates working in Papua New Guinea, for example, and other places in the Pacific. The effect of this is that there is a disproportionate effect of transmissible diseases such as antibiotic resistant bacteria, HIV and tuberculosis in these countries. So it becomes a humanitarian issue as well. Part of our aid responsibility is to ensure that any surveillance network we have in place in Australia is at least in some umbrella capacity spread over our neighbours as well.⁴²

- 4.67 According to Dr Waring, providing aid to regional neighbours played a significant role in preventing the spread of disease, preventing its importation into Australia, and, more broadly, improving the lives of people in nearby developing countries:

If we contribute aid to countries like Papua New Guinea, East Timor, the Pacific Islands and Indonesia, we do not just improve our chances of reducing TB coming to Australia by helping our immediate neighbours control the problem. It has much greater

41 Dr David William Smith, Chair, Public Health Laboratory Network of Australia, *Official Committee Hansard*, Canberra, 25 May 2012, p. 36.

42 Dr Laurens Manning, Associate Professor, Infectious Diseases, University of Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 11.

effects because, for example, TB affects the economic powers of young adults. If you reduce the incidence of TB in a country like Indonesia, you improve the working population. The mothers and the young adults do not get sick and die.⁴³

Building capacity in neighbouring countries

4.68 Dr Manning considered that Australia should take a leading role in controlling and responding to infectious disease issues in the Asia-Pacific. He stated there was a gap in knowledge regarding infectious disease identification and control in countries such as PNG, West Timor, West Papua and the Solomon Islands:

Essentially the main problem as I see it is that there is a huge knowledge gap in pretty much all aspects of infectious diseases in these countries, and that spans all facets of infectious diseases, from bacteria viruses through to parasites, and common diseases like golden staph right through to epidemic diseases like influenza or Hendra virus, that we are more familiar with as epidemics.⁴⁴

4.69 The Committee was told that there was limited laboratory capacity in PNG, with even basic tests such as malaria and TB testing not being available in most settings, and other more complex tests only available in Port Moresby - or not available at all. Dr Manning proposed that Australia assist in building laboratory capacity in countries such as PNG:

Essentially I submit to you that if we want to play a role as a leader in the region we need to be promoting expanded laboratory capacity in Papua New Guinea and a broader surveillance network that integrates well with our own but encompasses these countries.⁴⁵

4.70 Dr Paul Armstrong, of the Western Australia Department of Health, told the Committee that a lack of laboratory capacity meant that some people with an infectious disease would not be diagnosed until well down the track:

One of the issues is that in countries where the laboratory systems are less developed an outbreak of a disease of epidemic or pandemic potential which arises somewhere in a remote part of

43 Dr Justin Waring, Medical Director, Western Australian Tuberculosis Control Program, Chair, National Tuberculosis Advisory Committee, *Official Committee Hansard*, Perth, 8 August 2012, p. 11.

44 Dr Laurens Manning, Associate Professor, Infectious Diseases, University of Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 2.

45 Dr Laurens Manning, Associate Professor, Infectious Diseases, University of Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 2.

that country may not necessarily be diagnosed until well down the track, simply because they do not have laboratory expertise.⁴⁶

- 4.71 Professor Geoffrey Shellam, of the University of Western Australia, told the Committee that better diagnosis and control of infectious disease in countries of origin would mean better overall control of the disease:

Since infectious diseases know no boundaries, obviously if there were better diagnosis in the countries of origin then there would be better control and better awareness of what they have to do to control it. I do not know whether there is anything that can be done by Australia to improve this, but since we focus so much on quality control in our own diagnostic procedures we have a mind to improve diagnostic facilities wherever we can. I would have thought that a recommendation to investigate ways of increasing core facilities in neighbouring countries would be valuable.⁴⁷

- 4.72 Dr Kamalini Lokuge, of the Australian National University, told the Committee that Australia had a history of aid which was short term, ineffective and did not produce long-term outcomes. Dr Lokuge stated that aid needed to be delivered at a grass roots level to build capacity and local engagement within local communities:

I think what is needed is real engagement with those who are directly involved in taking up those services and delivering them, rather than just limiting our involvement to external assistance that is not monitored and is not accountable.⁴⁸

- 4.73 Professor Sorrell said that building capacity within a country's own health system was important:

The laboratories are fairly rudimentary. We have just come back from Indonesia and it is certainly true that their influenza capacity has been increased as a special initiative, funded from outside, but their ability to detect multi-drug-resistant TB is minimal, and some of the other diseases that occur in eastern Indonesia. They are asking for our help to build laboratory capacity. I think the two need to go hand-in-hand.⁴⁹

46 Dr Paul Armstrong, Director, Communicable Disease Control Directorate, Department of Health, Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 8.

47 Professor Geoffrey Shellam, Professor of Microbiology, University of Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, pp. 18-19.

48 Dr Kamalini Lokuge, Medical Epidemiologist, National Centre for Epidemiology and Population Health, Australian National University, *Official Committee Hansard*, Canberra, 25 May 2012, pp. 7-8.

49 Professor Tania Sorrell, Director, Sydney Institute for Emerging Infectious Diseases and Biosecurity, *Official Committee Hansard*, Canberra, 25 May 2012, p. 8.

- 4.74 Professor Shellam submitted that government should encourage national research funding agencies such as the National Health and Medical Research Council (NHMRC) to fund more international research collaborations, whereby Australian researchers worked with countries to our north to investigate diseases of importance in those countries.⁵⁰
- 4.75 Professor Shellam told the Committee that he had a student from Malaysia conducting research in Australia that he could not conduct overseas, due to the lack of laboratory capacity:

I have a student who has come from the health department in Malaysia, bringing the whole database of dengue since 2005 – nearly 300,000 cases. He has discovered that there are a large number of cases of dengue-like illness which are actually not caused by dengue. They did not have the laboratory capacity to identify this. We have identified these cases by using PathWest in Western Australia. That is a particular example, but one would like to see real capacity in neighbouring countries to make good quality diagnoses – perhaps not tertiary level diagnoses but good quality diagnoses.⁵¹

- 4.76 Ms Jenny Da Rin, of AusAID, outlined the Commonwealth Government's current investments (through AusAID) in strengthening the capacity of neighbouring countries to respond to infectious disease issues:

Probably our biggest investments really are about building partner-government capacity to deal with these issues themselves, to monitor effectively both at the national level and at the subnational level, and to have good data so that they have got a good understanding of what is going on, and to have effective coordination and control.⁵²

- 4.77 Ms Joanne Greenfield, of AusAID, explained that AusAID had bilateral programs where representatives worked very closely with governments on the ground, as well as with the WHO:

So we take a multipronged approach to what we do and we build up a framework around actually building the systems in the countries that we work in to actually deliver the health services to

50 Professor Geoffrey Shellam, Professor of Microbiology, University of Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 11.

51 Professor Geoffrey Shellam, Professor of Microbiology, University of Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 19.

52 Ms Jenny Da Rin, Assistant Director General, Education and Health Branch, AusAID, *Official Committee Hansard*, Canberra, 25 May 2012, p. 19.

save lives, to control diseases and to prevent maternal and child deaths.⁵³

Committee comment

- 4.78 As a global citizen with a world class health care system, Australia has a responsibility to assist regional neighbours respond to emerging threats of infectious disease.
- 4.79 In fulfilling this obligation, Australia will in turn be protecting Australians and preventing the importation and spread of infectious disease into Australia from international sources.
- 4.80 It is clear that Australia must approach its role as a global leader in the fight against infectious disease using a multi-pronged approach:
- by assisting in building the laboratory capacity in the Asia-Pacific region;
 - by implementing 'grassroots measures' such as educating and training health workers in neighbouring countries, to increase local capacity to diagnose and treat infectious disease; and
 - by participating in collaborative research on infectious disease issues with neighbouring countries, to identify emerging threats.
- 4.81 From its previous visit to PNG and the Solomon Islands, the Committee understands the challenges that developing countries in the Asia-Pacific face in building capacity to implement ongoing effective infectious disease surveillance, treatment and control measures.
- 4.82 For example, the Committee witnessed firsthand in PNG instances where new health equipment sat idle in clinics and hospitals, because health workers either did not have the necessary training to use the equipment, or the resources required to maintain the equipment were not available and so equipment was not maintained.
- 4.83 The Committee supports AusAID's strategic goals in the Asia-Pacific region in working with governments to build their own capacity to provide infectious disease control measures which save lives and fight the further spread of disease.
- 4.84 The Committee supports AusAID's phased, long term support program for TB control in PNG which includes both shorter and longer term measures based on the WHO treatment guidelines for TB and MDR-TB. The Committee notes, for example, that in its paper, *Tackling Tuberculosis*

53 Ms Joanne Greenfield, Senior Health Specialist, AusAID, *Official Committee Hansard*, Canberra, 25 May 2012, p. 19.

*in Western Province, Papua New Guinea*⁵⁴, AusAID identifies building PNG's laboratory capacity to diagnosis and monitor TB and MDR-TB as short to medium-term goals.

- 4.85 As noted earlier, the Committee is reassured that AusAID and the PNG Government have a robust review and reporting framework in place. This will ensure that there is appropriate accountability in the implementation of aid measures in PNG and the opportunity to review and revise programs if needed to achieve outcomes. The Committee encourages AusAID to continue to work closely with the PNG Government and service-providers both during the initial roll-out of any measures and on a continuing basis, to ensure the ongoing viability of these programs.

Research collaborations

- 4.86 The Committee was told that Australia should continue targeted research in Australia and overseas, as a means of preparing Australia to respond effectively to future outbreaks of infectious disease.
- 4.87 Dr Deborah Lehmann, of the Telethon Institute for Child Health Research, considered that a key focus of research should be modelling to predict the future changes in climate and the environment, and research on surveillance activities. Further, Dr Lehmann stated that research on surveillance should be conducted both here and overseas. Conducting research on surveillance techniques overseas would be a means of supporting neighbouring countries in managing emerging disease threats.⁵⁵
- 4.88 Professor Shellam argued for the need for more dedicated research funding for Australians involved in researching tropical infectious diseases overseas:

At the moment it has been very difficult to get such support from our national body, the National Health and Medical Research Council, and many of our good researchers in Australia struggle to get funds to do adequate research in tropical countries. Other countries such as the United Kingdom, the Scandinavian countries and so on are much better served per capita in terms of funding for research in tropical areas, although the diseases are less immediately important to them. I think that is something that really does need to be addressed if we are to capture the best of

54 AusAID, *Tackling Tuberculosis in Western Province, Papua New Guinea: a long term approach to ensure effective and sustained TB services*, October 2012.

55 Dr Deborah Lehmann, Principal Research Fellow, Telethon Institute for Child Health Research, *Official Committee Hansard*, Perth, 8 August 2012, p. 4.

what we do in Australia. We have some very good tropical research going on in Australia – malaria, in particular, is pursued at a very high level – but we are finding it difficult to do research in the countries in which these diseases are prevalent, because of lack of dedicated research funding.⁵⁶

- 4.89 Professor Tania Sorrell, of the Sydney Institute for Emerging infectious Diseases and Biosecurity, advised that maintaining international links and building research capacity in neighbouring countries would assist in containing infectious disease issues in those countries:

... An example of a more slowly moving issue is rabies in Indonesia, which is moving slowly towards the Torres Strait. It is partly related to the movement of humans and dogs between different islands. We need to keep a handle on that. We need to collaborate with partners and build their capacity to do research in Indonesia to actually contain the problem in Indonesia.⁵⁷

- 4.90 Professor Shellam considered that funding more collaborative international research involving Australian researchers was important:

One I mentioned before would be to allow the national grant-giving agencies to fund international research, involving Australian researchers, in infectious diseases which are important in countries to our north and that sort of thing. That would be a very important development ...

