Queensland Ebola virus disease management plan

December 2014

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An electronic version of this document is available at www.health.qld.gov.au/ebola

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Acknowledgements

To meet the challenge of preventing or minimising Ebola virus disease transmission in Queensland, Queensland Health in collaboration with other key stakeholders has developed the *Queensland Ebola virus disease management plan* (QEVDMP).

This plan serves to guide and coordinate efforts to manage the Ebola virus disease in Queensland.

It was developed in consultation with the following agencies:

- Queensland Health
- Australian Government Department of Immigration and Border Protection
- Australian Government Department of Health
- Queensland Department of Communities, Child Safety and Disability Services
- Queensland Department of Housing and Public Works
- Police, Fire and Emergency Services Business Agency
- Multicultural Development Association
- Mater Refugee Health Service.

The development, implementation and revision of this plan are the responsibility of the Senior Director, Communicable Diseases Unit.

Proposed amendments to this plan are to be forwarded to:

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1. Introduction

1.1 Aim

The *Queensland Ebola virus disease management plan* aims to protect the health of Queenslanders through the rapid identification and management of people potentially infected with the Ebola virus disease (EVD).

The plan supports this aim by providing direction for disease surveillance, prevention and control measures, and educating the community, industry, clinicians and relevant professional groups.

1.2 Purpose

The plan provides strategic guidance for best practice clinical and public health management of EVD in Queensland.

1.3 Scope

The plan highlights four central components of EVD management:

- surveillance and reporting
- infection control
- clinical and public health management of cases and contacts
- public, professional and executive communication.

The plan provides strategic direction for the prevention and control of EVD in Queensland. It calls for continued and improved collaboration in EVD management between Queensland Health, other Queensland Government and Australian Government departments and agencies, and non-government stakeholders.

The plan should be read in conjunction with the following documents which are available on the Queensland Health website at www.health.qld.gov.au/ebola:

- *Interim guidelines for Ebola virus disease environmental cleaning in a community setting*
- *Interim guidelines for Ebola virus disease voluntary home restriction*
- *Interim guidelines for healthcare workers deployed to Ebola virus disease affected countries*
- *Interim guidelines for managing Ebola virus disease patients*
- *Interim infection control guidelines for the management of Ebola virus disease in Queensland*
- *Interim PPE guidelines for managing Ebola virus disease patients*.

Queensland Health staff can access the following documents via QHEPS (intranet):

- *Interim guidelines for healthcare workers caring for Ebola virus disease patients in Queensland*

- *Interim guidelines for deployable Ebola virus disease treatment teams*
- *Process for accessing Ebola virus disease PPE stockpile*
- *Suspected ebola virus infection – Pathology management plan*

1.4 Governance

The *Hospital and Health Boards Act 2011* authorises a chief executive to develop health service directives to respond to public health emergencies—these are binding for Hospital and Health Services (HHSs). A health service directive for the management of public health incidents of statewide concern has been approved by the chief executive (Department of Health) and was invoked on 21 October 2014 to ensure consistency in the management of EVD within Queensland Health.

The Chief Health Officer:

- is responsible for managing the Queensland Government's response to EVD
- is the State Health Coordinator, under the *Queensland Health Disaster Plan,* as the State Health Emergency Coordination Centre—Ebola Virus Disease Incident Management Team (SHECC EVD IMT) was activated on 15 October 2014
- will authorise and direct statewide strategies to be implemented within Queensland Health for EVD management in Queensland.

The Senior Director, Communicable Diseases Unit (CDU), Department of Health, is the State Health Incident Controller for the SHECC EVD IMT. If SHECC EVD IMT is stood down, the Senior Director, CDU, will assume the role of State Health Incident Controller for the CDU Incident Management Team for the management of EVD incidents in Queensland.

The SHECC EVD IMT is responsible for determining the strategies to prevent and/or control the risk of local transmission of EVD in Queensland. Strategies will be informed by advice from the Premier of Queensland, the Minister for Health (Queensland) and the Australian Government Department of Health, and will be developed in consultation with other Queensland Health services wherever possible.

HHSs and other Queensland Health services are required to develop local operational plans to implement the strategies of this plan.

1.5 Stakeholders

The implementation of this plan is reliant upon the support and cooperation of a range of stakeholders, including but not limited to:

- Queensland Health
- General Practice
- Australian Government Department of Immigration and Border Protection
- Australian Government Department of Agriculture
- Australian Government Department of Social Services
- Australian Government Department of Health
- Queensland Government Department of Communities, Child Safety and Disability Services

- Queensland Government Department of Housing and Public Works
- Police, Fire and Emergency Services Business Agency
- Queensland Government Department of Aboriginal and Torres Strait Islanders and Multicultural Affairs
- Queensland Government Department of Tourism, Major Events, Small Business and the Commonwealth Games
- Queensland Government Department of Science, Information, Technology, Innovation and the Arts
- Queensland Government Department of Agriculture, Fisheries and Forestry
- Queensland Government Department of Local Government, Community Recovery and Resilience
- Multicultural Development Association
- Mater Integrated Refugee Health Services.

2. Background

2.1 What is Ebola virus disease

EVD is an acute severe disease in humans with a 50–90 per cent mortality rate in cases in African countries. The mortality rate in Australia and other developed countries should be moderated through more timely access to healthcare resources and equipment.

The Ebola virus is introduced to the human population by direct contact between mucous membranes or broken skin, and the blood, organs, secretions or other bodily fluids of infected animals including fruit bats, chimpanzees, gorillas, monkeys, squirrels and forest antelope (often through the hunting or preparation of game or 'bushmeat'). Domestic dogs may be infected after coming into contact with infected animals or infectious human fluids, but there are no examples of them becoming ill or shedding the infectious Ebola virus. Insects have never been found to harbor or transmit the Ebola virus. There is no evidence that EVD is present in Australian bats or other animals.

Early identification and treatment of people with EVD can improve their health outcomes and the following basic interventions, when used early, can significantly improve their chances of survival:

- providing intravenous fluids and balancing electrolytes (body salts)
- maintaining oxygen status and blood pressure
- treating other infections if they occur.[1]

Refer to the *Interim guidelines for managing Ebola virus disease patients* for further information on the clinical management of cases.

Transmission of the Ebola virus between humans requires direct exposure to the blood or other bodily fluids (including, but not limited to vomit, urine, sweat, saliva, faeces, semen and breast milk) of an infected person, or objects and surfaces contaminated with the blood or other bodily fluids of people with EVD. It is important to note that there is no evidence that people infected with the Ebola virus can infect others until they have

symptoms. The risk of acquiring the Ebola virus from an infected person is extremely low, unless there has been direct exposure to that person's blood or other bodily fluids.

There have been no reported cases of EVD in humans in Australia.

2.2 Epidemiology

Since 1976, there have been more than 20 distinct EVD outbreaks encompassing approximately 2500 cases, mostly occurring in central African countries. The 2014 epidemic in West Africa was first identified in March and as at 19 December widespread and intense transmission of EVD is occurring in three countries (Guinea, Liberia, and Sierra Leone). Other countries have had imported cases with limited local transmission (Nigeria, Senegal, Spain, United States of America and Mali).

In 2014, a separate, unrelated Ebola virus outbreak began in Boende, Equateur, an isolated part of the Democratic Republic of Congo. The World Health Organization (WHO) was notified in mid-September 2014 and the country was declared EVD free on 20 November 2014.

