Australian quarantine arrangements at the border

Greg Fullam outlines the vital role of Australia's quarantine service

Introduction

The Australian Quarantine and Inspection Service (AQIS) provides quarantine inspection services for the arrival of international vessels, passengers, cargo, mail, animals, plants and their products into Australia. AQIS also undertakes inspection of and provides certification for a range of animals, plants and their products exported from Australia. In providing these services, AQIS works closely with other border agencies, industry stakeholders and the public to identify and intercept quarantine risk material.
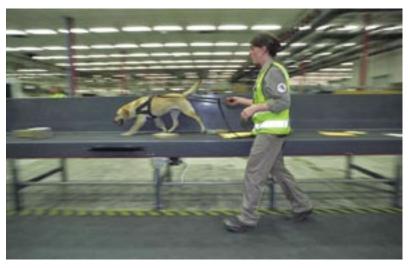
Human quarantine arrangements

The objective of quarantine activities in Australia is to ensure that, as far as possible, diseases of human quarantine concern do not enter the country, and to control and eradicate these diseases if they are identified in Australia.

AQIS also administers human quarantine on behalf of the Department of Health and Ageing, primarily through surveillance of arriving passengers for quarantinable diseases. Human quarantine surveillance measures are administered by a range of means, including co-operative arrangements with airlines, shipping agents and state medical authorities.

The SARS and Avian Influenza outbreaks during 2003 and 2004, in Asia, Europe and North America, caused WHO, for the first time, to issue travel advice that warned prospective travellers against travel to some locations due to health risks. The outbreaks also caused major disruption to the international tourism and airline industries, with significant economic impacts.

Australia responded to these outbreaks by immediately with increased surveillance of the health of passengers and crew arriving on aircraft and ships from affected countries, increased screening of passenger luggage for poultry products, and enhanced surveillance of poultry and wild birds.

The human diseases that are currently prescribed diseases in Australia are:

- Cholera
- Dengue Fever
- Malaria
- Measles
- Plague
- Polio
- Rabies
- Severe Acute Respiratory Syndrome (SARS)
- Smallpox
- Tuberculosis
- Typhoid fever
- Viral haemorrhagic fevers of humans
- Yellow Fever

Recent amendments to the *Quarantine Act 1908* place greater responsibility on crew to report possible symptoms observed in passengers. The new Prescribed Symptoms are:

- Temperature over 38°C. If a thermometer is available and able to be used, then only temperatures above 38°C are notifiable. If a thermometer is not available, or cannot be used, any person suspected of having a temperature should be reported.
- Acute unexplained skin rashes or lesions and rashes or lesions caused by illness and/or exposure to hazardous agents. Heat rashes, dermatitis, eczema and other such common skin conditions are not reportable.
- Persistent and/or severe vomiting. Vomiting caused by inebriation or motion sickness is not reportable.
- Persistent, watery or profuse diarrhoea.

Quarantine inspections at an international mail centre

AQIS staff inspect the outside of containers for pests and diseases

- Bleeding from the eyes, ears, nose, mouth, anus and/or skin. People who are predisposed to nose bleeds and/or haemorrhoids, or who have cuts and abrasions are not reportable.
- Glandular swelling in the armpits or neck.
- Prolonged loss of consciousness where a person cannot be roused. Loss of consciousness caused by consumption of alcohol, drugs and/or other medications is not reportable. Temporary loss of consciousness from fainting is not reportable. This symptom does not include sleeping.
- Persistent coughing and difficulty breathing with no apparent cause and no history of similar symptoms. Persistent coughing and difficulty breathing due to asthma, heart disease, obesity, chronic bronchitis or emphysema is not reportable.
- Other symptoms or combinations of symptoms as declared in alerts issued by the Director of Human Quarantine. These alerts are only effective for as long as the Director decrees.

The introduction of prescribed symptom reporting allows medical staff to assess the passenger, determine if an illness of quarantine concern is present, and take action to protect the wider Australian population.

Quarantine as an integral part of Australia's border security

Australia's quarantine function has a long and effective history. Originally focusing on human health issues, quarantine now aims to prevent the introduction, establishment or spread of human, animal and plant pests and diseases in Australia. This benefits all Australians by protecting public health, safeguarding Australia's agricultural, trade and tourism industries, and protecting native flora and fauna.

The Australian Government takes bio-security very seriously, and conducts a range of simulations and planning exercises to maintain and improve preparedness.

In February 2001, there was a serious and widespread outbreak of foot-and-mouth disease (FMD) in Europe. The Australian Government responded to this serious economic and environmental threat to Australia by implementing increased quarantine intervention.