... Doing our own research in collaboration with those countries.⁵⁸

- 4.91 Dr Clive Morris, of the National Health and Medical Research Council (NHMRC) advised that the NHMRC maintained links internationally with major funding organisations, to consider potential research collaborations:

We work through both government and non-government funders of research. A good example of that is the Bill & Melinda Gates Foundation. We are in discussions with them about potential research collaborations. Just recently we held a joint symposium with the Singaporean health research agency, A*STAR, on tuberculosis and influenza. We will shortly be doing a joint call for

56 Dr Clive Morris, Head, Research Group, National Health and Medical Research Council, *Official Committee Hansard*, Canberra, 25 May 2012, p. 37.

57 Professor Tania Sorrell, Director, Sydney Institute for Emerging Infectious Diseases and Biosecurity, *Official Committee Hansard*, Canberra, 25 May 2012, p. 5.

58 Professor Geoffrey Randolph Shellam, Professor of Microbiology, University of Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 11.

research into infectious diseases. We anticipate that that will be opening in June or July this year.⁵⁹

Committee comment

- 4.92 Research is an important part of the fight against the outbreak of infectious disease in Australia and its importation from international sources. The Committee notes that NHMRC is already actively engaged in a range of activities to support international infectious disease research collaboration. In particular the Committee commends the NHMRC for its engagement with international government funders of research, and non-government funders of research such as the Bill and Melinda Gates Foundation.
- 4.93 To ensure that research of the highest calibre is supported, the Committee understands that the research funding is awarded following a rigorous competitive, merit-based assessment process. While supporting the principle of merit-based research funding, the Committee sees the strategic benefit to Australia and to its regional neighbours, of increasing collaboration to build infectious disease research capacity. Therefore the Committee recommends that the NHMRC provide more support for initiatives to increase international infectious disease research collaborations and build research capacity, particularly with neighbouring countries in the Asia-Pacific region.

Recommendation 8

- 4.94 **The National Health and Medical Research Council, in conjunction with key stakeholders, work collaboratively to provide more support for initiatives to increase international infectious disease research collaborations and build research capacity, particularly with neighbouring countries in the Asia-Pacific region.**

59 Dr Clive Morris, Head, Research Group, National Health and Medical Research Council, *Official Committee Hansard*, Canberra, 25 May 2012, p. 37.

The problem with a pandemic is that you do not know what it is until it comes. Viruses mutate all the time. Our planning has always been based on a severe-case scenario and we can scale back from that.¹

Pandemic planning and preparedness

Planning for pandemic influenza

- 5.1 It is impossible to predict when the next pandemic will occur, how severe it will be or how long it will last.² Australian authorities are planning for the possibility that the next pandemic will be influenza.
- 5.2 The WHO lists the H5N1 (Avian Influenza or bird flu) virus as having pandemic potential, because it continues to circulate widely in some poultry populations, most humans likely have no immunity to it, and it can cause severe disease and death in humans.³
- 5.3 Other types of animal influenza viruses of concern to the WHO include avian H7 and H9, swine H1 and H3 viruses, and the H2 virus. The WHO advises that pandemic planning should consider risks of emergence of a variety of influenza subtypes from a variety of sources.⁴

1 Ms Megan Morris, First Assistant Secretary, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 20 March 2012, p. 5.

2 Department of the Prime Minister and Cabinet, *National Action Plan for Human Influenza Pandemic*, p. 4, <http://www.dPMC.gov.au/publications/pandemic/index.cfm>, viewed on 7 January 2013.

3 World Health Organization, *Avian Influenza*, http://www.who.int/mediacentre/factsheets/avian_influenza/en/index.html, viewed on 15 February 2013.

4 World Health Organization, *Avian Influenza*, http://www.who.int/mediacentre/factsheets/avian_influenza/en/index.html, viewed on 15 February 2013.

- 5.4 Dr Rodney Givney, of the University of Newcastle, agreed that H5N1 could be the next pandemic:

H5N1 influenza has fallen out of the news but it is still endemic in Indonesia. It still kills people regularly. We would be in terrible straits if that disease became readily transmissible between people. That would be our next pandemic, and in fact it is the one that we are expecting.⁵

- 5.5 Dr Jenny Cupit, of the Department of Agriculture, Fisheries and Forestry (DAFF), told the Committee that DAFF was keeping a watch on animals coming into Australia from nearby northern countries such as PNG, which may pose a risk of carrying disease:

In that area we are primarily looking at the influenza viruses, avian influenza in particular, but also swine flu and those types of conditions. Arboviruses are pretty important for us to be watching and monitoring because they can actually be transmitted from animals into humans. Diseases in pigs, such as classical swine fever and rabies are very important ones, along with Newcastle disease. So, what we are focussing on in most of these areas in our near neighbours, are the production animals – primarily pigs and poultry and in some cases cattle – and looking at the diseases that they carry that can influence or infect humans.⁶

- 5.6 The Commonwealth Government has developed a number of different pandemic plans across a number of agencies, aimed at preparing Australia for the next influenza pandemic.

- 5.7 Two of the primary Commonwealth pandemic influenza plans include:

- the Australian Health Management Plan for Pandemic Influenza (AHMPPI); and
- the National Action Plan for Human Influenza Pandemic (NAP).

- 5.8 The AHMPPI and NAP are discussed in more detail in Chapter 2. Other Commonwealth plans in place include, but are not limited to, the following:

- National Pandemic Influenza Airport Border Operations Plan (FLUBORDERPLAN 2009) – prepared by DoHA;⁷

5 Dr Rodney Givney, Infectious Diseases Physician and Clinical Microbiologist, University of Newcastle, *Official Committee Hansard*, Canberra, 25 May 2012, p. 7.

6 Dr Jenny Cupit, Acting Chief Veterinary Officer, Department of Agriculture, Fisheries and Forestry, *Official Committee Hansard*, Canberra, 25 May 2012, p. 28.

7 Department of Health and Ageing, *FLUBORDERPLAN*, February 2009, <http://www.flupandemic.gov.au/internet/panflu/publishing.nsf/Content/fluborderplan>, viewed on 9 January 2013.

- National Health Emergency Response Arrangements (NatHealth Arrangements – November 2011) – prepared by the Australian Health Protection Committee (AHPC)⁸; and
 - Commonwealth Government Action Plan for Influenza Pandemic – prepared by the Commonwealth Government Deputy Secretaries’ Inter-departmental Committee on Influenza Pandemic Prevention and Preparedness.⁹
- 5.9 These plans are based on international and national best practice, and are informed by the expertise of the WHO, Australian infectious disease advisory groups, and other relevant stakeholders.
- 5.10 In addition to the Commonwealth pandemic plans, each state and territory government has developed a separate plan to respond to an influenza pandemic in Australia. The state and territory plans are designed to be complementary to the Commonwealth plans for pandemic influenza.
- 5.11 This report does not propose to provide an exhaustive list of all pandemic plans in place throughout the Commonwealth, state and territory government. A full investigation of all pandemic plans in place was not possible, due to the scope of this inquiry.

Committee comment

- 5.12 There are numerous Commonwealth, state and territory plans in place which inform the way in which both tiers of government, in conjunction with local government, private industry, non-government entities and the general public, should respond in the event of pandemic influenza in Australia.
- 5.13 The Committee is encouraged to note that despite the number of pandemic plans in place, the Commonwealth and state and territory government plans generally appear to be linked and designed to be read in conjunction with each other. Each Commonwealth plan outlines the context in which it was created and how it fits in with other plans.
- 5.14 However, given the large number of pandemic plans in place, the Committee is apprehensive about how effectively the links between the

8 Department of Health and Ageing, *National Health Emergency Response Arrangements*, November 2011, p. 4, <http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-response-arrangement-nov11>, viewed 9 January 2013.

9 See Department of Health and Ageing, *National Pandemic Influenza Exercise – Exercise Cumpston 06 Report*, 2007, p. 10, <http://www.flupandemic.gov.au/internet/panflu/publishing.nsf/Content/cumpston-report-1>, viewed on 10 January 2013.

relevant Commonwealth government agencies, and the links between the Commonwealth and state and territory governments, would actually operate in practice.

- 5.15 The Committee considers the important issue of coordination in a broader context in Chapter 6.

Past pandemic experiences

- 5.16 The Commonwealth, state and territory governments test their ability to protect Australians from potential and actual pandemics by conducting simulations and by responding to and learning from actual infectious disease outbreaks in Australia.
- 5.17 Ms Megan Morris, of DoHA, told the Committee that DoHA responded to all pandemics by acting initially on the assumption that the pandemic was severe:

I think the experience a few years ago when we did have a pandemic was that, yes, we used our pandemic plan [AHMPPI] from day one. Once it was obvious that it was not severe, we were able to adjust. But the assumption at the beginning is: 'Go straight into the things you need to do. Don't stop and think about it, and ask around and look at how many people are dying first.' We go for severe and work back from there if we need to adjust.¹⁰

- 5.18 Dr Jennifer Firman, also of DoHA, agreed that best practice was to treat any pandemic as severe until it was assessed properly:

If you do not know the severity, you do not get a second go to say, 'I wish that I'd reacted more vigorously in the first instance,' because it is a bit late then. You actually have to be ready for any level of severity at that point, and you have to be able to assess it quickly. Then, when you know, you can then scale your response appropriately.¹¹

- 5.19 Professor Adrian Sleight, of the Australian National University, outlined some of the recent disease threats experienced by Australia, and current emerging disease threats:

Just in the last 10 years, as I mentioned earlier, we have dealt with SARS, an avian flu pandemic, human flu, equine flu and Hendra

10 Ms Megan Morris, First Assistant Secretary, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 20 March 2012, p. 5.

11 Dr Jennifer Ruth Firman, Principal Medical Adviser, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 20 March 2012, p. 40.

within Australia. We have learnt so much from each of those. On our doorstep we have multidrug-resistant TB threatening us from the Western Province of Papua New Guinea, Denge haemorrhagic fever ever expanding throughout the region, malaria, Japanese B encephalitis and many other threats.¹²

- 5.20 Dr Paul Armstrong, of the Western Australian Department of Health, was of the view that Australia's system of infectious disease control and ability to respond to pandemics had not yet been fully tested:

As I said before, there has been an element of luck in the past, with SARS in particular. We only had one case of SARS in Australia and that was diagnosed six months after SARS evaporated from the world. If we had had a SARS outbreak like the one Toronto had, the drive to fix the system would be much stronger. I think there is a fair element of luck there – we have not really had to test our system in a very robust way. The more recent pandemic, as we all know, was a fairly mild pandemic. It did not stress the country as much as more severe pandemics would have tested it.¹³

- 5.21 Dr Armstrong argued that the best approach to pandemic planning was to strengthen the national approach to communicable disease control now, rather than wait for the system to be proven inadequate:

One approach you could take would be to anticipate the risk and bolster the national approach to communicable disease control now. The alternative is, as has happened in other countries, to wait for something to occur which proves the system inadequate and then bolster it. From the risk management perspective, I think the former is a better approach.¹⁴

Pandemic planning exercises

- 5.22 One way in which Australia learns from past pandemic experiences is to undergo planning exercises, to assess the capability of pandemic plans created to guide Australia's future responses to pandemic events.
- 5.23 Since the development of the AHMPPI and NAP, the Commonwealth, state and territory governments have held simulation exercises (Exercise

12 Professor Adrian Sleight, Professor of Epidemiology and Population Health, Australian National University, *Official Committee Hansard*, 25 May 2012, p. 2.

13 Dr Paul Armstrong, Director, Communicable Disease Control Directorate, Department of Health, Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 7.

14 Dr Paul Armstrong, Director, Communicable Disease Control Directorate, Department of Health, Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 7.

Cumpston in 2006 and Exercise Sustain in 2008) designed to test the effectiveness of pandemic influenza plans.

- 5.24 Ms Morris told the Committee that the Department had been planning for a pandemic for some years and was always reviewing its preparedness:

The Office of Health Protection is constantly looking at our preparedness and is in contact with the states talking to them because it is a shared response what we do in the case of a pandemic. We have various Commonwealth-state structures and Commonwealth structures whereby we assess our readiness for it.¹⁵

- 5.25 Mr Simon Cotterell, of DoHA, stated that governments considered what level of response was appropriate in certain events, as part of its planning processes:

It is very difficult to close down schools at the drop of a hat. You have to be really sure that it is worth the pain because you take all the parents out of their workplaces and affect the economy badly by doing that. A judgment has to be made and it is quite difficult. That is what a lot of time was spent discussing during [Exercise] Cumpston.

