

State of Queensland

Biological Disaster Plan

A functional plan of the State of Queensland
Multi-Agency Response Plan to Chemical,
Biological, Radiological incidents.



Queensland Government
Department of Emergency Services
State Disaster Management Group
Queensland Health

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Part 1 - Introduction

The State Biological Disaster Plan describes the emergency response arrangements to a deliberate and accidental biological release. The level of response will be guided by the nature of the event. The Director-General, Queensland Health is responsible for the development and implementation of this plan.

Authority to plan

This plan is prepared within the provisions of the *State Disaster Management Act, 2003*. It focuses on disasters of a biological nature, which pose a threat to human health and well being. It forms part of the State of Queensland Multi-agency Response Plan to Chemical, Biological and Radiological (CBR) Incidents and reflects operational requirements and commitments under the following:

- The *Queensland Health Act, 1937* and Regulations
- The *State Disaster Management Act, 2003*
- The Commonwealth *Quarantine Act, 1908* and Regulations
- The State Disaster Management Plan

As some biological agents may impact on humans and animals, wider issues such as animal health, food chain security and any impact on export markets may also need to be considered. In the event of a biological release of a zoonotic agent the Department of Primary Industries and Fisheries will advise and support emergency response agencies.

Biological events affecting animal health are addressed under the QLDVETPLAN, a threat specific plan for exotic animal diseases.

Aim

The State Biological Disaster Plan aims to detail arrangements for the mobilisation and deployment of all the necessary resources to respond to a deliberate biological release affecting human health in Queensland.

Scope of plan

A biological disaster may have a considerable impact in terms of human life, disability, quarantine, treatment costs and disposal of deceased persons in addition to long term environmental and economic consequences. It is important to recognise that biological disasters may be naturally occurring events (e.g. an influenza pandemic) or a deliberate event (biological terrorism). This plan has a particular focus on the response to biological terrorism.

In the event of a biological terrorist event, quarantine, mass vaccination and chemoprophylaxis, utilisation of civilian or military facilities for quarantine and treatment, and the restriction of population movement are possible control measures that will contribute to concern among the community.

Many of the diseases and the essential measures to control them will generate fear and be unfamiliar to the public and those who will provide the services. This will add to the potential for media and political consequences.

Financial, Mental and Occupational Health aspects of biological disasters and jurisdictions will remain as outlined in the Queensland Health Disaster plan unless otherwise specified within the State Biological Disaster Plan.

Activation

The Director-General of Queensland Health activates the plan on advice from the State Manager, Public Health Services and Manager of the Communicable Disease Unit.

Part 2 - Concept of operations

Queensland Health (QHealth) is the lead agency with regard to the management of human biological disasters in Queensland. In the event of a deliberate release Queensland Police Services (QPS) will coordinate the whole-of-government response in accordance with the National Counter Terrorism Plan (NCTP).

Surveillance of communicable diseases and the prevention, investigation and control of outbreaks of communicable disease are coordinated through a network of Public Health Units in Queensland and the Communicable Diseases Unit, Queensland Health. Public Health Units routinely monitor disease notifications and conduct disease outbreak investigations in accordance with national and international best practice. These outbreak investigations are conducted in general accordance with the Outbreak Management Plan in Annex A. Queensland Health also has in preparation an Influenza Pandemic Plan. A number of the measures described in this plan will also be relevant to the Influenza Pandemic Plan.

The agents which could be associated with a biological terrorist event are beyond the normal scope of a Public Health Unit investigation. These agents are described in Annex B. Therefore, public health and medical management of a biological disaster will be in accordance with the most recent version of the Guidelines for the Management of Human Quarantine Disease in Australia, Commonwealth Department of Health and Aged

Care, and the Australian Emergency Manuals Series, Part III, Emergency Management Practice, Volume 2 – Specific Issues, Manual 3, Health Aspects of Chemical, Biological and Radiological (CBR) Hazards.

This plan assumes that:

- a biological terrorist event may take the form of a package suspected of containing a biological hazard, a covert release of a biological agent, or the threat of a release;
- a large biological agent release may produce hundreds to thousands of casualties or fatalities;
- the best method of detecting the covert release of a biological agent is a sensitive and timely public health surveillance system;
- a massive casualty management system may be necessary to treat victims;
- management will require close collaboration and coordination between all levels of government and between and within government and non-government agencies;
- resources, both material and human, may be quickly exhausted; and
- national assistance may take some time to be effective.