Both Senegal and Nigeria controlled their outbreaks and were declared EVD free on 17 and 19 October 2014 respectively. As at 19 December 2014, there have been 18,603 reported confirmed, probable and suspected cases attributed to the West African epidemic and 6915 reported deaths according to the WHO. For current information on the Ebola virus outbreak in West Africa refer to the latest WHO situation report.

Crude calculations based solely on the reported case and fatality tallies in the West African outbreak suggest 37 per cent of cases identified were fatal. However, a more considered revision by WHO determined the case-fatality ratio to mid-December 2014 is 70 per cent. Figures vary by country, but the average number of new people infected by each case ranges from 1.71 to 2.02. These values also change within counties in the affected countries. Control measures are needed to reduce this figure below one to stop continuation of the epidemic.

Modelling by WHO and others suggests other countries at risk of case importation include Ghana, France, Ivory Coast, United Kingdom, Belgium, Gambia, Guinea-Bissau, Benin, Cameroon, the Central African Republic, the Democratic Republic of Congo, South Sudan, Mauritania, Togo and Burkina Faso. Travel restrictions are considered to only postpone the spread of EVD to other countries. Unaffected countries have been advised by WHO to prepare a health system response in anticipation of EVD introduction, and to raise awareness and knowledge among travellers to and from affected countries as well as among healthcare providers managing cases.

3. Surveillance

Early identification of people who may have been potentially infected with EVD is the cornerstone for preventing community transmission. Measures should be in place at as many potential entry points as possible to assist with early identification of potential cases and contacts, including international borders, hospitals, primary care facilities, ambulance services and 13 HEALTH (13 43 25 84).

The following section describes Queensland Health's recommended surveillance activities and the legislation that underpins the notification criteria for EVD. It also directs the reader to the appropriate resources to implement the recommended activities.

3.1 Case definition

The *Ebola Virus Disease (EVD) CDNA National Guidelines for Public Health Units* contain current information on case definitions, including the definition criteria for persons under investigation, suspected cases, probable cases and confirmed cases.

Enhanced surveillance should be undertaken to identify and assess persons who may have EVD using the EVD case report form which will be made available at www.health.qld.gov.au/ebola.

A person with clinical symptoms and limited epidemiological linkage to an EVD case is considered to be a person under investigation until a decision is made to test them for EVD, at which point they are regarded as a suspect case.

3.2 Contact definition

Section 11 of the *EVD CDNA National Guidelines for Public Health Units* provides detailed criteria to determine whether a person is considered a contact, based on an exposure risk assessment.

Contact exposure category	Definition
Casual contacts	No direct contact with the patient or body fluids, but who have been in the near vicinity of the patient.
Lower risk exposures	Household contact with an EVD case (in some circumstances this might be classified as higher risk, such as where the household was in a resource poor setting); or Close contact in healthcare or community settings where close contact is defined as: • being within approximately one metre of an EVD patient or within the patient's room or care area for a prolonged period of time (e.g. healthcare personnel, household members) while not wearing recommended personal protective equipment (PPE) (see Section 9. Case management – Infection control, isolation and restriction) • having direct brief contact (e.g. shaking hands) with a confirmed EVD patient while not wearing recommended personal protective equipment.
Higher risk exposures	Contacts with higher risk exposures have had direct contact with the patient or their bodily fluids: • percutaneous (e.g. needle stick) or mucous membrane exposure to blood or body fluids of an EVD patient • direct skin contact exposure to blood or body fluids of an EVD patient without appropriate PPE • laboratory processing of body fluids of suspected, probable or confirmed EVD cases without appropriate PPE or standard biosafety precautions; or • direct contact with a dead body without appropriate PPE.

Potential contacts in Queensland will be assessed using an approved EVD exposure assessment form.

In Queensland, healthcare workers (HCWs) returning from caring for an EVD case overseas will be considered a low-risk contact if no PPE breaches are reported. An identified PPE breach would classify them as a high-risk exposure.

HCWs caring for a case in Queensland will be managed in accordance with the *Interim guidelines for healthcare workers caring for Ebola virus disease patients in Queensland* (accessible via QHEPS only).

3.3 Notification requirements

EVD is a quarantinable disease under the *Quarantine Act 1908*.

Border protection officers at international borders are required to notify a human quarantine officer (HQO) of persons with symptoms suggestive of EVD, as assessed using a prescribed checklist.

EVD is a controlled notifiable condition under Schedule 2 of the Public Health Regulations 2005 and as such the following criteria apply:

- EVD is immediately notifiable in Queensland on pathology request, pathological diagnosis and provisional diagnosis.
- Clinicians who suspect a person may have EVD must immediately notify the public health physician (PHP) at their local public health unit.
- Pathology services that receive a pathology request for EVD must also immediately advise the PHP at their local public health unit.

3.4 Border surveillance

Travellers entering Australia from countries with widespread and intense transmission of EVD may potentially be infected with EVD and therefore may pose a potential public health risk. To determine whether a person entering Australia may have been infected with EVD, the following measures have been put in place in Queensland:

- Airline staff will report the name and passport details of any passengers who are unwell during the flight to operational staff at the international airport as soon as the person is identified as being unwell. The Australian Government Department of Immigration and Border Protection will check the travel history of the unwell passenger and, if they have been in an area of intense and widespread Ebola virus transmission, the Australian Government Department of Agriculture officers at the airport will be immediately advised. These agriculture officers will contact either the CHQO or the HQO (C/HQO) to advise them of the situation. In this situation the unwell passenger will be assessed by a health officer immediately upon arrival at the airport (refer to Appendix 1 flow-chart).
- All travellers arriving in Australia are currently required to complete a travel history form to advise if they have travelled to an area of intense and widespread transmission of EVD in the previous 21 days.
- The travel history form is collected by border protection officers, who refer travellers who have been in a country with widespread and intense transmission of EVD in the previous 21 days to agriculture officers for assessment.

- All travel history forms are collected and collated by the Australian Government Department of Immigration and Border Protection daily. A collated list of travellers who were referred to agriculture officers for assessment is provided on a daily basis to the CHQOs in all states and territories.
- Information on travellers who were assessed in a Queensland airport and/or travellers who travelled directly onwards to Queensland is sent to public health units for a follow-up.

The following section outlines the process based on assessment outcomes by the Department of Agriculture officers:

Symptomatic travellers

- If the traveller has a temperature of 37.5ºC or higher, but is otherwise well, a second confirmatory reading will be taken after five minutes. If the person remains febrile the agriculture officer will contact the C/HQO.
- If the traveller advises the agriculture officer that he/she is unwell, with or without a fever, the officer will contact the C/HQO.
- The C/HQO may request a Queensland Ambulance Service (QAS) officer attend to assess the traveller, to re-take the traveller's temperature and provide further clinical advice to the C/HQO to enable a decision to be made on whether the traveller requires testing for EVD.
- Where the C/HQO determines that a symptomatic traveller requires further assessment and testing for EVD, the C/HQO will arrange for QAS to transfer the traveller to an EVD treatment or receiving hospital. (Refer to Section 5.1.1 for detailed information on the management of a person under investigation who presents at the border)

Asymptomatic travellers with identified risk exposure

- If a traveller being assessed by a Department of Agriculture officer answers yes to any of the high-risk exposure questions, the officer will contact the C/HQO for further assessment of the traveller.
- The C/HQO will undertake a more thorough assessment of the traveller's exposure risk and will manage the traveller in accordance with the assessed risk (refer to Section 5.2 for more detail on contact management).