The other issue is borders. Everyone's instinct is to shut down the borders but that has been shown time and again not to be effective because, by the time the pandemic has started, the disease is already in the country and we would cut off so many supply lines, including those for essential medications, that it would not be worth it. Those issues, when you exercise, all get discussed and then hopefully they have been through the wringer enough when the actual event happens for good judgments to be made.¹⁶

- 5.26 Dr Gary Lum, of DoHA, told the Committee that conducting exercises facilitated knowledge-sharing and knowledge progression. He explained that the Commonwealth took an all-hazards¹⁷ approach to managing emergencies:

15 Ms Megan Morris, First Assistant Secretary, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 20 March 2012, p. 5.

16 Mr Simon Cotterell, Assistant Secretary, International Strategies Branch, Portfolio Strategies Division, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 20 March 2012, p. 6.

17 'All Hazards Approach' is defined further by the Attorney-General's Department, as concerning arrangements for managing the large range of possible effects of risks and emergencies, noting that a large range of risks can cause similar problems and such measures as warning, evacuation, medical services and community recovery will be required during and following emergencies. For more see *Emergency Management Approaches*, <http://www.em.gov.au/Emergencymanagement/Pages/EmergencyManagementApproache>

While we do spend a lot of time thinking about outbreaks and pandemics of disease and infectious diseases, in a lot of the areas in state and territory health departments and in the Australian government health department we have now taken an all-hazards approach to managing emergencies...

...Through exercising we can also continue to progress that information so that it is not just sitting somewhere and not being shared.¹⁸

- 5.27 Ms Morris explained that exercises were regularly undertaken across all tiers of government:

I would add that those exercises are sometimes within the health system, and sometimes whole-of-Commonwealth-government or whole-of-Commonwealth-government-state, but there is a rolling program of exercises across the country within states and at the Commonwealth level.¹⁹

Exercise Cumpston 06

- 5.28 *Exercise Cumpston 06* was undertaken in 2006. This was the largest health simulation exercise ever undertaken in Australia at the time and the first major exercise conducted by DoHA. The aim of the exercise was to test and validate the capacity and capability of the Australian health system to detect and respond to a pandemic.²⁰

- 5.29 The report into *Exercise Cumpston* further explained the objectives and benefits of undertaking the exercise:

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

[s.aspx](#), viewed 18 February 2013.

18 Dr Gary Lum, Assistant Secretary, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 25 May 2012, p. 45.

19 Ms Megan Morris, First Assistant Secretary, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 25 May 2012, p. 46.

20 Department of Health and Ageing, *National Pandemic Influenza Exercise – Exercise Cumpston 06 Report*, 2007, p. 1, <http://www.flupandemic.gov.au/internet/panflu/publishing.nsf/Content/cumpston-report-1>, viewed on 10 January 2013.

government and its non-government and private sector partners to test plans, policies and procedures, and to trial new approaches.²¹

- 5.30 *Exercise Cumpston* was undertaken in accordance with the AHMPPI to identify and address any gaps in the plan. The exercise also applied governance aspects of the NAP and state and territory plans.²²
- 5.31 The report into *Exercise Cumpston* produced 12 key recommendations, including the need to improve whole-of-government and cross-jurisdictional communications mechanisms to ensure consistent and coordinated delivery of public messages in a pandemic.²³

Exercise Sustain 08

- 5.32 In 2008, the COAG Pandemic Exercise Program 2008, *Exercise Sustain 08*, was undertaken as the first exercise to assess national, whole-of-government preparedness to respond to and recover from a human influenza pandemic widespread across Australia.²⁴
- 5.33 *Exercise Sustain* comprised three discussion exercises and a functional exercise, involving COAG and senior representatives from the Commonwealth Government, state and territory governments and the Australian Local Government Association (ALGA).²⁵
- 5.34 The exercise also tested the National Influenza Pandemic Public Communications Capability, developed out of the recommendation made in *Exercise Cumpston* for improved communication mechanisms.²⁶
- 5.35 *Exercise Sustain* focussed on the Australian Phase 6b (Sustain) of a pandemic and tested roles and responsibilities across all levels of

21 Department of Health and Ageing, *National Pandemic Influenza Exercise – Exercise Cumpston 06 Report*, 2007, p. iii, <http://www.flupandemic.gov.au/internet/panflu/publishing.nsf/Content/cumpston-report-1>, viewed on 10 January 2013.

22 Department of Health and Ageing, *National Pandemic Influenza Exercise – Exercise Cumpston 06 Report*, 2007, p. 1, <http://www.flupandemic.gov.au/internet/panflu/publishing.nsf/Content/cumpston-report-1>, viewed on 10 January 2013.

23 Department of Health and Ageing, *National Pandemic Influenza Exercise – Exercise Cumpston 06 Report*, 2007, p. 3, <http://www.flupandemic.gov.au/internet/panflu/publishing.nsf/Content/cumpston-report-1>, viewed on 10 January 2013.

24 Council of Australian Governments, *Exercise Sustain 08 Overview*, 2009, p. 7, <http://www.dpmc.gov.au/publications/pandemic/index.cfm>, viewed on 10 January 2013.

25 Council of Australian Governments, *Exercise Sustain 08 Overview*, 2009, p. 7, <http://www.dpmc.gov.au/publications/pandemic/index.cfm>, viewed on 10 January 2013.

26 Council of Australian Governments, *Exercise Sustain 08 Overview*, 2009, p. 16, <http://www.dpmc.gov.au/publications/pandemic/index.cfm>, viewed on 10 January 2013.

government in maintaining and supporting social and economic functioning and recovery during the Sustain phase.²⁷

- 5.36 The report produced following the exercise noted that an influenza pandemic would pose a significant challenge across all tiers of government in maintaining effective coordination, public communications and resourcing during the response and recovery phases of a pandemic.²⁸

Committee comment

- 5.37 The Committee commends the ongoing review and planning process in place across the Commonwealth departments, to prepare for pandemic influenza in Australia. This planning process ensures that pandemic plans and emergency management policies are up to date and that coordination and decision-making processes are constantly monitored and reviewed.
- 5.38 It is clear that that the Commonwealth Government, and each state and territory government, has heeded the advice of the WHO and has comprehensively prepared for the possibility of an influenza pandemic. This is evident in the creation of numerous inter-linking plans across the Commonwealth and state and territories for pandemic influenza.
- 5.39 However, the Committee is concerned that planning for a national health emergency involving the spread of infectious disease appears to be solely focussed on pandemic influenza.
- 5.40 The Committee queries whether the current plans for pandemic influenza could be utilised in the event that Australia experiences an infectious disease outbreak of pandemic proportions which is not influenza.
- 5.41 In concluding the report into *Exercise Cumpston*, it was noted 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.²⁹
- 5.42 Reference to another 'major infectious disease outbreak' appears at the end of the report and is not mentioned in any detail throughout that report. This gives the impression that there has been little consideration in planning for a pandemic in Australia, if the pandemic is not influenza.

27 Council of Australian Governments, *Exercise Sustain 08 Overview*, 2009, p. 7, <http://www.dpmc.gov.au/publications/pandemic/index.cfm>, viewed on 10 January 2013.

28 Council of Australian Governments, *Exercise Sustain 08 Overview*, 2009, p. 7, <http://www.dpmc.gov.au/publications/pandemic/index.cfm>, viewed on 10 January 2013.

29 Department of Health and Ageing, *National Pandemic Influenza Exercise – Exercise Cumpston 06 Report*, 2007, p. 63, <http://www.flupandemic.gov.au/internet/panflu/publishing.nsf/Content/cumpston-report-1>, viewed on 10 January 2013.

- 5.43 Troubling also to the Committee is that the Department of the Prime Minister and Cabinet (PM&C) only has a defined coordination role in relation to pandemic influenza (see Chapter 2 for further information on PM&C's role). The Committee is concerned that the highest level of Commonwealth coordination during a national health crisis is only usually triggered in circumstances of pandemic influenza.
- 5.44 While the Committee makes no predictions as to what the next infectious disease threat to Australia might be, the Committee seeks assurance that the pandemic plans in place across the Commonwealth can be adapted to guide any national response required to any infectious disease threat that Australia may face. Presumably, an outbreak of infectious disease other than influenza manifests itself and spreads differently, and therefore requires a different response than would be required in an influenza outbreak.
- 5.45 The Committee therefore recommends that the Australian Government test Australia's ability to respond to a widespread outbreak of infectious disease other than influenza.

Recommendation 9

- 5.46 **The Australian Government test Australia's ability to respond to a widespread outbreak of infectious disease other than influenza, by undertaking a pandemic exercise across the relevant Commonwealth, state and territory government agencies.**

Consumer engagement during infectious disease outbreaks

- 5.47 The Committee has been told that consumer engagement is vital in ensuring that Australia is well equipped to respond to a widespread outbreak of infectious disease.
- 5.48 Ms Carol Bennett, of the Consumers Health Forum of Australia, argued that consumers should be consulted during any process which asked them to change their behaviour:
- Involving consumers in decision making, collaborating with them to develop solutions and empowering them to make decisions all contribute to the community accepting and taking on the behaviours which public health experts and epidemiologists

would like them to carry out, in a way that actually works for consumers.³⁰

5.49 Australia's response to HIV/AIDS in the 1980s was used as an example to highlight how the public could be engaged to take action in response to a disease outbreak of national concern.

5.50 Professor Geoffrey Shellam, from the University of Western Australia, told the Committee that Australia responded rapidly to the threat posed by HIV/AIDS. Professor Shellam emphasised how a rapid and robust research response had been augmented by community engagement:

We should be very proud of what was achieved in the Australian response to HIV-AIDS. The rapidity of our response is one of our great success stories. We are very well served by a substantial basis of research on immunology and virology, which put us in a very strong position to respond to a viral disease which attacked the immune system. ... Also what was quite remarkable was the setting up of community groups, which helped particularly the gay communities develop policy acceptable to them. This meant that public health messages were promulgated to hit the right target, as it were, because communities were willing and interested in responding to them. There was a real community involvement, not only from scientists and medical practitioners but also from affected communities.³¹

5.51 On the other hand, Ms Linda Forbes of the Australian Federation of AIDS Organisations, argued that the Grim Reaper campaign of the 1980s was largely unsuccessful because it frightened members of the public and created stigmatisation:

There has been no public health community education campaign about HIV since the eighties and the Grim Reaper campaign, which was basically unsuccessful because it made people frightened of HIV who had no reason to fear and it undermined efforts in the gay community to develop programs to get people to test. It created stigmatisation of gay people and complicated things. We are proposing that there should be a public health community education campaign again in Australia that is

30 Ms Carol Bennett, Chief Executive Officer, Consumers Health Forum of Australia, *Official Committee Hansard*, Canberra, 24 August 2012, p. 10.

31 Professor Geoffrey Randolph Shellam, Professor of Microbiology, University of Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, pp. 8-9.

generalised, but it needs to be very, very carefully done and nothing like the Grim Reaper campaign.³²

- 5.52 The Committee was told that the *Review of the management of adverse events associated with Panvax and Fluvax* (the Horvath review), conducted by Professor John Horvath AO, provided some useful lessons about engaging with the consumer. The report considered the national response to the 2010 influenza vaccine adverse event reporting.³³ Ms Bennett told the Committee:

[The Horvath review] found that there was a considerable lack of understanding among the public and health professionals about when they should report an adverse reaction. After there was sufficient data to identify that there was a problem, some health professionals and consumers felt that they were not sufficiently informed of events around the suspension of the vaccine program. The review called for a protocol for taking program action in the event of issues with vaccines, and that includes informing health professionals, consumers and the media. It wanted that to be developed and agreed with Commonwealth, state and territory authorities.³⁴

- 5.53 Ms Bennett told the Committee how poorly planned, coordinated and executed messaging around the flu vaccination and adverse reactions in children had caused confusion in the community. A result of this confusion was that people lost confidence in vaccination programs:

That is what we are concerned about, with people saying, 'I'm not sure I want to have the Fluvax next year or give it to my children because there was this outbreak last year.' The Horvath review was quite instrumental in identifying the problems that existed between various coordinating bodies and it made recommendations around how that could be addressed in the future.³⁵

- 5.54 Outlining the importance of consumer engagement in planning for and responding to infectious disease outbreaks, Ms Bennet explained:
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32 Ms Linda Forbes, Manager, Policy and Communications, Australian Federation of AIDS Organisations, *Official Committee Hansard*, Cairns, 2 August 2012, p. 7.

