
THE DEPARTMENT OF HEALTH AND AGED CARE

HUMAN QUARANTINE LEGISLATION REVIEW

FINAL REPORT

November 2000

EXECUTIVE SUMMARY

This is a Final Report of a Review of the human quarantine provisions of the *Quarantine Act 1908*, which has been undertaken with a view to updating and improving the legislative framework for human quarantine activities in Australia. The Review is overseen by the Human Quarantine Legislation Review Steering Committee, which is chaired by the Chief Medical Officer for the Department of Health and Aged Care and Director of Human Quarantine and comprises representatives from relevant Commonwealth agencies and a representative of the States and Territories' Chief Quarantine Officers.

The Human Quarantine Legislation Review Discussion Paper was released for public consultation on 15 April 2000. The Review received 37 submissions. The Review identified several issues that would benefit from immediate amendment to update the legislation and/or to ensure the legislation is consistent with contemporary policy and practice. Such amendments include:

- incorporation of appropriate checks and balances and review and appeal mechanisms;
- ensuring that policy practices such as pratique reporting by exception and vector control activities around the sea and airports are appropriately supported by the legislation;
- repealing outdated provisions; and
- resolving conflicts and ambiguities.

However, the Review also identified several complex issues that will require further consideration and consultation before decisions can be made on how to proceed.

The Discussion Paper canvassed 2 options open to the Review. Option A is a minimalistic approach which would effectively update and "tidy up" the legislation. Option B involves doing this updating in conjunction with a broader, strategic examination of human quarantine and examine options to harmonise human quarantine with contemporary communicable disease management strategies. Work on Option B would be undertaken on 2 levels:

- Level 1 would involve preparation of drafting instructions to address the issues identified in the Review as requiring immediate amendment to the legislation;
- Level 2 would involve undertaking a strategic examination of human quarantine in the context of current and future communicable disease management. Option B would allow thorough consideration of the issues identified in this Review. This would assist the Commonwealth Government, and particularly DHAC, to be proactive in the field of human quarantine and will ensure that human quarantine policy is informed by a strong evidence base. Option B would not be a review of State and Territory systems but would focus on the Commonwealth's role and how the Commonwealth can improve and add value to the national and international aspects of human quarantine and communicable disease control.

In order to address all of the issues identified, this Final Report recommends pursuit of Option B. Option B, and particularly Level 2, will require the DHAC to liaise with a range of stakeholders and to develop links with the processes already in progress, such as CDNANZ's Communicable Disease Strategic Framework project and the National Public Health Partnership.

LIST OF RECOMMENDATIONS

Recommendation 1

It is recommended that a practical review and appeal process should be introduced for human quarantine only (not plant and animal) and further advice should be sought on the most appropriate system.

Recommendation 2

It is recommended that the legislation should be amended to:

- support the current policy of granting pratique by exception for international aircraft; and
- ensure there is an explicit and enforceable reporting requirement for pratique

Recommendation 3

It is recommended that no legislative action is necessary in relation to disinsection of international aircraft.

Recommendation 4

It is recommended that no legislative action is required for disinsection of international ships.

Recommendation 5

It is recommended that the legislation should be amended to:

- define the 400m zone as being drawn from the perimeter of the port, pending further consideration as to whether 400m zone is sufficient; and
- ensure that the legislation allows for vector control activities to be undertaken within the boundary of the port as well as in the 400m surrounding buffer zone.

Recommendation 6

It is recommended that section 5 of the Act be amended to provide definitions of "pratique" and "disinsection". Further consideration is recommended as to whether the legislation should define terms such as "quarantinable diseases", "eruptive disease" and "communicable disease" and, if so, what those definitions should be. Implementation of this part of the recommendation will be closely linked to implementation of Recommendation 12.

Recommendation 7

It is recommended that the legislation be amended so that quarantine signals apply to sea vessels only and do not apply to aircraft. A consequential amendment to the proclamation, to repeal the provision that exempts aircraft from using quarantine signals, will also be required.

Recommendation 8

It is recommended that further consideration be given to the issue of notification of prescribed diseases. The questions that need to be considered include:

- the need to minimise the burden to the sea and aviation industry and to ensure that, at most, the only requirement placed on this industry is that they must report illness, within a certain timeframe, to a quarantine officer;
- what constitutes an illness or disease and what should be reported by the sea and aviation industry;
- whether prescribing disease symptoms rather than diseases would be more appropriate;

- appropriate instructions on the action to be taken if a quarantine officer is notified of a disease or disease symptoms;
- whether there would be any benefit in using this notification provision more broadly to detect other diseases;
- how to ensure that the link between notification of diseases/symptoms and pratique is made explicit;
- whether there needs to be separate provisions for aircraft and ships as some ships have doctors on board and the length of transit is longer;
- the need to ensure that the legislation can accommodate detection of bioterrorism.

Major stakeholders including AQIS, the Department of Defence, the aviation and shipping industries, State/Territory Health Departments, and CDNANZ need to be involved when developing a notification system.

It is recommended that the legislation be amended to ensure the reporting arrangements for States and Territories to notify the Commonwealth Government/DHAC of a quarantinable disease are made explicit.

Recommendation 9

It is recommended that section 59 of the legislation be amended to provide that costs relating to human quarantine **may** be recovered from the master, owner or agent of a quarantined vessel.

Recommendation 10

It is recommended that the following provisions be repealed so that individuals are not liable for the costs of food or medical expenses incurred in relation to human quarantine control:

- section 62 of the Act
- Regulation 44(1)(b), 44(1)(c), 44(2) and 44(3).

Recommendation 11

It is recommended that the legislation be amended to:

- remove references to the term "division or divisions" of quarantine;
- ensure that people released under quarantine surveillance cannot be apprehended under section 31(1);
- improve the administration of section 12 of the Act and Regulation 32, pending advice on the most appropriate method, eg by delegating the power to proclaim places of quarantine to the Director of Quarantine or basing proclaimed places on the formal advice of the status of a country referred to in the WHO notifications;
- amend Regulation 34(2) to clarify that, while it is still an offence if a person does not have a current yellow fever vaccination certificate and has recently been in a yellow fever zone, they may be released under quarantine surveillance in accordance with the Act;
- clarify Regulation 38(b) so that it is clear that a vaccination/inoculation for a prescribed disease must have been received within the last 10 years but no earlier than 10 days prior to entering the country; and
- ensure that sections 35, 35AA and 35A and Regulations 41 to 47, which relate to the performance of quarantine, are clear, consistent, practical and necessary.

Further consideration should be given to the following issues:

- Regulations 10(11) and 12(2), which relate to the reporting of illnesses, should be considered in conjunction with the other notification issues; and
- in relation to section 2B, which refers to the proclamation by the Governor-General of an epidemic in "a part of the Commonwealth", whether this geographic basis is appropriate.

Recommendation 12

It is recommended that further consideration be given to amendment to the list of human quarantinable diseases, and the development of criteria to assist in determining whether a human disease should be regulated under the *Quarantine Act 1908*. Relevant stakeholders, such as AFFA/AQIS, CDNANZ and the Chief Quarantine Officers, should be involved in debating this issue further. Implementation of this recommendation will be closely linked to implementation of Recommendation 6.

Recommendation 13

It is recommended that the legislation be amended to provide explicit sanctions for non-compliance with the pratique provisions and enable prosecution, if necessary, of any breaches.

It is also recommended that further work needs to be undertaken in consultation with all relevant stakeholders to:

- undertake and/or increase education and training initiatives;
- undertake research to improve the effectiveness of disease detection at the border and ensure that border control activities, such as pratique and passenger surveillance, are based on sound evidence; and
- undertake further work to determine whether the *Quarantine Act 1908* should be used to ensure timely contact tracing on domestic flights and public health inspections on international vessels, particularly cruise ships.

Recommendation 14

It is recommended that:

- expert advice and evidence be sought on an appropriate zone around air and sea first ports in which vector monitoring and control should be conducted under Commonwealth supervision; and
- discussions be held between Commonwealth and State and Territory agencies to clarify the issue of financial liability for eradicating and incursion of an exotic vector of public health significance.

Recommendation 15

It is recommended that no legislative action is necessary in relation to domestic disinsection.

Recommendation 16

It is recommended that section 35AA should be retained and amended to refer to tuberculosis as "human tuberculosis".

It is also recommended that potential scenarios could be referred to NTAC for consideration and to develop an optimal legislative framework to support tuberculosis control. Any options that NTAC develop would then need to be considered by DIMA, DHAC, AQIS and the State/Territory Health Departments.

Recommendation 17

It is recommended that no legislative action is necessary with regard to the relationship between human, plant and animal quarantine. DHAC should continue to work closely and improve links with relevant agencies, especially AQIS.

Recommendation 18

It is recommended that no legislative action is necessary with respect to surveillance and response.

Recommendation 19

It is recommended that no legislative action required with respect to risk assessment.

Further consideration is recommended to determine which aspects of human quarantine would benefit from risk assessment and, if required, to develop appropriate criteria.

Recommendation 20

It is recommended that:

- the Commonwealth's emergency powers should be retained in the *Quarantine Act 1908*;
- further consideration be given to the suggestions for improving national coordination; and
- DHAC, AQIS, CDNANZ, the Chief Quarantine Officers and the State/Territory Health Departments work together to clarify understanding of the scope of the Commonwealth's emergency powers.

Recommendation 21

It is recommended that no legislative action be undertaken with respect to CDNANZ.

Recommendation 22

It is recommended that Option B be pursued.

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ABBREVIATIONS

AAICC	AQIS/Airline Industry Consultative Committee
AAT	Administrative Appeals Tribunal
AFFA	Department of Agriculture, Fisheries, Forestry Australia
AHMAC	Australian Health Ministers Advisory Council
AHMC	Australian Health Ministers Council
AIHW	Australian Institute of Health and Welfare
AQIS	Australian Quarantine and Inspection Service
CDNANZ	Communicable Disease Network Australia New Zealand
COAG	Council of Australian Governments
CQO	Chief Quarantine Officer
Customs	Australian Customs Service
Defence	Department of Defence
DHAC	Department of Health and Aged Care
DIMA	Department of Immigration and Multicultural Affairs
IHR	International Health Regulations
NAQS	Northern Australia Quarantine Strategy
NNDSS	National Notifiable Disease Surveillance Scheme
NPHP	National Public Health Partnership
NTAC	National Tuberculosis Advisory Committee
MoU	Memorandum of Understanding
PHLN	Public Health Laboratory Network
SIEV	Suspected Illegal Entry Vessels
UIPHE	Urgent International Public Health Events
WHO	World Health Organization

SECTION 1 – BACKGROUND AND ADMINISTRATION

1. INTRODUCTION

This is the Final Report of a Review of the human quarantine provisions of the *Quarantine Act 1908*, which has been undertaken with a view to updating and improving the legislative framework for human quarantine activities in Australia.

2. BACKGROUND

2.1 Human Quarantine Legislation Review

Quarantine is a Commonwealth responsibility under the Australian Constitution and the *Quarantine Act 1908* ("the Act") derives its powers from s51(ix) of the Constitution. The Act and subordinate legislation provide the legislative basis for human, plant and animal quarantine activities.

The *Quarantine Act 1908* deals specifically with a small group of human diseases, generally referred to as "human quarantinable diseases"¹. Human quarantinable diseases are a very small subset of communicable diseases. Communicable disease is a term used to encompass a broad range of diseases that are transmissible. Another subset of communicable diseases is the group of diseases that are notifiable under the National Notifiable Disease Surveillance Scheme (NNDSS), which utilises State/Territory law. The regulation and management of quarantinable diseases is a small aspect of the management of communicable diseases.

The human quarantine provisions of the *Quarantine Act 1908* were identified for review under COAG's Competition Principles Agreement, which obliged each jurisdiction to review and, if necessary, reform by the year 2000 legislation affecting competition. That Review, which reported to the Minister for Health and Aged Care in 1998, found that the human quarantine provisions of the *Quarantine Act 1908* had minimal impact on competition and business. Where an impact was identified, the Review was satisfied that the costs to government and to industry were minor and/or justified by the benefits to public health.

However, that Review also found that the human quarantine provisions, although adequate, would benefit from consideration and possible updating to ensure they provide the best legislative framework to undertake human quarantine activity now and in the future. On 2 July 1998, the Minister agreed to a second phase of the Review of the human quarantine provisions to update and improve the legislative framework for human quarantine activities in Australia. The Terms of Reference for the Review are at Appendix 1.

¹ Currently, the group of human quarantinable diseases is plague, cholera, yellow fever, rabies and viral haemorrhagic fevers. The list of quarantinable diseases lies entirely in the proclamation (see section 5 of the Act and the Quarantine Proclamation 1998.)

2.2 AQIS Review of Quarantine Act 1908

In 1995, the then Minister for Primary Industries and Energy, Senator the Hon. Bob Collins, commissioned an independent committee, chaired by Professor Malcolm Nairn, to review Australia's quarantine policies and programs. In October 1996, the committee released a report, *Australian Quarantine: A shared responsibility*, known as the Nairn Report, which detailed a number of recommendations. While this Nairn Report process looked at quarantine issues in a unified way, the main focus was on plant and animal quarantine issues. In 1997, the Government accepted the majority of the recommendations made in the Nairn Report.

The *Quarantine Act 1908* has recently been reviewed by AQIS in response to the Nairn Report, although primarily the provisions relating to plant and animal quarantine were reviewed. The resulting amendments to the *Quarantine Act 1908* were incorporated into the *Quarantine Amendment Act 1999*, which received Royal Assent on 23 December 1999 and came into force on 23 June 2000.

3. THE REVIEW PROCESS

3.1 Management of the Review

The Review is managed by the Law Reform and Quality Section, Population Health Division of the Department of Health and Aged Care, in collaboration with the Division's Communicable Disease and Environmental Health Branch.

A Steering Committee, chaired by Professor Smallwood and comprising representatives from the Australian Quarantine and Inspection Service, Australian Customs Service, Department of Immigration and Multicultural Affairs, Department of Defence and a representative of the State/Territory Chief Quarantine Officers, acts as an advisory and coordinating body to the Review. The membership list for the Human Quarantine Steering Committee is at Appendix 2.

3.2 Terms of Reference

The Terms of Reference for the Human Quarantine Legislation Review ("the Review") can be found at Appendix 2. Broadly, they provide clear direction to update and improve the *Quarantine Act 1908* and its subordinate legislation. Two of the Terms of Reference also allow for a wider interpretation of the scope of the Review than simply resolving problems with the current legislation.

Section 2(b) of the Terms of Reference states that one of the aims of the Review is to "achieve a uniform, sustainable, legislative framework that effectively supports current and future human quarantine activity". In addition, section 3(b) of the Terms of Reference makes an undertaking to "examine mechanisms to improve the overall efficiency of the management

of human quarantine activity". In pursuing these two directions, the Review has necessarily gone beyond the immediate problems with the legislation to examine a broad range of issues impacting on the management of human quarantine in Australia, now and in the future.

In line with section 3(e) of the Terms of Reference, a letter and questionnaire was sent to the relevant authority for the United States of America, the United Kingdom, New Zealand, Canada, Japan, Papua New Guinea and Indonesia, seeking information on the human quarantine arrangements for each country. The information obtained was interesting although Australia's relatively disease free status meant that often the regulations or models that were used in other countries would not be applicable to or appropriate for Australia.