Part 3 - Committees

Disaster response committees are currently specified within the framework of the Queensland Health Disaster Plan and the State Disaster Management Plan.

A biological release will require the formation of local and statewide committees with responsibility for the public health management of the emergency at local and state levels. These committees will contain relevant clinical and public health expertise as well as representation from other government agencies e.g. Police, Emergency Services.

Queensland Health Disease Control Committee

The Queensland Health Disease Control Committee (QHDC) is an executive committee that will be responsible for:

- the coordination and allocation of health resources at the state level and providing specialist public health and medical advice to the Minister of Health and Premier and Cabinet;
- communication to the State Disaster Coordination Centre in the event of a disaster, the Police Operations Centre for deliberate releases and with other government agencies where necessary;
- communication strategies to the public in conjunction with the QPS ;
- liaison with Commonwealth Health authorities; and
- providing specialist advice in regard to quarantine or closure of facilities (schools, etc).

The Queensland Health Disease Control Committee will be comprised of:

- Directors-General of Health and Emergency Services, and Commissioner of Police (or their delegates);
- State Manager of Public Health Services, Queensland Health;
- Manager, Communicable Diseases Unit, Queensland Health (also Chief Quarantine Officer);
- Manager, Pharmacy Advisory Service, Queensland Health;
- Public Health Physician from affected area;
- Chief Veterinary Officer, Department of Primary Industries and Fisheries;
- Communications Officer;
- Administrative Support; and
- Other agencies as required (eg. ADF).

The Queensland Health Disease Control Committee is not responsible for criminal investigation procedures or the coordination of local responses.

Zonal Disease Control Committee (ZDCC)

The terms of reference for the ZDCC are contained within the Plan for the Management of Outbreaks of Communicable Disease and are identical to the terms of reference for the Outbreak Control Team (OCT) (see Annex A). The ZDCC will liaise with the relevant QPS Commander and/or the Disaster District Coordination Centres (DDCC) in their Zone.

Part 4 - Roles of government agencies

State

Public Health Services, Queensland Health

Coordinate health surveillance and monitoring over multiple jurisdictions; coordinate epidemiological investigation involving multiple local health agencies; communicate medical matters and provide advice to hospital and general medical practitioners throughout the state; coordinate requests for medical personnel, materials and support to local hospitals.

Queensland Health Pathology and Scientific Services

Provide specialist laboratory services in aiding the detection, investigation and management of the biological terrorist event; coordinate the provision of enhanced capabilities for storing and disposing of mass fatalities including infected remains (refrigerated trailers and rail transport); activate alternative morgue facilities.

State Disaster Management Group

Coordinate responses for requests for State and Commonwealth assets and disaster assistance; coordinate the response of all state agencies through the State Disaster Coordination Centre.

Emergency services (ambulance and fire services)

Coordinate mutual aid in the affected region; ensure that local Emergency Services are equipped with the resources necessary to maintain adequate response coverage for the affected community as well as the general public.

Police

Coordinate with Queensland Health and relevant security agencies on matters pertaining to the criminal investigation, media and ensure maintenance of traffic conditions to allow transport of incoming disaster assistance assets.

Local

Public Health Unit

Disease surveillance; epidemiological investigation; patient care protocols; communication with local medical community; provide information to State Disease Coordination Centre through the Coordinator Emergency Health Services and Disaster District Coordinators.

Hospitals/medical services

Augment internal patient care capabilities; increase staffing; inventory and ensure adequate supplies of medication and materials; coordinate patient care with public health unit; submit requests for assistance and resources through Coordinator Emergency Health Services.

Emergency services

Deploy to sites identified as potential sources of biological agent release; support activities with personnel and equipment where necessary; monitor call-outs and attendances for general increases and increases in specific syndromes such as influenza-like illness, respiratory illness and fevers of unknown origin; augment service capabilities by increasing staffing and resources; ensure continued emergency services to the affected community and the general public; coordinate logistic operations; ensure fire safety at medication distribution centres, alternative care centres and casualty collection points;

Police

In collaboration with other agencies, provide security and crowd control at medication distribution centres, alternative care centres, casualty collection points, hospitals, and pharmacies; assist security and escort of medical personnel where required and medical materials including antibiotics.