Asymptomatic travellers with no identified risk exposure

- Asymptomatic travellers who have no other identified risk factors will be provided with information and a 24-hour number to call if they become unwell. Public health units will make contact with those passengers within 24 hours of receipt of contact details from the Australian Government Department of Immigration and Border Protection to undertake a more comprehensive exposure assessment using the EVD exposure assessment form.
- Public health units contact all travellers from countries with widespread and intense transmission of EVD assessed at the border by Department of Agriculture officers within 24 hours to undertake a more comprehensive exposure risk assessment to determine the level of public health surveillance required (refer to Section 5.2 for more detail on contact management).

3.5 Hospital and primary care surveillance

Although public health surveillance mechanisms are in place to monitor the health of people who have recently returned from countries with widespread and intense transmission of EVD it is possible that a returned traveller may become unwell and seek initial medical assistance at a general practice, hospital, ambulance or by calling 13 HEALTH (13 43 25 84).

While the risk of this form of presentation is very low, emergency departments and general practitioners should monitor all presentations for a return from countries with widespread and intense transmission of EVD in the last 21 days. Patient alerts and triage algorithms (see Appendix 3) can assist these services to implement enhanced surveillance for people who may be infected with EVD.

If a person is very unwell, they may call an ambulance for assistance with getting to a hospital. QAS call centres should implement their standard operating procedure to screen callers for recent travel to a country experiencing an EVD outbreak (as per the QAS Clinical, Quality and Safety Communiqué: Ebola Virus Disease).

3.6 Direct call from a member of public to 13 HEALTH (13 43 25 84) or a hospital

A sick person or their carer may seek medical advice by calling a health service in the first instance. This could be a service, such as 13 HEALTH (13 43 25 84), their local GP or hospital.

13 HEALTH has in place a standard operating procedure to screen callers for recent travel to a country with widespread and intense transmission of EVD. Anyone who contacts 13 HEALTH who has travelled to a country with widespread and intense transmission of EVD in the previous 21 days and is symptomatic or is concerned that they may have been exposed to a symptomatic person should be immediately referred to the PHP for assessment. If the person is critically unwell, he/she should be referred to QAS as an emergency and the QAS should be advised of the recent travel history. 13 HEALTH should immediately advise the PHP of the incident.

If a community member calls a hospital or general practice directly about possible symptoms of EVD, they should be transferred to 13 HEALTH for management as per above.

4. Infection control

Maintaining the safety of HCWs caring for a suspected, probable or confirmed EVD case and/or their environment is the highest priority in an EVD response. The core principles for minimising opportunities for disease transmission must be adhered to at all times:

- The patient should be isolated from other people in the highest containment room available.
- The number of people in direct contact with the case should be contained to the minimum required to maintain safe care.

- Appropriate PPE must always be worn during contact with the case and/or the contaminated environment.
- A trained observer (who is not allocated to patients) should always be on-site to monitor the HCWs providing care to the case and/or their environment, and ensure safe donning and removing of PPE.
- A clean patient environment should be maintained with strict adherence to waste management, including safe handling and disposal of sharps.

All HCWs, including nursing, medical laboratory staff, cleaners and waste management contractors, providing direct care for a person infected with EVD or their environment must do so in accordance with the *Interim infection control guidelines for the management of Ebola virus disease in Queensland* and the *Interim PPE guidelines for managing patients with Ebola virus disease*.

Hospital managers must ensure the infection control practices as outlined in the infection control guidelines are adhered to by all staff, including contractors, such as cleaning and waste management contractors.

Mortuary workers should comply with the *Interim guidelines for managing deceased persons with Ebola virus disease* which will be available at www.health.qld.gov.au/ebola.

QAS has in place a Clinical, Quality and Safety Communiqué that outlines the infection control measures all ambulance officers are to adopt during a response and the transport of a suspected or confirmed EVD case.

5. Clinical and public health management of suspected/confirmed cases and contacts

Queensland Health has an obligation under the *Public Health Act 2005* to protect and promote the health of Queensland's population. Due to the severity of EVD, limiting the opportunities for EVD transmission in the community and hospital settings is the underpinning principle for the management of cases and contacts.

HCWs are particularly vulnerable to EVD exposure as they provide direct care to infected persons for extended periods of time and during the secretary phase, which can increase the opportunities for unintended exposures to occur.

5.1 Cases

5.1.1 Management of a person under investigation who presents at the border

Where the C/HQO is advised by an Australian Government Department of Agriculture officer of an unwell person who is inflight from a country with intense and widespread transmission of EVD, the C/HQO will arrange for an appropriate health officer to meet the plane and undertake a clinical assessment of the traveller (refer to Appendix 1 flow-chart).

Where it is determined that the symptomatic traveller meets the criteria of a suspected case and requires testing for EVD, the C/HQO will:

- advise the Department of Agriculture officer(s) of the assessment and intended management of the case
- organise road or air transfer of the traveller to a receiving EVD hospital. The C/HQO is responsible for liaising with the air or road retrieval service, and advising of the need for appropriate PPE
- contact the State Health Incident Controller to advise of the suspected case
- provide the State Health Incident Controller with details of case, flight number and seat allocation (if known) to enable the passenger manifest to be urgently sought from the National Incident Room (NIR)
- contact the person in charge of the emergency department and/or the infectious diseases physician at the receiving EVD hospital and advise them of the incoming suspected case. If the suspected case cannot be immediately transferred to a designated receiving/treatment hospital (e.g. case clinically unstable, logistical issues), the C/HQO will contact the nearest appropriate hospital and advise them of the incoming suspected case
- seek information from the Department of Agriculture officer(s) on any travelling companions or persons known to have had direct contact with blood or other body fluids from the suspected case, including persons sitting one seat away from the suspected case on the aircraft in all directions, and ensure their contact details are available
- ask customs officers to ensure contact details are available for all passengers on the same plane as the suspected case; this information should be completed on the Ebola information card by all incoming passengers to international ports
- provide details of the suspected case and contact details of any travelling companions and any other passengers known to have been in close contact with the suspected case (as per above) to the PHPs in the response area(s)
- notify Forensic and Scientific Services of the suspected case and that testing will be required.

Travellers with a fever and who have been in areas with intense and widespread transmission of EVD in the last 21 days, but have not been identified inflight, will be identified at the border by Department of Agriculture officers as per Section 3.4.

The C/HQO are to advise the SHECC EVD IMT/CDU IMT of all persons who they have assessed at the border following notification from a Department of Agriculture officer.

SHECC EVD IMT/CDU IMT will provide a weekly report on all persons assessed at the border by C/HQO to the Chief Health Officer for submission to the Australian Government Department of Health.

5.1.2 Management of a person under investigation who presents at a general practice

All general practices should be alert for symptomatic patients that have travelled to a country with intense and widespread EVD transmission in the past 21 days.

A symptomatic person who has travelled to a country of concern in the last 21 days should immediately be placed in a single room. Nobody should have direct unprotected

contact with the person and no clinical samples are to be taken. It is not necessary to measure the temperature.

If direct contact is unavoidable, a single staff member should be assigned. The staff member must use appropriate protection, including a P2 mask, disposable fluid resistant gown, double gloves and eye protection (e.g. goggles or face shield). Information for general practices regarding EVD is available on the Australian Government Department of Health website.

The PHP should be contacted immediately by the GP.