The general management of communicable diseases is a State and Territory responsibility and it is emphasised that this Review is not proposing any change to the present balance of Commonwealth and State/Territory powers. In addition to the cooperative arrangements of the Communicable Disease Network Australia New Zealand (CDNANZ), both the Commonwealth and the States and Territories will continue to have specific roles and responsibilities in relation to communicable disease management under their own legislation. The Commonwealth government will continue to be involved in both the international aspects of communicable disease management and coordination of the national response to communicable disease outbreaks and the States and Territories will continue to be responsible for communicable disease management within their borders.

3.3 The Public Consultation Discussion Paper

In line with the Terms of Reference, and particularly in relation to section 3, several independent research papers were commissioned to explore some of the broader issues facing the Review. The research papers were:

1. **The Purpose of Human Quarantine** – this paper examined the scope and objectives of human quarantine within the context of modern infectious disease risk assessment and management and specific issues pertinent to Australia, such as geographic isolation, absence of specific vectors and maintenance of disease free status.
2. **Future Activities for Human Quarantine** – this paper was an extension to the Purpose of Human Quarantine paper and examined the specific quarantine activities that would be necessary to protect Australia from infectious disease threats in the context of current infectious disease management practices, future trends and emerging and re-emerging infectious disease threats.
3. **The Relationship between Plant, Animal and Human Quarantine** – this paper considered the biological links between animal, plant and human diseases and vectors and the administrative links between animal, plant and human quarantine.
4. **A Regulatory Framework for Human Quarantine** – this paper examined the current regulatory framework for human quarantine and considered other options in light of the constitutional foundations, sources of Commonwealth power, constraints on legislative powers and Commonwealth-State issues.

A public consultation Discussion Paper was developed (see Appendix 3), based on the independent commissioned research papers, to assist in the exploration of the issues relating to human quarantine and communicable disease management in Australia. Issues that were raised in Phase 1 of the Human Quarantine Legislation Review (the Competition Principles Agreement-initiated Review) and during meetings of the Human Quarantine Legislation Review Steering Committee were also included in the Discussion Paper.

The Review has considered issues arising in three ways:

- immediate issues or problems with the current legislation;
- issues arising from a consideration of human quarantine from a strategic point of view, within the context of current communicable disease management practices; and
- issues arising from a consideration of whether aspects of the prevention and management of communicable diseases would benefit from legislative support and whether the powers of the *Quarantine Act 1908* could be used for this purpose.

An advertisement was placed in the national press on 15 April 2000 advising the availability of the Discussion Paper and calling for submissions from any interested parties. To ensure that relevant stakeholders were given the opportunity to comment, the Review actively sought submissions from groups potentially affected or interested in the human quarantine provisions. This stakeholder list (approximately 200 bodies) included professional organisations, key industry groups, other government agencies and the Australian Quarantine and Inspection Service (AQIS).

The public consultation process closed on 15 May 2000 although a number of submissions from significant stakeholders were received after this date. Responses from both the targeted consultation process and from the national advertising campaign numbered 37. A list of people/organisations who provided a submission to the Review can be found at Appendix 4.

The recommendations made in this Final Report are based on an analysis of the submissions received, meetings with stakeholders and from the commissioned independent research papers.

SECTION 2 – CURRENT PROBLEMS WITH THE LEGISLATION

This Section considers some of the immediate problems with the legislation including issues relating to outdated provisions, conflicts and ambiguities and where the legislation does not support contemporary policy practice.

4. HUMAN RIGHTS CONSIDERATIONS

4.1 Issue

The *Quarantine Act 1908* confers broad and sweeping powers that could affect individual and collective human rights. The emphasis is on the restriction of the movement of individuals and communities with general powers to compel the individual to do whatever is required to halt or contain the spread of disease, all without the right of appeal.

The International Covenant on Civil and Political Rights, to which Australia is a signatory, advocates for civil liberty and is against arbitrary detention. Pursuant to this Convention, any breach of an individual's civil liberty should be underpinned by a legislative regime that is clear and accountable. The legislation should provide limits and conditions on the nature of the intervention while at the same time providing appropriate checks and balances such as review and appeal processes.

The Discussion Paper raised the following questions:

- Q1) What areas of the legislation would benefit from incorporation of appropriate checks and balances and a right of appeal?*
- Q2) What review and appeal model would be most suitable for human quarantine?*

4.2 Analysis of Submissions

Ten of the submissions received provided specific comment on this issue. While protecting public health was considered of paramount importance, almost all of the submissions supported incorporating human rights considerations into the legislation. It should be noted that while detention may be enforced, treatment cannot. Therefore, when discussing human rights considerations, the Review is primarily discussing what checks/balances or review and appeal mechanisms would be appropriate when detaining a person under quarantine.

AQIS are concerned that incorporating review and appeal processes into the legislation with respect to human quarantine may risk a “flow-on” to plant and animal quarantine with consequences for plant and animal quarantine that will be unmanageable. Having plant/animal quarantine requirements subject to a review and appeals process, such as the Administrative Appeals Tribunal (AAT), would place a significant additional administrative burden on AQIS. The resources needed to manage such a review and appeal process would most likely have to be redirected from the surveillance and control activities that AQIS undertake to protect Australian from the introduction, spread or establishment of diseases and

pests. It is also worth noting that there are provisions in the legislation relating to plant and animal quarantine, which provide for compensation of the owners of cargo or livestock which have been destroyed under the provisions of the *Quarantine Act 1908*. The compensation provisions are considered more appropriate for plant and animal quarantine than review and appeal processes would be. It is possible to amend the legislation so that any review and appeal mechanism is specified to apply to human quarantine only, which should allay AQIS's concerns. AQIS have provided a list of the types of decisions made under the Act, which AQIS believe are not suitable for review, and these will need to be taken into account.

With respect to the most appropriate mechanism to incorporate human rights considerations into the human quarantine provisions of the *Quarantine Act 1908*, there were several suggestions as to the type of review and appeal mechanism that could be adopted. Other suggestions were directed at incorporating checks and balances into the legislation rather than review and appeal processes. Suggestions included:

- Utilising the court system: Suggestions varied from utilising local magistrates to superior/Federal courts. Advice would need to be sought from the Commonwealth Attorney General's Department on the feasibility of relying on cross vesting arrangements.
- Basing a human rights considerations model on the proposed new Queensland Public Health Act, which provides checks and balances when detaining an individual while also protecting the public from potential exposure. This model will allow the authorisation of interim detention of an individual for 24 hours. A magistrate's order is required if the person is to be detained after this period for up to 72 hours, although further detention for up to 28 days is possible on a magistrate's order.

Although it would be desirable to implement a system which is consistent with State/Territory legislation, there are several issues which will need to be considered if this approach is to be adopted. Firstly, it may be difficult to arrange a hearing to bring a case for further detention before a magistrate within 24 hours. Several of the submissions commented that any review and appeal process would need to recognise the technical realities involved and it would be unreasonable to expect that a case could be reviewed within 24 hours. For example, confirmatory laboratory tests may take up to two to three days to become available depending on where the person is located within Australia and the disease involved.

It is also worth noting a Canadian experience where a further detention was sought from a magistrate's court. In order to bring this case to the magistrate, the person who was suspected of having ebola fever had to be taken into open court in Toronto; a hearing which attracted considerable media attention.

- Implementing a system which required two independent infectious disease physicians to confirm the isolation (ie, quarantine) order within 24 hours of the patient entering isolation. The legislation could allow for quarantine and detention for at least 72 hours, after which a review mechanism could be invoked, although this may not be necessary if test results are available. Release from the quarantine order prior to the 72 hours could only be made on medical advice.

- Implementing a system which places a time limit on the duration of a quarantine order based on the known incubation period of a disease². Although this would not prevent a person from being improperly placed in quarantine, it would at least place a limit on the period of detention.

Australia is a party to the International Covenant on Civil and Political Rights and the *Quarantine Act 1908* should observe the principles upheld in this covenant where possible. However, further work needs to be undertaken to determine which mechanism will best suit the *Quarantine Act 1908* while maintaining the integrity of the purpose of the Act, and without imposing an unduly onerous cost burden on the Commonwealth government.

4.3 Recommendation 1

It is recommended that a practical review and appeal process should be introduced for human quarantine only (not plant and animal) and further advice should be sought on the most appropriate system.

5. PRATIQUE BY EXCEPTION

5.1 Issue

Pratique relates to human quarantine only and is the granting of a health clearance to all incoming international vessels under section 33 of the Act, ie the vessel should be free from infection. For the purposes of the Act, "vessel" includes ships and aeroplanes. In the past, vessels had to report to a quarantine officer, even if no illness was present or had occurred, to receive pratique. Currently, pratique is granted automatically for aircraft with the exception of those flights that report illness. The practice of reporting by exception for pratique for aircraft is not underpinned by the current legislation.

The Discussion Paper raised the following question:

Q3) Should consideration be given to amending the pratique provisions to ensure that the "pratique by exception" policy is supported by legislation?

5.2 Analysis of Submissions

Ten of the submissions received provided specific comment on this issue. All of the submissions supported amending the legislation to ensure that pratique by exception was underpinned by the legislation.

² The provisions regulating yellow fever reflect the incubation period of the disease, ie 6 days.

Another issue that was raised concerns the reporting against pratique. Currently, there is no explicit requirement to report under the pratique provisions - there is only an implied requirement to report any incident of illness or disease. This issue is also relevant to Section 12 of the Report, which discusses section 22(2) of the Act - Notification of Prescribed Diseases.

There are broader issues relating to pratique and these are discussed in Section 17 of the Report.

It should be noted that international sea vessels are still required to provide a report, which includes information about the health status of the vessel, before being granted pratique. The World Health Organization (WHO) noted in its submission that WHO are proposing a "sanitary" certificate for ships, which would include all areas for inspection, such as crew health, insect vectors, food and water supplies, and all rodents.

5.3 Recommendation 2

It is recommended that the legislation should be amended to:

- support the current policy of granting pratique by exception for international aircraft; and
- ensure there is an explicit and enforceable reporting requirement for pratique

6. DISINSECTION OF INTERNATIONAL AIRCRAFT

6.1 Issue

The movement of mosquitoes is partly controlled through the Quarantine Act's requirement for "disinsection" of all incoming international aircraft. The efficacy of disinsection had been an issue in the first phase of the Review. However, a report commissioned by AQIS and published in June 1999, "Aircraft Disinsection", confirmed that a great diversity of insects (arthropods) are transported in international aircraft and recommended that disinsection of all aircraft originating overseas should continue.

The Discussion Paper raised the following question:

Q4) The AQIS Aircraft Disinsection Report recommends continuation of disinsection of all aircraft originating overseas. This recommendation appears to have widespread support. Any comments would be welcome.

6.2 Analysis of Submissions

Fourteen submissions provided comment specifically on this issue. Thirteen of the submissions supported disinsection of international aircraft while the remaining submission partially supported the requirements.

While disinsection of international aircraft was supported as a viable vector control strategy it is acknowledged that disinsection is just one part of a wider, more comprehensive vector surveillance and monitoring program. One submission suggested that an evidence base should be accumulated with respect to the level of risk of importation of insects via international vessels and the efficacy of the disinsection program. It should be noted that Disinsection Report commissioned by AQIS assessed available evidence and that AQIS have commissioned another study to examine further vector control issues.

6.3 Recommendation 3

It is recommended that no legislative action is necessary in relation to disinsection of international aircraft.

7. DISINSECTION OF INTERNATIONAL SHIPS

7.1 Issue

Ships are also required to undertake disinsection if insect infestations are detected by AQIS. Prior to the introduction of the Quarantine Amendment Act 1999, there was no specific provision for the disinsection of ships, as there was for aircraft. However, with the amendment of section 78A and the introduction of section 78AA, there is now a directions power which will allow directions to disinsect to be given in relation to ships (and aircraft). Directions powers are inherently flexible in that the direction need not be given if the disinsection is deemed not necessary.

7.2 Analysis of Submissions

Four submissions provided comment specifically on this issue.

One of the submissions raised a concern that the new section 78AA will not address the issue that disinsection of international ships does not necessarily occur immediately, as it does with aircraft. The submission was concerned that the time between berthing and inspection allows time for importation of vectors to occur. Another issue that was raised was that there is a potential for insect eggs to be in a dry receptacle that has held water. The submission suggested that there should be capacity for the legislation to treat these vessels even if insects and larvae are not observed. These issues will be referred to AQIS for their consideration in consultation with DHAC.

Other submissions supported disinsection of international sea vessels and noted that guidelines could be developed to determine which vessels posed the higher risk of importation. It should be noted that AQIS has a comprehensive risk management system in place. Inspection of ships occurs on the following basis:

- all ships arriving for the first time are inspected;
- all high risk ships are inspected every visit; and
- low risk ships are inspected once every 3 visits.

7.3 Recommendation 4

It is recommended that no legislative action is required for disinsection of international ships.

8. VECTOR CONTROL AROUND SEA AND AIRPORTS

8.1 Issue

AQIS have implemented a comprehensive national Vector Monitoring Program, which involves collecting surveillance information about pests (primarily mosquitoes) that are taken in adult mosquito traps and other collection/detection devices at all major international airports and seaports. These activities are designed to ensure that the 400metre zone around all international ports is free of mosquito breeding sites. In this way Australia complies with Article 19 of the IHR requirement³, which aims to prevent mosquitoes being transported by aircraft to other destinations⁴ and assist in detecting exotic mosquitoes.

Prior to the Quarantine Amendment Act 1999 coming into force, the legislation did not directly address vector monitoring around ports. However, with the introduction of section 6B(2), it will be possible for the Governor General to declare, pursuant to section 13(1), that first ports of entry will be subject to the condition that vector monitoring arrangements are set up for 400m around ports.

8.2 Analysis of Submissions

Two submissions provided specific comment on this issue. The submissions noted that if the 400m zone is specifically legislated, the legislation will need to define where the zone is drawn from. In addition, defining the zone will also need to take into account the fact that port sizes vary, eg the port at Lord Howe Island compared with Port Botany.

³Although Australia is not currently a signatory to the WHO International Health Regulations, it meets the requirements of them as appropriate to the Australian context.

⁴ These provisions are mainly directed at *Aedes aegypti*.

The research and evidence (for example the AQIS Disinsection Report) suggest that exotic vectors will be transported on international vessels⁵. The aim of vector control activities around ports, therefore, is to prevent exotic vectors, such as *Aedes aegypti*, from becoming established and spreading. The requirement for ports to be free of mosquito breeding sites greatly reduces the risk that an exotic mosquito will be able to become established. The surveillance activities and eradication of any incursions further reduces the risks of vectors becoming established. With this in mind, it appears sensible that the actual port property as well as a surrounding 400m buffer zone, taken from the perimeter of the port, be free of mosquito breeding sites and subject to vector control activities.

Broader issues relating to vector control activities are considered in Section 18 of this Report, including whether, a 400m zone is sufficient or whether the zone should be extended.

8.3 Recommendation 5

It is recommended that the legislation should be amended to:

- define the 400m zone as being drawn from the perimeter of the port, pending further consideration as to whether 400m zone is sufficient; and
- ensure that the legislation allows for vector control activities to be undertaken within the boundary of the port as well as in the 400m surrounding buffer zone.