33 Professor John Horvath, *Review of the management of adverse events associated with Panvax and Fluvax*, Final Report 10 March 2011. See Ms Carol Bennett, Chief Executive Officer, Consumers Health Forum of Australia, *Official Committee Hansard*, Canberra, 24 August 2012, p. 10.

34 Ms Carol Bennett, Chief Executive Officer, Consumers Health Forum of Australia, *Official Committee Hansard*, Canberra, 24 August 2012, p. 10.

35 Ms Carol Bennett, Chief Executive Officer, Consumers Health Forum of Australia, *Official Committee Hansard*, Canberra, 24 August 2012, p. 11.

They bring their own expertise to these discussions, they are the experts in what will work for them and what will be acceptable to the community, and they know firsthand what the barriers are on the ground that prevent them from making the decisions and exhibiting the behaviours that public health experts consider to be the right ones.³⁶

Committee comment

- 5.55 The Committee sees that the Commonwealth Government plays an important role in informing and empowering the consumer about infectious disease issues in Australia and overseas. Educating the consumer is vital if Australia is to prevent or control the importation of infectious disease across international borders, and control the spread of infectious disease within Australia in the event of an outbreak.
- 5.56 In the event of an infectious disease outbreak in Australia, the Committee recognises that consumers need to be informed so that they understand what their responsibilities are, and what actions they can take to prevent themselves and their families from being infected, and to limit spread of the disease.
- 5.57 Evidence presented to the Committee indicates that there is significant scope for the development of better communication strategies to ensure that consumers are well informed in the event of a disease outbreak. The Committee supports the need for DoHA, in consultation with consumers and the relevant federal, state and territory agencies, to develop a consistent communication strategy to be used in the event of a disease outbreak that will ensure that consumers are provided with information that is reliable, up-to-date, clear and readily available through a range of media.
- 5.58 The Committee considers that during pandemic planning exercises, consumers should be engaged and consulted to test the effectiveness of any national communication strategy developed as part of any pandemic plan.

36 Ms Carol Bennett, Chief Executive Officer, Consumers Health Forum of Australia, *Official Committee Hansard*, Canberra, 24 August 2012, p. 10.

Recommendation 10

- 5.59 **The Australian Government, in consultation with consumers and other relevant federal, state and territory agencies, develop a national communication strategy for consumers to be used in the event of an infectious disease outbreak.**

Recommendation 11

- 5.60 **The Australian Department of Health and Ageing consult with members of the general public or representatives of health consumers in the pandemic planning process, including in pandemic exercises designed to test the ability of government to respond to a pandemic event. Consumer involvement should include testing the ability of any communication strategy designed to inform and engage consumers about a pandemic event.**

Vaccine stockpiles

- 5.61 Accumulating and maintaining a useful vaccine stockpile in preparation for a pandemic event is a complex component of pandemic planning.
- 5.62 A National Medical Stockpile (NMS) is held in Australia, containing the national strategic reserve of essential vaccines, antibiotics and antiviral drugs, chemical and radiological antidotes, and personal protective equipment. DoHA states on its website that the NMS also holds sufficient medical equipment to administer pandemic influenza vaccine to the Australian community.³⁷
- 5.63 The NMS is intended to supplement existing stocks of medical equipment and drugs kept in the Australian hospital system to ensure that these supplies are readily available, and in sufficient quantities, in the event of a public health incident in Australia. The Australian Health Protection Committee (AHPC) and the Chief Medical Officer of Australia (CMO)

37 Department of Health and Ageing, *Health Emergency Preparedness Response: National Medical Stockpile Fact Sheet*, http://www.health.gov.au/internet/main/publishing.nsf/content/health-publth-strateg-bio-factsht_stckpile.htm, viewed 19 February 2013.

make all policy decisions regarding the distribution of the NMS in the event of an influenza pandemic.³⁸

- 5.64 DoHA told the Committee that the NMS had been recently reviewed. Ms Maria Jolly, of DoHA, explained that the review considered the overall management of the medical stockpile, including its structure and governance:

The review suggested that there needs to be some work done on inventory management, how stock is held, how stock is chosen and deployed, what sort of purchasing models government might consider, what are the sorts of arrangements that you would have with states and territories, how those arrangements might work and what is the relationship between those sorts of decisions and the pandemic planning arrangements that you have just heard about. It goes to the overall structure, governance and arrangement of the medical stockpile.³⁹

- 5.65 Professor Adrian Sleigh, of the Australian National University, was involved with an expert working group reporting to the Prime Minister and Cabinet through the Prime Minister's Science, Engineering and Innovation Council (PMSEIC) in 2009. The PMSEIC produced a report which Professor Sleigh provided to the Committee, *Epidemics in a Changing World*.⁴⁰
- 5.66 Professor Sleigh told the Committee that the fourth major recommendation the expert working group made was for Australia to maintain vaccine production capacity, particularly for influenza and also the niche vaccines.⁴¹
- 5.67 As manufacturing vaccines is a worldwide business, the Committee was told that it was not possible for Australia to be completely self-sufficient in manufacturing and stockpiling vaccines, to avoid shortages during pandemics. Dr Firman explained:

38 Department of Health and Ageing, *Health Emergency Preparedness Response: National Medical Stockpile Fact Sheet*, http://www.health.gov.au/internet/main/publishing.nsf/content/health-publth-strateg-bio-factsht_stckpile.htm, viewed 19 February 2013.

39 Ms Maria Jolly, Assistant Secretary, Health Protection and Surveillance Branch, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 20 March 2012, pp. 6-7.

40 Prime Minister's Science, Engineering and Innovation Council (PMSEIC) Expert Working Group, *Epidemics in a Changing World*, 5 June 2009, <http://www.innovation.gov.au/Science/PMSEIC/Pages/PapersandPublications.aspx>.

41 Prime Minister's Science, Engineering and Innovation Council (PMSEIC) Expert Working Group, *Epidemics in a Changing World*, 5 June 2009, p. xi, <http://www.innovation.gov.au/Science/PMSEIC/Pages/PapersandPublications.aspx>.

Very little pharmaceuticals are manufactured in Australia. I think we have influenza and Q fever ones manufactured in Australia. As you can imagine, pharmaceutical manufacturing is a worldwide business; it is not individual countries making vaccines usually and indeed that is the case for Australia. Australia is a very small market. I am trying to imagine a multinational who would think that Australia is a good place to set up their manufacturing plant for that purpose and I cannot think of one at the moment. As that would occur, we are part of that worldwide market.⁴²

- 5.68 Dr Firman further explained that even the USA, which has a solid base of manufacturing pharmaceuticals, could end up short of vaccines:

The USA is regularly very short of different drugs and they have quite a robust manufacturing basis. It is a very multifactorial, difficult issue when it comes to shortages and it goes way beyond just the fact that you do not have a manufacturing plant on your shores.

- 5.69 Dr David Smith, Chair of the Public Health Laboratory Network (PHLN), told the Committee that supply would always be a problem in the manufacturing of vaccines:

There has been a discussion internationally in terms of flu vaccines and it is to do with the total manufacturing capacity and how you build that, which really depends on the use of the seasonal vaccines to have that manufacturing capacity that can then be diverted to pandemic vaccines. There is also a lot of research work going into how you make better vaccines that give longer term protection and better cross- protection so that you are less dependent on suddenly producing new vaccines – but supply will always be a problem even with seasonals. If one of the manufacturers has a regulatory failure or a failure of a run, suddenly there is a two or three month delay in international supplies.⁴³

- 5.70 Dr Smith said that stockpiles had a finite lifespan. However, he noted that the ability to deliver treatment early to people could make a huge difference in the management of an individual and also the overall management of a disease outbreak.⁴⁴
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42 Dr Jennifer Firman, Principal Medical Adviser, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 25 May 2012, pp. 47-48.

43 Dr David Smith, Chair, Public Health Laboratory Network, *Official Committee Hansard*, Canberra, 25 May 2012, p. 48.

44 Dr David Smith, Chair, Public Health Laboratory Network, *Official Committee Hansard*, Canberra, 25 May 2012, p. 48.

Committee comment

- 5.71 The Committee recognises that the stockpiling of vaccines for use in a pandemic event in Australia is complex and involves balancing a number of factors, including competing in a global pharmaceuticals market.
- 5.72 The Committee notes the recommendation of the PMSEIC Expert Working Group on *Epidemics in a Changing World*, that Australia should have a self-sufficient vaccine development and production capacity. The Committee supports this recommendation, with its focus on Australia developing its onshore development and production capacity for vaccines such as contemporary influenza vaccines and other niche vaccines, in line with Australia's needs.

Recommendation 12

- 5.73 **The Commonwealth Government support the growth of vaccine development and production capacity for vaccines in Australia, to enhance Australia's preparedness to respond to outbreaks of infectious disease in Australia, and in particular, pandemic influenza.**

Australia's pandemic workforce

- 5.74 The ability of the Commonwealth, state and territory governments to respond to the next pandemic event in Australia is contingent on whether Australia's health workforce can sustain the appropriate level of screening, surveillance and control measures throughout the course of the event.
- 5.75 Training Australia's health workforce in preparation for the next pandemic or widespread infectious disease outbreak is only one facet of pandemic planning. The Committee heard that equally important is the need for government to review the sustainability of the workforce, in anticipation of a long term pandemic.

Training

- 5.76 Professor Sleigh told the Committee that the PMSEIC expert working group referred to above had also called on the Commonwealth to maintain its human capacity to respond to epidemics:

We thought that it was very important for Australia to maintain its human capacity to combat epidemics, and this involves workforce

planning and the training and maintenance of first responders: epidemiologists who are trained to investigate epidemics; pathologists, particularly veterinary pathologists, and microbiologists are key members of the first-responding workforce and we need to maintain an adequate number and distribution and appropriate age and experience mix of that workforce.⁴⁵

- 5.77 Professor John McBride, from James Cook University, advised that while there was an increase in medical graduates in Australia, this did not necessarily translate into more microbiologists, infectious-disease physicians and other related experts:

There is now a big bottleneck with all these young interns, so they are getting intern jobs; but in terms of jobs opening up for training in specialities, the state government controls those numbers and has to pay the bills for training these people to become infectious-disease specialists and microbiologists or infection control practitioners, or whatever we need. So there is a bit of tension. We have lots of opportunities to train people in these specialities, but the funding for those positions is restricted. The Commonwealth, through the specialist training program, is feeding money in, so that is funding some of the opportunities; but clearly there needs to be a solution to training our specialist workforce for the future, because I think there is a looming crisis with the medical student numbers and so on. We are graduating enough doctors but we are not training them in a post-graduate sense.⁴⁶

- 5.78 Professor Geoffrey Shellam, from the University of Western Australia, speaking of the proposed need for a national centre for disease control (see Chapter 6 for this discussion), argued that national training centres like the Australian National University's National Centre for Epidemiology and Population Health (NCEPH) provided the educational infrastructure needed to underpin Australia's ability to respond to outbreaks of disease on a national level. He said:

I think it is also important to recognise the need for educational infrastructure to underpin any national centre. One example I can give is that the NCEPH, the National Centre for Epidemiology and Population Health, gave a course in Canberra that provided training in epidemiology nationally [Master of Applied

45 Professor Adrian Sleigh, Professor of Epidemiology and Population Health, Australian National University, *Official Committee Hansard*, Canberra, 25 May 2012, p. 2.

