

**DECLARATION FORM ON NOTHING TO DECLARE OR NOTHING NEW TO DECLARE FOR
USE IN THE INFORMATION EXCHANGE**

| Measure | Nothing to declare | Nothing new to declare |
|-----------------|--------------------------|-------------------------------------|
| A, part 1 | <input type="checkbox"/> | <input type="checkbox"/> |
| A, part 2 (i) | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| A, part 2 (ii) | <input type="checkbox"/> | <input type="checkbox"/> |
| A, part 2 (iii) | <input type="checkbox"/> | <input type="checkbox"/> |
| B (i) | <input type="checkbox"/> | <input type="checkbox"/> |
| B (ii) | <input type="checkbox"/> | <input type="checkbox"/> |
| C | <input type="checkbox"/> | <input type="checkbox"/> |
| D | <input type="checkbox"/> | <input type="checkbox"/> |
| E | <input type="checkbox"/> | <input type="checkbox"/> |
| F | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| G | <input type="checkbox"/> | <input type="checkbox"/> |

(Please mark the appropriate box(es) for each measure, with a tick.)

Date: 15 April 2008

State Party to the Convention: Australia

Exchange of data on research centres and laboratories¹

Australia's submission regarding questions 1-7 of Form A, part 1 is at **Attachment 1.1 to 1.5**, below.

1. Name(s) of facility² _____
2. Responsible public or private organization or company _____

3. Location and postal address _____

4. Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence

5. Number of maximum containment units³ within the research centre and/or laboratory, with an indication of their respective size (m²)

6. If no maximum containment unit, indicate highest level of protection

7. Scope and general description of activities, including type(s) of microorganisms and/or toxins as appropriate

¹The containment units which are fixed patient treatment modules, integrated with laboratories, should be identified separately.

²For facilities with maximum containment units participating in the national biological defence research and development programme, please fill in name of facility and mark "Declared in accordance with Form A, part 2 (iii)".

³In accordance with the 1983 WHO Laboratory Biosafety Manual, or equivalent

Exchange of data on research centres and laboratories

Background Information

Australia has four maximum containment units which meet the criteria for a “maximum containment laboratory” as specified in the 1983 WHO Laboratory Biosafety Manual.

They are:

- The Australian Animal Health Laboratory (**Attachment 1.2**)
- The National High Security Quarantine Laboratory (**Attachment 1.3**)
- The Queensland Health Forensic and Scientific Services Virology Laboratory (**Attachment 1.4**)
- The Emerging Infectious Diseases and Biohazard Response Unit (**Attachment 1.5**)

Data on these facilities relating to questions 1 to 7 of Form A, Part 1 are provided below in accordance with the Annex to the Final Declaration on Confidence Building Measures.

The Emerging Infectious Diseases and Biohazard Response Unit is operated by the Institute of Clinical Pathology and Medical Research (ICPMR) at Westmead in New South Wales. During 2007 the PC3+ high containment facility at the ICPMR was upgraded to the highest containment level, PC4.

The National High Security Laboratory (NHSQL) operates under the auspices of the Victorian Infectious Diseases Reference Laboratory (VIDRL) in Melbourne. In 2007 additional maximum containment laboratory facilities are being established at VIDRL that will boost capability for responding to a terrorist attack involving bioagents. In addition, some Australian hospitals and university departments have lower level containment units where diagnostic and research work is conducted.

On 13 April 2007, the Council of Australian Governments (COAG) considered the recommendations of the *Report on the Regulation and Control of Biological Agents* (the COAG Report) and agreed to the establishment of a national regulatory scheme for biological agents of security concern.

The COAG Report’s recommendations encompass:

- the development of a national authority to oversee the regulatory scheme - a section within the Department of Health and Ageing has been established to fulfil this role;
- the development of legislation: the *National Health Security (NHS) Act 2007*, which was passed by Parliament on 20 September 2007 and given Royal Assent on 28 September 2007, fulfils this role;
- establishment of a National Register (informed by mandatory reporting) identifying entities handling SSBA and allowing for the provision of this information to intelligence agencies [the *NHS Act 2007* provides the legislative basis for the National Register];
- the development of a registration scheme addressing physical, personnel and transport security concerns and including a security audit and inspection process; and
- the delivery of an education and awareness-raising campaign covering the proposed security requirements, use of the National Register, and coordination with other existing schemes.

The COAG Report also recommended the establishment of a two-tiered list of security-sensitive biological agents (SSBA). There are 22 SSBA on the list recommended by COAG—12 on Tier 1 (agents of the highest security concern) and 10 on Tier 2 (agents of high security concern). Tier 1 agents will be regulated from January 2009 with Tier 2 agents being regulated from January 2010. The regulatory measures proposed by this review are proportional to the risk posed by agents on the list.

Exchange of data on research centres and laboratories**1. Name of facility**

Australian Animal Health Laboratory

2. Responsible public or private organisation/ company

Commonwealth Scientific and Industrial Research Organisation (Federal Government) and the Department of Agriculture, Fisheries and Forestry (Federal Government). Note: Australia has a two-tiered system of Government, with the Federal Government and, to a lesser extent, the six respective State Governments and two Territories all involved in the formulation and implementation of Government policy.

3. Location and postal address

| Location | Postal address |
|---|--|
| 5 Port Arlington Road Geelong, Victoria AUSTRALIA | PO Bag 24 Geelong VIC 3220 AUSTRALIA |

4. Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence

This facility receives no funding from the Australian Government Department of Defence. The AAHL is funded by the Australian Government, via CSIRO and the Department of Agriculture, Fisheries and Forestry. It is also funded by industry organisations and commercial companies.

5. Number of maximum containment units within the research centre and/or laboratory, with an indication of their respective size (m²)

One maximum containment system and enclosure. Total floor space 11,000m², comprising three main parts: a large-animal accommodation area, total floor area about 3,500 m² made up of 29 rooms – each of these with a floor area of about 24 m² – and with a service area, incinerator, and autopsy area.

A laboratory complex of total floor area about 3,500 m² made up of three functional laboratory suites – each of these with a floor area of about 1,100 m² – and each comprised of six laboratories and four attached small-animal rooms. The laboratory suites are for diagnosis, pathology and virology. There are attached service areas.

A common support area for glass washing, tissue culture, laundry and other services.

6. If no maximum containment unit, indicate highest level of protection

N/A

Exchange of data on research centres and laboratories

7. Scope and general description of activities, including type(s) of microorganisms and/or toxins as appropriate.

The AAHL plays a vital role in maintaining Australia's capability to quickly diagnose exotic (foreign) and emerging animal diseases. This is achieved through ongoing research programs to develop the most sensitive, accurate and timely diagnostic tests, which are critical to the success of any eradication campaign in the event of a disease outbreak.

AAHL also undertakes research to develop new diagnostic tests, vaccines and treatments for endemic animal diseases of national importance. Major diseases of livestock, aquaculture animals, and wildlife, are studied. AAHL includes a high-biocontainment facility, to safely fulfil its major role of diagnosing emergency animal disease outbreaks.

The laboratory is a World Animal Health Organisation reference laboratory for avian influenza, Newcastle disease, bluetongue disease, and epizootic haematopoietic necrosis virus (EHNV). The AAHL is also an OIE Collaborating Centre for New and Emerging Diseases, a WHO Collaborating Centre for Severe Acute Respiratory Syndrome (SARS), and a national reference laboratory for rabies and brucella.

Exchange of data on research centres and laboratories**1. Name of facility**

National High Security Quarantine Laboratory (NHSQL)

2. Responsible public or private organisation/company:

Department of Health and Ageing (Commonwealth Government), Department of Human Services (State government).

3. Location and postal address:

| Location | Postal address |
|--|--|
| Victorian Infectious Diseases Reference Laboratory 10 Wreckyn Street North Melbourne Victoria AUSTRALIA | National High Security Quarantine Laboratory c/o VIDRL Locked Bag 815 Carlton South VIC 3053 AUSTRALIA |

4. Source(s) of financing, of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence

This facility receives no funding from the Australian Government Department of Defence. It receives funding from Commonwealth and State Departments of Health.