On advice from a GP that they suspect EVD, the PHP should:

- determine whether the person meets the criteria of a suspected case
- reinforce with the GP the recommended infection control measures required to prevent transmission of EVD
- liaise with the infectious diseases physician and/or Director of Emergency Medicine at the receiving (preferably designated treatment) EVD hospital to arrange assessment and testing for a suspected case
- organise ambulance transfer of the patient to the hospital and advise the QAS of the suspected EVD diagnosis
- advise the State Health Incident Controller of the suspect case
- notify Forensic and Scientific Services of the suspected case and that testing will be required.

5.1.3 Management of a person under investigation who presents via the Queensland Ambulance Service

Where QAS suspects that a person they are responding to may have been exposed to EVD in the last 21 days (as per QAS call centre screening algorithm), responding officers should wear appropriate PPE as per the QAS Clinical, Quality and Safety Communiqué for EVD.

The QAS call centre should immediately contact SHECC EVD IMT, or if not available, 13 HEALTH for transfer to their local PHP to discuss the call and confirm the response requirements.

QAS should contact the hospital emergency department prior to arrival if they are transporting a person who they have assessed as having been potentially exposed to EVD in the last 21 days.

5.1.4 Management of a person under investigation who presents at hospital emergency departments

Two Queensland hospitals—the Royal Brisbane and Women's Hospital and Lady Cilento Children's Hospital—are currently the designated EVD treatment hospitals and, wherever possible, suspected, probable and confirmed EVD cases will be managed in these facilities. Gold Coast University Hospital, Cairns Hospital, Princess Alexandria Hospital, Townsville Hospital and Cairns Hospital are also designated as receiving hospitals for suspected EVD cases due to their close proximity to international airports.

However, as circumstances may arise that prevent a suspected, probable or confirmed EVD case being managed in one of the designated EVD treatment hospitals, all hospitals should be prepared to manage unexpected presentations to emergency departments.

All emergency departments should be actively screening people who present to determine any recent travel to an area with intense and widespread EVD transmission in the last 21 days (refer to Appendix 3).

If a symptomatic person advises they have been in an area of concern in the last 21 days, they should be immediately placed in a single room in accordance with the patient placement plan in the *Interim infection control guidelines for the management of Ebola virus disease in Queensland* while further information is gathered.

Staff should be limited to those required to undertake an immediate assessment and provide any urgent medical care. Full recommended EVD PPE should be worn by staff attending the patient until a diagnosis of EVD is discounted (refer to *Interim PPE guidelines for managing patients with Ebola virus disease*).

If on assessment the patient is suspected to have EVD, the emergency department must immediately notify the PHP.

If the hospital is not a designated EVD treatment hospital, the State Health Incident Controller should immediately lead and coordinate a teleconference with the PHP, the hospital's infectious diseases physician, Director of Emergency Medicine, Chief Health Officer (if available), and the Director Retrieval Services/QAS (depending on distance) to determine whether it is safe to transport the patient to a designated hospital for testing and management.

Where clinically appropriate and safe to do so, suspected, probable or confirmed EVD cases within two hours of a designated EVD treatment hospital will be transported by road ambulance. In special situations, ambulance services may be able to transport cases by road up to four hours from a designated hospital.

Air retrieval services can transport suspected and confirmed EVD cases in an ISOPOD (a single-person isolation transport pod), where it is clinically justified, physically and logistically safe, and where the patient is mentally sound to undertake the air retrieval.

Where it is not safe for the patient to be transferred, the option of flying in a specialist EVD team to manage the patient on-site will be considered (refer to the *Interim guidelines for managing Ebola virus disease patients* and the *Interim guidelines for deployable Ebola virus disease treatment teams*, accessible via QHEPS only).

5.1.5 Clinical management of a suspected, probable or confirmed EVD case

Staff safety is a priority when determining appropriate clinical care for EVD patients. This includes:

- limiting the number of staff who have contact with the case
- ensuring PPE is available and used correctly by all staff
- considering the potential impacts of any procedures on disease transmission opportunities.

GPs should not undertake any clinical management of a person with suspected EVD.

All suspected, probable and confirmed cases of EVD should be managed in hospitals in a single room, with an anteroom where available, in accordance with the *Interim infection control guidelines for the management of Ebola virus disease in Queensland*.

If a sample collected from a patient at the very early stages of illness returns a negative result on EVD polymerase chain reaction (PCR), a follow-up PCR at least three days post-development of symptoms is required if the clinical picture remains compatible and if there is no alternative diagnosis available through other testing.

Decisions on clinical management of the case should be in accordance with the *Interim guidelines for managing Ebola virus disease patients*.

5.1.6 Collection of specimens and pathology testing

The Ebola virus is highly infectious in blood, therefore other laboratory tests on suspected EVD cases should be limited to urgent tests required for immediate clinical care only until EVD is excluded.

Persons collecting, transporting and testing specimens for Ebola virus should maintain strict adherence to the recommended infection control procedures as found in the Public Health Laboratory Network guidelines *Laboratory procedures and precautions for samples collected from patients with suspected viral haemorrhagic fevers* and the *Interim infection control guidelines for the Ebola virus disease in Queensland*.

The collection of specimens (primarily blood) for EVD testing and any other urgent tests are to be undertaken by the treating clinicians caring for the suspected or probable case. The clinician collecting the specimens should be competent in the collection procedure, and the safe and correct use of PPE.

All specimens are to be collected and labelled in accordance with (for Queensland Health facilities) Pathology Queensland's *Suspected ebola virus infection – Pathology management plan* (accessible via QHEPS only).

Specimens are to be submitted to the Central Specimens Reception (CSR). Specimens should be packed in accordance with IATA-compliant Category-A packaging requirements, which includes double bagging and packing in a rigid outer packaging of adequate strength for its capacity, weight and intended use. The container should be sealed and clearly marked **'DO NOT OPEN IN CSR'**. The receiving laboratory must be notified of specimens on route.

The CSR are responsible for ensuring proper identification, handling and transportation of specimens to Forensic and Scientific Services, the designated laboratory for testing for EVD in Queensland, including advising them of the expected time of arrival.

For road transportation, the normative triple packaging system applies; however, for air transportation of samples, Category-A transportation and IATA packing should be consistent with the National Pathology Accreditation Advisory Council's guidelines *Requirement for the Packaging and Transport of Pathology Specimens and Associated Materials.*

Forensic and Scientific Services will advise the Senior Director, CDU, Department of Health, and the relevant PHP of test results. The Senior Director will notify the Chief Health Officer and the treating physician.

Parallel testing will occur at the Victorian Infectious Diseases Reference Laboratory (VIDRL) for confirmation purposes. The Ebola virus is a security sensitive biological agent and, if confirmed, the Security Sensitive Biological Agent (SSBA) Regulations would apply.

Of note, more rapid diagnostic methods are under evaluation internationally to confirm EVD. Two of these methods test blood from a finger-prick and within minutes the presence of viral proteins in the blood can be detected. One of these devices is currently under trial in Guinea. Additionally, a faster, closed PCR-based system is being trialled by Emory University Hospital.

Use of I-STAT machines

In some facilities I-STAT machines may be used in the patient room for urgent blood analysis. Where this occurs the following critera must apply:

- The HCW must wear full PPE when collecting the blood sample and using the I-STAT machine.
- The I-STAT machine must be cleaned as per manufacturer's instructions after each use.
- The cartridge and all other consumables are to be disposed of as clinical waste after use

5.2 Contacts

People who are infected with EVD, but not yet symptomatic, may pose a public health risk to the community if they become unwell. Due to the severity of EVD and the high mortality rate, Queensland has determined that any person who is assessed as having had low- or high-risk exposure to EVD will be asked to go into voluntary home restriction for 21 days from their last exposure to EVD. This section describes the contact management processes to be implemented in Queensland.