46 Professor John McBride, Professor of Medicine, Infectious Diseases Physician, School of Medicine and Dentistry, James Cook University, *Official Committee Hansard*, 2 August 2012, p. 21.

Epidemiology]. People went out to work in the states and took that expertise back and enriched the health departments and hospitals around the country. The funding for the centre was in difficulty and the centre closed. It has re-established itself in another guise just recently. But we need these national centres to be robust and ongoing if we are to provide the skills that will underpin Australia's ability to respond to outbreaks of disease.⁴⁷

5.79 The Committee was told that the Master of Applied Epidemiology (MAE) course at the Australian National University (ANU) was the central national training program for epidemiologists, who were trained to be able to respond directly to epidemic investigations.⁴⁸

5.80 The Committee heard that Commonwealth funding (sourced from DoHA) for the MAE course was withdrawn in about 2009/2010.⁴⁹ However, the MAE program did not close after funding was withdrawn, as the ANU obtained alternative funding.⁵⁰

5.81 A number of roundtable participants agreed that the MAE was an important workforce source, as its graduates were able to immediately undertake public health roles in communicable disease control, having undertaken extensive practical training in the field while studying.⁵¹

5.82 Dr Kamalini Lokuge, Medical Epidemiologist at the NCEPH, advised that some of her previous students who studied the MAE had assisted during the H1N1 outbreak:

... during the early stages of the H1N1 outbreak, it was my staff and my students who were largely forming the surveillance and epidemiology capacity in the National Incident Room for the Department of Health and Ageing.⁵²

47 Professor Geoffrey Randolph Shellam, Professor of Microbiology, University of Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 11.

48 Professor Adrian Sleight, Professor of Epidemiology and Population Health, Australian National University, *Official Committee Hansard*, Canberra, 25 May 2012, p. 11.

49 Professor Adrian Sleight, Professor of Epidemiology and Population Health, Australian National University, *Official Committee Hansard*, Canberra, 25 May 2012, p. 11.

50 Professor Adrian Sleight, Professor of Epidemiology and Population Health, Australian National University, *Official Committee Hansard*, Canberra, 25 May 2012, p. 11. See also, Professor Jonathan Carapetis, Director, Telethon Institute for Child Health Research, *Official Committee Hansard*, Perth, 8 August 2012, pp. 14-15.

51 See Dr Paul Armstrong, Communicable Disease Control Directorate, Department of Health, Western Australia, and Professor Jonathan Carapetis, Director, Telethon Institute for Child Health Research, *Official Committee Hansard*, Perth, 8 August 2012, pp. 14-15.

52 Dr Kamalini Lokuge, Medical Epidemiologist, National Centre for Epidemiology and Population Health, Australian National University, *Official Committee Hansard*, Canberra, 25 May 2012, p. 13.

- 5.83 As a former graduate of the MAE, Dr Armstrong told the Committee that the practical experience he gained through the course was invaluable:

The training that I had as an MAE put me in a perfect position to walk straight into a job in a health department with that expertise. You hit the ground running. That is one of the catchcries of that program. The successful ones around the world are not necessarily based at a university, where they are governed by the vagaries of funding and what have you, but are government funded and based programs, like the one in America run by the Centre for Disease Control. There are different models of that. The one that we have in Australia is a university based one, and it was affected by a funding decision of the Commonwealth government not to subsidise that program.⁵³

- 5.84 Professor Jonathan Carapetis, Director of the Telethon Institute for Child Health Research, told the Committee that as the Commonwealth no longer subsidised the MAE program, it was likely that there would be a reduction in the number of public health professionals graduating from the ANU program:

ANU has managed to keep it going. But in order to do it, an organisation like mine would have to find serious money to get someone in there. Sure, you could go and talk to ANU, but I know that the demand for the course, as a result of that, is reduced, and we do not have a guaranteed supply of these people coming through. The course exists. What we need is the core funding to subsidise enrolments and to ensure that there are a minimum number of people coming through each year.⁵⁴

- 5.85 On the ANU's webpage, a Master of Philosophy (Applied Epidemiology) is now advertised:

The MPhil (Applied Epidemiology) is a two year research degree that emphasises learning-by-doing. The program teaches scholars epidemiology in the field, through coursework and learning in a field placement, such as a health department. The MPhil (App Epid) is Australia's only FETP [Field Epidemiology Training Program] and is part of the international network of Field Training Programs in Epidemiology & Public Health Interventions Network.

53 Dr Paul Armstrong, Director, Communicable Disease Control Directorate, Department of Health, Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 15.

54 Professor Jonathan Carapetis, Director, Telethon Institute for Child Health Research, *Official Committee Hansard*, Perth, 8 August 2012, p. 15.

- Costs

Field placements will support scholars either as employees, or by providing a tax free scholarship to the student administered through ANU. These tax free scholarships are for \$50,000 annually. Field placements will also cover the costs of scholars travel, accommodation and meals during course block at ANU, which is expected to be \$10,000 over the two years. As the MPhil (App Epid) program is a research degree, there are no tuition costs associated with scholars completing coursework subjects. ANU and field placements will enter a memorandum of understanding outlining these arrangements.⁵⁵

Workforce sustainability

5.86 The Committee heard that the long term capacity of Australia's public health workforce may be challenged in the face of a pandemic.

5.87 Dr Armstrong told the Committee:

I think we have an adequate public health workforce to manage the day-to-day issues quite well, but it is the issue of when you have your much bigger emergency and then your existing resources are very stretched. That is when there is this need for others in the health workforce to assist ...

... If we get a big pandemic like SARS or influenza, and it is much bigger than the swine flu pandemic – and the risk is there; it is a small risk but it is a definite risk – then our existing resources will be quickly overwhelmed. We need to pay some heed to how we manage that scenario.⁵⁶

5.88 Dr Smith, of the PHLN, told the Committee that the ability to handle increased workloads was reviewed following the H1N1 (swine flu) pandemic in Australia:

We did an extensive debriefing process after the pandemic in terms of dealing with additional workloads. It is a challenge because what you find, given that we have a certain amount of expertise – particularly high-level, professional expertise – is that gets stretched very thin in those sorts of circumstances. In such a situation you have a much more complex demand process

55 Australian National University, *NEW Master of Philosophy (Applied Epidemiology)*, <http://nceph.anu.edu.au/education/research-degree/new-master-philosophy-applied-epidemiology>, viewed 20 February 2013.

56 Dr Paul Armstrong, Director, Communicable Disease Control Directorate, Department of Health, Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 14.

occurring because people are wanting rapid turnarounds and samples are coming in different ways and often in large numbers.⁵⁷

- 5.89 Dr Smith explained that the review considered how to develop the skill base necessary to respond to large scale outbreaks, without over-resourcing the workforce during periods where there is no pandemic to respond to:

You do not want people who have nothing to do until an epidemic comes along so you really see how you utilise them within those frameworks.⁵⁸

- 5.90 Dr Smith outlined a number of issues which came out of the review:
- there is a strain on people with highly specialised skills who are placed in high demand during pandemic events;
 - highly specialised work is difficult to delegate;
 - increasing the use of electronic systems may reduce workloads on individuals who can direct their skills to areas of need;
 - engaging private health laboratories to assist government agencies in laboratory work during pandemic events is a complex process and commencing these processes prior to a pandemic event may assist;
 - the skill base needed to respond to a pandemic has to exist within the workforce prior to a pandemic event; and
 - maintaining a national communication network is extremely important in gaining access to people with the appropriate expertise quickly to meet a particular need.⁵⁹

A public health corp?

- 5.91 Dr Adam Kamradt-Scott, from the University of Sydney, invited the Committee to consider the creation of a national health commission corps, similar to the United States Centers for Disease Control and Prevention.

- 5.92 Dr Kamradt-Scott explained his proposition:

The investment required to create a commissioned corps of public health officers would be modest, as it would draw together existing civilian and military specialists and public health experts

57 Dr David Smith, Chair, Public Health Laboratory Network, *Official Committee Hansard*, Canberra, 25 May 2012, p. 37.

58 Dr David Smith, Chair, Public Health Laboratory Network, *Official Committee Hansard*, Canberra, 25 May 2012, p. 37.

59 Dr David Smith, Chair, Public Health Laboratory Network, *Official Committee Hansard*, Canberra, 25 May 2012, pp. 37-38.

in a new civil-military partnership. Its ranks would be strengthened by a new generation of trainees and interns, trained under a new national qualification to replace the Master of Applied Epidemiology that the federal government only recently and, in my professional view, very short-sightedly ceased funding. Members of the corps could be deployed throughout the states and territories to assist health departments and agencies in health promotion and health protection activities. The bulk of the corps could conceivably be located in central locations such as Darwin or regionally based, from which officers could be deployed to assist neighbouring countries to respond to public health emergencies and natural disasters.⁶⁰

- 5.93 In response to this proposed corps, Professor McBride noted there were some differences in how the military operated in the United States, compared to Australia:

There is a lot of talent within the Australian military – I served in the Australian military for a while, so I realise that there are some very good people in the medical corps – but it is a quantum size smaller than the US Army and even as a proportion of our population. I see that there is clearly a potential role for the military, but I do not think it would be as significant as the role of the US military in the CDC. Of course, the military has the advantage of being a national organisation that cuts across state boundaries and has policies and procedures that are national rather than state based.⁶¹

Committee comment

- 5.94 The Committee considers that Australia requires a public health workforce that is able to respond efficiently and appropriately, if faced with a pandemic event.
- 5.95 The Committee notes the views of some infectious disease experts who participated in the roundtable discussions, that Australia has been lucky during recent pandemic threats to our country. The Committee was told that the capacity of Australia's health system has not been tested in a long-term and fast-moving pandemic.

60 Dr Adam Kamradt-Scott, Senior Lecturer in International Security Studies, Centre for International Security Studies, University of Sydney, *Official Committee Hansard*, Cairns, 2 August 2012, p. 19.

61 Professor John McBride, Professor of Medicine, Infectious Diseases Physician, School of Medicine and Dentistry, James Cook University, *Official Committee Hansard*, 2 August 2012, p. 20.

- 5.96 Of course, the Committee is hopeful that our health system will never need to be tested to its limits. However, Australia must have a robust and highly skilled workforce in place to respond to a long-term and widespread pandemic, if and when required.
- 5.97 The Committee heard evidence from a number of public health experts that the MAE from the ANU has been very successful in training epidemiologists and equipping them with the practical knowledge and experience necessary to respond to infectious disease outbreaks on a national or global scale.
- 5.98 The Committee notes that the Commonwealth subsidy for the program has ceased, however it appears that the program is currently running (albeit with a different name) with funding from alternative sources.
- 5.99 Although practical experience may be obtained ‘on the job’ or ‘in the field’, the Committee supports the proposition that a university course that offers in-the-field training is an ideal training model to ensure Australia’s future health workforce is equipped to respond appropriately in a pandemic event.
- 5.100 The Committee shares the concerns expressed by public health experts working in infectious disease control that the current funding structure of the applied epidemiology course at ANU may over time reduce the number of graduates of the program, thus reducing the capacity of the Australian health workforce to respond to pandemic events in the future.
- 5.101 The Committee recommends that the Commonwealth review the need to support training courses such as the applied epidemiology course at ANU, as part of a wider assessment of the long-term sustainability of the infectious disease control workforce in Australia, and the capacity of that workforce to respond effectively to a pandemic in Australia.
- 5.102 The Committee notes the proposal to introduce a commissioned corps of public health officers, of both civilian and military background. In the Committee’s view, Australia should be innovative when considering how best to create a more coordinated and sustainable health workforce, which could respond to a national emergency in an organised and rapid way. Accordingly, the Committee encourages the Commonwealth to consult widely with infectious disease experts around Australia, and to consider innovative ideas such as introducing a commissioned corps to lead the response to any national health emergency.