5. Number of maximum containment units within the research centre and/or laboratory, with an indication of their respective size (m²)

One high security laboratory, containing two portable isolation units. Total area 90m².

6. If no maximum containment unit, indicate highest level of protection

N/A

7. Scope and general description of activities, including type(s) of micro-organism and/or toxins as appropriate

The diagnosis of possible imported cases of viral haemorrhagic fever or other quarantinable viral diseases such as yellow fever. Development of laboratory tests and protocols for exotic respiratory viral diseases, including *influenzavirus* A/H5N1 ('bird flu') and SARS. In addition, VIDRL has established and maintained the capability to perform diagnostic testing for the *variola virus*. See also, background information at Attachment 1.1.

Exchange of data on research centres and laboratories**1. Name of facility**

Queensland Health and Forensic Scientific Services (QHFSS).

2. Responsible public or private organisation/company:

Queensland Department of Health (State Government).

3. Location and postal address:

| Location | Postal address |
|--|---|
| 39 Kessels Road Coopers Plains Queensland AUSTRALIA | PO Box 594 Archerfield QLD 4108 AUSTRALIA |

4. Source(s) of financing, of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence

This facility receives no funding from the Australian Government Department of Defence. It receives funding from Commonwealth and State Departments of Health.

5. Number of maximum containment units within the research centre and/or laboratory, with an indication of their respective size (m²)

Two. Total area 150m².

If no maximum containment unit, indicate highest level of protection

N/A.

7. Scope and general description of activities, including type(s) of micro-organism and/or toxins as appropriate

The maximum containment facility at QHFSS, a state government public health virology laboratory, has both a diagnostic and a research function. The maximum containment facilities are used for the development and performance of diagnostic tests on patients with suspected exotic or endemic viral illness. This includes Hendra virus or exotic haemorrhagic fever viruses. The only PC4 level pathogens that the laboratory has are Hendra virus and SARS coronavirus, which are used for diagnostic purposes. The laboratory intends to introduce reagents useful for the diagnosis of a number of exotic viral diseases including Ebola, Lassa, Junin, Rift Valley fevers and Hantavirus among others. These reagents will consist of either inactivated diagnostic reagents, cloned viral subunits or live virus.

No research involving PC4 level organisms was conducted in the facility in 2007. Hendra virus was isolated from a horse in 2007.

Attachment 1.5

Exchange of data on research centres and laboratories

1. Name(s) of facility Emerging Infectious Diseases and Biohazard Response Unit (EIBRU).
2. Responsible public or private organization or company Institute for Clinical Pathology and Medical Research, Sydney West Area Health Service.
3. Location and postal address Centre for Infectious Diseases and Microbiology Laboratory Services (CIDMLS)
ICPMR
Institute Road.
Westmead NSW 2145
4. Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence

Funded by New South Wales Department of Health

5. Number of maximum containment units within the research centre and/or laboratory, with an indication of their respective size (m²)

One maximum containment PC4 unit—Laboratory work area 85.5m²

6. If no maximum containment unit, indicate highest level of protection

N/A

7. Scope and general description of activities, including type(s) of microorganisms and/or toxins as appropriate

Laboratory investigation of human specimens or substances suspected of containing an exotic agent, emerging infectious disease or bioterrorism agent such as pandemic influenza, anthrax and ricin toxin for the state of New South Wales.

National biological defence research and development programme Declaration

Is there a national programme to conduct biological defence research and development within the territory of the State Party, under its jurisdiction or control anywhere? Activities of such a programme would include prophylaxis, studies on pathogenicity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxinology, physical protection, decontamination and other related research.

Yes. Australia has a science and technology program in defence against biological agents, which occurs in the Defence Science and Technology Organisation (DSTO), Department of Defence, as detailed below (see Form A, Part 2(ii)).

If the answer is Yes, complete Form A, part 2 (ii) which will provide a description of the programme.

National biological defence research and development programme**Description**

1. State the objectives and funding of the programme and summarize the principal research and development activities conducted in the programme. Areas to be addressed shall include: prophylaxis, studies on pathogenicity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxinology, physical protection, decontamination and other related research.

The objective of the program is to provide the Australian Government with an appropriate understanding of the issues pertinent to protection against biological weapons. The program also assists in the provision of a defensive capability for the Australian Defence Force (ADF) and contributes to Defence support to the civil power in the management of biological threats to the community. The program enhances the ability of the ADF to operate in parts of the world where biological weapons might be used. It also enhances Australia's ability to contribute to biological arms control verification. The principal research activities are concerned with the detection and analysis of biological species that have been identified as potential biological warfare agents and development of medical countermeasures to those agents. The program also covers toxins that are considered threats in terms of both the Biological and Chemical Weapons Conventions.

2. State the total funding for the programme and its source.

The program is funded solely by the Australian Department of Defence, with an allocation for the current financial year (July 2007-June 2008) of approximately \$2 652 000.

3. Are aspects of this programme conducted under contract with industry, academic institutions, or in other non-defence facilities?

Yes. Work is contracted to non-defence facilities.

4. If yes, what proportion of the total funds for the programme is expended in these contracted or other facilities?

For the calendar year 2007, the following payments were made;

- \$125 000 to James Cook University
- \$62 000 to the Cooperative Research Centre (CRC) for Diagnostics.
- \$15 000 to CSIRO Australian Animal Health Laboratories part of the Cooperative Research Centre (CRC) for Biosecurity

5. Summarize the objectives and research areas of the programme performed by contractors and in other facilities with the funds identified under paragraph 4.

The James Cook University of Technology funding is to support a post doctoral fellow to undertake investigations into the causative organism of the disease Q-Fever. This work is to be completed in June 2008 however, depending on progress, there will be further consideration of another 2-3 years.

In a collaborative research project, DSTO and CSIRO are examining the neutralizing capacity of mesophase nanomaterials to bind the plant toxin ricin. Completion date expected to be 30 June 2008.

The program includes an association with the CRC - Diagnostics that aims to produce high affinity reagents that can be used in the treatment or detection of biological agents. This interaction is through the funding of two PhD students, one located at the Commonwealth Scientific and Industrial Research Organisation (CSIRO) - Health Science and Nutrition, Parkville, Victoria, and the other at LaTrobe, University, Bundoora, Victoria.

The funding to CSIRO Australian Animal Health Laboratories supports a DSTO employee undertaking doctoral studies in developing detection methods for uncharacterised viruses.

6. Provide a diagram of the organizational structure of the programme and the reporting relationships (include individual facilities participating in the programme).

The organisational structure is as follows. There is a single active research cell operating within the Department of Defence within the hierarchy represented below.



7. Provide a declaration in accordance with Form A, part 2 (iii) for each facility, both governmental and non-governmental, which has a substantial proportion of its resources devoted to the national biological defence research and development programme, within the territory of the reporting State, or under its jurisdiction or control anywhere.

See Form A, Part 2(iii) and the associated attachment (**Attachment 2**) for Australia's response.

National biological defence research and development programme

Facilities

Complete a form for each facility declared in accordance with paragraph 7 in Form A, part 2 (ii).

Australia’s submission of Form A, Part 2 (iii) is at **Attachment 2**.

In shared facilities, provide the following information for the biological defence research and development portion only.

1. What is the name of the facility?
2. Where is it located (include both address and geographical location)?
3. Floor area of laboratory areas by containment level:
 - BL2 _____ (sqM)
 - BL3 _____ (sqM)
 - BL4 _____ (sqM)
 - Total laboratory floor area _____ (sqM)
4. The organizational structure of each facility.
 - (I) Total number of personnel _____
 - (ii) Division of personnel:
 - Military _____
 - Civilian _____
 - (iii) Division of personnel by category:
 - Scientists _____
 - Engineers _____
 - Technicians _____
 - Administration and support staff _____
 - (iv) List the scientific disciplines represented in the scientific/ engineering staff.
 - (v) Are contractor staff working in the facility? If so, provide an approximate number.

(vi) What is (are) the source(s) of funding for the work conducted in the facility, including indication if activity is wholly or partly financed by the Ministry of Defence?