9. CLARIFICATIONS AND DEFINITIONS

9.1 Issue

There are ambiguous and ill-defined provisions in the legislation. The amendments detailed in the *Quarantine Amendment Act 1999* addressed some human quarantine issues but did not complete the task of definitional clarification.

The Discussion Paper raised the following question:

Q5) Are there any clarification or definition issues that need to be resolved?

9.2 Analysis of Submissions

Three submissions commented specifically on this issue and noted that several issues or terms were poorly or not defined in the legislation.

⁵ See AQIS Disinsection Report

9.2.1 *Pratique*

While an interpretation of *pratique* exists in Section 5 of the Act, the definition is circular. The definition refers to what *pratique* applies to and in what circumstances but does not actually define what *pratique* means. The interpretation in section 5 needs to be amended to clarify that *pratique* is a health clearance meaning that the vessel is free from infection or disease.

9.2.2 *Disinsection*

Disinsection is not defined in the Act. There would be benefit in providing an interpretation of disinsection in section 5 of the Act.

9.2.3 *Quarantinable Diseases*

The issue has been raised how "quarantinable diseases" should be defined in the Act. The present definition states that:

"Quarantinable disease means any disease declared by the Governor-General, by proclamation, to be a quarantinable disease."

A few submissions indicated that human quarantinable diseases should be clearly defined in the Act. It was suggested that consideration could be given to establishing an expert working group to look at definitional issues relating to disease so that these diseases, such as viral haemorrhagic fevers, may be defined appropriately. Another suggestion noted that CDNANZ would be the appropriate expert body to undertake any work relating to definitions for quarantinable diseases similar to the case definitions that CDNANZ has developed for notifiable diseases.

However, the Human Quarantine Legislation Review Steering Committee is of the view that quarantinable diseases should not be defined specifically in the legislation. Indeed, the Quarantine Amendment Act 1999 amended the definition of quarantinable diseases in the Act so that there was no mention of any specific disease. Now, the human diseases, which are regulated as quarantinable diseases, can easily be changed by proclamation. This was done to create a greater level of flexibility to cope with new and emerging diseases, advances in medicine and technology and in the event that diseases, such as polio, are eliminated from Australia. In addition, it is questionable how useful a list of human disease definitions in the Act would be. Clinical diagnosis is the only true way to determine whether the disease is a quarantinable disease and international reporting requirements for communicable diseases are moving away from lists of diseases.

It appears that further consideration is needed of whether a definition for human quarantinable diseases is needed in Section 5 of the Act and, if so, what that definition should be.

9.2.4 *Disease and Other Terms Involving Disease*

The term "disease" is used frequently in the legislation but causes problems with respect to disease notification. "Disease" can be interpreted broadly and creates confusion amongst AQIS staff and the sea/aviation industry as it is not clear what "diseases" should be reported. This issue is discussed in more detail in Section 12 of the Report and requires further consideration.

Several submissions also noted that terms such as "eruptive disease" and "communicable disease" are not defined in the legislation. As noted in the Discussion Paper, communicable disease may not have been defined due to difficulty in developing an acceptable definition. Any consideration of whether a definition for human quarantine diseases is needed should include consideration of defining terms such as eruptive and communicable disease.

9.3 Recommendation 6

It is recommended that section 5 of the Act be amended to provide definitions of "pratique" and "disinsection".

Further consideration is recommended as to whether the legislation should define terms such as "human quarantinable diseases", "eruptive disease" and "communicable disease" and, if so, what those definitions should be. Implementation of this part of the recommendation will be closely linked to implementation of Recommendation 12.

10. SECTIONS 21 AND 23 – QUARANTINE SIGNALS

10.1 Issue

Section 21(1A) and s23 of the Act require aircraft to display prescribed signals in certain situations. However, a Proclamation made under s14 of the Act (which authorises the making of exemptions) states these signals are not required.

The Discussion Paper raised the following question:

Q6) Should the provisions relating to quarantine signals, ie section 21(1A) and section 23, be repealed?

10.2 Analysis of Submissions

Five submissions provided comment specifically on this issue. Four of the submissions supported repealing the provisions as quarantine signals for aircraft are outmoded and archaic. However, AQIS advised that quarantine signals are still used on ships and are particularly useful with regard to cruising yachts and illegal entry vessels.

A sensible solution would be to amend section 21(1A) and s23 so that the provisions do not apply to aircraft but will continue to apply to sea vessels. The proclamation exempting aircraft from the provisions could then be repealed.

10.3 Recommendation 7

It is recommended that the legislation be amended so that quarantine signals apply to sea vessels only and do not apply to aircraft. A consequential amendment to the proclamation, to repeal the provision that exempts aircraft from using quarantine signals, will also be required.

11. SECTION 22(2) – NOTIFICATION OF PRESCRIBED DISEASES

11.1 Issue

Section 22(2) of the Act requires masters of vessels – both ships and aircraft – to alert the quarantine officer, in writing, of every case of any of the diseases prescribed in Regulation 6⁶ of the *Quarantine (General) Regulations 1956*. These provisions are separate to the pratique requirements. Advice from AQIS indicates that Section 22(2) is not invoked and there appears to be no reason why it would need to be invoked in the future.

The Discussion Paper raised the following questions:

- Q7) What is the purpose of section 22(2) and Regulation 6? Is there a better way to achieve this purpose and what are the implementation options?*
- Q8) Would there be any adverse consequence to repealing section 22(2) and/or the list of prescribed diseases in Regulation 8?*

11.2 Analysis of Submissions

Nine submissions provided comment specifically on this issue. There is general agreement that the current system with the list of diseases in Regulation 6 is not working.

There appears to be much confusion about the purpose of this provision. There is also the further issue that the provision places a requirement on non-medically trained staff to identify illness and disease. The Review's interpretation of the intent of s22 is that it places a requirement on incoming international flights and vessels to report to a quarantine officer if someone is ill or becomes ill during transit. The burden of determining if a disease is a quarantine concern should be with the quarantine officer and not the sea and aviation industry. However, the legislation needs to be clear what action is intended to flow from the information received, eg could a person be ordered into quarantine. It should be noted that

⁶ Cholera, Dengue Fever, Diphtheria, Dysentery, Encephalitis, Gastroenteritis, Haemorrhagic fever, Hepatitis A, Influenza, Legionnaire's disease, Leprosy, Malaria, Measles, Meningitis, Paratyphoid fever, Pertussis, Plague, Pneumonia, Polio, Rabies, Relapsing fever (louse-borne), Salmonellosis, Tuberculosis, Typhoid fever, Typhus fever, Yellow fever.

these concerns are also relevant to section 27A of the *Quarantine Act 1908*, which was introduced in the *Quarantine Amendment Act 1999*.

It appears there are also concerns with reporting under the Act in general. If the notification of prescribed diseases provision is the reporting requirement for pratique, then the provision needs to be linked more clearly to the pratique provision. Also, the reporting arrangements for when States/Territories need to notify the Commonwealth government/DHAC of a disease need to be made more explicit. Apart from vague implications with pratique and notification of prescribed diseases, the Act does not specify how the Commonwealth government or DHAC would become aware of disease. The Act does not reflect the current chain of events of disease notification.

The suggestions raised in the submissions included:

1. repealing the provision for notification of prescribed diseases,
2. updating the list of prescribed diseases (so that it is consistent with the list of national notifiable diseases under the National Notifiable Disease Surveillance Scheme (NNDSS)),
3. changing the prescribed list of diseases to a prescribed list of symptoms. There were suggestions that the list of symptoms could be based on the NNDSS. Also, several submissions suggested that a list of current outbreaks could also be generated on an "as-needs" basis.

With regard to repealing the provision, AQIS have indicated that these provisions are still useful as there they place a requirement on the master of the vessel to report within a certain period of time. Other submissions indicated that this provision could be a useful early warning mechanism if utilised properly.

With regard to suggestion 2, the Human Quarantine Legislation Review Steering Committee advised that the NNDSS is a separate system and the sea and aviation industry should not be bound to reporting against this scheme when they are not medically trained.

The third suggestion, to move to a list of prescribed symptoms, attracted the most attention and support; particularly as it would have the flexibility to apply to emerging as well as existing diseases.

It is interesting to note that the new International Health Regulations (IHRs), currently under development by WHO, will not contain a list of diseases, for the following reasons:

- the list would become obsolete with the discovery of the first variant or new disease found
- the name of the disease alone does not denote the urgency or importance of the event. A commonly cited example is that another case of cholera in Bangladesh would not be urgent, but cases showing up in Mexico City would be.
- Getting global consensus on the list would be difficult at best, and many diseases would be of regional concern only

WHO is also moving away from the sole use of syndromes for notification, and instead syndromes will become one of many means to notify WHO of urgent events. WHO is presently focussing on using "events of urgent importance related to public health" as the trigger for Member State notification, and are developing an algorithm for determining when

an event is both urgent and international. The criteria for this test are both epidemiological and operational. It is also likely that many events will not necessarily be caused by communicable diseases. Some food-borne events may be caused by chemical contamination, for example. The end result is still a cluster of cases that involve investigation and follow up by a public health agency.

The Steering Committee were of the view that listing symptoms would be beneficial in setting up a system that is not onerous to comply with but is useful for the purposes of disease control. The Steering Committee suggested that the Chief Quarantine Officers and CDNANZ could assist the DHAC in developing guidelines for identifying and notifying broad categories of symptoms that may have quarantine significance eg, vomiting blood, severe diarrhoea, high temperature combined with a rash. There was a suggestion that there may be benefit in basing the list of prescribed symptoms on the list of national notifiable diseases. However, for a disease notification system to be fully effective, there needs to be appropriate education and training of both AQIS and sea and aviation industry staff.

While implementing a list of reportable symptoms should improve the current system, there are still two issues of concern that will need to be resolved in consultation with relevant stakeholders:

- industry staff have little time available to note illness; and
- reporting against symptoms may result in travel sickness and non-communicable disease episodes being reported, creating a greater burden on quarantine officers and unwanted delays in passenger processing.

The question arose, both in the submissions and within the Steering Committee, of whether the legislation could be used to detect diseases other than quarantinable diseases. It could be useful to use the *Quarantine Act 1908* to pick up on public health issues at the border, as the sooner a disease is detected, the more opportunity there is to look at the source of the disease. It was noted that the "rash and fever" symptom would also pick up measles. Although measles is not a quarantinable disease, there is a public expectation that quick public health action should be taken.

One of the submissions noted that this provision of the legislation could possibly provide an early warning system for outbreaks of communicable diseases (in addition to quarantinable diseases) and that this would be especially useful for vessels such as cruise ships. It was noted that outbreaks of gastroenteritis on cruise ship are a particular problem as currently no one is being notified. This issue clearly needs further consideration and should be done in consultation with major stakeholders, particularly the State and Territory Health Departments, as they are the authorities who have to deal with diseases like measles and whooping cough if they are missed at the border, and CDNANZ.

The issue was also raised that there may need to be separate provisions for ships, as many ships have a doctor on board as part of the crew, for example cruise ships. In these cases, it would not be unreasonable to not only require identification of incidents of disease, but also evidence of transmission.

Another important issue was raised involving bioterrorism. As well as identifying if people are seriously ill, the total number of people falling ill, or unusual clusters of illness, need to

be taken into account along with severity of individual cases. This will assist in identifying the possibility of biological agents and bioterrorism.

11.3 Recommendation 8

It is recommended that further consideration be given to the issue of notification of prescribed diseases. The questions that need to be considered include:

- the need to minimise the burden to the sea and aviation industry and to ensure that, at most, the only requirement placed on this industry is that they must report illness, within a certain timeframe, to a quarantine officer;
- what constitutes an illness or disease and what should be reported by the sea and aviation industry;
- whether prescribing disease symptoms rather than diseases would be more appropriate;
- appropriate instructions on the action to be taken if a quarantine officer is notified of a disease or disease symptoms;
- whether there would be any benefit in using this notification provision more broadly to detect other diseases;
- how to ensure that the link between notification of diseases/symptoms and pratique is made explicit;
- whether there needs to be separate provisions for aircraft and ships as some ships have doctors on board and the length of transit is longer;
- the need to ensure that the legislation can accommodate detection of bioterrorism.

Major stakeholders including AQIS, the Department of Defence, the aviation and shipping industries, State/Territory Health Departments, and CDNANZ need to be involved when developing a notification system.

It is recommended that the legislation be amended to ensure the reporting arrangements for States and Territories to notify the Commonwealth government/DHAC of a quarantinable disease are made explicit.

12. SECTION 59 – MASTER OF VESSEL LIABLE TO PAY COSTS

12.1 Issue

Under Section 59 of the Act, all of the costs associated with quarantining a vessel, including catering, conveyance of passengers to their ports of destination after quarantine is lifted, medical surveillance, treatment of individuals and lost profits would be borne by the “*master, owner or agent*” of the quarantined vessel. From a human quarantine perspective, this provision has not been invoked in recent times.

The Discussion Paper raised the following question:

Q9) Would there be any adverse consequences to repealing section 59 of the Act?

12.2 Analysis of Submissions

Eight submissions provided specific comment on this issue. There was little consensus in the submissions as to how to proceed with this issue.

AQIS operations are run on a cost recovery basis. It is therefore essential that the provisions remain applicable to plant/animal quarantine although AQIS would prefer that the provision remain applicable to human quarantine as well. While AQIS acknowledge that it is unlikely to get money from suspected illegal entry vessels (SIEVs), costs should be recoverable from fishing vessels, eg disinsection/treatment, removal of the vessel. It should be noted that s59A of the Act specifically provides for recovering the costs for disinfection/treatment from the master of the vessel. The Human Quarantine Legislation Review Steering Committee agree that AQIS need to have the capacity to recover costs.

Current policy places the burden for human communicable disease management on the government. However, it had been suggested that Occupational Health and Safety legislation places the responsibility and costs for treatment of an employee, injured at work, on the employer. The situations are different however, in that an injured employee is not likely to pose a risk to public health and safety if they are not treated properly.

It was also suggested that there may be some cases where it is practical to bill the company/master of vessel, for example big shipping companies (cargo carriers with crew) could be billed for medical expenses incurred. However, the legislation would want to avoid any situations that could be classed as discriminatory. Also, determining when costs should or should not be recovered for the management of human quarantinable diseases would pose an additional administrative burden which would be unlikely to be justified in the allocation of resources to administer the *Quarantine Act 1908*.

The most important issue with human quarantine is that any suspected case of a quarantinable disease is identified and managed as early as possible. This reduces the risk of the spread of the disease and minimises the risks to public health and safety. DHAC wishes to avoid situations where suspected cases are not brought to the attention of the appropriate authorities in order to avoid being billed for any medical expenses that may be incurred. One suggestion which may ensure that there is no impact on AQIS's capacity to recover costs but will take into account DHAC's concerns is that the provision could be made optional rather than mandatory, with respect to the management of human quarantinable diseases.

12.3 Recommendation 9

It is recommended that section 59 of the legislation be amended to provide that costs relating to human quarantine **may** be recovered from the master, owner or agent of a quarantined vessel.