Part 5 - Operations

Threat response strategy

Defining the threat will determine whether it is a credible threat and the nature of the response.

Depending on the nature of the threat, the State Manager Public Health Services in conjunction with the QPS may:

- convene an urgent inter departmental meeting to evaluate the threat;
- seek national assistance/guidance from security agencies;
- enhance public health surveillance;
- alert hospitals and healthcare providers of the threat;
- prepare to distribute medications;
- prepare alternative care facilities;
- prepare alternative morgue sites; and
- prepare to access national contingency stocks of medication/vaccines/equipment.

Recognition and evaluation strategy

One of the primary difficulties with biological agents is that there may be no obvious evidence of a release. Hence, the first sign that a biological agent has been released may be the development of cases of the disease in the community. A threat may be recognised through:

- intelligence information;
- the discovery or receipt of a package suspected to contain a biological agent;
- the identification of a disease caused by a biological terrorism agent; and
- the detection of an unexplained illness or death through the gathering and analysis of health surveillance data.

When such events occur, each will be evaluated in terms of its potential seriousness.

Police and security agencies are responsible for the interpretation of intelligence information, although Queensland Health may be required to provide health advice to these deliberations. Queensland Health Pathology and Scientific Services will be responsible for coordinating the provision of laboratory analysis (either in Queensland, or by referral to other laboratories) to determine if a suspected material is indeed a biological agent. When a patient is diagnosed with a disease caused by any of the biological agents of concern (these include all Category A agents and may also include Category B agents, as listed in Annex B), a full epidemiological investigation will be undertaken to determine if this is a naturally occurring case and the scope of the incident. Police investigations may occur concurrently. Detection of abnormal health events through routine surveillance will trigger an epidemiological investigation.

Site management strategy

Biological terrorism events may be small-scale local incidents. A site response may be required through the discovery of a package suspected of containing a biological agent, suspicious biological materials, or a clandestine laboratory. These events are essentially biological hazardous materials incidents and should be addressed according to the usual HazMat protocols in terms of command and control. They are also crime scenes that must be investigated by police or security agencies.

Medical direction at such scenes will be provided through the Queensland Health Disaster Plan; specialist public health advice will be provided by Public Health Services; laboratory services will be coordinated by Queensland Health Scientific Services and QAS will remain responsible for the establishment of casualty collection, triage, treatment and transport of any associated incident casualties.

Casualty management strategy

There are four key components to this strategy, mass medication, mass treatment, medical transportation and casualty coordination.

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Mass medication

When indicated, and on the advice of the Queensland Health Disease Control Committee, this will be provided to the population to mitigate the effects of a biological terrorism event. The available options are to bring the people to the medications, or to bring the medications to the people, or a combination of these.

Distribution points

Useful when the disease is not transmissible from human to human; use community based centres (e.g. school halls) to distribute.

Neighbourhood drop

In the case of a highly communicable disease, people would be instructed to remain at home and medication would be distributed by sending adequately protected teams to every residence in the affected area.

Postal services

Australia Post may be a possible way to distribute medication to affected areas.

Schools, large businesses

These may also act as ways of distributing medication to the community.

Outreach programs

Use of Community Nursing and other community services to provide medication to homeless people and those disabled people unable to reach other services.

Mass treatment

This is designed to mitigate the effects of a biological terrorism event by providing various levels of medical care for those affected by the agent.

Initial surge

Hospitals will activate disaster plans, clear wards as appropriate, cease elective admissions, designate isolation wards, establish triage procedures and alternative care facilities.

Internal augmentation

Hospitals will activate unused beds and convert large internal spaces into ward areas.

External augmentation

With the assistance of the State Disaster Coordination Group, Queensland Health will identify and designate large facilities as close as possible to hospitals as alternative Care Facilities. Hospitals will be tasked to staff and supply these facilities. Requests to other States and Territories for staff and resource assistance may be required.

Patient relocation

Hospital and nursing home patients may be relocated out of the area to free up hospital beds for treatment.