(vii) What are the funding levels for the following programme areas:

Research

Development

Test and evaluation

(viii) Briefly describe the publication policy of the facility:

(ix) Provide a list of publicly-available papers and reports resulting from the work during the previous 12 months. (To include authors, titles and full references.)

5. Briefly describe the biological defence work carried out at the facility, including type(s) of microorganisms* and/or toxins studied, as well as outdoor studies of biological aerosols.

*Including viruses and prions.

National biological defence research and development programme**Facilities**

Australia has one facility that meets the criteria of paragraph 7 in Form A, part 2 (ii).

1. Name

Human Protection and Performance Division, DSTO

2. Location

| Location | Postal address |
|--|---|
| 506 Lorimer Street Fishermans Bend Victoria AUSTRALIA | Platforms Sciences Laboratory (PSL) 506 Lorimer Street Fishermans Bend Victoria AUSTRALIA |

| | | |
|----------------------|-----|-------------------|
| 3. Floor Area | BL2 | 150 square metres |
| | BL3 | 60 |
| | BL4 | nil |

4. Personnel

- (i) Total of 25 staff years effort for the combined biological defence and arms control programs, with contributions from 33 personnel.
- (ii) All are civilian.
- (iii) 32 scientists, 1 technician, nil engineers, shared administrative and support staff.
- (iv) Biochemistry, molecular biology, microbiology, immunology, chemistry, pharmacology, physicists.
- (v) Yes—there are two PhD students working as contractors on this program at the facility.
- (vi) Currently wholly financed by the Department of Defence, there is expected to be other funding in the 2006-2007 financial year from the Department of Health and Ageing, Emergency Management Australia and Australia Post, amounts are as yet unknown.
- (vii) Research funded at ca. \$2 385 000 per annum.
- (viii) Publication in scientific journals is encouraged, and staff are expected to maintain their professional status by such publication.
- (ix) The publications are listed at **Attachment 4** (see Form C).

5. Description of Biological Defence Work

Various types of work are undertaken, as outlined in the following sections:

(1) Detection of biological entities recognised as potential biological warfare agents

Immunological and gene based techniques for rapid identification of BW agents are being investigated.

Recombinant and colostrum derived antibodies, and combinatorial peptides are being produced to a number of BW agents, including *B. pseudomallei*, *Bacillus anthracis*, anthrax toxins and ricin. Platforms for the amplification of antibody avidity, such as self-assembling gels, are also being investigated. Binding inhibition and cytotoxicity assays are being developed to assess the usefulness of potential therapeutic agents such as antibodies, peptides and aptamers.

PCR assays for the rapid detection of potential BW agents. Current research focuses on the evaluation of diagnostic tools that enable rapid detection of microbial antibiotic resistance and genetically manipulated bacteria.

(2) Physical methods for rapid detection of bio-aerosols

Methods of particle characterisation for provision of rapid warning of a bio-aerosol are being assessed.

(3) Treatment/Toxicology

Cultured human lung cells are being developed as a test bed for examining potential therapeutic compounds against toxin agents. Compounds for treatment of ricin intoxication are currently being examined.

A program for the development of DNA vaccines against selected agents is being pursued.

(4) Detection of biological toxins using physico-chemical methods

Studies on detection of biological material using mass spectrometry and other physico-chemical methods are being conducted to determine their utility for field detection of biological toxins and BWC verification procedures. This work has included the analysis of ricin and crude extracts of ricin by MALDI and FT-ICR mass spectrometry.

(5) Strengthening the Biological Weapons Convention (BWC)

A BWC Regional Workshop, co-hosted by Australia and Indonesia, was convened in 2007 to help BWC States Parties in South East Asia become better engaged with the Geneva-based interessional program of work as a means to reduce the possibility of bioterrorism in the region, or the inadvertent assistance by states in the region to biological weapons programs being developed elsewhere. This workshop was followed up by more specialised regional workshops on biosafety and biosecurity.

**Background information on outbreaks of reportable
infectious diseases**

In 2006, Australia had no outbreaks of infectious diseases and similar occurrences caused by toxins that deviate from the normal pattern. For this reason, we report the information requested in Form B(i) with respect to diseases of humans (see **Attachment 3.1**), animals (see **Attachment 3.2**) and plants (see **Attachment 3.3**), but make no formal report regarding the information requested in Form B(ii). We provide, however, information relevant to Form B(ii) regarding animal plant diseases in Attachments 3.2 and 3.3, respectively.

Background information on outbreaks of reportable infectious diseases

In accordance with the requirements agreed at the Third Review Conference, a summary table of notifiable diseases for Australia for the years 2000 to 2007 is attached as Form B (i).

(A) Human diseases

The Australian Government Department of Health and Ageing has overall responsibility for national disease surveillance. The Department's Office of Health Protection routinely receives diagnostic data from key medical laboratories throughout Australia.

Each Australian State and Territory has legislation which requires doctors, hospitals and/or laboratories to report the occurrence of certain diseases, known as "notifiable diseases". Under the auspices of the Communicable Diseases Network of Australia (the Network), the State and Territory health authorities provide data on an agreed set of notifiable diseases to the Australian Government Department of Health and Ageing. The data are collated by the Department and published quarterly in the *Communicable Diseases Intelligence* and updated three times per week on the Department's website (www.health.gov.au/cda). *Communicable Diseases Intelligence* is sent to the World Health Organization and to approximately 1,100 health professionals and researchers both nationally and internationally as well as published on the Department website.

The Network meets fortnightly by teleconference. It provides a forum for information exchange on communicable disease activity in Australia and New Zealand and enables Federal and State health authorities to cooperate in taking prompt action to control outbreaks.

No. of cases of Nationally Notifiable Communicable Diseases in Humans, 2000 to 2007

| Disease | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007* |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| AIDS | 206 | 261 | 208 | 225 | 222 | 160 | NA | NA |
| HIV | 714 | 755 | 765 | 848 | 861 | 886 | NA | NA |
| Anthrax | NN | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Barmah Forest virus infection | 646 | 1142 | 910 | 1367 | 1105 | 1323 | 2122 | 1701 |
| Botulism | 2 | 2 | | 1 | 1 | 3 | 1 | 1 |
| Brucellosis | 29 | 20 | 40 | 20 | 38 | 41 | 50 | 40 |
| Campylobacteriosis | 13669 | 16131 | 14732 | 15361 | 15579 | 16492 | 15406 | 17677 |
| Congenital Rubella | 0 | 0 | 2 | 3 | 1 | 1 | 0 | 1 |
| Congenital Syphilis | 5 | 21 | 18 | 13 | 13 | 15 | 13 | 9 |
| Chancroid | 1 | 0 | 0 | NN | NN | NN | NN | NN |
| Chlamydial (NEC) | 16963 | 20325 | 24459 | 30439 | 36224 | 41376 | 47243 | 51458 |
| Cholera | 2 | 4 | 5 | 1 | 5 | 3 | 3 | 3 |
| Cryptosporidiosis | 1152 | 1629 | 3273 | 1223 | 1684 | 3212 | 3205 | 2877 |

CONFIDENCE BUILDING MEASURE B(i)