13. SECTION 62 – PERSON TO PAY COSTS OF FOOD AND MEDICINE

13.1 Issue

Section 62 states that a person detained in quarantine, who is not a crew or passenger of the vessel, should pay for the costs of food and medicine should they be reasonably able to do so.

The Discussion Paper raised the following question:

Q10) Are there any adverse consequences to repealing section 62 of the Act?

13.2 Analysis of Submissions

Eight submissions provided comment specifically on this issue. There was considerable apprehension about requiring an individual to pay for the medical costs of managing/treating a quarantinable disease. Apart from AQIS, who are keen to retain all cost-recovery provisions, there was strong support to repeal this provision.

Apart from it being unclear who this provision would apply to (eg stowaways, workers at the port), the issues that were raised in the above section are pertinent to this issue as well. The earlier a suspected case of human quarantinable/communicable disease is identified, the less chance there is of an outbreak and the less risk there is to public health and safety. Placing the financial responsibility of paying for medical treatment on an individual is likely to be a deterrent for people to seek care, and as such, may hinder effective disease control.

AQIS are concerned about needing the capacity to recover costs. However, if a person is suspected of having a quarantinable disease they are treated under the State or Territory health system. The current convention is that the States and Territories bill DHAC for any expenses incurred while treating a person with a quarantinable disease, including food and medicine. Therefore, AQIS would not need to seek cost recovery for the costs of food and medicine of a person detained in quarantine.

Again, DHAC wishes to avoid situations where suspected cases of disease are not brought to the attention of the appropriate authorities in order to avoid being billed for any medical expenses that may be incurred. While it is agreed that there may be some justification for retention of this provision on an optional basis where companies are concerned, it is difficult to envisage the circumstances in which application to an individual could be justified. It should also be noted that, if a claim goes to court, the costs involved in recovering the medical expenses incurred from an individual would likely be equal to or greater than the costs of the medical expenses themselves.

It has come to the attention of the Review that Regulation 44 also places the costs of medical expenses incurred relating to human quarantine on the individual. Regulation 44(1)(a) ensures the Commonwealth government is not liable for medical expenses incurred prior to an examination by a medical practitioner pursuant to the legislation and should be retained. However, in line with the arguments above, the rest of Regulation 44 should be repealed.

13.3 Recommendation 10

It is recommended that the following provisions be repealed so that individuals are not liable for the costs of food or medical expenses incurred in relation to human quarantine control:

- section 62 of the Act
- Regulation 44(1)(b), 44(1)(c), 44(2) and 44(3).

14. OUTDATED, AMBIGUOUS AND/OR CONFLICTING PROVISIONS

14.1 Issue

The *Quarantine Act 1908* was enacted over 90 years ago and has had numerous piecemeal amendments since that time. This has led to the existence of extraneous, anachronistic or conflicting provisions/sections within the Act and its subordinate legislation.

The Discussion Paper raised the following questions:

- Q11) Are there any other conflicting or ambiguous provisions that need to be resolved?*
Q12) Are there any other outdated provisions that could be considered for repeal?

14.2 Analysis of Submissions

There were several issues that were brought to the attention of the Review involving conflicting, ambiguous or outdated provisions. Some were identified during the AQIS Review of the *Quarantine Act 1908*.

1. Use of the term "division or divisions of quarantine" became redundant when the department ceased using these terms in February 1993 following cessation of the involvement in human quarantine administration of the Australian Government Health Service. These terms could be removed from the legislation.
2. Section 31(1) allows a person placed under quarantine to be apprehended without a warrant if they are outside a quarantine area. However, the Act does not require a quarantined individual to stay in a quarantine area as people can be released under quarantine surveillance. The Act should be amended so that section 31(1) is not inconsistent with the provisions relating to quarantine surveillance.
3. Regulation 10(11) and 12(2) deals with the reporting of illness to quarantine. This issue is linked to the issues discussed under notification of prescribed diseases (Section 12 of the Report). AQIS have advised that these sub regulations would be virtually impossible to administer as such a broad request causes major problems for masters of vessels and aircraft and either needs to be reconsidered or requires clearer direction from Health on the practical administration of these regulations. In addition, these two sub-regulations

should be linked to regulations 6, 14 and 15, which also relate to reporting illnesses/death on board. As discussed in Section 12 of the Report, this issue requires further consideration.

4. Regulation 31 deals with when addresses are to be given to quarantine officers. AQIS have advised that the requirement for a notice to be given for an address seems antiquated and impractical. AQIS question the purpose of requiring this information as, in cases of a disease outbreak, this information is more likely to be sought from the vessel/airline operator. However, adequate address information is often not retained by the airline or ship.

Obtaining information on where a person has been, where they are intending to go and who they have been in contact with is a very important component of disease control. While it is accepted that this provision could benefit from review to ensure it is updated and consistent with current practice, the Commonwealth government needs to retain the capacity to seek information on travellers' whereabouts.

5. Section 12 of the Act enables the Governor-General to proclaim a place beyond Australia to be infected with a quarantinable disease and Regulation 32 relates particularly to yellow fever proclaimed places. AQIS have advised that it is impractical that a place needs to be proclaimed by the Governor-General. AQIS suggest that it may be more appropriate to delegate this power to the Director of Quarantine. Alternatively, AQIS suggest the formal advice of the status of a country could be based on WHO notifications. The legislation should be amended to improve the administration of section 12 of the Act and Regulation 32.
6. Regulation 34(2). Regulation 34 places a requirement on a traveller coming from a yellow fever proclaimed place to have a current yellow fever vaccination certificate. Regulation 34(2) makes it an offence to not have a vaccination certificate. However, current practice is that someone who does not comply with this sub regulation is automatically put under quarantine surveillance rather than being prosecuted. While it should still be considered an offence to not have a current yellow fever vaccination certificate, the legislation should be amended to clarify that releasing a person under quarantine surveillance in accordance with the Act is a viable option.
7. Regulation 38(b) relates to prescribed periods for prescribed diseases. Under section 35(1A) of the Act, a human quarantine officer can order a person into quarantine if that person has not been vaccinated or inoculated against a prescribed disease within the prescribed period. Regulation 38(b) specifies what the prescribed period for vaccination/inoculation is. However, the wording is confusing and needs to be clarified so that it is clear that the vaccination/inoculation must have been received within the last 10 years but no earlier than 10 days before entering the country.
8. Sections 35, 35AA and 35A and Regulations 41 – 47 relate to being ordered into quarantine and performing quarantine. AQIS question the purpose of some of these provisions within a modern context and suggest they be reviewed for practicality and necessity. AQIS also suggest that the three "order into quarantine" powers in sections 35, 35AA and 35A could perhaps be condensed into one provision.

The Commonwealth government needs to retain the capacity to order people into

quarantine and for people to perform quarantine in the event of an emergency or if a person is suspected of carrying a quarantinable disease where isolation is an effective strategy. However, it appears that these provisions would benefit from close scrutiny to ensure they are clear, consistent, practical and necessary.

9. Section 2B provides for the Governor-General to proclaim that an epidemic or threat of an epidemic from a quarantinable disease exists in a "part of the Commonwealth". One submission raised the issue of whether this geographic basis is appropriate considering the potential for threats from communicable disease to be global in nature. Further consideration is needed on this issue.

14.3 Recommendation 11

It is recommended that the legislation be amended to:

- remove references to the term "division or divisions" of quarantine;
- ensure that people released under quarantine surveillance cannot be apprehended under section 31(1);
- improve the administration of section 12 of the Act and Regulation 32, pending advice on the most appropriate method, eg by delegating the power to proclaim places of quarantine to the Director of Quarantine or basing proclaimed places on the formal advice of the status of a country referred to in the WHO notifications;
- amend Regulation 34(2) to clarify that, while it is still an offence if a person does not have a current yellow fever vaccination certificate and has recently been in a yellow fever zone, they may be released under quarantine surveillance in accordance with the Act;
- clarify Regulation 38(b) so that it is clear that a vaccination/inoculation for a prescribed disease must have been received within the last 10 years but no earlier than 10 days prior to entering the country; and
- ensure that sections 35, 35AA and 35A and Regulations 41 to 47, which relate to the performance of quarantine, are clear, consistent, practical and necessary.

Further consideration should be given to the following issues:

- Regulations 10(11) and 12(2), which relate to the reporting of illnesses, should be considered in conjunction with the other notification issues; and
- in relation to section 2B, which refers to the proclamation by the Governor-General of an epidemic in "a part of the Commonwealth", whether this geographic basis is appropriate.

SECTION 3 – HUMAN QUARANTINE FROM A COMMUNICABLE DISEASE MANAGEMENT PERSPECTIVE

This Section discusses issues arising from a consideration of human quarantine from a strategic point of view, within the context of current communicable disease management practices. This Section includes discussion of issues that go beyond the traditional boundaries of human quarantine activity

15. QUARANTINABLE DISEASES

15.1 Issue

In the *Quarantine Act 1908* quarantinable diseases are defined in section 5 as "any disease declared by the Governor-General, by proclamation, to be a quarantinable disease." The reference to "*any disease declaredby proclamation*" allows for flexibility to respond to emerging public health threats.

Improved understanding of transmission and management of diseases, such as leprosy and typhus fever, means they are no longer managed through quarantine or isolation, hence the removal of such diseases from the list of quarantinable diseases. However, Australia faces growing threats from the emergence or increasing incidence of diseases such as arboviruses and parasitic diseases.

The Discussion Paper raised the following questions:

Q13) Are there other diseases that should be regulated under the Quarantine Act 1908?

Q14) Should criteria be developed to assist in determining whether a disease should be regulated under the Quarantine Act 1908?

15.2 Analysis of Submissions

Fifteen of the submissions received provided comment specifically on this issue. There were mixed views on what should be a human quarantinable disease although there was general agreement that the capacity to have a disease proclaimed as quarantinable should be retained to maintain flexibility in the legislation and that Australia needs to have regard to any international requirements. Some submissions were more specific with regard to which human diseases should be included as quarantinable diseases. Suggestions included tuberculosis, Hantaavirus pulmonary syndrome, leprosy, Japanese encephalitis, HIV, legionella and any arboviral and parasitic diseases where quarantine is an effective response. There was also a suggestion that the distinction between classical terrestrial rabies and lyssavirus needs to be clarified. However, very few submissions provided justification for why certain diseases should or should not be included as human quarantinable diseases.

While some of the suggestions above have merit, it would be premature to make any decisions at this stage regarding which diseases should be classified as human quarantinable diseases as there is no foundation on which to base any decision. It is therefore not surprising that the proposal to develop criteria to determine which human diseases should be quarantinable met with strong support. However, it should be noted that most submissions suggested that the criteria should not be supported by legislation, but simply used as a tool so that legislation is based on sound policy. Using criteria as a policy tool rather than having them underpinned by legislation certainly enables them to be more flexible and responsive to changing disease patterns, world conditions and new and emerging disease threats.

The suggestions for criteria were wide ranging and included taking into account:

- those human diseases that are regarded as quarantinable by other countries, without compromising Australia's relatively disease free status;
- what we are trying to achieve through the quarantine legislation and why we want these diseases covered by the legislation;
- the mortality/morbidity of the disease;
- the virulence of the organisms;
- air-borne diseases and diseases that could infect local vectors and establish an endemic transmission cycle;
- mode of spread;
- ability to contain infection, availability of treatment and or vaccination;
- the capacity to use a disease or its toxin for biological warfare or terrorism purposes;
- action by the WHO to eradicate diseases elsewhere in the world as this would have a significant influence on what diseases become quarantinable. For example, polio and measles may be considered in the future.

Internal quarantine within Australia continues to be an issue. Some submissions were firmly of the view that diseases which are presently managed through State/Territory law should not be regulated under the *Quarantine Act 1908*, eg. HIV and legionella. However, the point was made that the Quarantine Act allows the Commonwealth government to impose controls before people enter Australia from overseas, such as those controls for yellow fever which require travellers to have a yellow fever vaccination certificate if they have been to a yellow fever zone in the past 6 days. If measles was ever eliminated from Australia, the Commonwealth could implement a requirement for travellers to have a measles vaccination certificate as a condition of entering the country. Even if measles is not eliminated from Australia and is not a quarantinable disease, some submissions queried whether there would be benefit from notifying health authorities at the border of a suspected case of measles. The circumstances which would lead to a disease, such as influenza, being declared as a human quarantinable disease in the event of an emergency also received attention.

From the submissions and meetings with various stakeholders, it has become apparent that there is some confusion between diseases that are quarantinable diseases, and therefore subject to stringent controls under the *Quarantine Act 1908*, and diseases which are only subject to certain provisions of the *Quarantine Act 1908*, such as notification. The *Quarantine Act 1908* works on several levels and any attempt to develop criteria for human disease would need to address these levels.

For example, separate criteria may be needed to determine:

- which human diseases should be subject to the more stringent requirements of the *Quarantine Act 1908* to protect Australia from the introduction, establishment and/or spread of a disease and its vectors;
- which human diseases should not be quarantinable diseases but still be regulated under the Act for other purposes, such as disease notification;
- when the Commonwealth's powers should be used for internal emergency issues, eg. if there was a flu pandemic, we may wish to make flu a quarantinable disease so that it could be regulated and resources could be controlled.

It is apparent that there is still much work to be undertaken in this area. Given the expertise housed in CDNANZ and the network of Chief Quarantine Officers, consideration of which human diseases should be quarantinable diseases and the development of criteria should be conducted in consultation with these groups. AQIS/AFFA should also be involved, considering the close links between human and animal diseases and their vectors and considering AQIS are responsible for the implementation of any outcomes.

15.3 Recommendation 12

It is recommended that further consideration be given to amendment to the list of human quarantinable diseases, and the development of criteria to assist in determining whether a human disease should be regulated under the *Quarantine Act 1908*. Relevant stakeholders, such as AFFA/AQIS, CDNANZ and the Chief Quarantine Officers, should be involved in debating this issue further. Implementation of this recommendation will be closely linked to implementation of Recommendation 6.

16. JUSTIFICATION FOR PRATIQUE AND PASSENGER SURVEILLANCE

16.1 Issue

Pratique is the granting of a health clearance to all incoming international aircraft and vessels. Passenger surveillance involves the routine surveillance of incoming passengers and implementation of the yellow-fever vaccination requirements. Pratique and passenger surveillance are the main activities carried out at the border solely for human health reasons.

Currently, these activities are in place predominantly to:

- identify and place under quarantine surveillance⁷ people who have potentially been exposed to yellow fever and who are not immunised.

⁷ A Customs officer will refer to an AQIS officer, any travellers who state verbally that they are ill and/or any travellers who have passed through a yellow fever zone in the past 6 days and who do not have a current yellow fever vaccination certificate. In addition, a Customs officer will refer to the immigration officer any person who has ticked “yes” to the question “Do you suffer from tuberculosis?”. An international traveller who is suspected

- identify and assess people who have been exposed to serious and highly transmissible diseases such as pneumonic plague.

The human border control activities are implemented to prevent the introduction of disease within Australia. However, with the increase in the speed of travel, most of the incubation periods for infectious diseases are now greater than the flight times. Travellers are therefore highly unlikely to develop the illness (at least to the extent where they are showing obvious symptoms) during transit. This raises the question of whether border control activities, such as pratique and passenger surveillance, continue to be valid mechanisms for the detection and management of communicable diseases sourced in another country.