Casualty collection points

May be designated by Queensland Health in consultation with the Queensland Ambulance Service and used to augment hospital facilities where they are overwhelmed. Use of ADF Health Support Battalions may be required.

Medical transportation

Transport of patients will remain the responsibility of Queensland Ambulance Service.

Casualty coordination

Queensland Health will conduct coordination of casualty placement. This will be by use of clinical coordination and the Emergency Health Services Unit of Queensland Health

The establishment of a hotline for service providers will be essential to this role to allow service providers to access information and request supplies.

Fatality management strategy

The aim of the fatality management strategy is to ensure the proper handling of fatalities resulting from a bio-terrorist incident including accurate documentation and identification of deceased, while limiting the public health threat posed by mass fatality incidents. Not all deaths reported during a bio-terrorist incident will be related to the emergency. An important feature will be the processing of remains to allow hospitals to remain functional and to limit the spread of disease from corpses.

Identification

A feature of bio-terrorist events is that most victims will be identified before death. All deaths should be required to be certified by a medical practitioner. Deaths that are suspicious and not related to the biological incident will be referred through Police and Coroner's Office in the usual manner. The Office of Births, Deaths and Marriages may establish Case Management Teams with assistance from Queensland Health and other agencies as required to facilitate identification, processing of corpses and issuing of certificates.

Transport and storage

In the event of a large number of fatalities, it is likely that existing resources will be overwhelmed. In accordance with existing Plans, refrigerated trucks and containers will be used to store corpses until they can be processed. Alternative morgue facilities may be established in large open areas near key health centres. Trailer mounted refrigeration units may be necessary to maintain optimum storage temperatures. No corpse will be released to family or next of kin without approval from Health and other relevant authorities.

Disposal of deceased

This will depend upon the total numbers of deceased, the nature of the infectious agent and social, religious and cultural factors.

If burial can be done in a timely fashion and there is no threat to public health, people will be allowed to bury deceased family members. If there are large numbers of victims, it may be necessary to perform mass burials. Cremation may be a suitable and preferred method of disposal in certain circumstances, although existing facilities may be overwhelmed by large numbers of deceased, in which case alternative, industrial incinerators may be used.

It may be necessary to form a management team to oversee these processes. This team may include representatives from the local Funeral Director's industry, Coroners Office and other relevant agencies.

Logistics strategy

The aim of the logistics strategy is to provide a framework for the coordination of the logistical operation required to support the response to a bio-terrorist incident.

Personnel and supplies

Ground, Air and Sea Points of Entry to the declared Disaster Zone need to be identified early. Movement of supplies (such as vaccines, antibiotics) may need to be secured by appropriate agencies such as Police or the ADF. Sites will need to be identified which possess appropriate capacity and facilities (eg refrigeration) to adequately store vaccines.

Movement of people into and out of the declared Disaster Zone will be in accordance with the relevant legislation. It may be necessary to place strict controls over the movement of people out of the Zone at the advice of the State Manager Public Health Services. Registration and accommodation of aid personnel will be in accordance with existing plans.

Part 6 - Review of the plan

A review of this plan is to be conducted subsequent to:

- the use of the Plan in facilitating a multi-agency radiological incident response
- exercises designed to practise or test aspects of the Plan
- alterations to the roles or responsibilities of any agency involved in the Plan
- CBR occurrences or other biological incidents external to Queensland or new technology which suggests a review should be carried out

A requirement exists for an automatic review every two years, regardless of other review indications as mentioned above.

Responsibility for review

The Communicable Disease Unit, Queensland Health is responsible for initiating a review of the Plan.

Annex A

A plan for the management of outbreaks of communicable disease in Queensland

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Executive summary

This Plan proposes suitable arrangements for managing outbreaks of communicable disease of public health significance.

The plan is intended to ensure prompt action to recognise an outbreak of communicable disease, eliminate the source and stop further spread, prevent recurrence, and ensure satisfactory communication between all concerned.

The decision to convene an Outbreak Control Team (OCT) will be made jointly by the Public Health Medical Officer (PHMO) and the Director of Environmental Health Services (DEHS) in the area involved.

An OCT will normally be convened if an outbreak is characterised by one or more of the following:

- immediate and/or continuing health hazard to the local population;
- one or more cases of serious disease;
- large numbers of cases; and
- involvement of more than one health district.