5.2.1 Identifying potential contacts

Contact tracing of persons potentially exposed to a confirmed case should be managed in accordance with *EVD CDNA National Guidelines for Public Health Units*.

Passengers on same flight as a sick person who is a person under investigation for EVD

Passengers who have been on a flight with a sick person who was notified to the international airport operations officers during the flight and who is being investigated for EVD, may need to be delayed briefly on the aircraft or on the tarmac (whichever is more suitable) to receive verbal and written information about their possible exposure to EVD and recommended management.

The C/HQO should request customs officers ensure contact details, including mobile phone numbers, are properly completed by all passengers on the Ebola information card to enable them to be contacted once test results are available for the suspected case.

If the suspected case is determined to be infected with EVD, all passengers will need to be contacted for an exposure assessment. 13 HEALTH will undertake a preliminary

assessment of each passenger's potential exposure to the case, using the aircraft exposure assessment screening tool. Those passengers with potential low- or high-risk exposure will be referred to the relevant public health unit for further assessment. Refer to Section 5.2.3 – Aircraft contacts.

If the suspected case is determined not to be infected, passengers will be advised by generic email or SMS text. Those passengers who have not provided an email address or mobile number will have been advised in the travel health alert notice provided at the airport to monitor the Queensland Health website for this information.

Identification and assessment at the border

Persons potentially exposed to EVD may also be identified and notified to the C/HQO (who is a PHP) by Department of Agriculture officers, who are assessing all persons who arrive from an EVD affected country (as detailed in Section 3.4).

All passengers are required to complete in English the Ebola information card, which advises if they have been in a country with intense and widespread EVD in the last 21 days.

Department of Agriculture officers will assess and take the temperature of all passengers arriving from areas of intense and widespread transmission of EVD and will refer any passengers with a temperature 37.5ºC or above to the C/HQO (after re-testing following a five minute wait for any passengers not obviously unwell and who do not report any symptoms).

Asymptomatic passengers from an EVD affected country who are assessed as having a potential exposure to EVD (based on a standard checklist) will be referred to the C/HQO for further assessment and management.

Asymptomatic passengers from an EVD affected country who are assessed at the border by the Department of Agriculture officers but have no identified exposure to EVD will be provided with a thermometer and information on how to report by telephone any fevers of 37.5ºC or above and other symptoms. They will be able to leave the airport and/or on-travel. Refer to Appendix 2 flow-chart.

Notification of all travellers from EVD affected countries identified at border

The Australian Government Department of Immigration and Border Protection will provide the Chief Human Quarantine Officers in each jurisdiction (in Queensland the Senior Director, CDU) with a daily contact list of all passengers who have been assessed by the border protection officers. The list will be distributed via SHECC EVD IMT to relevant PHUs, so any passengers not previously assessed at the border by the C/HQO can be contacted and a more comprehensive exposure history conducted using the EVD exposure assessment form.

The PHP will:

- establish contact with the returned traveller
- explain the context of the communication by the PHU
- provide the returned traveller with information as necessary
- complete the exposure assessment form

- remind the returned traveller to monitor their temperature and general health daily, and ring the PHU or 13 HEALTH if they become febrile (37.5ºC or above) and/or develop other symptoms
- provide a point of contact for advice/call for concerns
- contact the patient on a weekly basis until the patient has been out of the EVD affected country for 21 days
- provide SHECC EVD IMT with an initial report on the exposure assessment and a weekly update on the returned traveller's status.

If the patient on exposure assessment is deemed to be of low- or high-risk exposure, the procedures around voluntary home restriction are to apply.

The Australian Government Department of Immigration and Border Protection will also provide the Chief Health Officer with a weekly contact list of refugees expecting to arrive on immigration visas from any of the EVD affected countries, along with any details of quarantine prior to arrival.

Where an initial assessment prior to the arrival of the refugee(s) determines that exposure to EVD in the last 21 days was possible, SHECC EVD IMT will work with the PHU and other key stakeholders to put in place arrangements for suitable accommodation for home restriction should the assessment determine that they have had a low- or high-risk exposure (refer to the *Interim guidelines for Ebola virus disease voluntary home restriction*.

Anyone arriving on a refugee visa from an area with intense and widespread EVD transmission will be assessed at the border as per Section 5.2.1 Identifying potential contacts.

Overseas aid organisations

In Queensland, all HCWs who return after caring for EVD cases overseas will be requested to enter into voluntary home restriction in Brisbane for 21 days from their last contact with an EVD case or their environment.

To assist with these arrangements, Queensland Health has requested the Australian Government Department of Health ask national health aid organisations to provide a weekly list of HCWs and aid workers being sent to or returning from deployments to countries with widespread and intense transmission of EVD.

The SHECC EVD IMT will send the details of Queensland HCWs and aid workers going on deployment to the relevant PHU for follow-up as per below.

People identified as returning to Queensland after their deployment are to be contacted by their local PHU prior to their departure to advise them of Queensland’s requirements for home restriction and to assist them to plan for this.

A log of expected returning HCWs and aid workers is to be kept by PHUs and a statewide collated log will be kept by the SHECC EVD IMT.

Each PHU is to provide SHECC EVD IMT with a weekly update of their log of expected returning HCW and aid workers, including plans for their home restriction on return.

Assessment of potential contacts

A comprehensive exposure history should be undertaken on all potential contacts using the EVD exposure assessment form. An epidemiological log should be maintained of all contacts, including location.

Persons assessed as having negligible or nil known exposure to an infected case or their environment are to be provided with information on EVD, the symptoms to watch for and a 24-hour number to ring if they become unwell in the 21-day incubation period. The local PHU are to contact these people a minimum of once a week to check on their health throughout the incubation period.

Where a casual contact is a child, the decision on whether the child can attend school or child care during the 21-day monitoring period is to be made on a case-by-case basis and will depend on the age of the child, the exposure history, and the potential for concern by the school or childcare community. Consultation must occur between the PHP, the State Health Incident Controller and the school principal or childcare director and the child's parent/guardian before a final decision is made.

If a casual contact becomes unwell, the PHP should assess whether their symptoms are compatible with EVD. The PHP may consult with the infectious disease physician and the State Health Incident Controller to determine whether the person requires testing for EVD. Where EVD is not considered as part of the differential diagnosis, the casual contact will be advised that they can seek medical attention at a GP or local hospital. It may be necessary for the PHP to advise the GP or local hospital that the person is not considered to have EVD.

Persons identified as having a potential low- or high-risk exposure to an EVD case (as per the contact definition table in Section 3.2) are to be monitored daily for 21 days from their last known exposure.

In Queensland, it is requested that all persons with an identified potential low- or high-risk exposure to an EVD case enter into voluntary home restriction for 21 days from their last exposure to EVD. This means that they will be asked to stay within the boundaries of their property and to maintain a distance of more than one metre from any other household resident(s) and visitors (refer to the *Interim guidelines for Ebola virus disease voluntary home restriction*).

During the home restriction period, the contact will be provided with a thermometer and asked to take their temperature twice daily. The HHS is requested to put in place processes for daily contact to monitor their health status.