Reporting under pratique seldom happens although whether this is because illnesses are not being reported or whether there are rarely illnesses to report is unclear. Recent events where illnesses have not been reported under pratique at the border and have only been detected after the person has entered Australia would indicate that the effectiveness of the current pratique arrangements is questionable.

AQIS have implemented a comprehensive risk management system to guide its animal and plant quarantine activities, eg the Vessel Monitoring System is a risk based system used to determine when ships need to be inspected for clearance purposes. It may be possible to implement a similar system with respect to pratique.

Current knowledge of the epidemiology of communicable disease and routine review of information on international outbreaks could be analysed to determine what threat these diseases pose to Australia. A risk assessment could then be made to determine where efforts and resources for pratique could be concentrated in much the same way that AQIS determines which ships are inspected to monitor compliance with quarantine requirements⁸. For example:

- an outbreak of a disease in an overseas country could see implementation of pratique reporting on all flights coming from that country until the outbreak was contained; or
- pratique reporting could be reinstated for flights coming from zones where a quarantinable disease is endemic, eg Africa for yellow fever.

Consideration of the type of risk analysis that would be appropriate and the criteria that would need to be assessed would need to be determined.

or at risk of carrying a quarantinable disease can be placed under quarantine and released under surveillance for the duration of the incubation period. People under quarantine surveillance are not restricted in their movement unless symptoms develop, although they are asked to provide information as to their whereabouts. Currently, quarantine surveillance is only routinely undertaken for yellow fever. Under these arrangements, all persons over 1 year of age who, within 6 days preceding their arrival in Australia, have been in or passed through an infected area as listed by the World Health Organization must be in possession of a current valid International Certificate of Vaccination against yellow fever. Passengers who do not produce a valid certificate are placed under quarantine surveillance for the duration of the incubation period (six days).

⁸ AQIS has already implemented a comprehensive risk management system to monitor compliance. Ships entering Australia are inspected on a "risk management" basis; targets of one in three low risk vessels and all high risk vessels are in place.

Effective collaboration between all relevant agencies is vital to preventing the introduction of disease and managing human quarantine and communicable disease threats. There are already formal and informal collaborative arrangements in place between DHAC, AQIS, the Australian Customs Service, the State and Territory Health Departments, other government agencies, the aviation, shipping and other industry bodies. Other formal and informal arrangements could be considered to strengthen the collaborative links with DHAC's stakeholders, thus improving the effectiveness of current strategies and border control activities.

Education programs/campaigns are an important part of any effective prevention strategy. Strengthening education strategies was a commitment given by government in response to the Nairn Report recommendations. Currently, AQIS require international flights to show a video on plant and animal quarantine to alert people to the risks to Australia and outline briefly what they are required to do as they enter the country. However, education programs are not presently widely used with respect to human quarantine. The potential to use education as a means of improving the effectiveness of current initiatives and increasing awareness of the issues in the general public, travel and sea/aviation industry and medical/health profession could be further explored.

The Discussion Paper raised the following questions:

- Q15) Are pratique and passenger surveillance still effective quarantinable disease/communicable disease prevention/management strategies?*
- Q16) What strategies could/should be implemented to improve compliance with pratique?*
- Q17) Should consideration be given to developing a risk assessment approach to pratique?*
- Q18) What criteria/principles should a risk assessment for pratique include?*
- Q19) What other mechanisms could be employed to strengthen collaboration between all relevant agencies/stakeholders?*
- Q20) Are strategies such as education programs/campaigns viable, complementary strategies to pratique and passenger surveillance?*
- Q21) Are there other complementary strategies or alternatives to pratique and passenger surveillance that could be considered?*

16.2 Analysis of Submissions

Seventeen submissions provided comment specifically on this issue.

The discussion in Section 6 and Section 12 of this Report is also relevant. Section 6 notes that the legislation needs to clarify the reporting requirements against pratique and Section 12 discusses the problems surrounding the interpretation of disease and the difficulties faced by the sea and aviation industry in reporting "disease" on international voyages.

While the aviation industry indicated that they felt there was little benefit from pratique, there was general agreement in the other submissions that pratique and passenger surveillance are worth retaining and remain an important aspect of communicable disease control. Identification of diseases at the border can assist in limiting the spread of disease and allows the early provision of treatment to the affected individual. While some submissions suggested that these strategies need not be implemented on a routine basis, there was a strong

recognition that the capacity should exist for a quick and increased response at the border should a threat occur. However, it was noted that these strategies are not optimally effective.

There were many suggestions in the submissions as to how compliance with pratique and passenger surveillance could be improved and how detection of diseases at the border could be more effective.

16.2.1 *Compliance*

There were several suggestions as to how compliance, particularly with pratique, could be improved, including increasing fines and making public any incidence of proven non-compliance. Certainly, the fines for not complying with the regulations should be greater than the cost of complying with the regulations. One submission suggested implementing a series of actions/responses for vessels that fail to comply with the pratique requirements. For example, an initial breach could result in a warning letter explaining the nature of the breach and the penalties for non-compliance in future. Subsequent transgressions could result in actions ranging from the removal of pratique by exception status to quarantine officers meeting vessel on arrival. Evidently, AQIS and the airline industry have already had discussions on this issue through the AQIS/Airline Industry Consultative Committee (AAICC).

Another issue is that the nature of the current provisions relating to pratique make it very difficult to prosecute any breaches, even where there are considerable public health concerns.

It is suggested that the legislation should be amended to provide explicit sanctions for non-compliance with the pratique provisions and enable prosecution, if necessary, of any breaches.

16.2.2 *Training and Education*

There was strong support to undertake and/or increase education and training initiatives to improve compliance with pratique and the effectiveness of disease detection at the border. It was also noted that increased collaboration between various government agencies, the health/medical profession, and the travel and transport industry would be needed.

Suggestions included:

- Better training of officers both AQIS and Customs on the types of diseases that should be picked up at the border, the symptoms of these diseases, the potential risk and the processes that should be followed to contain the disease and notify the health authorities. Guidelines should be provided to AQIS and Customs staff, which summarise the above information, clarify each agency's responsibilities and note the processes to be followed.
- Inclusion of health training for cabin crew for airlines and shipping vessels to alert them to the symptoms of the diseases that are of concern and what processes should be followed. Guidelines could also be provided which lists the types of symptoms, describe the risk to other passengers and crew and the containment measures that should be undertaken, the types of questions to ask to determine the risk and how and when to report the illness before and on arrival.

- Educational material and more publicity on human quarantine, especially for travellers, travel agents and for the medical profession. The types of strategies that could be implemented include:
 - updating the quarantine video that is shown on international flights as they enter Australia to include material on human quarantine. As well as explaining the importance of human quarantine, the video could explain the common symptoms of significant infectious diseases and what the person should do in the event that they think they may have a serious infectious disease.
 - provision of guidelines to doctors and travel agents of what information should be provided to people planning on travelling overseas, particularly to high risk zones.
 - brochures and posters with information on human quarantine, what to look out for and what to do if you suspect you have a serious infectious disease, could be placed at airports in the departure lounges and around baggage carousels.
 - develop a web page with information on human quarantine.
 - develop a hand out card to be given to passengers with the incoming passenger card with a 1800 number or contact details of health units so that travellers can get in touch with someone if they become sick.

One submission also suggested that education campaigns should extend to indigenous communities, many of who are on the frontline of Australian border controls and that education should go beyond human quarantine diseases to communicable diseases.

While DHAC has already commenced some work in this area, there is considerably more work that could be done in consultation with the relevant stakeholders.

16.2.3 Research and Risk Assessment

There were several comments that any decisions on how to improve the current pratique and passenger surveillance systems should be based on sound evidence and that research should be undertaken in several areas including:

- what are the risks posed at the border?
- what is the incidence of detection at the border compared to detection once the person has entered Australia (post border)?
- what are the consequences of diseases not being detected at the border?
- what are the most useful reporting sources/systems?

There were mixed views about the usefulness of utilising risk assessment for pratique. The concern was that global epidemiology of communicable disease is not static, and that it would be difficult to ensure adequate communication of the ever-changing requirements. It was felt that it is not always possible to predict which diseases will be imported to Australia from which countries. It was also noted that there are not many flights that fly directly to Australia. Travellers coming from South America may stop over in New Zealand first. Risk assessment would therefore need to take into account the origin of the flight or the last 2 or 3 ports or we may miss travellers coming from high risk areas.

It should be noted that any suggestions for improving pratique and passenger surveillance will likely have resource implications that will need to be addressed. However, undertaking

such research will ensure that border control activities, such as pratique and passenger surveillance, will be based on sound evidence.

16.2.4 Additional Activities to Improve Border Control

The submissions identified two areas where legislation could be used to improve the effectiveness of border control. The first was to improve the capacity to undertake passenger tracing, particularly on domestic flights. The second was to provide capacity to undertake public health inspections of international ships, particularly cruise ships.

Contact tracing for international flights operates quite well with airlines providing flight and seat allocation information and the Department of Immigration and Multicultural Affairs providing contact information from the Incoming Passenger Card. In recent times, this system has primarily been activated to locate persons who have been exposed to tuberculosis on long-haul flights.

Contact tracing is more difficult for domestic flights. It is acknowledged that airlines may only have a name and phone number for many domestic passengers. However, a home or business address or the name of a travel agent or company may be held and this information could be valuable in tracing the passengers. As the submissions noted, in order for any contact tracing exercise to be effective it is vital that passenger details are provided rapidly to the health authority that is managing the response to the case or outbreak.

One submission suggested that an ideal target would be for airlines to provide a printed or electronic list containing a flight number and date, passenger names, phone number and address (if any) within 12 hours of receipt of a request from an Australian health authority. The submission also suggested that it would be potentially useful if other relevant information could be provided such as details of any connecting or return flight reservations or other travel made, name of travel agent making the booking or name of company paying for the travel.

Another submission noted that Section 22 of the Act requires that outbreaks of 'eruptive' communicable diseases and single cases of 'prescribed' communicable diseases on vessels must be notified to quarantine. It was suggested that this section could allow investigation and management of all kinds of communicable disease events on ships and aircraft from overseas and could be used to require airlines/shipping vessels to provide passenger lists and so forth for follow up.

While the scope of the *Quarantine Act 1908* implies that Act could be used to regulate internal infectious disease matters, such as contact tracing on domestic flights, it would be premature to make any decision on this matter. This issue needs to be discussed more fully with all relevant bodies, including the State and Territory Health Departments and with the aviation industry.

The second issue relates to the fact that a gap exists in the surveillance and control of communicable diseases related to ships in Australian waters. While AQIS regulates ships arriving in our waters, there is no coordinated national system for inspecting the public health aspects of ships, or for requiring reporting and investigating public health problems aboard ships after the AQIS inspection. The NSW Health Department advised that, to help address this problem, they have developed the Vessel Sanitation Program, based on the United States

Centers for Disease Control and Prevention's Vessel Sanitation Program. NSW Health suggested this program be adopted nationally.

Again, while this issue is undoubtedly important, further consultation with all relevant stakeholders is required on this matter.

16.3 Recommendation 13

It is recommended that the legislation be amended to provide explicit sanctions for non-compliance with the pratique provisions and enable prosecution, if necessary, of any breaches.

It is also recommended that further work needs to be undertaken in consultation with all relevant stakeholders to:

- undertake and/or increase education and training initiatives;
- undertake research to improve the effectiveness of disease detection at the border and ensure that border control activities, such as pratique and passenger surveillance, are based on sound evidence; and
- undertake further work to determine whether the *Quarantine Act 1908* should be used to ensure timely contact tracing on domestic flights and public health inspections on international vessels, particularly cruise ships.

17. CONTROL OF VECTORS

17.1 Issue

The vector that is of particular concern to human health is the mosquito. As discussed earlier, AQIS undertake vector control activities at all major international airports and seaports to ensure that the 400metre zone is free of mosquito breeding sites. Currently, AQIS monitor and control vectors within the 400metre radius and the States and Territories are responsible for monitoring and vector control beyond that zone. However, if exotic mosquitoes are found within the 400m zone, a more extensive search around the surrounding area may ensue to ensure any infestation has not spread.

Discussion of this topic raised two issues. Firstly, whether the 400m zone sufficient for all species of mosquito or whether routine vector monitoring and control activities should extend beyond that zone. Secondly, it is unclear who is liable in the event of an incursion of exotic vectors of public health significance, particularly if the incursion is located outside the 400m zone.

The Discussion Paper raised the following questions:

Q22) Is the 400m zone around ports sufficient for all species?

Q23) Who should be responsible for vector control activities relating to exotic pests beyond the 400m zone around ports and especially on private property? Who should be liable for the activity and costs?

Q24) *Can and/or should Australia undertake additional vector control activities and if so, what activities?*

17.2 Analysis of Submissions

Seventeen submissions provided comment specifically on this issue.

17.2.1 400m Zone

There were mixed views as to whether the 400m zone is sufficient protection against an exotic vector becoming established. Currently the 400m zone is set by WHO in the International Health Regulations. Some submissions argued that the 400m zone is not sufficient for many species of mosquito, including *Aedes aegypti* and *albopictus* at which the 400m is primarily directed, and suggested the zone be extended to 500m or 1000m. Some submissions suggested that the zone should vary depending on whether the port was deemed to be a high or low risk port. Other submissions argued that it would not be justifiable to extend the zone at this stage and that a pragmatic compromise would be, if a high risk species is detected within the 400m zone, to search beyond the 400m zone to determine the extent of the species' spread. Several submissions suggested that technical information on flight patterns and flight capacity of high risk species of mosquitoes is needed before any decision on amending the zone could be made.

Several submissions also suggested that, at this stage, it is more important to ensure that mosquito control measures are strictly maintained in the 400m zone around the ports and airports rather than debate what would be the optimal zone. Certainly, over a period of a number of days, the flight dispersal of even poor flying species of mosquito can exceed the 400m zone; a vector control zone will only be effective if there are regular and routine surveys carried out to detect the presence of exotic vectors. Also, there are other vector control activities that are, or should be, undertaken to help ensure that the 400m zone is free of mosquito breeding sites, including fogging with residual insecticides in harbourage areas, treatment of potential breeding sites, and filling pot plant bases with sand, etc.

There appears to be a range of information available on various mosquitoes flight patterns, breeding patterns etc although this information has not been assessed in Australia with a view to determining what would be the optimal buffer zone to reduce the risk of exotic mosquitoes becoming established. Although the 400m zone is set by WHO, Australia's relatively disease free status means that international requirements are not always appropriate for Australia. The information available, not only on mosquitos but on any evidence of the spread of high risk species around ports, needs to be assessed by experts so that the legislation is based on sound evidence. It must be acknowledged however, that if the evidence suggests that the 400m zone should be extended, the consequential resource implications would need to be addressed.

The issue relating to "process" also needs further assessment. AQIS carries out vector control activities and searches/inspections of ports and vessels for exotic pests based on risk assessment. While AQIS is very efficient at performing vector control activities, what is unclear, is whether the risk assessment that AQIS bases these activities on, is appropriate from a health perspective. The Department of Health and Aged Care has not been actively

involved in the development of AQIS's risk assessments. This could be rectified by DHAC working with AQIS to review the vector control activities that are undertaken and the risk assessments that are used to determine the nature of the activities and the searches/inspections of ports and vessels. While AQIS would continue to be responsible for the implementation of vector control activities, DHAC need to ensure that AQIS activities are based on sound health evidence as well as sound agricultural evidence.