[Form B(i) continued]

| Disease | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007* |
|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Dengue | 198 | 131 | 170 | 861 | 351 | 221 | 188 | 322 |
| Diphtheria | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Donovanosis | 22 | 32 | 17 | 16 | 10 | 13 | 6 | 3 |
| Flavivirus NEC | 67 | 87 | 73 | 60 | 61 | 27 | 32 | 23 |
| Gonococcal infection | 5893 | 6287 | 6440 | 6790 | 7183 | 8084 | 8592 | 7622 |
| Haemolytic uraemic syndrome | 17 | 3 | 13 | 15 | 16 | 20 | 13 | 20 |
| Haemophilus influenzae type b | 27 | 20 | 31 | 19 | 15 | 17 | 22 | 17 |
| Hepatitis (NEC) | 1 | 3 | 0 | 0 | 0 | 0 | 1 | 0 |
| Hepatitis A | 816 | 539 | 392 | 431 | 319 | 327 | 280 | 164 |
| Hepatitis B (incident) | 415 | 421 | 392 | 348 | 283 | 251 | 293 | 290 |
| Hepatitis B (unspecified) | 7767 | 8035 | 6673 | 5814 | 5788 | 6327 | 6244 | 7520 |
| Hepatitis C (incident) | 535 | 693 | 452 | 520 | 453 | 376 | 437 | 354 |
| Hepatitis C (unspecified) | 19688 | 19433 | 15611 | 13680 | 12726 | 12009 | 11994 | 13034 |
| Hepatitis D | 28 | 20 | 22 | 27 | 29 | 30 | 31 | 34 |
| Hepatitis E | 12 | 14 | 12 | 12 | 28 | 30 | 24 | 18 |
| Hydatid infection | 4 | NN | NN | NN | NN | NN | NN | NN |
| Influenza (laboratory confirmed) | 104 | 1293 | 3669 | 3481 | 2136 | 4565 | 3258 | 10703 |
| Japanese encephalitis | 0 | 0 | 0 | 1 | 1 | | | |
| Kunjin virus | 4 | 5 | | 18 | 12 | 1 | 3 | 1 |
| Legionellosis | 470 | 311 | 315 | 333 | 312 | 331 | 350 | 313 |
| Leprosy | 4 | 10 | 6 | 5 | 7 | 10 | 5 | 12 |
| Leptospirosis | 239 | 246 | 160 | 126 | 177 | 129 | 147 | 106 |
| Listeriosis | 67 | 64 | 62 | 69 | 67 | 54 | 61 | 50 |
| Malaria | 967 | 717 | 468 | 592 | 557 | 822 | 771 | 578 |
| Measles | 110 | 141 | 32 | 93 | 45 | 10 | 125 | 11 |
| Meningococcal infection | 628 | 686 | 689 | 558 | 405 | 392 | 317 | 311 |
| Mumps | 212 | 116 | 69 | 77 | 102 | 241 | 275 | 584 |
| Murray Valley encephalitis | 16 | 6 | 2 | 0 | 1 | 2 | 1 | 0 |
| Ornithosis | 102 | 137 | 213 | 200 | 239 | 164 | 171 | 97 |
| Pertussis | 5981 | 9510 | 5564 | 5096 | 8757 | 11201 | 10997 | 5472 |
| Pneumococcal disease (invasive) | 538 | 1762 | 2441 | 2232 | 2370 | 1745 | 1453 | 1498 |
| Q fever | 574 | 693 | 795 | 560 | 464 | 353 | 407 | 458 |
| Ross River virus infection | 4224 | 3227 | 1459 | 3850 | 4209 | 2544 | 5490 | 4183 |
| Rubella | 322 | 264 | 253 | 54 | 31 | 31 | 59 | 36 |
| Salmonellosis (NEC) | 6194 | 7053 | 7880 | 7011 | 7844 | 8425 | 8255 | 9725 |
| Shigellosis | 491 | 567 | 507 | 442 | 520 | 729 | 545 | 618 |

Attachment 3.1 *continued*

CONFIDENCE BUILDING MEASURE B(i) *[Form B(i) continued]*

| Disease | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007* |
|---------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| SLTEC/VTEC | 43 | 46 | 59 | 52 | 49 | 86 | 70 | 111 |
| Syphilis | 2101 | 1830 | 2013 | 2005 | 138 | 1 | 42 | 49 |
| Syphilis - Infectious | 177 | 251 | 359 | 453 | 622 | 641 | 830 | 1291 |
| Syphilis - duration more than 2 years | 1,602 | 1,135 | 1,084 | 1,204 | 1583 | 1598 | 1819 | 1793 |
| Tetanus | 8 | 3 | 4 | 4 | 5 | 2 | 3 | 3 |
| Tuberculosis | 1520 | 1430 | 1131 | 1048 | 1138 | 1083 | 1193 | 1131 |
| Typhoid | 58 | 75 | 69 | 51 | 76 | 52 | 77 | 91 |

NA - not available

NN - not nationally notifiable in that year

NEC - Not Elsewhere Classified

* 2007 provisional figures only

Information relevant to Measure B(ii) – no formal declaration necessary, as explained on Form B(i)

Background information on outbreaks of reportable infectious diseases

(B) Animal disease

The Australian Government Department of Agriculture, Fisheries and Forestry is responsible for national coordination on animal health matters and for providing reports on Australia's animal health status, including a joint annual return to the World Organisation for Animal Health (OIE), the Food and Agriculture Organization (FAO) and the WHO.

The following sections contain information on significant animal disease events/issues in 2007. Australia publishes quarterly reports⁴ and annual reports⁵ on animal health incidents and status, as well as providing emergency, monthly, quarterly and annual reports to the World Organisation for Animal Health (OIE)⁶. Australia's status for OIE-listed diseases for 2007 is shown in the table that follows.

⁴ <http://www.animalhealthaustralia.com.au/status/ahia.cfm>

⁵ <http://www.animalhealthaustralia.com.au/status/ahsq.cfm>

⁶ http://www.oie.int/eng/info/en_infoan.htm

Status for OIE-listed diseases in 2007

| Disease | Status | Date of last occurrence and notes |
|---|----------------------|---|
| Multiple-species diseases | | |
| Anthrax | Present | Limited distribution |
| Aujeszky's disease | Free | Never occurred |
| Bluetongue | Viruses present | Restricted to specific northern areas of the country; sentinel herd program |
| Brucellosis (<i>Brucella abortus</i>) | Free | Australia declared freedom in 1989 |
| Brucellosis (<i>B. melitensis</i>) | Free | |
| Brucellosis (<i>B. suis</i>) | Serological evidence | Occurs only in feral pigs in northern Australia |
| Crimean Congo haemorrhagic fever | Free | Never occurred |
| Echinococcosis/hydatidosis | Present | |
| Foot-and-mouth disease | Free | 1872; officially recognised by OIE as free without vaccination |
| Heartwater | Free | Never occurred |
| Japanese encephalitis | Serological evidence | Detected annually in Torres Strait, and on Cape York in 1998 and 2004 |
| Leptospirosis | Present | |
| New World screw-worm fly (<i>Cochliomyia hominivorax</i>) | Free | Never occurred |
| Old World screw-worm fly (<i>Chrysomya bezziana</i>) | Free | Never occurred |
| Paratuberculosis | Present | National control/management programs |
| Q fever | Present | |
| Rabies | Free | 1867 |
| Rift Valley fever | Free | Never occurred |
| Rinderpest | Free | 1923; officially recognised by OIE as free |
| Trichinellosis | Not reported | <i>Trichinella spiralis</i> not present; <i>T. pseudospiralis</i> present in wildlife |
| Tularaemia | Free | Never occurred |
| Vesicular stomatitis | Free | Never occurred |
| West Nile fever | Free | Never occurred |
| Cattle diseases | | |
| Bovine anaplasmosis | Present | |
| Bovine babesiosis | Present | |
| Bovine genital campylobacteriosis | Present | |
| Bovine spongiform encephalopathy | Free | Never occurred; National Transmissible Spongiform Encephalopathy Freedom Assurance Program includes surveillance; official OIE 'negligible risk' status |
| Bovine tuberculosis | Free | Australia declared freedom in 1997; because of the nature of the disease, sporadic residual cases may occur (the last case was in 2002) |
| Bovine viral diarrhoea | Present | Bovine viral diarrhoea virus (BVDV) 1 — present; BVDV 2 — never occurred |