Recommendation 13

- 5.103 **The Australian Government coordinate the development of a highly skilled workforce which can respond effectively to a sustained pandemic in Australia.**

Research capacity

- 5.104 Infectious diseases come in many forms, and may develop, change and spread by a number of different means. Some infectious diseases of risk to Australians may be slow to spread and easily controlled with effective surveillance and control measures. Other infectious disease outbreaks may spread rapidly and be harder to control, or may be triggered unexpectedly through environmental factors such as contamination of food or water supply, or climate factors.
- 5.105 Australia relies on infectious disease physicians, epidemiologists, pathologists, microbiologists and other experts to identify and control emerging disease threats of risk to the community.
- 5.106 The Committee was told that targeted and timely research into infectious disease issues of importance to Australia underpins any successful response to emerging disease threats in Australia. Maintaining Australia's capacity to research, innovate and collaborate with international infectious disease experts will help Australia prepare for future disease threats.
- 5.107 Professor Shellam believes that Australia currently has a strong capacity in basic medical and clinical research. He told the Committee this has enabled Australia to respond quickly to emerging disease threats:
- We have the ability to respond quickly. The important thing is to recognise that we cannot do research in every single esoteric organism, but we must have the capacity to respond quickly by being in contact with people overseas who are leading research in particular areas. I would argue that it is very important for Australia to maintain internationally competitive research so that we are sitting around the table with other experts and can

exchange ideas, even though we may not be strong in that particular area.⁶²

- 5.108 The Committee was told that grants from the National Health and Medical Research Council (NHMRC) have been used in the past as a means of assisting in the response to pandemic situations:

NHMRC give special grants. They gave them for SARS and they give them in areas of influenza and so on and for rapid response sort of things. That is one means of engaging the research community.⁶³

- 5.109 Dr Clive Morris, of the NHMRC, advised that one of the agency's research goals from 2010-2012 was to plan for emerging infectious disease threats. Dr Morris told the Committee that NHMRC made targeted calls for research when particular health threats arose:

We maintain the capacity to run urgent calls for research. Over the last 10 years we have done that four times. In 2003 we ran an urgent call for research in response to the SARS epidemic. In 2006 we made an urgent call for research in response to the threat of bird flu – H5N1. And in 2009 we made a very urgent call for research on the swine flu epidemic. When I say 'very urgent', that is against the normal time frame for calling for applications, doing peer review and allocating funding. It is very difficult to do in under four months. We were able to call for applications and have research dollars going out the door within about six weeks. We followed that up with a workshop about six months later. We brought together the researchers we had funded and the policymakers to look at the outcomes of that research.

In 2012 – that is this year – we ran an urgent call for research into the hendra virus. This was in response to concerns that the virus, which is currently limited in its ability to infect humans, may cross the species barrier.⁶⁴

Committee comment

- 5.110 While conducting innovative research on infectious disease issues is not at the 'front line' of infection control, it forms a necessary backbone to Australia's preparedness to respond to infectious disease issues. Strong

62 Professor Geoffrey Shellam, Professor of Microbiology, University of Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 9.

63 Professor Geoffrey Shellam, Professor of Microbiology, University of Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 11.

64 Dr Clive Morris, Head, Research Group, National Health and Medical Research Council, *Official Committee Hansard*, Canberra, 25 May 2012, p. 37.

targeted research on specific disease issues can help inform public policy decisions about infectious disease issues and guide approaches to pandemic planning, thus assisting in protecting the future health of the wider community.

- 5.111 The Committee commends the important research which has been undertaken with support from NHMRC, when Australia was facing disease threats such as SARS, swine flu, and the Hendra virus.
- 5.112 The Committee encourages NHMRC to continue to support innovative research relating to emerging disease threats in Australia and in neighbouring countries, including continuing to make calls for urgent research when the need arises.

6

Infectious diseases are not going to go away – they are a continuing problem. They are influenced by frequent travel and climatic and environmental conditions. In order to control these infectious diseases and protect Australia from potential threats, I believe there is a need for a coordinated dedicated centre for disease control.¹

Does Australia need a national centre for communicable disease control?

- 6.1 Throughout this inquiry, numerous roundtable participants supported the proposition that Australia needed a dedicated national centre for communicable disease control.
- 6.2 This proposition is discussed in detail below.

What is a CDC?

- 6.3 In discussing the proposal for a national centre for communicable disease control in Australia, participants often referred to the need for a 'CDC', or a national centre for disease control (a national centre).
- 6.4 The main centre for disease control (CDC) model referred to by participants in the roundtable discussions was the model operating in the United States of America. The USA has The Centers for Disease Control and Prevention, which is a United States federal agency under the Department of Health and Human Services.²

1 Dr Deborah Lehmann, Principal Research Fellow, Telethon Institute for Child Health Research, *Official Committee Hansard*, Perth, 8 August 2012, p. 2.

2 For further information see their website, Centres for Disease Control and Prevention, www.cdc.gov, viewed on 21 February 2013.

- 6.5 The USA's CDC mission statement says:
- The Centers for Disease Control and Prevention (CDC) serves as the national focus for developing and applying disease prevention and control, environmental health, and health promotion and health education activities designed to improve the health of the people of the United States.³
- 6.6 As outlined in its mission statement, the CDC in the USA is not solely focussed on infectious or communicable disease control. It is focussed more widely on disease prevention and control, covering issues outside of infectious diseases such as healthy living, health promotion and chronic disease prevention.
- 6.7 The Committee was told by the Public Health Association of Australia Incorporated (PHAA) that Australia is the only Organisation for Economic Co-operation and Development (OECD) country without a recognised separate authority for the national scientific leadership and coordination of communicable disease control.⁴
- 6.8 The Committee considers that the CDC model proposed for Australia, as discussed during the roundtable discussions, is based on the premise that it would cover communicable disease control only, rather than disease more broadly. This is discussed in further detail below.

Does Australia need a national CDC?

- 6.9 The overview of the current policy environment presented in Chapter 2 highlights the multiplicity of agencies across Commonwealth portfolios and at all levels of government that are involved in infectious disease screening, surveillance and control. The majority of these agencies have pandemic influenza plans which outline the agency's role in the event of pandemic influenza. These plans are usually developed and supported by one or more expert committees or working groups.
- 6.10 Given the large number of agencies, expert groups and plans, the Committee questioned whether coordination was effective between Commonwealth agencies, and between Commonwealth and state/territory governments, and other stakeholders.

3 Centres for Disease Control and Prevention, *CDC Organization*, <http://www.cdc.gov/about/organization/cio.htm>, viewed on 21 February 2013.

4 Public Health Association of Australia Incorporated, *Does Australia need a national centre for disease control?* Appendix B Tabled document 2, <http://phaa.net.au/submissions.php>, viewed on 25 February 2013.

- 6.11 Ms Megan Morris, of the Department of Health and Ageing's Office of Health Protection (OHP), told the Committee that coordination worked well within the current systems of communicable disease control:

It was a very pertinent question about whether the coordination works and whether it ever falls through. That is something we try and check all the time... We are reasonably comfortable that we have the right networks. We are in partnership with those people we need to be in partnership with and we are getting good information exchange on that.⁵

- 6.12 Ms Morris advised that the expertise of national committees could be mobilised at very short notice to respond to health emergencies of national importance:

If there is a health emergency at any time, AHPC (Australian Health Protection Committee – a subcommittee of the Australian Health Ministers' Advisory Council) is convened. I have seen it convened with half an hour's notice. It comprises the chief health officers from each jurisdiction, the Department of Defence and also [the Attorney-General's] Emergency Management Australia. They get together at the drop of a hat and people phone in from wherever they are. Things happen very quickly to address whatever the health emergency is. In a pandemic, as I mentioned earlier, you have to bring in other parts of jurisdictional governance to make things work.⁶

- 6.13 In contrast to the view that coordination worked efficiently between the Commonwealth, state and territory governments, the Committee heard evidence suggesting that coordination was in fact disjointed in practice and based largely on informal networks of infectious disease experts.

- 6.14 Dr Deborah Lehmann, of the Telethon Institute for Child Health Research, argued that the current national system for infectious disease control was fragmented:

There needs to be a coordinated, dedicated place where there will be a group of epidemiologists, microbiologists and environmental scientists who are going to address an emergency and also collect optimal data to respond in a rapid manner to outbreaks and to predict future outbreaks. I do not know if you feel that we already have that but it is quite fragmented – there are different

5 Ms Megan Morris, First Assistant Secretary, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 20 March 2012, p. 2.

6 Ms Megan Morris, First Assistant Secretary, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, 20 March 2012, pp. 5-6.

organisations – and also to develop a cadre of people who can go out and assist somewhere like Papua New Guinea, Indonesia and elsewhere or in the northern areas of Australia when there is an emergency.⁷

- 6.15 Professor Peter McIntyre, of the National Centre for Immunisation Research and Surveillance of Vaccine-Preventable Diseases, agreed that there was fragmentation at a national level:

I think there is one unifying theme ... it would be fragmentation. Australia has very strong capacity in lots of areas but there tends to be fragmentation both at the national level and in our capacity to respond regionally and more broadly, because we lack the sort of coordination that would achieve that.

It is a challenge in a federation, as we know. Everyone would be keen to have one leading centre – as long as it was their leading centre; they would be fine about that – and it is always the challenge as to how to achieve that and come up with a mechanism that will capitalise on all the expertise and get the most effective use of that.⁸

- 6.16 Associate Professor Thomas Gottlieb, President of the Australian Society for Antimicrobials, told the Committee that there was a need for a more formal structure for disseminating information at a national level:

We have a very good knowledge base among our physicians. Our infectious diseases society has a bulletin board. If someone has an issue, they will bring it to the attention of everyone so people hear it quickly. But we do not have a formalised structure for disseminating information, for linking what states and territories are doing.⁹

- 6.17 Professor Geoffrey Shellam, of the University of Western Australia, argued that having a dedicated national centre for disease control could improve efficiency and capitalise on the expertise available around the country:

At the moment a lot of the national policy around communicable disease control is put together by these networks and committees from around the country. It is a slow, cumbersome, inefficient

7 Dr Deborah Lehmann, Principal Research Fellow, Telethon Institute for Child Health Research, *Official Committee Hansard*, Perth, 8 August 2012, p. 10.

8 Professor Peter McIntyre, Director of the National Centre for Immunisation Research and Surveillance of Vaccine-Preventable Diseases, *Official Committee Hansard*, 25 May 2012, p. 9.

9 Associated Professor Thomas Gottlieb, President of the Australian Society for Antimicrobials, *Official Committee Hansard*, Canberra, 25 May 2012, p. 11.

process compared to if you have a dedicated unit at national level to say why we need to have a national policy on this and the expertise is there to do it. That does not happen here at the moment. We muddle along¹⁰.

- 6.18 Professor Jonathan Carapetis, of the Telethon Institute for Child Health Research, told the Committee that there was too much reliance on informal networks and the goodwill of individuals or jurisdictions to take on a coordination role during an emerging disease threat of national concern:

I think that, for something like a communicable diseases threat, relying on the goodwill of people like that without having some systematic way of responding is just not sustainable.¹¹

- 6.19 Professor Carapetis argued that Australia's current capacity to deal with widespread outbreaks of infectious disease in Australia would be stretched as people movements across borders increased. Professor Carapetis proposed a public health reserve force be developed, composed of a network of professionals with different types of expertise that could be called on in the event of a public health emergency involving infectious disease:

Our capacity to deal with [disease outbreaks] is thanks to individual doctors – infectious diseases people – sharing information through their goodwill. That is fantastic, but, if things get out of control, the coordination bodies sitting in Canberra and other places do not have the capacity or the resources. One of the things that I suggested could be done is to build a public health reserve force that we can move into action, if needs be, but we do not have that in this country right now.¹²

- 6.20 Dr Kamalini Lokuge, of the Australian National University, advised that Australia did not have a national agency like the CDC in the US, with decision-making authority. Dr Lokuge noted that the Communicable Diseases Network Australia (CDNA), which is expected to play a key role in coordinating any response to an infectious disease outbreak of national significance in Australia, largely had an advisory role:

10 Professor Geoffrey Randolph Shellam, Professor of Microbiology, University of Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 10.

11 Professor Jonathan Carapetis, Director, Telethon Institute of Child Health Research, *Official Committee Hansard*, Perth, 8 August 2012, p. 18.