This issue needs considerably more consultation and there are other issues that have been identified in this Review that will need to be resolved, including:

- what happens when the 400m zone extends onto a naval base and there are military exercises in progress? and
- do port authorities have adequate legislation to enforce control in private premises within a port area?

17.2.2 Roles and Responsibilities

The Memorandum of Understanding (MoU) between AQIS and DHAC, signed on 21 December 1999, states that AQIS will conduct monitoring and surveillance for notified disease vectors within a 400m radius of all first ports within Australia at a level appropriate for the risk category defined for each port. The MoU further states that AQIS will notify DHAC of an incursion of a notified disease vector as a result of international aircraft and shipping movements. Under the MoU, DHAC has responsibility for undertaking an assessment of the threat to human health resulting from a notified disease vector incursion and will liaise with the relevant State health authority to determine and initiate an appropriate response.

The clear objective of the *Quarantine Act 1908* is to prevent the introduction, spread and/or establishment of exotic diseases and their vectors. Unfortunately, neither the Act or the MoU clarify which agency is financial liable for eradicating an incursion of an exotic vector of public health significance, both within and outside the 400m zone.

There does not appear to be any dispute that AQIS will continue to be responsible for the implementation of all vector monitoring and control activities within the 400m zone. However, AQIS advised at a Steering Committee meeting they consider that AQIS are acting as DHAC's agent in the implementation of the *Quarantine Act 1908* and, therefore, DHAC should be responsible for the cost of eradication of exotic pests within the 400m zone.

DHAC does not currently have a budget allocation for vector control activities. AQIS have advised that its budget allocation provides for the routine monitoring and surveillance of vectors but is not sufficient to cover the costs of eradicating an importation of exotic pests. As well as the actual eradication costs, there would be other costs involved with temporarily increasing surveillance and monitoring to verify the pest has been eliminated.

The situation appears to become more complicated if an incursion is discovered outside the 400m zone. It should be noted that as systematic surveys do not occur outside the 400m zone, this is only likely to be an issue if an incursion is found inside the 400m zone which results in a positive search beyond the 400m zone. Suggestions in the submissions on who

should be liable and financially responsible for eradicating an incursion of exotic pests included the Commonwealth government generally, DHAC and AQIS specifically, State/Territory Health Departments, Local Government, and the owner of the port.

There was strong support for the suggestion that a formal agreement must be reached between the Commonwealth and the States/Territories. This agreement should state explicitly who has responsibility, and what the funding arrangements are, for vector monitoring and control beyond the 400m zone in the event of an incursion. It is also important to develop collaborative links between a number of agencies, particularly those with statutory responsibility and those on the ground, prior to such a situation developing.

It is worth noting that there are comprehensive Commonwealth/State/Territory agreements in place with respect to plant/animal vector incursions which may have value as precedents in the development of agreements concerning for incursions of exotic pests relevant to human health.

17.2.3 Additional Vector Control Activities

There were several suggestions made where additional vector control activities could be warranted.

It was noted that illegal and unregulated movement of humans and cargo into Australian waters presents potential public health risks and that illegal entry refugee and fishing vessels are a possible source of exotic pest vectors, particularly mosquitoes. AQIS advised that it has a quarantine officer on each of the inhabited islands in the Torres Strait and the movement of goods and persons under the Treaty between Australia and the Independent State of Papua New Guinea⁹ is still regulated under the Quarantine Act. However, while AQIS conducts inspections and disinsections of any illegal entry vessel that is discovered, consideration could be given to working with the source countries and ports of these movements to reduce the risks prior to entering Australian waters.

Another suggestion that was made was to coordinate nationally the sentinel animal serologic testing program to ensure a highly sensitive surveillance system for mosquito borne diseases.

It should be noted that AQIS have commissioned further work on vectors. In response to increasing number of detections of exotic mosquitoes in Northern Australia, Papua New Guinea, Timor and Indonesia, particularly *Aedes aegypti* and *Aedes albopictus*, AQIS are reviewing all the high risk ports in Australia and near by risk countries.

The Communicable Disease and Environmental Health Branch of DHAC is in the process of establishing a national arbovirus committee. As well as assessing information on vectors and the risks posed, this Committee will be able to provide high level policy advice to DHAC on the surveillance and control of arbovirus vectors and disease.

⁹ The full title is "Treaty between Australia and the Independent State of Papua New Guinea concerning Sovereignty and Maritime Boundaries in the area between the two Countries, including the area known as Torres Strait, and Related Matters". The Treaty was signed at Sydney, 18 December 1978.

17.3 Recommendation 14

It is recommended that:

- expert advice and evidence be sought on an appropriate zone around air and sea first ports in which vector monitoring and control should be conducted under Commonwealth supervision; and
- discussions be held between Commonwealth and State and Territory agencies to clarify the issue of financial liability for eradicating and incursion of an exotic vector of public health significance.

18. DOMESTIC DISINSECTION

18.1 Issue

Mosquitoes are partly controlled through the Quarantine Act's requirement for "disinsection" of all incoming international aircraft. The Aircraft Disinsection Report, commissioned by AQIS in response to the Nairn Report, made several recommendations including that disinsection of domestic aircraft be considered for exceptional circumstances, such as declared Special Quarantine Zones, and for domestic aircraft flying from areas where dengue activity is present.

The Discussion Paper raised the following questions:

Q25) Assuming domestic disinsection is within Commonwealth legislative competence, should consideration be given to requiring disinsection of domestic flights coming from areas infected with Dengue?

Q26) What would be the impacts to business? What are the costs and practicalities?

18.2 Analysis of Submissions

Fifteen submissions provided specific comment on this issue with almost all submissions not supporting domestic disinsection.

It appears that domestic disinsection would not be an effective strategy in reducing the risk of dengue fever spreading. The highest risk of dengue fever being imported into and spread throughout Australia is from returning travellers and overseas tourists. Although mosquitoes are the vectors of dengue it is more likely that infected travellers incubating the disease will be the main source infecting local mosquitoes and facilitating spread of disease.

The aviation industry in particular had raised several concerns about the practicalities of implementing domestic disinsection in certain regions of Australia. For example, approximately 40,000 light aircraft depart from Cairns each year, and this does not include helicopters. Submissions also noted that small aircraft on rural properties travelling from Queensland to the Northern Territory may fall under the legislation and that compliance in this situation would be almost impossible to uphold. In addition, the cost of residual spraying

or top of descent spraying of all small aircraft would be prohibitive and impractical to carry out and police.

The aviation industry were also concerned about the perceived health risks of travelling to areas that required domestic disinsection due to the risk of spreading vectors for dengue fever. Industry noted that such a perceived health risk would severely impact on the development of North Queensland and the Far North's international and domestic tourism industry and could economically damage Cairns.

Several submissions noted that domestic disinsection of aircraft is unwarranted unless all other means of transport that travel to and from risk areas are also disinfected, include cars, trucks, buses and trains and sea vessels. And, as noted above, it appears the greatest risk is from viraemic travellers.

Several submissions suggested alternatives to pursuing domestic disinsection, including:

- ensuring domestic ports in high risk areas are free of mosquito breeding sites,
- concerted and fully supported attempts to eliminate dengue/*Aedes aegypti* and reduce the distribution of *aegypti* in Queensland;
- disinsection from flights coming from areas experiencing an outbreak.

From the comments provided in the submissions, there appears to be no evidence that domestic disinsection is justified or would improve public health. In addition, domestic disinsection would place considerable burden on business and could have a detrimental impact on the economies of those areas where domestic disinsection was proposed to be implemented. Enforcement would be difficult and resource intensive.

18.3 Recommendation 15

It is recommended that no legislative action is necessary in relation to domestic disinsection.

19. TUBERCULOSIS

19.1 Issue

Tuberculosis is not a quarantinable disease but section 35AA of the *Quarantine Act 1908* makes specific provision for examination of “non-citizens” for pulmonary tuberculosis.

Tuberculosis is also regulated under the *Migration Regulations 1994* (under the *Migration Act 1958*), which make provision for the identification and management of people with tuberculosis. The requirements under the Migration Regulations include:

- x-rays for all permanent and some temporary applicants for migration; and
- a Health Undertaking for applicants whose tuberculosis has been treated and people who show evidence of previous but now non-active disease.

All travellers entering Australia are required to advise, via the Incoming Passenger Card, whether they have tuberculosis. If a person answers yes, an Immigration Officer will ask them to sign a Health Undertaking and they are required to report to the central State chest clinic. Once a person on a Health Undertaking arrives in Australia, they become the responsibility of the relevant State Health Department.

The initial justification for s35AA is unclear. The current prevention measures for overseas visitors are implemented under the Migration Regulations.

The Discussion Paper raised the following question:

Q27) Should the provisions relating to tuberculosis continue to be included in the Quarantine Act 1908?

19.2 Analysis of Submissions

Fifteen submissions provided comment specifically on this issue with most submissions supporting the retention of this provision.

Although submissions noted that section 35AA is very rarely employed, it was generally felt that the tuberculosis provision in the *Quarantine Act 1908* serves a role that is not covered by the migration legislation or by State and Territory Public Health Acts. The Migration Act operates by regulating people before they come into Australia and imposes health requirements on those non-citizens applying for visas in Australia. The powers involve cancellation of visas and removal of the person from the country – there is no power for treatment, however the Minister is empowered to request a medical examination in relation to a visa application. State/Territory laws do not have the power to force treatment or testing but do have powers to quarantine any person known to be suffering active tuberculosis. However, it is not clear whether State/Territory law can quarantine a person on suspicion of tuberculosis. Section 35AA of the Quarantine Act is the only means by which a non-citizen may be compelled to undergo examination on strong suspicion of the disease (suspicions may arise from chest x-ray appearances or by clinical presentation).

The submissions indicated a strong view that tuberculosis remains a constant threat and that Australia needs to have the capacity to respond to a tuberculosis threat as the need arises. However, several of the submissions indicated that the mechanisms for tuberculosis control could be improved.

It was noted in the submissions that migrant tuberculosis makes up 75% of all tuberculosis notifications in Australia and that many of these cases are not detected at entry but after the traveller has been in the country for up to 12 months. There was concern that the tuberculosis control at entry to Australia seems inadequate and there was a suggestion that all long term visitors (>6months) and immigrants should be required to undertake a chest x-ray in Australia. DIMA appoints panel doctors and radiologists in overseas countries to undertake the medical examinations of visa applicants in line with the requirements of the Migration Act. The potential for fraud and deception is greatly reduced by the fact that DIMA's Medical Directors appoint and supervise the overseas panel doctors and radiologists.

However, on-shore medical examinations are also carried out for those applicants already in Australia.

There were also suggestions that the legislation should be amended to clarify that section 35AA refers to human tuberculosis. Some submissions suggested that the provision could be further clarified by amending tuberculosis to "active, infectious or multidrug resistant pulmonary tuberculosis". While distinguishing between human and animal tuberculosis is reasonable, it is probably unnecessary to stipulate whether the tuberculosis is active, infectious or multidrug resistant as the type of tuberculosis that is present will not be known until after diagnosis and treatment.

While the Human Quarantine Legislation Review Steering Committee agree that an optimal public health approach to tuberculosis needs to be developed, there was general agreement that the current system (the status quo) should be retained for the time being. The Steering Committee is of the view that the legislation should not be amended without a specific aim in mind. However, the Steering Committee suggested that there may be benefit in referring potential scenarios to the National Tuberculosis Advisory Committee (NTAC) for consideration. NTAC could determine how best to manage various situations relating to tuberculosis control through the Quarantine Act, the Migration Regulations, and State/Territory law (and bearing in mind that review and appeal processes will likely be established in the Quarantine Act).

19.3 Recommendation 16

It is recommended that section 35AA should be retained and amended to refer to tuberculosis as "human tuberculosis".

It is also recommended that potential scenarios could be referred to NTAC for consideration and to develop an optimal legislative framework to support tuberculosis control. Any options that NTAC develop would then need to be considered by DIMA, DHAC, AQIS and the State/Territory Health Departments.

20. RELATIONSHIP BETWEEN PLANT, ANIMAL AND HUMAN DISEASES

20.1 Issue

The Discussion Paper identified that as well as a biological overlap between diseases that affect both animals and humans, there are also obvious overlaps in the administrative arrangements and the types of activities that are undertaken to manage both human and animal diseases. For example:

- surveillance and monitoring occurs for both human and veterinary diseases although the sources of information on incidents or outbreaks of disease would be quite different.

- the vector control activities at the border have benefit to both human and animal health¹⁰.

There are relatively few activities carried out at the border solely for human health reasons. Establishing a separate agency for the few border activities pertinent to human health would be impractical and the continued implementation of quarantine laws by AQIS suggests the maintenance of a single unifying Act. However, the Discussion Paper also noted that there are significant differences in the sources of legislative power to regulate human quarantine and plant/animal quarantine and that there is also the potential problem of conflicting portfolio policies and priorities.

The Discussion Paper raised the following questions:

Q28) Are there any other issues that need to be considered when addressing the relationship between animal and human quarantine?

Q29) Should human, plant and animal quarantine continue to be regulated by one Act? What are the advantages and disadvantages?

20.2 Analysis of Submissions

Eleven submissions provided comment specifically on this issue. There was strong support for retention of a unified Act and strengthening of the links between plant, animal and human quarantine.

AQIS stressed that human, plant and animal activities are highly integrated and that the roles undertaken by AQIS staff, especially at remote locations, are also highly integrated. Any legislative changes that impact on service delivery will have implications for resourcing, cost recovery, and there will be disturbances in how human quarantine is administered. AQIS also emphasised that many of the activities undertaken – imported foods, disinsection, hygiene – are relevant to plant and animal as well as human quarantine.

Several submissions noted that some of the emerging pathogens of humans are significantly contributed to by zoonoses and that any response to such threats, both in terms of preventative and interventional efforts, should be collaborative between animal and human communicable disease and quarantine authorities.

One submission suggested that there could be benefit in establishing a committee in each State/Territory with representatives from human health and animal health, such as the Zoonosis Committee which exists in the Northern Territory. Such a committee could provide good and timely communication of emerging issues and rapid response to local issues.

The AQIS submission advocates greater liaison between DHAC and AQIS and suggest issues on which Health input may be valuable, for example:

- which pests are of concern and should be targeted;
- what diseases (or preferably symptoms) are of concern; and

¹⁰ Some shipments of live animals, eg live horses, require vector control activities as part of their import requirements

- guidelines to help officers on the ground with quarantine, eg what are the appropriate processes to follow and when should Health experts/DHAC be involved.

The regulation of plant, animal and human quarantine, particularly at the border, is closely integrated and the threats that impact on both animal and human quarantine require close collaboration between the relevant authorities. Continuing to regulate plant, animal and human quarantine under the one Act will maintain collaborative partnerships, and reduces the risk of administrative duplication.

The issue of micro-organisms and segments of DNA was raised. The submission noted that while Australia should be guided by international practice, there should be a system for controlling micro-organisms and their products which is appropriate for Australian circumstances. A thorough consideration of this issue is needed in conjunction with the Office of Gene Technology.