The OCT will usually be established under the chairmanship of the Public Health Medical Officer. This may pass to the Chairman of the Infection Control Committee in hospital outbreaks.

The terms of reference of the OCT will include:

- Developing a strategy to deal with the outbreak and allocating individual responsibilities for implementing action;
- Investigating the outbreak, implementing control measures, and monitoring their effectiveness;
- Ensuring adequate staff and resources are available for the management of the outbreak;
- Keeping relevant outside agencies, the general public and the media appropriately informed when the release is accidental; and
- Ensuring liaison with Queensland Police Services (QPS) in the event of a deliberate release of a biological agent, in accordance with the National Counter Terrorism Plan.

At the conclusion of the outbreak a final report will be circulated to all OCT members, Manager of Communicable Disease Unit, Manager of Environmental Health Unit, State Manager of Public Health Services, the Chief Health Officer, the relevant Health District Manager(s) and any other agencies or authorities involved.

Introduction

This plan proposes management arrangements for dealing with an outbreak of communicable disease of public health significance (whether notifiable or not).

The *Health Act, 1937* and regulations made thereunder, provides the Health Department and Local Government with statutory responsibility for the control of notifiable communicable diseases in their locality.

Outbreaks of nosocomial infections in hospitals are the responsibility of that hospital's Infection Control Committee. However, to fulfil statutory obligations, outbreaks of notifiable diseases will require the involvement of the Public Health Medical Officer (PHMO), and Environmental Health Services where appropriate (e.g. food-borne illness outbreaks, nosocomial legionellosis).

Under the *Health Act, 1937* notification of communicable disease is the responsibility of the medical practitioner attending the patient. Laboratories are also required to report these diseases to the Health Department. In the Brisbane South area notification usually occurs via laboratories to the Public Health Medical Officer. The PHMO will be responsible for ensuring appropriate follow up of routine notifications according to agreed guidelines (e.g. Control of Communicable Diseases Protocol Manual 2nd Edition). Information on notifiable diseases in Queensland is provided in Appendix 1.

Non notifiable diseases may also cause outbreaks of public health importance, and a list of some of these is given in Appendix 2.

This plan requires that local arrangements are agreed in the Health Districts for the provision of sufficient, suitably qualified supporting staff for the Public Health Medical Officer and the Director of Environmental Health Services (DEHS).

The PHMO and the DEHS should ensure that the plan is tested, reviewed and updated annually.

Objectives

This plan is intended to ensure prompt action to:

- recognise and investigate an outbreak of communicable disease;
- identify and where possible, eliminate the source;
- stop or limit further spread;
- prevent recurrence;
- ensure satisfactory communication between all concerned; and
- disseminate lessons learnt.

Instituting the Outbreak Plan

To confirm the outbreak, immediate steps must be taken by the Public Health Medical Officer and/or Environmental Health Services to collect further clinical, epidemiological and laboratory information. A case definition should be established and used to verify known cases and to search for further possible cases.

If an outbreak is confirmed, an initial assessment of the extent and importance of the outbreak will be made and a decision taken on whether to institute the Outbreak Plan and convene the Outbreak Control Team (OCT).

The decision to convene an OCT will be made jointly by the PHMO, DEHS. In the case of a hospital outbreak the decision will be taken in consultation with the relevant Consultant in Infectious Diseases (CID).

Factors to be considered in the decision to convene an OCT include:

- the type of communicable disease involved;
- the number of confirmed or suspected cases;
- the size and nature of the population at risk; and
- the likely source.

If an outbreak is characterised by one or more of the following the OCT will normally be convened:

- immediate and/or continuing health hazard to the local population;
- one or more cases of serious disease (e.g. a single case of hospital acquired legionellosis). In the event of single cases it would be appropriate to form a specific Investigation Team, rather than an OCT;
- large numbers of case; and
- involvement of more than one health district.

Outbreak Control Team - Membership

The OCT will usually be established under the chairmanship of the PHMO. The PHMO and DEHS will decide on the appropriate composition of the outbreak control team.