Asking a person to go into home restriction places the responsibility on Queensland Health to ensure the person's safety and welfare. People may require additional support to comply with this request. Refer to the *Interim guidelines for Ebola virus disease voluntary home restriction* for information on roles and responsibilities of organisations for managing people in home restriction.

If a person in home restriction reports a temperature of 37.5ºC or above and/or other EVD compatible symptoms, the local PHU will arrange for them to be transported to a (preferably) designated EVD hospital for assessment and testing.

When considering voluntary home restriction, planning should also include arrangements for domestic pets.[2; 3; 4; 5; 6]

While maintaining a distance of more than one metre from other household members and pets may be possible under certain circumstances, it may not be possible in all cases.

In these circumstances, planning for pets should consider two possible alternatives:

- rehousing pets temporarily for the 21-day voluntary home restriction
- providing separate housing for the person entering voluntary home restriction, allowing other household members and pets to remain in their own accommodation.

If a person is confirmed with EVD and they have had contact with a pet either in the patient's home or elsewhere while they were symptomatic, a risk assessment should be conducted by human and animal health officials to establish the pet's risk of exposure to the virus (close contact or exposure to blood or body fluids of an Ebola patient) and to determine how to handle the pet(s). A decision will be required on whether quarantine of the pet is warranted or other management may be required.

5.2.2 Healthcare workers caring for persons with Ebola virus disease

All HCWs returning from caring for EVD cases overseas are considered to have had low-risk exposure to EVD. If a PPE breach is identified, the exposure assessment is classified as high (refer to Section 3.2). They are to be asked to go into voluntary home restriction for 21 days from their last exposure to the case in a place which is within two hours drive from Brisbane to be close to the Royal Brisbane and Women's Hospital (designated EVD treatment hospital).

The management of HCWs caring for a confirmed EVD case in Queensland is outlined in the *Guidelines for healthcare workers caring for Ebola virus disease patients in Queensland*.

In general, HCWs caring for an EVD case in Queensland will be asked to commence voluntary home/work restriction within 48 hours of first caring for a suspected, probable or confirmed EVD case and continue until 21 days after their last exposure to the case.

They will be asked to monitor their temperature twice daily commencing 48 hours from the first contact with a suspected or confirmed case up until 21 days from their last exposure to a case, and to report a fever and/or other symptoms immediately.

Where alternative accommodation needs to be sourced for the HCWs while in home restriction, this will be arranged in accordance with the voluntary home restriction guidelines.

Hospitals should have in place contingency plans for managing staff shortages due to HCWs' post-exposure home restriction requirements.

5.2.3 Aircraft contacts

Where a person with suspected, probable or confirmed infection with EVD was symptomatic on a flight, contact tracing should commence immediately.

A copy of the flight manifest and seating details of all passengers, including the case, should be immediately requested. The manifest request is to be directed via SHECC EVD IMT/CDU who will liaise with the National Incident Room to urgently access this information.

Where there is a delay in accessing this information or where the contact details are unclear, the National Incident Room will be asked to access a copy of the Ebola information card for all passengers on the affected flight.

All passengers on the aircraft will be contacted to discuss their risk, commencing with those likely to have had higher risk exposures, such as known travelling companions and persons seated within one seat of the passenger in all directions.

Arrangements are in place with 13 HEALTH to assist with contacting aircraft contacts, immediately referring persons assessed as having low- or high-risk exposures to the relevant PHU for further assessment and management, and providing a daily report on contact tracing status and outcomes.

Aircraft contacts assessed as having low- or high-risk exposures will be managed as per other low- or high-risk exposure contacts.

6. Training

The successful implementation of this plan is reliant on a skilled and competent workforce. As there have not been any cases of EVD in Australia, very few people have experience in managing a response to this disease. Training is therefore an essential element in preparedness and throughout the implementation of a response.

All agencies employing staff to support the response to an EVD incident are to ensure staff are appropriately trained and supported in their areas of responsibility, including:

- recommended infection control practices
- correct use of PPE, including donning and removing, and the use of a trained observer
- case assessment and management—clinical and public health
- contact tracing
- contact management and support
- surveillance and reporting
- public and professional communication
- procurement.

The guidelines and resources provided by Queensland Health for preventing or managing EVD transmission in Queensland should be used to support staff training. As additional resources are developed they will be made available at www.health.qld.gov.au/ebola.

7. Logistics

A streamlined response to an EVD threat requires timely access to appropriate resources, including but not limited to:

- medical supplies
- PPE
- cleaning equipment

- pathology supplies
- transportation equipment
- home management resources.

HHSs and other areas of Queensland Health involved in EVD preparedness and response are to identify resources required to safely manage cases, contacts and their environment.

If additional resources outside of the usual supply are required, a request should be submitted to SHECC EVD IMT via email to dl-chob-admincdu@health.qld.gov.au.

7.1 Personal protective equipment

Queensland Health maintains a stockpile of PPE and other resources, such as adult and children's thermometers for use in communicable disease outbreaks of statewide significance, such as an influenza pandemic and EVD.

Additional resources to manage higher exposure risks are stockpiled on the advice of the Infection Prevention Expert Advisory Group.

Designated **receiving** and **treatment hospitals** for managing EVD cases (Royal Brisbane and Women's Hospital, Lady Cilento Children's Hospital, Gold Coast University Hospital, Cairns Hospital, Princess Alexandria Hospital, Townsville Hospital and Cairns Hospital) should keep in stock at least a 72-hour supply of PPE required to manage a suspected or confirmed EVD case.

Non-designated hospitals should have in place sufficient PPE to manage a case for 12 hours to enable time for laboratory results to be available, retrieval to be arranged, and/or time for additional stock to be transported if the case needs to stay in that hospital for a longer period of time.

Access by HHSs and other Queensland Health agencies to the PPE stockpile is in accordance with the *Process for accessing Ebola virus disease PPE stockpile* (accessible via QHEPS only).

7.2 Other stockpile resources

The stockpile includes additional supplies of Category A specimen transport kits.

A list of all items in the stockpile is maintained by Queensland Health's Supply Services.

7.3 Resources for people in home restriction

Resources to assist people to remain in voluntary home restriction will be determined on a case-by-case basis, but may include:

- alternative accommodation
- groceries and other domestic and personal care items
- mobile phones
- entertainment resource
- online counselling services

- educational resources.

Provision of resources to persons in home restriction will be in accordance with the *Interim guidelines for Ebola virus disease voluntary home restriction*.

8. Communication

8.1 Media

Keeping the public informed on the preparedness of the state to manage anyone presenting with EVD is essential. Information to the public should be factual, accurate and timely.

The Chief Health Officer is the key person in Queensland to advise the public on the actions being taken by the government to protect the public, including information on EVD cases.

HHSs are able to provide advice to the media on any EVD activities in their local area following consultation with the Chief Health Officer via the Department of Health's Media Unit.

8.2 Public information

Queensland Health provides web-based information on EVD for the public, which is available at www.health.qld.gov.au/ebola. The Integrated Communications Branch is responsible for maintaining public information on EVD on the Queensland Health website. Health-related content is to be approved by the Senior Director, Communicable Diseases Unit (State Health Incident Controller) or a delegate before publication.

8.3 Health Contact Centre

The Health Contact Centre (HCC) provides confidential health assessment and information services to Queenslanders 24 hours a day, seven days a week using phone 13 HEALTH (13 43 25 84) and online delivery models.

HCC also responds to health alerts to form a single point of communication during communicable disease incidents, including suspected or confirmed cases of EVD. In emergencies, the HCC has the ability to advise the public and to provide information, support and referrals.