| | | |
|--|----------------------|--|
| Contagious bovine pleuropneumonia | Free | 1967; Australia declared freedom in 1973; officially recognised by OIE as free |
| Enzootic bovine leucosis | Present | Voluntary accreditation and testing programs in place; very low prevalence |
| Haemorrhagic septicaemia | Free | Never occurred; strains of <i>Pasteurella multocida</i> present, but not the 6b or 6e strains that cause haemorrhagic septicaemia |
| Infectious bovine rhinotracheitis/infectious pustular vulvovaginitis | Present | Bovine herpesvirus (BHV) 1.2b — present; BHV 1.1 and 1.2a — never occurred |
| Lumpy skin disease | Free | Never occurred |
| Malignant catarrhal fever (wildebeest only) | Free | |
| Theileriosis | Free | Nonpathogenic <i>Theileria buffeli</i> only present; <i>T. parva</i> and <i>T. annulata</i> not present |
| Trichomonosis | Present | |
| Trypanosomosis (tsetse borne) | Free | Never occurred |
| Sheep and goat diseases | | |
| Caprine arthritis/encephalitis | Present | |
| Contagious agalactia | Not reported | <i>Mycoplasma agalactiae</i> has been isolated, but Australian strains do not produce agalactia in sheep |
| Contagious caprine pleuropneumonia | Free | Never occurred |
| Enzootic abortion of ewes (ovine chlamydiosis) | Not reported | Never occurred |
| Maedi–visna | Free | Never occurred |
| Nairobi sheep disease | Free | Never occurred |
| Ovine epididymitis (<i>Brucella ovis</i>) | Present | Voluntary accreditation schemes in all states |
| Peste des petits ruminants | Free | Never occurred |
| Salmonellosis (<i>Salmonella Abortusovis</i>) | Free | Never occurred; <i>S. Abortusovis</i> was isolated in 1994 from two children, but surveillance has shown no evidence of infection in sheep |
| Scrapie | Free | 1952 |
| Sheep-and-goat pox | Free | Never occurred |
| Equine diseases | | |
| African horse sickness | Free | Never occurred |
| Contagious equine metritis | Free | 1980 |
| Dourine | Free | Never occurred |
| Equine encephalomyelitis (Eastern) | Free | Never occurred |
| Equine encephalomyelitis (Western) | Free | Never occurred |
| Equine infectious anaemia | Present | Limited distribution/sporadic occurrence |
| Equine influenza | Present | Outbreak occurred in last quarter of 2007; the last reported case occurred on 25 December 2007. |
| Equine piroplasmiasis | Free | Last reported in 1976 |
| Equine rhinopneumonitis | Present | |
| Equine viral arteritis | Serological evidence | |

| | | |
|---|-----------------|---|
| Glanders | Free | 1891 |
| Surra (<i>Trypanosoma evansi</i>) | Free | Never occurred |
| Venezuelan equine encephalomyelitis | Free | Never occurred |
| Swine diseases | | |
| African swine fever | Free | Never occurred |
| Classical swine fever | Free | 1962 |
| Nipah virus encephalitis | Free | Never occurred |
| Porcine cysticercosis | Free | Never occurred |
| Porcine reproductive and respiratory syndrome | Free | Never occurred |
| Swine vesicular disease | Free | Never occurred |
| Transmissible gastroenteritis | Free | Never occurred |
| Avian diseases | | |
| Avian chlamydiosis | Present | |
| Avian infectious bronchitis | Present | |
| Avian infectious laryngotracheitis | Present | |
| Avian mycoplasmosis (<i>Mycoplasma gallisepticum</i>) | Present | |
| Avian mycoplasmosis (<i>M. synoviae</i>) | Present | |
| Duck virus hepatitis | Free | Never occurred |
| Fowl cholera | Present | |
| Fowl typhoid | Free | Last reported in 1952 |
| Highly pathogenic avian influenza | Free | 1997 |
| Infectious bursal disease (Gumboro disease) | Present | Infectious bursal disease occurs in a mild form; Gumboro disease does not occur |
| Low pathogenic notifiable avian influenza (poultry) | Free | Not present |
| Marek's disease | Present | |
| Newcastle disease | Viruses present | Last reported 2002 |
| Pullorum disease | Present | Not in commercial chickens |
| Turkey rhinotracheitis | Free | Never occurred |
| Lagomorph diseases | | |
| Myxomatosis | Present | Used as a biological control agent for wild rabbits |
| Rabbit haemorrhagic disease | Present | Used as a biological control agent for wild rabbits |
| Bee diseases | | |
| Acariosis of bees | Free | Never occurred |
| American foulbrood | Present | |
| European foulbrood | Present | |
| Small hive beetle | Present | Restricted distribution |
| <i>Tropilaelaps</i> mite | Free | Never occurred |
| Varroosis | Free | <i>Varroa destructor</i> has never been reported in Australia |

| Other diseases | | |
|----------------|----------------------|--|
| Camel pox | Free | Never occurred |
| Leishmaniosis | Novel organism found | A new <i>Leishmania</i> species has been isolated from skin lesions in a group of captive red kangaroos. Occasionally, cases of leishmaniosis are reported in imported dogs. |

Australia's status for other diseases of interest in 2007

| Disease | Status | Date of last occurrence and notes |
|---|---------|-----------------------------------|
| Actinomycosis | Present | |
| Avian encephalomyelitis | Present | |
| Avian leucosis | Present | |
| Avian salmonellosis (excluding fowl typhoid and pullorum disease) | Present | |
| Avian spirochaetosis | Present | |
| Blackleg | Present | |
| Botulism | Present | |
| Caseous lymphadenitis | Present | |
| Coccidiosis | Present | |
| Contagious ophthalmia | Present | |
| Contagious pustular dermatitis | Present | |
| Distomatosis (liver fluke) | Present | Restricted distribution |
| Enterotoxaemia | Present | |
| Equine coital exanthema | Present | |
| Filariosis | Present | |
| Footrot | Present | Restricted distribution |
| Infectious coryza | Present | |
| Intestinal salmonella infections | Present | |
| Listeriosis | Present | |
| Melioidosis | Present | Restricted distribution |
| Salmonellosis (<i>S. Abortusequi</i>) | Free | Never reported |
| Sheep mange | Free | 1896 |
| Strangles | Present | |
| Swine erysipelas | Present | |
| Toxoplasmosis | Present | |
| Ulcerative lymphangitis | Free | Never reported |
| Vibrionic dysentery | Present | |
| Warble fly infestation | Free | Never reported |
| Other clostridial infections | Present | |
| Other pasteurelloses | Present | |

Comments on selected OIE-listed diseases

Bluetongue

Bluetongue viruses capable of causing disease are only found in parts of the far north of the Northern Territory and Western Australia. Relatively nonpathogenic strains (types 1 and 21) are found on the east coast in Queensland and northern New South Wales. There is little overlap between the distribution of vectors of bluetongue virus and major sheep populations, because the climate conditions that favour sheep production are not conducive to the vectors.

Transmission of bluetongue virus was seen in the endemic areas of far northern Australia and coastal New South Wales; in Western Australia bluetongue virus it was detected in the central and north Kimberley, but has almost disappeared from the Pilbara region. In the Northern Territory, bluetongue virus activity was late, with a number of seroconversions detected in May and June. Activity in New South Wales appeared to start on the far north coast and extended inland to Yarrowitch (as in the previous year), but did not reach further south than Kempsey (in contrast to the previous year, when it reached Camden). In Queensland, activity was largely confined to northern herds. Incidence was lower than average in the Northern Territory, low to moderate in Queensland and low to high in coastal New South Wales. Serotyping in the Northern Territory was difficult because there appeared to be a new strain (possibly BTV1) circulating; isolates will be characterised by the Australian Animal Health Laboratory. There was no evidence of bluetongue viruses in proximity to any of the major sheep populations in any state. Nationally, the areas free from bluetongue virus are marginally smaller this year. All regions in southern Australia and most pastoral regions in eastern Australia remain free from the virus.

Anthrax

Anthrax is a notifiable animal disease subject to compulsory government controls including quarantine, disposal of carcasses, and vaccination. It is present in well-defined areas in the northern and northeastern districts of Victoria and central New South Wales. In these areas, anthrax has a low prevalence, and occurs only sporadically. Occasional outbreaks have occurred in other States. South Australia last recorded an outbreak in 1914, and Tasmania in 1933. Anthrax was diagnosed in Queensland in 1993 and 2002, and in Western Australia in 1995. The disease has never been reported in the Northern Territory. During 2007, there were seven confirmed incidents of anthrax in New South Wales, and one in Victoria.