12 Professor Jonathan Carapetis, Director, Telethon Institute of Child Health Research, *Official Committee Hansard*, Perth, 8 August 2012, p. 13. The Committee received a paper from Professor Carapetis during the public roundtable in Perth, entitled *Australia Needs a National Centre for Communicable Diseases*. Appendix B Tabled document 8.

There is no equivalent in Australia, for example, to the Centers for Disease Control and Prevention in the US or the Health Protection Agency in the UK which has technical capacity but is a statutory body. They can make decisions based on technical advice that are implemented cross-jurisdictionally, whereas for CDNA it is more the willingness of the members to take and to give advice.¹³

- 6.21 Dr Paul Armstrong, of the Western Australian Department of Health, explained that unlike countries such as the UK, the USA and Canada, Australia had not adopted a larger scale, national approach to control large scale infectious diseases:

A lot of the expertise – most of the expertise – comes from the states and territories. I think a reasonable argument could be put forward that that is probably not the best model or that that model could be improved by bolstering the resources at a national level.¹⁴

- 6.22 While Ms Morris agreed that the USA's CDC was a well-respected model with an excellent reputation, she questioned whether a federally-based CDC in Australia would raise constitutional issues, given that the states and territories had primary responsibility for public health.¹⁵

- 6.23 It was also argued that the formation of a CDC may have more benefit to countries with a larger population such as the USA.¹⁶

- 6.24 Dr Jennifer Firman, of DoHA, compared the current CDC models in operation around the globe to the health outcomes of each country:

If you look at that CDC model, the CDC has 15,000 employees in 50 [states] and does chronic health as well as communicable disease. It is a much bigger body than just a CDC in terms of infectious disease. The UK and Europe have a CDC-like model with different levels of employees. If you are looking for a government system that is similar to Australia, Canada has provinces akin to our states and territories. Canada has a CDC with 2,000 to 3,000 employees, and they also do some aspects of chronic health. The European CDC has a core of 270 employees in Stockholm. They cover Europe, but they leave countries to run

13 Dr Kamalini Lokuge, Medical Epidemiologist, National Centre for Epidemiology and Population Health, Australian National University, *Official Committee Hansard*, Canberra, 25 May 2012, p. 12.

14 Dr Paul Armstrong, Director, Communicable Disease Control Directorate, Department of Health, Western Australian, *Official Committee Hansard*, Perth, 8 August 2012, p. 7.

15 Ms Megan Morris, First Assistant Secretary, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 25 March 2012, pp. 48-49.

16 Ms Megan Morris, First Assistant Secretary, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 20 March 2012, p. 2.

their own systems. All of these systems are a hub-and-spoke network of communicable disease control. Some people have an enormous hub and do everything in it, and that is the CDC model. Is that the best model? Their public health and health outcomes are not as good as Australia's, by a long shot. That is a model, but does it deliver you exactly what you want in terms of outcomes? Perhaps not. The country's system suits that country really.¹⁷

Committee comment

- 6.25 There appears to be general consensus among roundtable participants that Australia has strong infectious disease expertise within the states and territories and within the national expert committees that can be drawn upon, should Australia need to respond to a national health emergency involving the spread of infectious disease.
- 6.26 However, the Committee understands that there are a large number of Commonwealth agencies, and networks within and outside those agencies, that have responsibility for emergency management and pandemic planning. Similarly, each state and territory has its own agencies, networks and plans for monitoring and responding to infectious diseases.
- 6.27 Noting the number of agencies involved across portfolios and different levels of government, it is vital that there are clear lines of communication. Responsibilities must be clearly defined and understood, so that any plans can be implemented efficiently and effectively when required.
- 6.28 The Committee was informed that the CDNA is developing an overarching communicable disease framework, the *National Communicable Disease Framework*.¹⁸ Advice provided by DoHA indicates that this framework may be completed in the latter half of 2013.¹⁹
- 6.29 The Committee assumes that this framework will detail the relevant policies and procedures in place to respond to infectious disease emergencies of national significance, including outlining the respective responsibilities of DoHA, AHPC, CDNA and other national expert committees. It is unclear to what extent this framework will apply to agencies outside of the health portfolio.

17 Dr Jennifer Ruth Firman, Principal Medical Adviser, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 25 May 2012, pp. 49-50.

18 Ms Megan Morris, First Assistant Secretary, Office of Health Protection, Department of Health and Ageing, *Official Committee Hansard*, Canberra, 20 March 2012, p. 2.

19 The Committee was told in correspondence from DoHA received by the Committee Secretariat via e-mail on 2 November 2012 that the *National Communicable Disease Framework* would be completed in the second half of 2013 at the earliest.

- 6.30 The majority of participants agreed that Australia's resources and the coordination of national expertise may be stretched beyond capacity, should Australia experience an outbreak of infectious disease or pandemic that is more significant than what Australia has so far experienced.
- 6.31 The Committee shares the concern expressed by several participants that some of the most effective networks in place regarding infectious disease control are informal networks, maintained by the goodwill and enthusiasm of a number of hard-working infectious disease physicians and individuals around the country.
- 6.32 In the Committee's view, there is a strong case for giving further consideration to the need for an overarching national structure to oversee policy development and coordinate responses to infectious disease outbreaks issues at a national level. A national centre for communicable disease control could serve as a central coordinating agency, overseeing infectious disease policy development and managing any response to a large-scale outbreak of infectious disease.
- 6.33 The Committee acknowledges that there may be jurisdictional and/or constitutional issues that need to be considered in the creation of such a national centre. However, the Committee is of the view that the concept has merit and warrants further investigation.
- 6.34 The Committee considers what a national centre for communicable disease control might look like below.

What would a national centre for communicable disease control look like?

- 6.35 The Committee heard a range of evidence regarding possible models for a national centre for communicable disease control in Australia.
- 6.36 Dr Richard Gair, of Queensland Health, outlined the following functions as essential elements of a national centre:
- Coordination;
 - national surveillance – to provide a national picture of what is going on;
 - expert advice – a national centre for expert advice on infectious disease control issues; and
 - a national centre for education and advice to government.²⁰

20 Dr Richard Gair, Public Health Medical Officer, Queensland Health, *Official Committee Hansard*, Cairns, 2 August 2012, p. 17.

6.37 In considering what model might work best in Australia, participants considered international CDC models. CDCs currently in existence around the world include:

- Centers for Disease Control and Prevention (United States);
- Health Protection Agency (United Kingdom);
- Public Health Agency of Canada; and
- European Centre for Disease Prevention and Control.²¹

6.38 Dr Paul Armstrong, of the Western Australia Department of Health, advised how Australia might adapt the idea of a national CDC from other international models:

We could look at all of those and work out what the best would be for Australia. We would have to decide whether the national centre would be dedicated to communicable diseases only or whether it would be like the one in the United States, which is a centre for disease control. It is not a centre for communicable disease control but a centre for a national approach to all types of diseases. We have that in Australia for preventable diseases [Australian National Preventive Health Agency]. We have parts of the model in place already. We do not have a good one for communicable diseases. Pulling all of that together would be a good aim, I would think.²²

6.39 Chief Executive Officer of the Public Health Association of Australia Incorporated (PHAA), Michael Moore, argued for a CDC in line with the Canadian model (with variations), rather than basing it on the US model:

We do not see it as being a need for a whole new bureaucracy. We think it is actually a coordinating function, taking people from within bureaucracy, where you have many good people, and making sure that these issues are coordinated properly.²³

6.40 Professor McIntyre also considered that Canada's experience in creating a national public health agency was instructive to Australia:

I think looking at the Canadian experience in more detail and what they did in establishing this public health agency for Canada – which did not mean that everything else got trashed; it

21 Public Health Association of Australia Incorporated, *Does Australia need a national centre for disease control?* Appendix B Tabled document 2, <http://phaa.net.au/submissions.php>, viewed on 25 February 2013.

22 Dr Paul Armstrong, Director, Communicable Disease Control Directorate, Department of Health, Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 10.

23 Adjunct Professor Michael Moore, Chief Executive Officer of the Public Health Association of Australia Incorporated, *Official Committee Hansard*, Canberra, 25 May 2012, p. 18.

just meant that there were additional resources brought to bear and the coordination capacity at the laboratory level and at the epidemiologic investigation level was strengthened.²⁴

- 6.41 Professor McIntyre said better coordination would improve the good work that was already taking place nationally:

I think the thing which would really strike you if you were a Martian coming down and looking at the Australian system now is that we have all these fabulous initiatives and groups – some of whom are represented at the table today – which are doing great work, but we do not have one coordinating group that we can look to as happens in the US, Canada or the UK.²⁵

- 6.42 Dr Adam Kamradt-Scott, of the University of Sydney, told the Committee that a CDC could ideally be placed under DoHA, similar to the United States model:

The technical expertise and the people that we have to do the jobs already exist, so we are further ahead than a lot of other countries in that we have got capacity there. What we are lacking and what we struggle with unfortunately is our federal-state structure and it is the responsibilities before it.²⁶

- 6.43 Professor Carapetis stated that in reviewing Australia's current capacity to respond to infectious disease issues of national concern, the National Centre for Immunisation Research and Surveillance was a model worthy of consideration:

One of the things I did was to try to look through to see what our current capacity is. That included the Communicable Diseases Network of Australia, the Public Health Laboratory Network and other bodies which no longer exist, such as the Biosecurity CRC, AusReady and the Northern Australia Emerging Infectious Diseases Alliance. We do not have much left. There are some academic bodies that focus on infectious diseases, but they are not strongly linked to policy or practice. The example I use of a body that acts in the way I think this should act in communicable

24 Professor Peter McIntyre, Director of the National Centre for Immunisation Research and Surveillance of Vaccine-Preventable Diseases, *Official Committee Hansard*, Canberra, 25 May 2012, p. 12.

25 Professor Peter McIntyre, Director, National Centre for Immunisation Research and Surveillance of Vaccine-Preventable Diseases, *Official Committee Hansard*, Canberra, 25 May 2012, p. 6.

26 Dr Adam Kamradt-Scott, Senior Lecturer, in International Security Studies, Centre for International Security Studies, University of Sydney, *Official Committee Hansard*, Cairns, 2 August 2012, p. 18.

disease is the National Centre for Immunisation Research and Surveillance. It is a body that is charged with supporting government responses and policy around immunisation, that does have the capacity to link with networks around this country and that acts as a secretariat for the immunisation committees. It does not really have the capacity to draw in the extra workforces needed, but it is a model for what I would imagine one could create in the communicable diseases area.²⁷

6.44 The Committee heard evidence from a number of participants that the basis of a strong CDC type model in Australia already existed.

6.45 Associate Professor Thomas Gottlieb told the Committee that the Australian Society for Antimicrobials had called for a coordinated national system drawing from the structures that were already in place:

The point I would like to make is that we do not need to create a new structure that needs something to be built; we already have very good agencies. We just need to link these things together very effectively.²⁸

6.46 Dr Peter Markey, of the Northern Territory Centre for Disease Control, also told the Committee that Australia already had many of the elements of a CDC:

My view is that a lot of what will constitute the future CDC exists already. I know politicians are always concerned about funding, and maybe this is what puts them off a bit. But institutions like the National Centre for Immunisation Research and Surveillance, the Kirby Institute²⁹ and bits of the Department of Health and Ageing as they exist at the moment I see would come under the umbrella of the CDC.³⁰

6.47 The Committee heard evidence that a suitable CDC model in Australia was one that could effectively capture the expertise of people and agencies working in the states and territories, without taking control away from the people 'on the ground' - i.e. the experts in the state and territories.

27 Professor Jonathan Carapetis, Director, Telethon Institute of Child Health Research, *Official Committee Hansard*, Perth, 8 August 2012, p. 13.

28 Associate Professor Thomas Gottlieb, President of the Australian Society for Antimicrobials, *Official Committee Hansard*, Canberra, 25 May 2012, p. 11.

29 The Kirby Institute is affiliated with the University of New South Wales Faculty of Medicine. Its primary functions relate to the co-ordination of national surveillance programs, population health and epidemiological research, clinical research and clinical trials.