HCC supports the EVD response through:

- managing public enquiries
- advising SHECC EVD IMT on issues of concern that the public are ringing about
- assisting with contact tracing
- assisting to monitor the health of persons in home restriction and reporting to the PHU
- triaging persons who are concerned they may have EVD
- taking referrals from the national 1800 number.

8.4 Health sector

The Queensland Department of Health coordinates the development of clinical and public health guidelines, protocols and resources for the management of EVD in Queensland in consultation with HHSs, Health Support Queensland and other government departments.

The Chief Health Officer Branch, in particular CDU, is responsible for facilitating regular communication forums and communiqués for health staff within and external to Queensland Health to ensure consistent messaging on recommended actions for managing EVD risk in Queensland.

Official communiqués for health professionals will be posted on the Queensland Health website at www.health.qld.gov.au/ebola.

9. Further information

Further information on preparedness and response to EVD can be found on the websites of the Australian Government and the Centers for Disease Control and Prevention. The World Health Organization provides Ebola information and situation reports on the outbreak in West Africa.

Review

This plan will be reviewed as new information and evidence emerges and no later than 30 June 2015.

Business area contact

Communicable Diseases Unit, Chief Health Officer Branch

Approval and implementation

Policy custodian:

Senior Director, Communicable Diseases Unit, Chief Health Officer Branch

Approving officer:

Dr Jeannette Young

Chief Health Officer

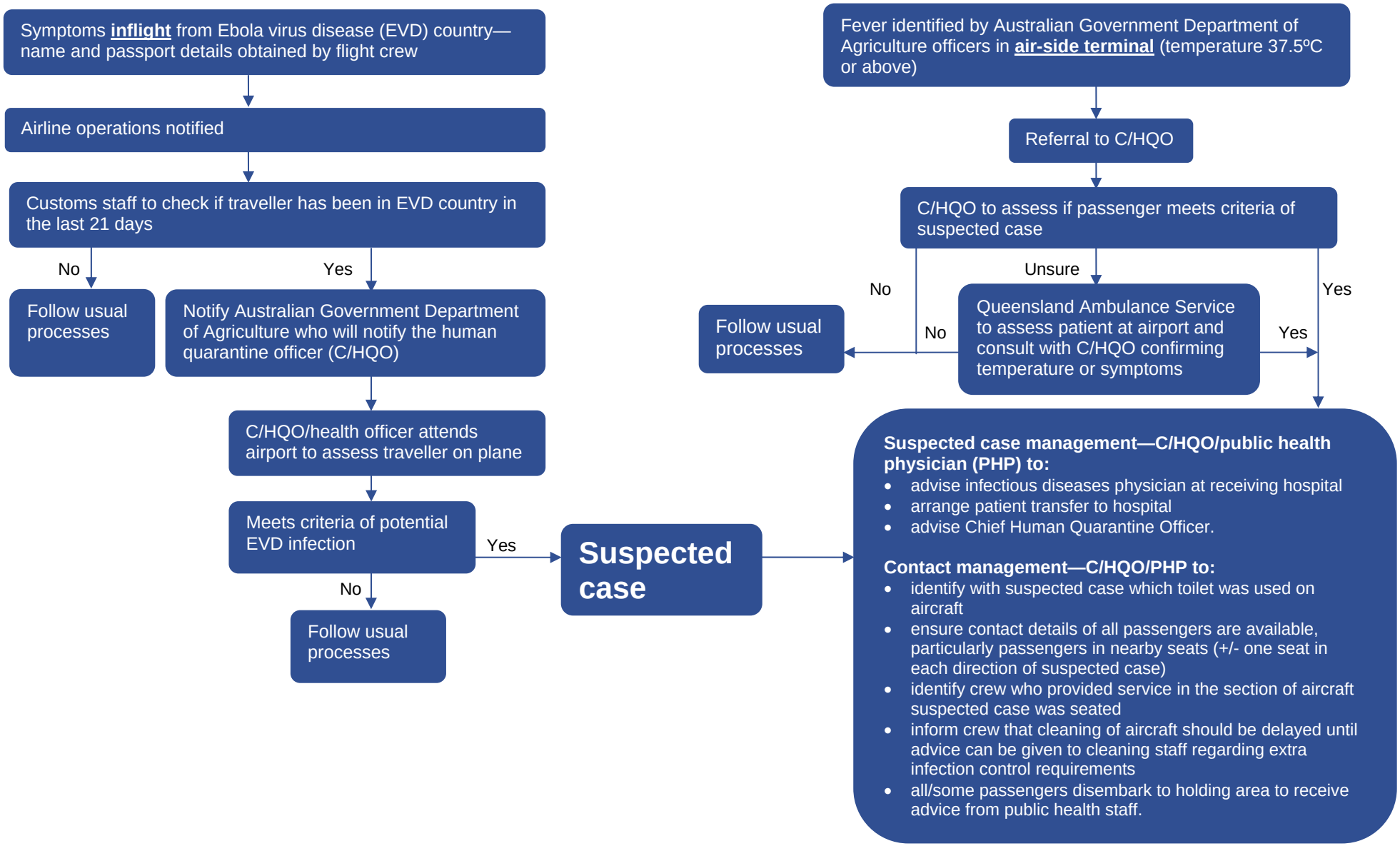
Approval date: 23 December 2014

Effective from: 23 December 2014

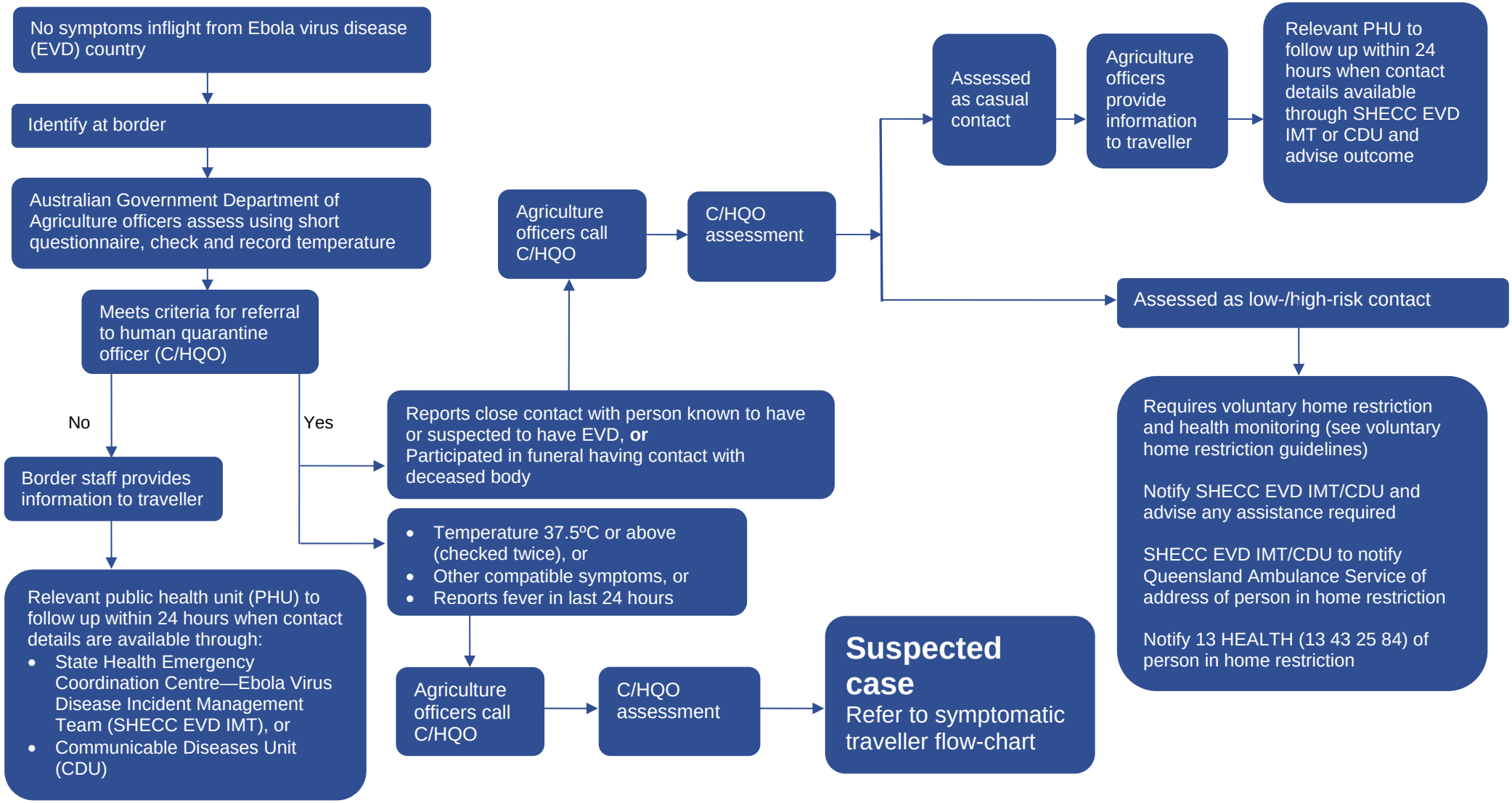
Version control

Version	Date	Prepared by	Comments
1.0	23/12/2014	SHECC EVD IMT	New document

Appendix 1 Symptomatic traveller arriving from Ebola virus disease country



Appendix 2 Non-symptomatic traveller arriving from Ebola virus disease country



Appendix 3 Ebola virus disease patient risk assessment—advice in the event that patient presents to emergency departments in Queensland

1. Does the patient report:

- having a fever or history of fever in the past 24 hours? **AND**
- returning from a country where there is a current Ebola virus disease (EVD) outbreak within 21 days of illness onset? (see EVD Outbreak Country List) **OR**
- having had contact with a known or highly suspected case of EVD within 21 days of illness onset.

NO
- **EVD test not indicated**

EVD HIGHLY UNLIKELY
- **Transmission based precautions based on clinical condition**

YES
- **No staff member to have contact with patient unless wearing EVD personal protective equipment (PPE)—**see EVD infection control/PPE to the right.
- **Provide patient with a surgical mask (provide a vomit bag if vomiting).**
- **Escort to facility's designated isolation room for assessment (single room with door closed, with own bathroom and negative pressure if available).**

2. Has the patient:

- come into contact with body fluids (blood, urine, faeces, tissues, laboratory specimens) from an individual or animal known or strongly suspected to have EVD?
- participated in a funeral which involved direct contact with the deceased body?
- presented with vomiting **OR** diarrhoea **OR** bruising **OR** bleeding?
- been assessed by infectious disease physician and/or PHP as having increased possibility of EVD?

NO
- **EVD test not indicated**

NO KNOWN EXPOSURE
- **Standard plus contact and droplet precautions or as advised by infection control practitioner/infectious diseases physician**
- **Laboratory precautions and procedures as advised by clinical microbiologist**

ASSESS/TREAT FOR ALTERNATIVE DIAGNOSES
- **Travel related (e.g. malaria) and other infections**

Alternate diagnosis or patient improving

PUBLIC HEALTH ACTION
Twice daily temperature monitoring and public health unit (PHU) follow-up as per *Queensland Ebola virus disease management plan*

YES TO ANY
- **EVD test indicated**

INCREASED POSSIBILITY OF EVD
(see EVD infection control/PPE to the right)
- **Notify your immediate manager of the situation**
- **Urgent discussion between IDP, public health physician (PHP), Director of the Emergency Department, Senior Director of the Communicable Diseases Unit (CDU), Forensic Scientific Services (FSS) to determine the need for patient transfer to designated hospital; Director of Retrieval Services/Queensland Ambulance Service (depending on distance) specimen referral to FSS for EVD testing and other testing.**

Patient not improving and no alternate diagnosis

COMMENCE PUBLIC HEALTH ACTION
- **Work with the PHU to identify contacts**
- **Further actions depend upon results of EVD testing**

Last updated: 2 December 2014 **Visit:** www.health.qld.gov.au/ebola

Designated EVD treatment hospitals:

Royal Brisbane and Women's Hospital	(07) 3646 8111
Lady Cilento Children's Hospital	(07) 3068 1111
Public health units	13 HEALTH (13 43 25 84)
Forensic and Scientific Services	**Business hrs:** (07) 3000 9387 **After hrs:** 0431 502 157

EVD OUTBREAK COUNTRY LIST

EVD outbreaks as at 19 December 2014:
- Sierra Leone, Guinea, Liberia

Check CDC for recent updates:
http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/distribution-map.html

EVD INFECTION CONTROL/PPE

ENSURE STAFF ARE:
- **rigorously and repeatedly trained**
- **donning and removing PPE in designated area outside of the patient's room**
- **not exposing any skin when wearing PPE**
- **monitored by a trained PPE observer for donning and removing compliance.**

Recommended PPE includes:
- P2/N95 fluid-resistant respirator
- full-length face shield
- two pairs non-sterile long cuff gloves (nitrile gloves preferable)
- long sleeved fluid-resistant or impermeable gown that extends to mid-calf. Hood that covers all of the hair, ears and extends past neck and shoulders

OR

- fluid-resistant or impermeable coveralls with or without an integrated head covering hood that covers all the hair, ears and extends past the neck to the shoulders if the coveralls do not have an integrated hood
- fluid-resistant or impermeable boot covers that extend to at least the mid-calf.

NOTE:
- restrict entry to essential staff only
- keep list of staff with patient contact
- avoid aerosolising procedures
- refer to Interim infection control guidelines for EVD and Interim PPE guidelines for managing EVD patients.

Standard plus contact and droplet precautions or as advised by infection control practitioner/infectious diseases physician/clinical microbiologist

Transmission based (precautions based on clinical condition)

Acronyms

Acronym	Word
CDU	Communicable Diseases Unit
CHQO	Chief Human Quarantine Officer
C/HQO	Refers to both Chief Human Quarantine Officer and/or human quarantine officer
EVD	Ebola virus disease
GP	general practitioner
HCW	healthcare worker
HHS	Hospital and Health Service
HQO	human quarantine officer
IMT	incident management team
PHU	public health unit
PHP	public health physician
PPE	personal protective equipment
QAS	Queensland Ambulance Service
SHECC EVD IMT	State Health Emergency Coordination Centre—Ebola Virus Disease Incident Management Team
WHO	World Health Organization

Glossary

Word	Definition
Outbreak	One or more locally acquired cases of EVD
Queensland Health	Refers to the Department of Health and the Hospital and Health Services
EVD affected countries	Refers to countries with widespread and intense transmission of EVD. As at 19 December 2014, these countries are Liberia, Sierra Leone and Guinea. Please refer to the World Health Organization for the current situation update on EVD

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