Equine influenza

In August, equine influenza (EI) was diagnosed in an equestrian centre in central Sydney. Australia aimed to control and eradicate EI as quickly as possible. During the outbreak, a number of technical working groups, each with a specific focus, were established to ensure that the best possible technical advice was available and to mount an effective and rapid response. The initial horse standstill and subsequent movement restrictions, combined with strong messages on biosecurity, were effective in containing the disease to areas in New South Wales and Queensland. As the outbreak progressed, horse movements were carefully managed and only permitted where risk assessments determined that the chance of carrying EI to another area was very low. By the end of 2007, equestrian and racing events had recommenced where biosecurity could be effectively implemented and the risk had been assessed as low. Vaccine was used

during the outbreak to create buffer zones of vaccinated horses around areas of high disease incidence. Where appropriate, vaccination was also used to assist businesses that were at risk as a result of the outbreak. Australia so far remains on track to eradicate EI by mid-2008.

| |
|---|
| Information relevant to Measure B(ii) – no formal declaration necessary, as explained on Form B(i) |
|---|

Background information on outbreaks of reportable infectious diseases

(C) Plant diseases

The Australian Government Department of Agriculture, Fisheries and Forestry, through the Office of the Chief Plant Protection Officer, is the peak organisation that gathers information on pests of plants. The Department is notified of exotic incursions through State Government agricultural, forestry and natural resource agencies. It also provides national leadership in responding to incursions of exotic pests and diseases of plants.

New plant pests and diseases recorded in Australia for 2007

| Pest | Where Detected | State | Date of detection |
|-----------------------------|--|-------|-------------------|
| Sycamore Lace Bug | Plane Trees | NSW | 19/03/2007 |
| (Corythuca ciliata) | Carrots | NSW | 26/03/2007 |
| Powdery Mildew | Personal effects consignment | WA | 20/04/2007 |
| (Erysiphe heraclei) | Plane Trees | NSW | 8/05/2007 |
| Khapra Beetle | Cutting propagations | QLD | 23/05/2007 |
| (Trogoderma granarium) | Cherry tomato | WA | 8/06/2007 |
| Canker Stain | Commercial cultivated mushroom (agaricus bisporus) | VIC | 4/09/2007 |
| (Ceratocystis platani) | Brugmansia sp. in a nursery | NSW | 13/09/2007 |
| Chrysanthemum Chlorotic | On catmint within a greenhouse | SA | 26/09/2007 |
| Mottle Viroid | On surfaces of rotting scales | TAS | 15/10/2007 |
| Potato Spindle Tuber Viroid | On leaves of tomato plants | WA | 5/11/2007 |
| Hormiactis Cap Spotting | On two mango trees at a reseach station | NT | 13/11/2007 |

Information on outbreaks of infectious diseases and similar occurrences, that seem to deviate from the normal pattern

As noted on Form B(i), Australia had no outbreaks of infectious diseases and similar occurrences caused by toxins that deviate from the normal pattern. However, Attachments 3.1 and 3.2 of Form B(i) provide information relevant to that requested below.

1. Time of cognizance of the outbreak
2. Location and approximate area affected
3. Type of disease/intoxication
4. Suspected source of disease/
intoxication
5. Possible causative agent(s)
6. Main characteristics of systems
7. Detailed symptoms, when applicable
 - respiratory
 - circulatory
 - neurological/behavioural
 - intestinal
 - dermatological
 - nephrological
 - other
8. Deviation(s) from the normal pattern as regards
 - type
 - development
 - place of occurrence
 - time of occurrence
 - symptoms
 - virulence pattern

- drug resistance pattern
 - agent(s) difficult to diagnose
 - presence of unusual vectors
 - other
9. Approximate number of primary cases
10. Approximate number of total cases
11. Number of deaths
12. Development of the outbreak
13. Measures taken

Encouragement of publication of results and promotion of use of knowledge

At the Third Review Conference it was agreed that States parties continue to implement the following:

"Encouragement of publication of results of biological research directly related to the Convention, in scientific journals generally available to States parties, as well as promotion of use for permitted purposes of knowledge gained in this research."

Australia's submission of Confidence Building Measure C is at **Attachments 4.1 and 4.2**. Information relating to "Modality 2", below, is provided with respect to (A) The Australian Animal Health Laboratory (see Attachment 4.1), and (B) Defence Science and Technology Organisation (see Attachment 4.2).

Modalities

The Third Review Conference agreed on the following:

1. It is recommended that basic research in biosciences, and particularly that directly related to the Convention should generally be unclassified and that applied research to the extent possible, without infringing on national and commercial interests, should also be unclassified.
2. States parties are encouraged to provide information on their policy as regards publication of results of biological research, indicating, *inter alia*, their policies as regards publication of results of research carried out in research centres and laboratories subject to exchange of information under item A and publication of research on outbreaks of diseases covered by item B, and to provide information on relevant scientific journals and other relevant scientific publications generally available to States parties.
3. The Third Review Conference discussed the question of cooperation and assistance as regards the safe handling of biological material covered by the Convention. It concluded that other international forums were engaged in this field and expressed its support for efforts aimed at enhancing such cooperation.

Encouragement of publication of results and promotion of use of knowledge**(A) The Australian Animal Health Laboratory (AAHL)**

AAHL's policy is to encourage the publication of research results. The following were published by staff at AAHL during 2007.

Journal Articles

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(B) Human Protection and Performance Division, Defence Science Technology Organisation (DSTO)

The policy of the Defence Science and Technology Organisation is to publish results of a general scientific value in the open literature. Information that is more specialised and relevant particularly to defence is published in laboratory reports, which are unclassified and available to the public, unless they contain information that might prejudice the security of Australia or information that is commercial-in-confidence. It is envisaged that all results of the biological research will be either unclassified or “commercial-in-confidence”.

The Defence Health Services Division encourages the publication of scientific reviews of the literature in the biological defence area. Over the past 12 months, several articles have been published or accepted for publishing in the Australian and international scientific literature. These include:

Liu, C.Q., Tran, H., Alderton, M.R. Nuttall, S.D., Wilkins, M., Streltsov, V.A., Construction, crystal structure and application of a recombinant protein that lacks the collagen-like region of BclA from *Bacillus anthracis* spores, *Biotechnology and Bioengineering* July 2007 (in press).

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(C) The National High Security Laboratory (NHSQL)

The National High Security Laboratory (NHSQL) operates under the auspices of the Victorian Infectious Diseases Reference Laboratory (VIDRL). The laboratory only carries out a limited number of research activities that result in publication.

Gustavo Palacios, Druce J, Du L, Tran T, Birch C, Briese T, Conlan S, Phenix-Lan Q, Hui J, Marshall J, Simons J F, Egholm M, Paddock, C.D. M.P.H.T.M, Sun-Ju S, Goldsmith C.S, Zaki S. R, Catton M, Lipkin M.D. A New Arenavirus in a Cluster of Fatal Transplant-Associated Diseases. N.Engl Med 2008;358 p1-8

Active promotion of contacts

Australia’s submissions with respect to the information sought under Form D (Part 1a-g) and Form D (Part 2) are at **Attachments 5.1** and **5.2**, respectively.

1. Planned international conferences, symposia, seminars, and other similar forums for exchange

For each such event, the following information should be provided:

- a. name of the conference, etc.
- b. arranging organization(s), etc.
- c. time
- d. place
- e. main subject(s) for the conference, etc.
.....
- f. conditions for participation
- g. point of contact for further information, registration, etc.
.....
.....

2. Information regarding other opportunities

.....
.....
.....

Active promotion of contacts

Australia welcomes *bona fide* professional contact with other researchers in matters directly related to the Biological Weapons Convention. Contact should be made with the facility described in Form A, part 2 (iii).

1. Planned international conferences, symposia, seminars, and other similar fora in which Australia participated in 2007

BWC Regional Workshops, including specialised regional workshops on biosafety and biosecurity, have been convened to help BWC States Parties in South East Asia become better engaged with the Geneva-based intersessional program of work and related activities as a means to reduce the possibility of bioterrorism in the region, or the inadvertent assistance by states in the region to biological weapons programs being developed elsewhere.