30 Dr Peter Markey, Head of Surveillance Section, Centre for Disease Control, Northern Territory Department of Health, *Official Committee Hansard*, Cairns, 2 August 2012, p. 18.

- 6.48 Professor Scott Ritchie, of James Cook University, gave an example of how the CDC might work in the case of a dengue outbreak:

With dengue, the way I would see the CDC is as a sort of centralised area of real expertise and capacity to do investigations and to do epidemiological work. I did not see it as the guys on the ground fighting dengue; I see the CDC as supplementing ...

... But I do see that the responsibility for a lot of the nuts and bolts control stuff will still be with the states and/or local government. The CDC will have a lot of the technical expertise and research to help us do the job better.³¹

- 6.49 Dr Armstrong envisaged that a national CDC could set the national policy, with the states and territories adopting and implementing the policies uniformly across the states and territories:

It is a lot more efficient than having seven state departments writing a particular policy or a particular factsheet about dengue fever. There are seven around the country. If there were one and we all used it, there would be efficiencies of scale, which are very obvious. You would have to continue to have expertise in the states and territories – there is no doubt about that – because that is where the issue would be managed. That is the effector arm of this national policy. The national people would be largely policy development people rather than on-the-ground, operational people.³²

- 6.50 Professor Shellam proposed that an educational infrastructure underpin any national centre, as this would in turn strengthen Australia's ability to respond to outbreaks of disease.³³ This was discussed further in Chapter 5.

Committee comment

- 6.51 Infectious diseases do not recognise state and territory borders. Effective coordination of surveillance and response activities at a national level is therefore crucial to effectively managing infectious disease risks.
- 6.52 A consequence of running public health primarily at a state and territory level is that there is little uniformity in policies and procedures. For example, the Committee was told that an infectious disease listed as notifiable in Queensland, may not be listed in Western Australia. The

31 Professor Scott Ritchie, Professorial Research Fellow, James Cook University, *Official Committee Hansard*, Cairns, 2 August 2012, p. 20.

32 Dr Paul Armstrong, Director, Communicable Disease Control Directorate, Department of Health, Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 18.

33 Professor Geoffrey Randolph Shellam, Professor of Microbiology, University of Western Australia, *Official Committee Hansard*, Perth, 8 August 2012, p. 11.

Committee was also told that there may be a different policy in each state and territory to respond to and manage the same infectious disease issue.

- 6.53 The Committee is concerned that the lack of uniformity in infectious disease control and inadequate coordination between portfolio agencies and across all levels of government, could potentially compromise Australia's preparedness to respond to a nationwide outbreak of infectious disease in the future.
- 6.54 As noted earlier in this chapter, there was consensus among the majority of participants that establishing a national centre for communicable disease control would enhance Australia's capacity to respond to nationally significant infectious disease risks and outbreaks.
- 6.55 In considering what a national centre for communicable disease control might look like, participants observed that while international models provide useful points of reference, a national centre for Australia would need to be specific to operate effectively in Australia's federal system of government, and to address the unique demographic and regional issues.
- 6.56 In response to questions from the Committee about the role of an Australian centre for communicable disease control, participants proposed the following:
- Coordination of robust and uniform national surveillance activities
 - ⇒ enhancing national surveillance activities such as the National Notifiable Diseases Surveillance System to monitor infectious diseases at a national level and identify emerging threats
 - Provision of expert policy advice and guidance on policy development
 - ⇒ providing evidence-based and consistent policy advice and guidance on policy development to Commonwealth, state and territory governments, and expert committees as required
 - ⇒ undertaking and supporting targeted research into emerging infectious disease threats and issues of concern to Australia, that can inform policy and assist in planning for a widespread national infectious disease emergency
 - Oversight and coordination of cross-agency and cross-jurisdictional responses to national health emergencies involving the spread of infectious diseases
 - Provision of national leadership in communicable disease control prevention programs and public awareness campaigns
 - Capacity building to develop and maintain a 'public health reserve workforce', comprising experts in the infectious diseases field

- ⇒ providing national oversight, coordination and support for training and development of infectious disease experts (eg laboratory, epidemiology, clinical, entomology, environmental health) in Australia, to build up a workforce which is sustainable during 'surge' times³⁴
- 6.57 When asked to describe the key components of the 'ideal' model for supporting the role of a national centre, alternative proposals were put to the Committee. Proposals incorporated various suggestions for structure (eg an actual or virtual centre), location (eg centralised or distributed), governance (eg embedded within a government department, an academic department or set up as an independent statutory authority) and staffing (eg staff drawn from existing structures or designated staff).
- 6.58 As a broad principle, however, the majority of participants emphasised that establishing a national centre should not involve 'reinventing the wheel' or creating unnecessary and additional layers of bureaucracy.
- 6.59 On the basis of evidence presented, it is clear to the Committee that there are a number of effective national networks already in place, comprising infectious disease experts from around the country, tasked with protecting Australians from the threat of infectious disease.
- 6.60 The Committee also recognises that state and territory governments have an important role to play in implementing public health policies at a local level, by engaging medical practitioners and infectious disease experts who can act 'on the ground' and at the forefront of infection control.
- 6.61 Nevertheless, at a national level, the Committee considers that a national centre for communicable disease control could assist in encouraging more uniformity, improved efficiency and better coordination between public health departments in each state and territory and the Commonwealth, and across a range of portfolio agencies.
- 6.62 A national centre could also ensure that there is a visible central coordination point for any national response to an emerging infectious disease threat or disease outbreak from an international source or within Australia.
- 6.63 To progress consideration of the case for establishing a national centre of communicable disease control in Australia, the Committee recommends a two stage process. The first stage would comprise an audit and mapping

34 As well as drawing from the evidence provided during the roundtable discussions, the Committee has also considered Adjunct Professor Michael Moore's paper, *Does Australia need a national centre for disease control?*, provided to the Committee on 25 May 2012 and Professor Carapetis' paper, *Australia needs a national centre for communicable diseases*, provided to the Committee on 8 August 2012, in the development of these recommendations. Appendix B Tabled documents 2 and 8.

exercise of existing structures, networks, policies and plans. In the context of the outcomes of the audit and mapping exercise, the second stage would comprise an independent review of the case for establishing a national centre for communicable disease control.

Recommendation 14

6.64 The Australian Government, in consultation with state and territory governments, conduct a comprehensive national audit and mapping exercise to:

- **identify all of the agencies (not limited to those within the health portfolio) and expert committees/working groups involved in managing infectious disease risks;**
- **clarify roles, responsibilities and map hierarchies and lines of communication;**
- **identify all relevant infectious disease policies and plans, explain how these operate in relation to one another;**
- **identify any duplication and present options for streamlining; and**
- **identify any policy or response gaps that need to be addressed.**

The outcomes of the audit and mapping exercise should be made publically available.

Recommendation 15

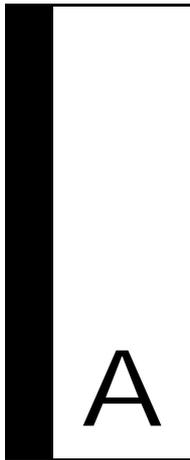
- 6.65 **The Australian Government, in consultation with state and territory governments, commission an independent review to assess the case for establishing a national centre for communicable disease control in Australia.**

The review should outline the role of a national centre and how it might be structured to build on and enhance existing systems. It should examine different models, considering a range of options for location, governance and staffing. The review should incorporate a cost-benefit analysis for each of the models presented.

The outcomes of the review should be made publically available.

**Ms Jill Hall MP
Chair**

19 March 2013



Appendix A – List of roundtables and participants

Friday, 25 May 2012 - Canberra

AusAID

Ms Jenny Da Rin

Ms Joanne Greenfield

Ms Caitlin Wilson

Australian National University

Dr Kamalini Lokuge

Professor Adrian Sleigh

Australian Society for Antimicrobials

Dr Thomas Gottlieb

Department of Agriculture, Fisheries and Forestry

Dr Jenny Cupit

Ms Rona Mellor

Department of Agriculture, Fisheries and Forestry/Biosecurity

Mr Tim Chapman

Department of Health and Ageing

Dr Jennifer Firman

Ms Megan Morris

Department of Health and Ageing

Ms Maria Jolly

Dr Gary Lum

Department of Immigration and Citizenship

Dr Paul Douglas

Mr Miles Henderson

Mr Gregory Saphin

National Centre for Immunisation Research & Surveillance of Vaccine Preventable Diseases

Professor Peter McIntyre

National Health and Medical Research Council

Ms Virginia Hart

Dr Clive Morris

Public Health Association of Australia Incorporated

Adjunct Professor Michael Moore

Public Health Laboratory Network of Australia

Dr David Smith

Sydney Institute for Emerging Infectious Diseases and Biosecurity

Professor Tania Sorrell

University of Newcastle

Dr Rodney Givney

Thursday, 2 August 2012 - Cairns

Australian Federation of AIDS Organisations

Ms Linda Forbes

Cairns Base Hospital

Dr Stephen Vincent

James Cook University

Professor John McBride

Professor Scott Ritchie

Northern Territory Department of Health

Dr Peter Markey

Queensland Health

Dr Richard Gair

University of Sydney

Dr Adam Kamradt-Scott

Wednesday, 8 August 2012 - Perth**Humanitarian Entrant Health Service**

Ms Joanna Fagan

Telethon Institute for Child Health Research

Professor Jonathan Carapetis

Dr Deborah Lehmann

The University of Western Australia

Professor Geoffrey Shellam

Dr Laurens Manning

Western Australian Department of Health

Dr Paul Armstrong

Mr Shane Matthews

Western Australian Tuberculosis Control Program

Dr Justin Waring

Friday, 24 August 2012 - Canberra**Consumers Health Forum of Australia**

Ms Carol Bennett

Ms Anna Greenwood

Department of Immigration and Citizenship

Mr Matthew McMahon

Ms Wendy Richardson

Ms Melinda Tynan

Mr Paul Windsor

Ms Anne Watson

International Health and Medical Services

Ms Melissa Lysaght

Dr Mark Parrish

Wednesday, 21 November 2012 - Christmas Island**Christmas Island Detention Centre**

Mrs Julie McCaughan

Department of Immigration and Citizenship

Mr Maurice Schaffner

Mr Troy Sokoloff

Mr Paul Windsor

Indian Ocean Territories Health Service

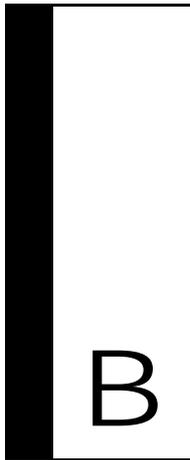
Dr Julie Leanne Graham

International Health and Medical Services

Dr Parbodh Chandar Gogna

Shire of Christmas Island

Councillor Kelvin Kok Bin Lee



Appendix B – Tabled documents

1. *NHMRC Strategic Plan 2010-2012*. Provided by National Health and Medical Research Council.
2. *Does Australia need a national Centre for Disease Control?* Provided by Public Health Association of Australia.
3. *One planet – one health: moving towards sustainable solutions*. Provided by Sydney Institute for Emerging Infectious Diseases and Biosecurity.
4. *Mission Report, Subject: SARS and Research, 27 July 2003*. Provided by National Centre for Epidemiology and Population Health, Australian National University.
5. *Epidemics In A Changing World, Report of the Expert Working Group on Epidemics in a Changing World, 5 June 2009*. Provided by National Centre for Epidemiology and Population Health, Australian National University.
6. *HIV Australia, Strengthening capacity: facing up to HIV in Papua New Guinea, Volume 8, Number 2*. Provided by Australian Federation of AIDS Organisations.
7. *Kimberley Population health Unit: Support for public health issues in Department of Immigration Detention Centres: Christmas Island and Curtin (Derby), 2 August 2012*. Provided by Western Australian Department of Health.
8. *Australia needs a National Centre for Communicable Diseases, August 2012*. Provided by Telethon Institute for Child Health Research.