The Government committed an extra $596 million over four years to increase the capacity of DAFF and the Australian Customs Service (Customs) to respond to exotic pests and diseases, substantially strengthening Australia's quarantine border controls. These measures built on enhancements already in place as a result of the Government's commitment of $76 million to quarantine in 1996. Quarantine border intervention target rates increased to more than 80% at international airports and 100% at other border entry points.

The grave threat to Australia from an FMD outbreak was confirmed by the Productivity Commission's independent report into the potential impact of an outbreak of FMD on Australia, which estimated FMD would cost Australia between $8 billion and $13 billion.

What has increased quarantine intervention achieved?

The Government's Increased Quarantine Intervention (IQI) program, which greatly expanded resources available for quarantine at the border from May 2001, has increased both the levels of intervention at the border and the proportion of quarantine risk material being intercepted.

AQIS has recruited, trained and deployed over 1200 additional staff and 46 detector dog teams, and acquired 64 X-ray machines. These staff form an integral part of Australia's border protection and deal with very substantial volumes of approaching material (2003-2004 figures):

- about 10 million passengers and crew at airports;
- around 150 million mail items; and
- approximately 1.3 million sea containers, 420,000 air cargo containers, and 2.1 million consignments of High Volume, Low Value air cargo.

At airports, with the benefit of increased resources, over 90% of passenger baggage is screened. Similarly, 100% of international mail is now screened for material of quarantine concern, and 100% of sea containers are inspected. Continuing high levels of co-operation between AQIS, Customs and industry have assisted in achieving these results.

To put this performance in a practical context, after IQI rollout, each month AQIS staff seize significant volumes of quarantine risk material at airports and mail centres as shown in Table 1.

Much of this product is fresh, high-risk material, coming from FMD affected countries including China and southern African nations.

AQIS staff also regularly find items of interest to other agencies that pose a threat to Australia's border security. For example, in December 2003, AQIS staff found a shipment of 7kgs of drugs (23,500 tablets of MDMA with a street value of $1.6m) at Sydney airport.

While the outbreak of FMD in the United Kingdom is now controlled, there have been continuing outbreaks of exotic diseases around the world (such as the recent FMD outbreaks in Korea), and there remain significant and longstanding quarantine risks to Australia from other exotic pests and diseases.

Recent examples include the Severe Acute Respiratory Syndrome (SARS) outbreak, and the current avian influenza outbreak. Australia's

Sniffer dogs form part of the front-line defences

rapid and effective response to the avian influenza threat has included increases in passenger surveillance and awareness campaigns.

Indeed, the ongoing threat from these exotic pests and diseases may in fact have increased, given the potential use of exotic pests and diseases as instruments of bio-terrorist attack. Quarantine is a critical part of Australia's defences against these forms of terrorist threats.

The effectiveness of Australia's enhanced quarantine activities was evaluated in ANAO Report 47, Managing for Quarantine Effectiveness, released in June 2001. The ANAO found that, as a result of actions undertaken in response to the Quarantine Review Committee report "quarantine operations were now markedly more effective across the board".

Following the commitment of the Increased Quarantine Intervention

funding, an inquiry into Australia's quarantine effectiveness was undertaken by the Joint Committee of Public Accounts and Audit (JCPAA). In its report in February 2003, it noted:

"…the additional funds allocated to the quarantine function are being well spent. In general, the Committee believes Australia's quarantine function is in good shape and the additional funding is being appropriately used."

AQIS works with its stakeholders at the front line of Australia's defences against biological threats to ensure that effective and co-ordinated plans are in place to respond to potential quarantine threats. This maintains Australia's animal, plant and human health status and protects Australia's agricultural industries.

Author
Greg Fullam is the Manager of the Strategic Initiatives Team within the Quarantine Group in the Australian Quarantine and Inspection Service (AQIS). The Quarantine Group works with industry, other Commonwealth, State and Territory agencies and the community to protect Australia's animal, plant and human health status and the environment from unwanted pests and diseases. The Quarantine Group employs over 2,000 staff Australia wide, and has an annual budget of over $200 million. Each year, staff employed in the programs within the group process almost 10 million incoming passengers, 150 million mail items, over 2 million consignments of air cargo and more than 1 million incoming sea containers.

Table 1. Volume of seizures per month

Items	Airports	Mail Centres
Fruit/Plants	3.9t	150kg
Vegetables	3.9t	150kg
Meat	1.5t	350kg
Seeds	550kg	350kg
Eggs	500kg	350kg
Egg Prod.	500kg	350kg
Poultry	300kg	50kg