DSTO is a contributing member of the Technical Cooperation Program (TTCP) CBD Group, and through a CBR MOU with Canada, US and the UK collaborates in matter directly relating to Biological Defence

Active promotion of contacts

2. Information regarding other opportunities

Declaration of legislation, regulations and other measures

| Relating to | Legislation | Regulations | Other measures | Amended since last year |
|---|-------------|-------------|----------------|-------------------------|
| (a) Development, production, acquisition or retention of microbial or other biological agents, or toxins, weapons, equipment and means of delivery specified in Article I | Yes | Yes | No | Yes |
| (b) Exports of micro-organisms* and toxins | Yes | Yes | Yes | No |
| (b) Imports of micro-organisms* and toxins | Yes | Yes | No | No |

In addition to the above summary, an overview of key Australian Government legislation relevant to the BWC is provided below:

Background

Australia has the following Australian Government legislation, regulations and other measures to declare under this confidence-building measure. Australia has taken a range of legislative and executive measures that ensure compliance with the UN Security Council Resolution 1540 (2004).

Australia is fully committed to the work of the 1540 Committee in ensuring global implementation of this resolution. As well as WMD-dedicated legislation, there is a considerable amount of health, safety and environmental legislation that control access to hazardous biological materials. The Australian Government is reviewing all WMD and hazardous materials controls, with a view to enhancing them if necessary for counter-terrorism purposes.

Chemical Weapons (Prohibition) Act 1994 and associated regulations

This Act, administered by the Australian Safeguards and Non-Proliferation Office within the Department of Foreign Affairs and Trade, gives effect to Australia’s obligations to the

Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction. The Act controls certain chemicals which may be used as weapons, including the natural toxins ricin and saxitoxin. The Act's general purpose criterion also applies to the hostile use of any chemical, including other toxins.

The Act extends to the acts of Australian citizens outside Australia. Contravention of the Act is an indictable offence.

Declaration of legislation, regulations and other measures

Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction. The Act controls certain chemicals which may be used as weapons, including the natural toxins ricin and saxitoxin. The Act's general purpose criterion also applies to the hostile use of any chemical, including other toxins. The Act extends to the acts of Australian citizens outside Australia. Contravention of the Act is an indictable offence.

Crimes (Biological Weapons) Act 1976

This Act, which is administered by the Attorney-General, makes it unlawful for Australians to develop, produce, stockpile or otherwise acquire or retain microbial or other biological agents or toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes; or weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict. The Act extends to the acts of Australian citizens outside Australia. Contravention of the Act is an indictable offence.

Crimes (Biological Weapons) Regulations 1980

These Regulations specify the way in which substances acquired under the Act should be stored, disposed of and analysed.

Customs Act 1901 and Customs (Prohibited Exports) Regulations

Under the *Customs Act 1901*, the *Customs (Prohibited Exports) Regulations 1958* prohibits the exportation from Australia of defence and dual-use goods listed in the 'Defence and Strategic Goods List' (DSGL) without prior permission from the Minister for Defence or an authorised person. Under the regulations, the Minister for Defence may authorise in writing a person employed in the Department of Defence to approve exports of defence and dual-use goods listed on the DSGL. Applications to export goods listed in the DSGL are considered on a case-by-case basis against published policy criteria to ensure exports of defence and dual-use goods are consistent with Australia's broader national interests and international obligations.

The DSGL is divided into two parts: Part 1 of the DSGL covers defence and related goods, which are those goods and technologies designed or adapted for use by armed forces or goods that are inherently lethal. Part 2 of the DSGL covers those goods that have a dual use. Dual-use goods comprise equipment and technologies developed to meet commercial needs, but which

may be used either as military components or for the development or production of military systems or weapons of mass destruction. As such, Part 2 includes human pathogens and toxins, animal pathogens, plant pathogens and equipment capable of being used to develop biological weapons.

The DSGL is amended from time to time to reflect changes in the various multilateral non-proliferation and export control regimes of which Australia is a member.

National Health Security Act 2007

The *National Health Security Act* was passed by the Australian Parliament in September 2007. It has two main operative parts; Part 2 of the Act enacts Australia's responsibilities under the International Health Regulations 2005 and formalises surveillance systems in Australia, while Part 3 establishes a regulatory scheme for biological agents of security concern. Part 3 of the Act enables a national authority (based in the Department of Health and Ageing) to regulate organisations that handle security sensitive biological agents. The Act establishes a list of agents to be regulated, a national register that is informed by mandatory reporting, purposes for which the agents may be handled, security (physical, personnel and transport) standards that must be met while handling agents, exemptions from regulation, and an inspection and auditing scheme to monitor compliance with the regulatory scheme.

Quarantine Act 1908 and associated regulations

The *Quarantine Act 1908* is designed to prevent the introduction of serious pests and diseases affecting humans, plants and animals into Australia. Accordingly, in conjunction with the *Biological Control Act* (see below), it controls the import into Australia of all biological material and may prohibit the import in some circumstances.

Responsibility for human quarantine is administered by the Minister for Health and Ageing through this Act. Responsibility for plant and animal quarantine is administered by the Minister for Agriculture, Fisheries and Forestry through this Act. All biological agents require prior permission to import. Under the provisions of section 13 of the Act, goods of biological origin, including human pathogenic microorganisms and toxins, may only be imported into Australia if approval has been given by a Director of Quarantine (Animal/Plant or Human). In giving approval, the Director may require that the importer adhere to certain conditions or requirements, including, but not limited to, the storage, transportation, distribution and disposal of the goods, the use to which the goods may be put, and the personnel authorised to handle or use the goods.

Import conditions vary depending on the nature of the organisms, and on the risks involved. High risk organisms such as serious pathogens of humans, animals and plants which might be considered as potential biological weapons would only be permitted under the most stringent, high security conditions. Very few such imports are approved, and generally those would be for diagnostic research in preparation for emergency responses to specific serious exotic disease incursions.

Penalties for the importation of controlled goods without a permit, and for breaches of permit requirements, are severe and may include a fine, imprisonment or both.

Biological Control Act 1984 and associated regulations

This Act is administered jointly by the Bureau of Rural Sciences and the Agriculture Industry Division of the Department of Agriculture, Fisheries and Forestry within the framework of the Federal Government's quarantine policy. It provides powers additional to those of the Quarantine Act in order to regulate the release of biological agents for the control of pests, diseases and weeds. It primarily covers issues of compensation for the release of a biological control agent.

Gene Technology Act 2000 and associated regulations

The object of this Act is to protect the health and safety of people and the environment from risks posed by, or as a result of, gene technology by identifying those risks and managing them by regulating certain dealings with genetically modified organisms (GMOs). Dealings include manufacturing, importing or conducting experiments with GMOs and require authorisation under legislation. In addition, there are legislative provisions for accreditation of organisations, certification of facilities and extensive monitoring and enforcement powers.

Therapeutic Goods Act 1989 and associated regulations

The Therapeutic Goods Administration of the Department of Health and Ageing regulates therapeutic goods for human use under this Act. The Act covers the import, manufacture, supply and export of therapeutic goods and includes pathogenic microorganisms where these are included in vaccines for human use.

Prior to initial supply for human use products must be entered in the Australian Register of Therapeutic Goods. Vaccines are registrable products and undergo evaluation by the Therapeutic Goods Administration prior to entry in the Register.

Weapons of Mass Destruction (Prevention of Proliferation) Act 1995 and associated regulations

The Act is administered by the Department of Defence and complements the existing controls contained in the *Customs Act 1901* and the *Customs (Prohibited Exports) Regulations*. The WMD Act and the associated Regulations provide the legislative basis for controlling the movement of goods and services that will or may assist in the development of a WMD program. It prohibits the supply or export of goods, not otherwise controlled by the *Customs Act*, or the provision of services, in circumstances where the goods or services may be used to assist in the development, production, acquisition or stockpiling of WMD, including biological weapons or their delivery systems. The prohibitions under the legislation apply where the person involved knows or suspects the connection with a WMD program, including a biological weapons program.