The composition of the Outbreak Control Team may include:

- Public Health Medical Officer;
- DEHS;
- EHOs and Public Health Nurses (PHNs) involved in the investigation;
- Epidemiologist;
- Consultant microbiologist/Queensland Health Scientific Services;
- Infectious Disease consultant;
- Veterinary Officer (if appropriate);
- Local Government (if appropriate);
- Secretary;
- Media Relations Officer; and
- Other individuals, including representatives of other agencies involved in the outbreak will be co opted as necessary (e.g. Hospitals, Police, Emergency Services).

Arrangements for dealing with multi district or hospital outbreaks require special consideration. These are dealt with in Appendices 3 and 4.

Outbreak Control Team - Terms of Reference

To review evidence and confirm there is an outbreak.

To develop a strategy to deal with the outbreak and to allocate individual responsibilities for implementing action.

To investigate the outbreak and identify the nature, vehicle and source of infection by using microbiological, epidemiological and environmental health expertise.

To implement control measures and to monitor their effectiveness in dealing with the cause of the outbreak and in preventing further spread.

To prevent further cases elsewhere by communicating findings to Communicable Diseases Unit, Queensland Health and to the Communicable Diseases Australia and New Zealand Network (CDANZ).

To ensure adequate staff and resources are available for the management of the outbreak.

To consider the potential staff training opportunities of the outbreak.

To identify and utilise any opportunities for the acquisition of new knowledge about disease control.

To provide support, advice and guidance to all individuals and organisations directly involved in dealing with the outbreak.

To keep relevant outside agencies, the general public and the media appropriately informed. This is to be done in conjunction with the QPS for incidents involving the deliberate release of a biological agent.

To declare the conclusion of the outbreak and to prepare a final report.

To evaluate the response to the outbreak and implement changes in OCT procedures based upon lessons learnt.

In the event of the deliberate release of a biological agent, ensuring liaison with QPS in accordance with the National Counter Terrorism Plan.

Outbreak Control Team - Procedure

Chairman: PHMO

Secretary: Administrative Officer, Public Health Unit Network (PHUN)

Minutes to be taken of all OCT meetings and subsequently approved. These will record details of all issues discussed and decisions made.

At first OCT meeting:

- agree OCT composition and terms of reference;
- confirm individual responsibilities (Appendix 4); and
- review checklist of OCT tasks (Appendix 5).

At each subsequent OCT meeting the situation should be systematically reviewed and the need to obtain further assistance should be formally considered.

At final OCT meeting (determined by Chairman):

- review experience of all involved in management of the outbreak;
- identify any problems encountered;
- allocate responsibility for preparing final report; and
- recommend any necessary revisions to the State Biological Disaster Plan.

Communication and reports

When an OCT is convened, the PHMO will inform:

- Manager, Public Health Unit Network (MPHUN);
- Manager, Communicable Diseases Unit, Queensland Health;
- State Manager Public Health Services;
- Chief Health Officer;
- Health District Manager(s);
- Hospital consultants, Local Government Directors of Environmental Health and Divisions of General Practice as appropriate;
- Commissioner Queensland Ambulance Service; and
- Commissioner of Police for deliberate releases of biological agents.

The DEHS will inform the Manager, Environmental Health Unit, Queensland Health when the outbreak is of wider than local significance and may have environmental health implications.

During the outbreak key individuals will be kept informed in accordance with responsibilities outlined in Appendix 4.

The OCT will endeavour to keep the public and media as fully informed as possible without prejudicing the investigation and without compromising any statutory responsibilities and legal requirements. For incidents involving the deliberate release of a biological agent, all responses to the media or public are required to be cleared through QPS. Media statements and enquiries will be dealt with in accordance with the principles outlined in Appendix 6.

Where necessary, the OCT will identify a suitable incident room and establish arrangements for telephone helplines to deal with calls from the public and/or the media if appropriate.

The final OCT meeting should include a debriefing session when aspects of the outbreak are reviewed and lessons learnt identified.

At the conclusion of the outbreak, a final report will be prepared by the PHMO and DEHS on behalf of the OCT and will highlight:

- the results of the outbreak investigation;
- any difficulties or problems encountered;
- any action required to prevent recurrence; and
- any recommended revisions to the Outbreak Plan.

The final report should be considered a public document and due regard therefore given to confidential aspects of the outbreak investigation.

