

## Assessing biosecurity risks from imported materials



*Mike Nunn*

Biosecurity Australia  
Australian Government  
Department of Agriculture,  
Fisheries and Forestry  
GPO Box 858  
Canberra ACT 2601  
Tel: (02) 6272 4036  
Fax: (02) 6272 3399  
Email:  
mike.nunn@biosecurity.gov.au

**Biosecurity Australia is responsible for assessing and providing policy advice on the sanitary (animal health) and phytosanitary (plant health) risks arising from imports of people, animals and plants, and other goods and materials entering Australia. Biosecurity Australia meets this responsibility by undertaking import risk analyses (IRAs) to establish policy and by conducting reviews of existing policy as necessary. If Biosecurity Australia assesses the risk of a proposed import as acceptable (with or without risk management measures), it makes a recommendation to the Director of Animal and Plant Quarantine, who makes a determination. The Australian Quarantine and Inspection Service (AQIS) implements this policy determination, by issuing an import permit and ensuring that any recommended risk management measures are undertaken.**

Australia is free of many debilitating pests and diseases of humans, animals and plants that occur in other countries. This privileged health status is of significant benefit in ensuring agricultural productivity (animal, aquatic animal and plant), accessing export markets, maintaining Australia's unique native flora and fauna, and enhancing the quality of life of all Australians. Australia's biosecurity policy aims to maintain this favourable health status while fulfilling national and international obligations.

Risk analysis – including risk assessment, risk management and risk communication – is integral to international trade overseen by the World Trade Organization (WTO), which recognises the World Organisation for Animal Health (OIE), the International

Plant Protection Convention (IPPC) and the Codex Alimentarius Commission (Codex) as the standard-setting organisations for animal health, plant health, and food, respectively. The WTO Agreement on the Application of Sanitary and Phytosanitary Measures (the SPS Agreement) defines the basic rights and obligations of member countries with respect to taking “sanitary and phytosanitary measures” to protect human, animal or plant life or health. WTO members are obliged to ensure their quarantine measures are based on an assessment of the risks to human, animal or plant life or health, taking into account risk assessment techniques developed by the relevant international organisations.

Biosecurity Australia is a prescribed agency within the Australian Government Department of Agriculture, Fisheries and Forestry (DAFF) and is responsible for the development of biosecurity policy and for technical negotiations on export market access for animals, plants and their products. Biosecurity Australia was established in October 2002 as an entity separate from AQIS, which is responsible for implementing biosecurity policy, including maintaining border quarantine security, issuing import permits, and providing health certification for exports.

In undertaking IRAs, Biosecurity Australia consults with a wide range of stakeholders and liaises closely with the proponents of the proposed import. Proponents may include individuals (importers or exporters), university or other research organisations, importing or exporting companies, or trading partner countries. When necessary, such as for an application to import a new commodity, Biosecurity Australia consults with external experts and may formally establish an IRA team (comprising Biosecurity Australia staff and external experts) to help Biosecurity Australia undertake the IRA or to review existing policy.

Biosecurity Australia undertakes IRAs on a wide range of commodities including live animals and plants; genetic material (e.g. semen, embryos, seeds); food and feedstuffs; skins, hides and wool; and ‘biologicals’. Biologicals includes a diverse range of commodities such as microorganisms, vaccines, culture media, cell lines, immunoglobulins, hormones, enzymes, genetically modified organisms, and laboratory diagnostic kits.

The first step in the IRA that Biosecurity Australia undertakes is to identify any potential sanitary and phytosanitary hazards associated with the proposed import. Biosecurity Australia then assesses the likelihood of the presence of any hazards of concern in or on the proposed import and the likelihood of exposure of Australian animals and plants to such hazards. It also assesses the consequences if the pests or pathogens identified as hazards of concern were to establish and spread in Australia.

Biosecurity Australia then estimates the risk – the combination of the likelihood and the consequences – and seeks to identify a measure or measures to reduce the risk to an acceptable level (i.e. to meet what the SPS Agreement calls the “appropriate level of sanitary or phytosanitary protection” or ALOP). If no such measure or combination of measures can be identified, a recommendation is made to reject the import application. If a suitable measure or combination of measures can be identified, Biosecurity Australia makes a recommendation to the Director of Animal and Plant Quarantine, who makes a determination. AQIS then implements this policy determination, by issuing an import permit and ensuring that any recommended risk management measures are undertaken. For example, risk measures for a microorganism might include, *inter alia*, restricting its use to *in vitro* work in a facility that is inspected and meets a specified level of biosecurity containment.

AQIS maintains an online database, ICON<sup>1</sup>, on more than 20,000 commodities for which there is an established import policy and existing import conditions; this database can be searched online<sup>2</sup>.

The full process of undertaking an IRA can take some time, particularly if it involves a new commodity. Proponents of a particular import can help to reduce the time involved by providing as much information as possible (e.g. about the origin and provenance of the commodity and its intended use) when applying for a permit to import, and by providing as quickly as possible any further detailed information that might be sought during the assessment process. Although the process may sometimes seem to be complex and time consuming, it must be seen in the context of its aim of maintaining Australia’s privileged animal and plant health status and the benefits this status brings to all Australians.

## References

1. Available at: <http://www.daff.gov.au/aqis/import/icon-icd>
2. Available at: [http://www.aqis.gov.au/icon32/asp/ex\\_querycontent.asp](http://www.aqis.gov.au/icon32/asp/ex_querycontent.asp)

**Dr Mike Nunn** is a veterinary epidemiologist with Australian and international experience in the control of animal diseases. He has particular interests in risk analysis, information systems, disease modelling, and emergency animal disease preparedness and response. He is employed as the Principal Scientist (Animal Biosecurity) with the Australian Government Department of Agriculture, Fisheries and Forestry.

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