The Act applies extraterritorially as well as within Australia, covering the activities of Australian citizens or residents, as well as bodies incorporated in Australia. It provides a mechanism for

exporters to obtain written guidance from the Government on the risk of a particular planned transaction contributing to a biological weapons program.

Guidelines to prevent the inadvertent supply of biological weapons-applicable plant, equipment source cultures and expertise

The Guidelines are a non-statutory, non-proliferation measure, developed by the Department of Foreign Affairs and Trade, to raise the awareness of industry and researchers about the risk of inadvertent involvement in the biological weapons programs of other countries. The Guidelines have been circulated to biological industry, universities, relevant professional associations and government agencies.

Declaration of past activities in offensive and/or defensive biological research and development programmes

In addition to the following information, see **Attachment 6** for explanation of research related to biological warfare defence in Australia.

1. Date of entry into force of the Convention for the State party.

5 October 1977

2. Past offensive biological research and development programmes:

- YES – NO

No

- Period(s) of activities

Not applicable

- Summary of the research and development activities indicating whether work was performed concerning production, test and evaluation, weaponization, stockpiling of biological agents, the destruction programme of such agents and weapons, and other related research.

Not applicable, but see Attachment 6.

3. Past defensive biological research and development programmes:

- YES – NO

No

- Period(s) of activities

No, but see Attachment 6.

- Summary of the research and development activities indicating whether or not work was conducted in the following areas: prophylaxis, studies on pathogenicity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxinology, physical protection, decontamination, and other related research, with location if possible.

No, but see Attachment 6.

Declaration of past activities in offensive and/or defensive biological research and development programmes

**EXPLANATORY STATEMENT
RESEARCH AND DEVELOPMENT PROGRAMS RELATED TO
BIOLOGICAL WARFARE AND DEFENCE IN AUSTRALIA
SINCE 1 JANUARY 1946**

Between 1946 and 1994, Australia had no R&D program specifically aimed at defence against biological and toxin weapons. However, some methods for protection against chemical warfare agents could also be used to protect against biological agents. As Australia has had a longstanding R&D program to develop protection against chemical agents, it had, though only incidentally, also been involved in the development of means capable of offering some protection from biological weapons.

The Position at the end of World War II

During World War II, Australia acquired a protective capability against chemical and biological warfare (CBW), which included the equipping of military units with protective clothing, respirators, detection apparatus and decontamination equipment. This capability was associated with the threat of chemical warfare, as almost all of the major combatants possessed chemical weapons.

Australia had no biological weapons and knew little about them. While a need for some defence against them was generally perceived, no major specific steps were taken to achieve this. The tendency was to regard chemical and biological weapons as a single category of threat, with biological weapons treated as the lesser element.

The Situation from 1945 to the 1970s

In the late 1940s and 1950s Defence committees assessed the need for defence against biological agents. The view adopted was that if biological threats arose, Defence authorities would co-opt staff from public health facilities who were trained in microbiology and biological sciences.

In this Australia received limited information on biological defence from the United States of America, the United Kingdom and Canada through the Technical Cooperation Program (TTCP). Under TTCP, there is provision for collaborative research on biological defence, but Australia never participated in that research.

During the 1960s and 1970s some research was conducted in an Australian Defence laboratory on toxins and venoms from Australian animals and plants. The research had no biological warfare focus, and was undertaken solely for the purpose of developing expertise in toxicology. The results of the research were published in scientific journals, contributing to the open scientific literature.

Declaration of past activities in offensive and/or defensive biological research and development programmes

The Situation from 1970 to 1994

During this period the policy was to maintain a watching brief on developments in biological warfare defence research so that a competency could be maintained to advise on policy and to give direction to training for the Australian Defence Force. This competency was derived from open literature and from Australia's partners under The Technical Cooperation Program (TTCP). No research on defence against toxins (or other biological warfare agents) was undertaken during this period.

Australia did, however, maintain an R&D program into chemical defence and the protective aspects of this program and some incidental common utility in biological defence.

1994 – Present

In 1994, it was recognised that Australia's knowledge of toxins as warfare agents needed to be strengthened if appropriate advice on defensive measures was to be given to the Australian Defence Force and in support of the country's arms control objectives. Consequently, the Government gave approval to commence a modest program of Research into defence against toxins as warfare agents.

It was also recognised that the Government needed advice on defence against biological weapons if it was to pursue its aims of strengthening the Biological Weapons Convention. Consequently, the policy of maintaining only a watching brief on BW defence research was modified to allow research in BW defence that did not involve pathogenic reproducing organisms. Such activities as epidemiological studies, computer simulations and studies of the detection of toxins could then be undertaken.

In 1998, government approval was given for DSTO to undertake biological defence work with reproducing organisms up to Risk Group 3, with interdepartmental oversight of all such activities. This research allows Australia to play a larger part in those TTCP Panels that deal with BW defence research and obtain access to more information held by our cooperative partners. Australia still maintains its active program into researching protective aspects of defence against chemical agents and has expanded the scope to include defence against biological weapons (e.g. incorporation of antibacterials in carbon adsorbents).

Declaration of vaccine production facilities

CSL is the primary manufacturer licensed by the Australian Government pursuant to the *Therapeutic Goods Act 1989* to produce vaccines for the protection of humans included on the Australian Register of Therapeutic Goods (ARTG). The licence requires the manufacturer to comply with principles of Good Manufacturing Practice.

1. Name of facility:

CSL Limited

2. Location (mailing address):

45 Poplar Road
Parkville Victoria 3052
Australia

3. General description of the types of diseases covered:

Vaccine products must be entered in the Australian Register of Therapeutic Goods prior to supply of the products for human use. Registered products manufactured by CSL Limited are:

Diphtheria Vaccine
Diphtheria & Tetanus Vaccine
Influenza Vaccine
Plague Vaccine
Q fever Vaccine
Tetanus Toxoid Vaccine
Triple Antigen (Diphtheria, Tetanus, Pertussis)
Cholera Vaccine
Typhoid Vaccine
*Malarial Vaccine

* CSL manufactures the Malarial Vaccine for another sponsor, for export to Papua New Guinea only.

Note that Section 3, General Description of the Types of Diseases Covered, CSL Limited sponsor the following vaccines according to the Australian Register of Therapeutic Goods (ARTG):

Cholera Vaccine
Diphtheria and Tetanus Vaccine

Declaration of vaccine production facilities

Diphtheria Vaccine
Influenza Vaccine
Meningococcal Vaccine
Tetanus Toxoid Vaccine
Triple Antigen (Diphtheria, Tetanus, Pertussis)
Diphtheria, Tetanus, Pertussis and Hepatitis B Vaccine
Typhoid Vaccine
Q Fever Vaccine
Plague Vaccine
Yellow Fever Vaccine
Rotavirus Vaccine
Human Papilloma Virus Vaccine
Japanese Encephalitis Vaccine
Rabies Vaccine
Measles, Mumps, Rubella Vaccine
Measles, Mumps, Rubella, Varicella Vaccine
Rubella Vaccine
Varicella Vaccine
Hepatitis A Virus Vaccine
Hepatitis B Virus Vaccine
Haemophilus Influenzae Type B and Hepatitis B Virus Vaccine

There are other manufacturers in Australia with a GMP licence issued by the TGA to produce biological goods – this category includes, but is not limited to, vaccines. The list of these facilities may be accessed from the TGA on-line services home page at www.tgasime.health.gov.au and by selecting the link to “Australian Manufacturers Database”. The relevant manufacturers may be located by searching for appropriate terms, for example “biological” or “vaccines”. CSL may use one or more of such GMP-licensed manufacturers to supply components of its vaccines.

A search for the word “vaccines” identifies two additional manufacturers:

- Queensland Institute of Medical Research has been issued with a license that is restricted to the manufacture of clinical trial autologous vaccines for melanoma.
- Ludwig Institute for Cancer Research has been issued with a license that authorises quality control testing, packaging & labelling, & release for supply of peptide vaccines, monoclonal antibodies, recombinant proteins & other clinical trial products.

Neither of these manufacturers is listed on the ARTG as sponsors of vaccines (i.e. responsible for the commercial supply).