20.3 Recommendation 17

It is recommended that no legislative action is necessary with regard to the relationship between human, plant and animal quarantine. DHAC should continue to work closely and improve links with relevant agencies, especially AQIS.

SECTION 4 – WIDER USE OF QUARANTINE POWERS

To date, the *Quarantine Act 1908* has only been used for the management of quarantinable diseases and then virtually always in terms of prevention. This Section discusses further areas where the *Quarantine Act 1908* could possibly be used more widely to support the general management of communicable diseases.

21. SURVEILLANCE AND RESPONSE

21.1 Issue

Surveillance of communicable disease involves detecting and monitoring incidents of disease and should therefore serve as an early warning system for outbreaks or epidemics. Surveillance can also be used to gather other pertinent information on the epidemiology of the disease, such as factors influencing the emergence of the disease. The information obtained from surveillance activities can be analysed to evaluate communicable disease control measures and provide the rationale for public health intervention.

Australia currently undertakes surveillance at the local, national and international level. Legislation could assist in formalising the sources and/or mechanisms for surveillance of communicable disease and, perhaps more importantly, it can reinforce the reporting mechanisms. For data collected under surveillance strategies to be of use in determining appropriate responses, the data must be reported to the relevant authorities in a timely manner. Legislation could be used to clearly define what information needs to be reported and to whom.

The Discussion Paper raised the following questions:

Q30) What aspects of surveillance and reporting could be supported by legislation and what would be the benefits of doing this?

Q31) Are there other options that may be more appropriate, eg inter-governmental agreements or memorandums of understanding?

21.2 Analysis of Submissions

Nine submissions provided comment specifically on this issue.

There was a general view that there would not be any benefit in using legislation to support surveillance activities or further support response activities. Many submissions were of the view that processes were already in place to improve the timeliness and effectiveness of national surveillance and that, as these had the full participation of States and Territories, legislation was not needed. Many submissions noted that the current system of reporting to the Australian Health Ministers Council (AHMC) via the National Public Health Partnership (NPHP) ensures that all States provide information in a timely manner as this provides a mechanism for follow-up if a particular State or Territory is not providing required information.

The point was made that the States and Territories recognise the value of both contributing to and having access to national data and that legislation should not be necessary to regulate information transfer between State and Federal governments. There was also a view that there were not any problems with the current National Notifiable Disease Surveillance Scheme that could be resolved by Commonwealth legislation.

It was noted that despite each State/Territory having legislation relating to the notification of certain diseases, it is generally accepted that there is considerable under-reporting of infectious diseases in both the wider community and in Aboriginal communities. Since disease notification is already underpinned by legislation, it is unlikely that implementing national/Commonwealth legislation would improve the rates of disease notification. It is entirely possible that ignorance of what diseases should be reported is a large factor in under-reporting and the best way to overcome this problem is through education and not legislation.

One submission had suggested that legislation could be used to require every pathology laboratory, human or animal, to provide data to government health authorities on request and that this would particularly help the investigation of foodborne diseases where commercial laboratories may have relevant information from routine sampling of produce. As has been discussed previously, having timely access to relevant information can greatly enhance the effectiveness of a response and management of a threat. This is an area where legislation may be useful although it may be more appropriately addressed through State/Territory legislation.

It was suggested that memorandums of understanding and intra-governmental agreements would be time consuming to develop and would not add significantly to the current surveillance and reporting collaboration between the States/Territories and the Commonwealth. However, the suggestion was made that inter-governmental agreements may be useful for improving collaboration between the DHAC and other national governments, including New Zealand, Papua New Guinea and Indonesia. Some collaboration already occurs with overseas countries through the Northern Australia Quarantine Strategy (NAQS), which is administered by AQIS. NAQS monitors the northern Australian coastline from Cairns to Broome, nearby islands and adjacent countries for a target list of exotic plant and animal pests and diseases and their vectors, including Japanese encephalitis.

The Steering Committee considered examining ways to improve surveillance and reporting, such as:

- is there data that is not currently available but would be useful?
- could clearer/easier reporting frameworks be developed?
- could organisations such as AIHW, who have relevant data sources, be more productively utilised?

However, the Steering Committee is of the view that work was already being undertaken in these areas and that these processes were sufficient.

21.3 Recommendation 18

It is recommended that no legislative action is necessary with respect to surveillance and response.

22. RISK ANALYSIS

22.1 Issue

Risk assessment is increasingly being used as a management tool to maximise efficient use of resources and improve outcomes. Section 16 discusses the issue of quarantinable diseases and whether criteria should be developed to determine whether a disease should be subject to the *Quarantine Act 1908*. As an example, risk assessment could be used in developing the criteria to determine which human diseases are a threat and should be subject to control.

Some general principles for a risk assessment approach for disease threats are outlined below although this list should not be considered to be exhaustive. Risk assessment should:

- be based on **analysis of current international and national communicable disease surveillance** reports;
- consider the **likelihood of a disease agent being imported** into Australia;
- consider the **potential for importation of disease vectors** that could become established in Australia;
- consider the **likelihood for the spread of disease** in Australia;
- consider the cost of the activity compared to the **cost and consequences** of an outbreak or establishment of a disease or vector; and
- be conducted on a **regular basis** as part of national communicable disease coordination and planning.

Legislation could be used to underpin the principles of risk assessment and ensure that a thorough and appropriate risk assessment is undertaken to analyse both human quarantine and communicable disease threats and determine what is the best response in the context of resource limitations.

The Discussion Paper raised the following questions:

Q32) What are the advantages and disadvantages of underpinning risk assessment for communicable diseases by legislation?

Q33) Are there other aspects under the general area of Applied Research that could be supported by legislation and what would be the advantages and disadvantages?

22.2 Analysis of Submissions

Nine submissions provided comment specifically on this issue. There was general support for risk assessment although it was acknowledged that frequent reassessment would be necessary. There are varying views on whether risk assessment should be underpinned by legislation. It was also noted that risk assessment should be tempered by other priorities and that there needs to be awareness that it is not always possible to foresee a risk.

It is interesting to note the proposal in the current revision of the International Health Regulations (IHRs) to use a template based on risk assessment to provide direction for urgent international public health events (UIPHE).

Risk assessment could be applied to various aspects of human quarantine including determining which diseases are a threat and should be subject to control, pratique and vector control activities. However, as mentioned above, any risk assessment system must provide for frequent periodic reassessments of risks, and there needs to be awareness that the level of risk can change rapidly in the event of a large epidemic or pandemic (eg influenza could become high risk in the event of evolution of a pandemic strain).

There was some debate as to whether risk assessment should be underpinned by legislation or whether it is simply a tool that could support human quarantine by informing policy decisions. While it is acknowledged that there could be some advantage to using legislation to underpin risk assessment, eg defining responsibilities and liabilities, the Steering Committee were of the view that risk assessment is best used as a tool to support policy decision making. It was felt that the inflexible nature of legislation may impact on the effectiveness of risk assessment given that frequent reassessments need to occur and that the factors which determine risk can change rapidly.

22.3 Recommendation 19

It is recommended that no legislative action required with respect to risk assessment.

Further consideration is recommended to determine which aspects of human quarantine would benefit from risk assessment and, if required, to develop appropriate criteria.

23. NATIONAL CO-ORDINATION

23.1 Issue

An important component to the success of dissemination and implementation of control strategies is effective national coordination. Also, the Commonwealth has a responsibility under the *Quarantine Act 1908* to respond to an emergency of national significance. The capacity to effectively coordinate activities at the national level will be instrumental in successfully meeting any such challenge.

Legislation could be used to better support and improve the Commonwealth government's capacity to coordinate activities relevant to the management of human quarantine diseases and possibly communicable diseases at the national level. For example, legislation may be a useful tool to underpin the appropriate and timely dissemination of information from the DHAC and AQIS to relevant bodies such as State/Territory Health Departments, AQIS and/or the travel/sea/aviation industry.

The Discussion Paper raised the following questions:

Q34) What aspects of national coordination could be supported by legislation?

Q35) How could the legislation better support the Commonwealth's capacity to act in the event of an emergency or epidemic?

Q36) Should criteria be developed and incorporated in legislation, detailing the circumstances in which Commonwealth intervention and action in the national regulation of communicable disease management in non-emergency situations is appropriate?

23.2 Analysis of Submissions

Ten submissions provided a range of comments on this issue.

Several submissions are of the view that there are already strong processes in place which support national coordination, such as CDNANZ, the NPHP and AHMC, and that legislative support would not be necessary or useful. In addition, there was a view that legislation could potentially result in inflexible processes that would hinder national coordination.

The point was also raised that these collaborative processes need to be sufficiently resourced to ensure they are effective. The Steering Committee took the view that legislation is not an effective mechanism to ensure expert bodies are appropriately resourced.

There was a suggestion that legislation could be used to assign liability for recommendations by expert groups, including CDNANZ, to the Commonwealth government, thereby protecting these groups and members and respective State/Territory health departments from legal action. Provided due care is taken, the members of CDNANZ already have indemnity (for example in relation to endorsement, publication and dissemination of guidelines, standards and other policy material) through Commonwealth and State/Territory governments. Further, even if a legislative indemnity was desirable, the *Quarantine Act 1908* is not the appropriate place to legislate because CDNANZ does not only perform functions related to quarantine.

There were several suggestions as to how national coordination could be improved. Suggestions included:

- obligatory simulation exercises;
- provision of an annual report to DHAC from the Chief Quarantine Officer (CQO) in each State and Territory;
- harmonisation of various plans including State disaster plans and epidemic plans;
- development of bilateral memorandums of understanding (MoUs) between the Commonwealth and the States/Territories delineating functions, responsibilities and

obligations of both levels of government. The MoUs would need to recognise the different legislation and situations of each State/Territory.

The Steering Committee is of the view that many of the issues raised in this section are best handled through cooperative agreements rather than through legislation. It was also noted that initiatives and projects are underway that address many of these issues and it was considered that legislation would not assist these processes.

Australia has not faced a communicable disease emergency in recent times. However, section 2A and 2B place a legal requirement on the Commonwealth government to manage an emergency due to the threat of a disease. The issue of the Commonwealth's emergency provisions and the Commonwealth's capacity to act in the event of an emergency attracted considerable comment.

The suggestion was made that legislation could support DHAC by allowing or requiring it to convene expert groups or consult individual experts, including international groups or individuals, in an emergency. However, CDNANZ has effectively managed incidents and outbreaks of communicable disease in Australia since its inception and DHAC would naturally consult with CDNANZ in the management of a communicable disease emergency.

In general, the view was that legislation could not further support the Commonwealth's capacity to act in an emergency or epidemic, beyond the current provisions in the *Quarantine Act 1908*. However, while there was no question that the emergency powers should be retained, the Steering Committee is of the view that the understanding of the scope of the Commonwealth's emergency powers could benefit from greater consultation with States and Territories. For example, the circumstances in which the Commonwealth may exercise its emergency powers, including details on how the powers can be exercised; to what end would the Commonwealth use these powers and how would they work with the States/Territories, could be clarified.

The Steering Committee suggested that CDNANZ could bring a proposal for a system to exercise the emergency powers (specifying the when, if, why and how) to the Partnership and ultimately to AHMC. The Steering Committee also noted that AQIS's Chief Veterinary Officer is experienced at handling national emergencies and cooperating with the States/Territories and that DHAC could use this framework as a model as well as look at lessons learnt. However, it should be clear that if guidelines are developed, these guidelines should not limit the capacity of Australia to meet any future threats from disease or their vectors. It should be remembered that having broad emergency powers in the *Quarantine Act 1908* does provide Australia with legislative support to do whatever is needed in the event of an emergency.

23.3 Recommendation 20

It is recommended that:

- the Commonwealth's emergency powers should be retained in the *Quarantine Act 1908*;
- further consideration be given to the suggestions for improving national coordination; and

- DHAC, AQIS, CDNANZ, the Chief Quarantine Officers and the State/Territory Health Departments work together to clarify understanding of the scope of the Commonwealth's emergency powers.

24. COMMUNICABLE DISEASE NETWORK AUSTRALIA NEW ZEALAND

24.1 Issue

The Communicable Diseases Network Australia New Zealand (CDNANZ) is a collaborative network and has operated since 1989¹¹. It has recently come under the auspices of the National Public Health Partnership. CDNANZ was formed to coordinate national surveillance and management of communicable disease outbreaks across jurisdictions and sectors. CDNANZ also identifies areas of research which need to be undertaken. Currently, State and Territory public health legislation is used to undertake any communicable disease activities that are organised cooperatively and collaboratively under the auspices of the CDNANZ. CDNANZ has a formal role although it is not a legislated one.

The Discussion Paper questioned whether there would be any advantage to utilising the powers of the *Quarantine Act 1908* to underpin the activities coordinated by CDNANZ rather than using State and Territory public health legislation, as is currently the case. The Discussion Paper also highlighted some possibilities that Commonwealth legislation could be used for including:

- placing a responsibility on DHAC to convene CDNANZ and provide secretariat support;
- ensuring DHAC consults with CDNANZ on human quarantine issues as well as communicable disease issues; and
- limiting the Commonwealth's capacity to respond to communicable disease threats without majority consensus from CDNANZ.
- recognition that CDNANZ exists
- defining CDNANZ's roles and functions and providing status for its policy documents.

The Discussion Paper stressed that if CDNANZ was supported by national legislation, the activities that CDNANZ performs could still be supported by State/Territory public health legislation, as is the current situation. In addition, any move to support CDNANZ by national legislation would need to ensure that the roles and responsibilities of individual members of CDNANZ under relevant State/Territory law were not infringed or impeded in any way.

¹¹ Members of CDNANZ comprise representatives from the Commonwealth, States and Territories, the New Zealand Ministry of Health, the Department of Agriculture, Fisheries and Forestry Australia, the Australian Defence Force, the Australia New Zealand Food Authority, the Public Health Laboratory Network, academic units and other non-government organisations with expertise in communicable disease control, and expert bodies involved in research and surveillance on behalf of CDNANZ, eg NCIRS and NCHECR.

The Discussion Paper raised the following questions:

Q37) What are the benefits and disadvantages of leaving CDNANZ as it is now compared with providing CDNANZ with a legislative underpinning?

Q38) As the peak policy and coordinating body in the field of communicable diseases nationally, should CDNANZ be referred to in the only piece of national legislation that covers communicable disease issues, ie the Quarantine Act 1908, and in what capacity?

24.2 Analysis of Submissions

Eight of the submissions received provided a range of comments on this issue.

Those submissions that supported consideration of legislating CDNANZ were primarily concerned with ensuring adequate resources for CDNANZ and the Public Health Laboratories Network and with ensuring legal indemnity for CDNANZ members. However, two submissions commented that, as CDNANZ houses a considerable body of expertise and has a crucial role in communicable disease management, CDNANZ should be referred to in the *Quarantine Act 1908* as the peak advisory group for providing recommendations on quarantine issues to the Commonwealth government by request.