The final report will be sent as soon as possible to:

- OCT members;
- State Manager Public Health Services;
- Manager Communicable Diseases Unit;
- Manager Environmental Health Unit;
- Chief Health Officer;
- Commissioner Queensland Ambulance Service;
- Commissioner of Police for incidents involving deliberate releases; and
- any other Authorities or Agencies involved.

Important recommendations for future outbreak management will be circulated to other Health Districts for information.

Routine revision

The plan will be reviewed annually by the PHMO in consultation with the DEHS and updated as necessary.

Appendix 1 to Annex A

Schedule 2 – Diseases notifiable to Queensland Health under the Health Act 1937

For a list of notifiable diseases in Queensland go to the Office of the Queensland Parliamentary Council website at <http://www.legislation.qld.gov.au> and access Schedule 2 – Part 1 notifiable diseases of the *Health Regulation 1996*, which will always be current.

Appendix 2 to Annex A

Communicable diseases (non-notifiable) of public health importance

- Coxsackie virus infection (Hand, Foot & Mouth Disease)
- Giardiasis
- Parvovirus B-19
- Scabies
- Staphylococcal infection
- Streptococcal infection
- Toxoplasmosis
- Varicella Zoster virus (Chicken Pox/ Shingles)
- Viral gastroenteritis

Appendix 3 to Annex A

Dealing with hospital outbreaks

The Consultant in Infectious Disease (CID) will make an initial assessment of the extent and importance of the outbreak and will notify the Chairman of the hospital Infection Control Committee and the PHMO of an incident of public health importance or notifiable disease. The Chairman of the Infection Control Committee (CICC) will then decide in consultation with the PHMO (and others, e.g. DEHS if appropriate) whether to convene an Outbreak Control Team (OCT).

An OCT will ordinarily be convened if a hospital outbreak is characterised by any of the following:

- suspected serious hospital acquired infection;
- involvement of more than one ward or department;
- involvement of more than one hospital; and
- potential spread to the community.

Lead responsibility will normally lie with the hospital Infection Control Committee if the outbreak is due to infection with organisms which do not generally affect the population outside the hospital.

Lead responsibility will pass to the PHMO if a hospital outbreak has implications for the community, involves cases of notifiable disease or involves even small numbers of a disease which constitutes a serious public health hazard.

The CICC will inform the District Manager and the Chief Executive Officer if an OCT is to be convened.

The PHMO will inform:

- DEHS;
- Manager, Public Health Unit Network;
- Manager, Communicable Diseases Unit;
- State Manager, Public Health Services; and
- Chief Health Officer.

The Health District Manager/Chief Executive Officer will be responsible for making adequate secretarial and clerical support available to the OCT.

The core members of the OCT will include:

- Infectious Diseases Unit and Infection Control Committee members;
- PHMO;
- DEHS;
- Microbiologist (or representative);
- Clinical consultant(s) responsible; and
- Senior nurse manager responsible.

The OCT may also co opt a representative of any of the following:

- Workplace Health and Safety Department;
- Paramedical Services;
- Domestic Services;
- Unit Catering Department;
- Unit Works Department;
- Central Sterile Supplies Department;
- Central Stores;
- Laundry;
- Pharmacy;
- Ambulance Services; and
- Trade Unions.

Where the outbreak involves more than one hospital, the composition of the OCT should reflect this.

OCT tasks will include:

- implementing control measures and monitoring their effectiveness in preventing further spread;
- investigating the cause of the outbreak;
- giving support and advice on the nursing and medical care of patients involved;
- providing clear guidelines for patients, relatives, visitors, staff and hospital departments;
- assessing the need for additional resources;
- keeping relevant outside agencies, the general public and the media appropriately informed; and
- evaluating lessons learnt and making recommendations based upon those findings.