However, the majority of submissions did not support the idea of legislating CDNANZ in any way. There was a strong view that CDNANZ works well as it is and that legislation would hinder the flexibility and effectiveness of CDNANZ. There is no need to provide legislative underpinning for such a collaborative arrangement that has proved successful. Integral elements in the success of CDNANZ and the PHLN is the trust among members and the range of expertise they represent. This has been achieved through voluntary collaboration and an increasing track record as a peak body in communicable disease control. Hence the benefits of legislative reform must clearly exceed perceived risks to the structure, function and governance of CDNANZ.

As discussed in section 23.2 of the Report above, the *Quarantine Act 1908* does not need to be used to provide indemnity to CDNANZ members. And with respect to resourcing, legislation is not an optimal strategy to ensure adequate resources are provided. Bringing CDNANZ under the umbrella of the National Public Health Partnership strengthens the infrastructure, formalises the reporting and introduces another level of accountability negating any need for using legislation to protect CDNANZ.

24.3 Recommendation 21

It is recommended that no legislative action be undertaken with respect to CDNANZ.

SECTION 5 – REVIEW OPTIONS

25. OPTIONS FOR GOVERNMENT ACTION

25.1 Issue

The Discussion Paper canvassed 2 options open to the Review. Option A is a minimalistic approach which would involve making specific amendments to the existing legislation to modernise it and to ensure that current policy approaches are adequately supported. Option B would make the same specific amendments to the Act that are proposed in Option A. However, Option B would also involve a broader, strategic examination of human quarantine and investigate options to harmonise human quarantine with contemporary communicable disease management strategies. The aim would be to ensure that both the current and future prevention and control of quarantinable and communicable diseases in Australia was supported by appropriate management and legislative frameworks.

The Discussion Paper raised the following questions:

Q39) What do you consider to be the disadvantages and advantages of each option?

Q40) Are there other options worth considering and what are the pros and cons of these options?

25.2 Analysis of Submissions

Eleven submissions provided comment specifically on this issue.

A few submissions supported Option A as it was felt that this approach will result in a review of the *Quarantine Act 1908* in a realistic timeframe. While these submissions noted that there is a need to better define a strategic response to communicable disease management in Australia, the submissions took the view that this can be achieved through other processes already in train, including the development of the National Communicable Diseases Strategic Framework.

Most of the submissions supported Option B as it was a more comprehensive approach that takes into consideration future prevention as well as amendment to the current legislation.

Work on Option B could be undertaken simultaneously on 2 levels:

Level 1. immediate amendment to the legislation and

Level 2. a broader strategic examination of human quarantine within the context of communicable disease management.

Option B will therefore involve more than a "tidy up" of the current legislation. Level 2 of Option B will provide a strategic consideration of the issues which will assist the Commonwealth government/DHAC in being more proactive in the field of human quarantine and will ensure that policy is informed by a strong evidence base. Option B would not be a review of State and Territory systems but would focus on the Commonwealth government's role and how the Commonwealth can improve and add value to the national and international aspects of human quarantine and communicable disease control. Implementation of Option

B, and particularly Level 2, will require the DHAC to liaise and collaborate with a range of stakeholders and to develop close links with the processes already in progress, such as CDNANZ's Communicable Disease Strategic Framework project.

After assessing the available evidence and the submissions made to this Review, this Report makes recommendations on how to progress the issues that were raised in the Discussion Paper. Some of the recommendations propose amending the legislation to repeal outdated provisions, resolve conflicts and ambiguities or update the legislation to align with current policy and practice. These recommendations would be addressed by the work undertaken under Level 1 of Option B. However, many of the recommendations propose that further work be undertaken and these recommendations need to be taken into account when progressing Level 2 of Option B.

As mentioned earlier in the paper, information was sought from the United States of America, the United Kingdom, New Zealand, Canada, Japan, Papua New Guinea and Indonesia, on the human quarantine arrangements for each country. The information obtained was interesting and should be assessed thoroughly when undertaking a strategic examination of human quarantine and communicable disease management.

It should also be noted that if the Minister for Health and Aged Care agrees to the recommendation to make specific amendments to the legislation to modernise it and ensure that existing policy approaches are properly supported, then a Regulation Impact Statement (RIS) will need to be developed and will be the subject of extensive consultation with all stakeholders.

25.3 Recommendation 22

It is recommended that Option B be pursued.

SECTION 6 – CONCLUSIONS AND RECOMMENDATIONS

26. FINDINGS OF THE REVIEW

26.1 Issues for Immediate Amendment

The Review identified several issues or areas of the legislation that would benefit from immediate amendment to update the legislation and/or align it with current policy and practice. The legislation should be amended to:

- incorporate an appropriate review and appeal process for human quarantine only;
- support the current policy of granting pratique by exception for international aircraft and to ensure there is an explicit and enforceable reporting requirement for pratique, with sanctions for non-compliance;
- ensure the Act reflects the current chain of events of disease notification between States/Territories and the Commonwealth/DHAC.
- define the 400m zone as being drawn from the perimeter of the port, pending further consideration as to whether 400m zone is sufficient, and ensure that the legislation allows for vector control activities to be undertaken within the boundary of the port as well as in the 400m surrounding buffer zone;
- clearly define several terms used in the legislation, including pratique and disinsection;
- ensure that quarantine signals apply to sea vessels only and do not apply to aircraft;
- provide that costs relating to human quarantine may be recovered from the master, owner or agent of a quarantined vessel;
- ensure that individuals are not liable for the costs of food or medicine relating to human quarantine control;
- resolve conflicts and ambiguities, such as removing the references to "division or divisions" of quarantine and amending section 31(1) to ensure that people released under quarantine surveillance cannot be apprehended; and
- refer to tuberculosis in section 35AA as "human tuberculosis".

26.2 Issues for Further Consideration

The Review also identified several complex issues that will require further consideration, research and consultation before any decisions could be made on how to proceed. The Review determined that further consideration is needed:

- to determine whether the legislation should define terms such as "quarantinable diseases", "eruptive diseases" and "communicable diseases" and, if so, what those definitions should be;
- on the issue of disease notification and prescribed diseases, and particularly to:
 - clarify that there is a requirement on sea and aviation industry to report illness, within a certain timeframe, to a quarantine officer without creating an onerous burden on this industry;
 - clearly define what is meant by illness or disease for notification and reporting purposes, perhaps by use of a list of symptoms rather than diseases;

- place the burden of determining whether an illness poses a risk on the quarantine officer and the quarantine medical officer;
- provide clear instructions on what action should be taken if a quarantine officer is notified of a disease or disease symptoms;
- consider whether there would be any benefit in using this notification provision more broadly to detect other diseases; and
- ensure the link between notification of diseases/symptoms and pratique is made explicit.
- to determine if the list of quarantinable diseases should be amended, and to develop criteria to assist in determining whether a disease should be regulated under the *Quarantine Act 1908*;
- to improve the effectiveness of disease detection at the border and ensure that border control activities, such as pratique and passenger surveillance, are based on sound evidence.
- on the issue of vector control, particularly in relation to:
 - obtaining evidence and expert advice to determine whether the 400m buffer zone around ports is sufficient;
 - financial liability for eradicating and incursion of an exotic vector of public health significance.
- on what is the optimal legislative framework to support tuberculosis control;
- to determine which aspects of human quarantine would benefit from risk assessment and then to develop appropriate criteria; and
- to clarify the understanding of the scope of the Commonwealth's emergency powers.

In progressing all of these issues, the Department will need to collaborate closely with all relevant stakeholders including AQIS, DIMA, State/Territory Health Departments, Chief Quarantine Officers, CDNANZ, the Public Health Laboratories Network, the National Tuberculosis Advisory Committee, the aviation and shipping industries, the travel industry and the medical profession.

27. RECOMMENDATIONS

It is recommended that the Minister approve Option B. Option B involves progressing work on two levels:

- Level 1. work would commence immediately to implement those recommendations to update the legislation and ensure it is aligned with current policy and practice.
- Level 2. work would commence to undertake a broader, strategic examination of human quarantine and examine options to harmonise human quarantine with contemporary communicable disease management strategies. The aim would be to ensure that both the current and future prevention and control of quarantinable and communicable diseases in Australia was supported by appropriate management, as well as legislative, frameworks. The recommendations for further consideration of various issues that have been made in this Report would need to be taken into account in this strategic examination.

28. APPENDIX 1 - TERMS OF REFERENCE

The Terms of Reference as cleared by the Minister for Health and Aged Care

1. The human quarantine provisions of the *Quarantine Act 1908* (the Act), and associated regulations and proclamations, are referred to the Human Quarantine Legislation Review Steering Committee (the Steering Committee) for examination and possible updating.
2. In undertaking this review, the Steering Committee aims to:
 - (a) uphold the policy objectives, ie. to prevent the introduction and/or spread of exotic communicable diseases aetiological agents of disease into Australia;
 - (b) achieve a uniform, sustainable, legislative framework that effectively supports current and future human quarantine activity;
 - (c) align, where possible, with international requirements, such as the International Health Regulations, Agreement on Sanitary and Phytosanitary Measures (SPS Agreement).
3. In making assessments, the Steering Committee undertakes to:
 - (a) Identify with a view to resolving:
 - extant provisions
 - ambiguous provisions
 - any irregularities
 - problems that arise from the compliance, administration, implementation or enforcement of the provisions
 - (b) Examine mechanisms to improve the overall efficiency of the management of human quarantine activity;
 - (c) Update the human quarantine provisions to ensure that infringement of human rights only occurs when necessary and that there are appropriate checks and balances and appeal and review processes incorporated into the legislation;
 - (d) Consider thoroughly the issues raised in the Competition Initiated Review of the Human Quarantine Legislation (Phase 1 Review);
 - (e) Examine the legislative arrangements in other countries regarding human quarantine activity (including New Zealand, the United Kingdom, the United States of America, Canada, Japan, Papua New Guinea and Indonesia);
 - (f) consider impact on plant and animal quarantine arrangements from any proposed amendments.
4. The Steering Committee will identify implementation options to achieve the outcomes of this Review and will provide justification for the preferred options.
5. Any papers or reports developed as part of this review process will have regard for Government guidelines such as the Government Regulatory Impact Statement Guidelines.
6. In undertaking the review, the Steering Committee is to consult nationally with key interest groups and affected parties. A list of the groups consulted with and an outline

of the consultation process will be included in the Final Report to the Minister.

7. The Steering Committee will provide a Final Report to the Minister for Health and Aged Care by **30 June 2000** and copy to the Minister for Agriculture, Fisheries and Forestry (responsible for plant and animal quarantine).

29. APPENDIX 2 - HUMAN QUARANTINE LEGISLATION REVIEW STEERING COMMITTEE MEMBERSHIP (AS AT 15 APRIL 2000)

Professor Richard Smallwood (Chair)
Director of Human Quarantine
Commonwealth Department of Health and Aged Care

Captain Jenny Firman
Director
Preventive Health
Department of Defence

Ms Marion Grant
A/g National Director
Border Management
Australian Customs Service

Mr Robert Murphy
National Manager
Border Programs Branch
Australian Quarantine and Inspection Service

Mr Dario Castello
Assistant Secretary
Border Control Branch
Department of Immigration and Multicultural Affairs

Dr John Carnie
Manager
Infectious Diseases
Department of Human Services (Victoria)

Department of Health and Aged Care Representatives

Professor John Mathews
Head, National Centre for Disease Control

Dr Cathy Mead
Chief Executive Officer, National Public Health Partnership

Review Management Team

Law Reform and Quality Section, Population Health Division
Samantha Holmes, Assistant Director (Review Manager)
Helen Couper, Assistant Director (Review Manager until January 2000)
Veronica Hancock, Director
Vicki Ellem, Policy Officer
Kate Rockpool, Policy Officer

30. APPENDIX 3 – PUBLIC CONSULTATION DISCUSSION PAPER

31. APPENDIX 4 – LIST OF PEOPLE/ORGANISATIONS THAT MADE SUBMISSIONS TO THE REVIEW

List of Submissions

Dolly Olesen President Australian Infection Control Association
Richard Madden Director Australian Institute of Health and Welfare
Dr Simon Brooke-Taylor Program Manager Food Product Standards Australia New Zealand Food Authority
Geoff Gorrie A/g Executive Director Australian Quarantine and Inspection Service
Chris McCarthy A/g Assistant General Manager Housing, Infrastructure, Health and Heritage Branch Aboriginal and Torres Strait Islander Commission
Mr Bob Manning Chief Executive Officer Cairns Port Authority
Chief Quarantine Officers (Human) from each State and Territory
Mrs Rosa Tognela State President Country Women's Association of Western Australia
Gail Batman A/g National Director Border Australian Customs Service
Dario Castello Assistant Secretary Entry Branch Department of Immigration and Multicultural Affairs
Nick Xynias Chairman The Ethnic Communities Council of Queensland
Dr Nurjehan Husain Convenor Health Policy Network Ethnic Communities Council of Tasmania
Vanessa Fanning Managing Director Health Services Australia

<p>Bridget Gilmour-Walsh Legal Services Branch Health and Aged Care</p>
<p>Surveillance and Management Section Communicable Disease and Environmental Health Branch Health and Aged Care</p>
<p>Dr Andrew Wilson Chief Health Officer New South Wales Health Department</p>
<p>Dr Shirley Hendy Assistant Secretary Health Development and Community Services Territory Health Services</p>
<p>Gary Lum Director of Pathology Pathology Department Royal Darwin Hospital Northern Territory Health Services</p>
<p>David Ashbridge Office of Aboriginal and Torres Strait Islander Health Health and Aged Care</p>
<p>Dr Rosalind Stanwell-Smith Consultant Epidemiologist Public Health Laboratories Service Communicable Disease Surveillance Centre United Kingdom</p>
<p>Lynelle Briggs Portfolio Strategies Division Health and Aged Care</p>
<p>Trevor Long Manager Group Facilitation Qantas Airways Limited</p>
<p>Dr R L Stable Director-General Queensland Health</p>
<p>Dr J L Faoagali Queensland Health Pathology Service Royal Brisbane Hospitals Campus Division of Microbiology Queensland Health</p>
<p>Dr T Konstantinos Senior Medical Officer Specialised Health Service Queensland Tuberculosis Control Centre Queensland Health</p>
<p>Scott Ritchie Tropical Public Health Unit Cairns Queensland Health</p>

<p>John Bates Chief Scientist Public Health Microbiology Queensland Health Scientific Services</p>
<p>Dr David Sloan A/g Director Health Surveillance and Disease Control Central Public Health Unit - Rockhamptom Queensland Health</p>
<p>Dr Paul Mercer Chairperson National Preventative and Community Medicine Committee for RACGP Royal Australian College of General Practitioners</p>
<p>Associate Professor Richard Russell Director Department of Medical Entomology, ICPMR Westmead Hospital</p>
<p>Dr Robert Hall Director Communicable Disease Control Branch South Australian Department of Human Services</p>
<p>Dr Jill Holm Medical Officer of Health Launceston, Sorell and Flinders Councils Tasmania</p>
<p>Ian Kean Chief Executive Tourism Tropical North Queensland</p>
<p>W J McCann Secretary Victorian Department of Human Services</p>
<p>Dr Rowan Davidson A/g General Manager Public Health Western Australia Health Department</p>
<p>Sandy Cocksedge IHR Revision Project Dr Pierre Guillet Parasitic Diseases and Vector Control World Health Organisation</p>