Appendix 4 to Annex A

Duties of Outbreak Control Team Members

The Public Health Medical Officer, (PHMO)

- Together with DEHS, to declare an outbreak and convene the Outbreak Control Team (OCT).
- To act as chairperson of the OCT and lead and co-ordinate the response to the outbreak.
- To provide expert medical and epidemiological advice to the OCT on the management of the outbreak including interpretation of clinical data, methodology of investigation and control measures required to minimise spread and prevent recurrence.
- To receive notifications from general practitioners and others.
- If necessary, to organise an outbreak control centre or helpline, including designated fax lines, phone lines, operators and a mobile phone for outgoing calls only.
- To assess and collate epidemiological information and to carry out epidemiological studies. Epidemiologists and Training Registrars in Public Health Medicine report to the PHMO on the epidemiological investigation of outbreaks.
- Where appropriate, to arrange for medical examination of cases and contacts and the taking of clinical specimens.
- Where appropriate, to arrange immunisation and/or chemo-prophylaxis for cases, contacts and others at risk.
- To inform the Manager, Public Health Unit Network (MPHUN), Manager Communicable Diseases Unit, State Manager Public Health Services, Chief Health Officer, Health District Manager(s), Hospital consultants, Local Government Directors of Environmental Health and Divisions of General Practice (as appropriate) and Commissioner QAS of the outbreak.
- Together with DEHS and on behalf of the OCT, to prepare a final report on the outbreak.

The Director of Environmental Health Services (DEHS)

- Together with the PHMO, to declare an outbreak and convene the Outbreak Control Team (OCT).
- Where appropriate, to carry out environmental investigations and where necessary to exercise powers of entry, closure, seizure, detention and destruction of food, or prosecution.
- With the PHMO to inform the Manager, Public Health Unit Network (MPHUN), Manager of Communicable Diseases Unit, State Manager Public Health Services, Chief Health Officer, Health District Manager(s), Hospital consultants, Local Government Directors of Environmental Health and Divisions of General Practice as appropriate of the outbreak and action taken in response.
- To liaise with other Directors of Environmental Health Services, (State and Local Government) and the Manager Environmental Health Unit, Queensland Health if the outbreak is of wider than local significance and may have environmental health implications.
- Where appropriate, to make available staff to assist in the investigation of the outbreak as required by the OCT.
- To arrange for the inspection of premises considered to be implicated in any outbreak and to receive reports thereon.
- To consider and (where appropriate) institute legal proceedings against parties involved in causing the outbreak.
- Where appropriate, to arrange for the transport of clinical and/or environmental specimens to recognised laboratories for analysis.
- Where appropriate, to investigate the availability of cleansing and/or other treatment of premises.
- Where appropriate, to secure compliance by producers of waste with their responsibilities.
- Together with the PHMO and on behalf of the OCT, to prepare a final report on the outbreak.

Appendix 5 to Annex A

Checklist of Outbreak Control Team Tasks

The principal aim of the OCT is to investigate the cause of the outbreak and to implement action to identify the source, minimise spread and prevent recurrence of the communicable disease. The following tasks must be undertaken in order to deal effectively with an outbreak. The step by step approach does not imply that each action must follow the one preceding it. In practice, some steps must be carried out simultaneously and not all steps will be required on every occasion.

Preliminary Phase

- Consider whether or not cases have the same illness and establish a tentative diagnosis.
- Determine if there is a real outbreak.
- Establish single comprehensive case list.
- Collect relevant clinical or environmental specimens for laboratory analysis.
- Conduct unstructured, in depth interviews of index cases.
- Conduct appropriate environmental investigation including inspection of involved or implicated premises.
- Identify population at risk.
- Identify persons posing a risk of further spread.
- Initiate immediate control measures.
- Assess the availability of adequate resources to deal with the outbreak.

Descriptive Phase

- Establish a case definition (clinical and/or microbiological).
- Search for other cases.
- Collect and collate data from affected and unaffected persons using a standardised questionnaire.
- Describe cases by time, place and person.
- Construct an epidemic curve.
- Form preliminary hypotheses on the cause of the outbreak.
- Make decision about whether to undertake detailed analytical studies.

Analytical Phase

- Carry out analytical epidemiological study.
- Calculate attack rates.
- Confirm factors common to all or most cases.
- Test and review hypotheses of the cause.
- Collect further clinical or environmental specimens for laboratory analysis.
- Ascertain source and mode of spread.

Control Measures

- Control the source: animal, human or environmental.
- Control the spread by:
 - Isolation or exclusion of cases and contacts;
 - Screening and monitoring of contacts;
 - Protection of contacts by immunisation or chemo-prophylaxis;
 - Closure and/or disinfection of premises; and
 - Instigation of legal proceedings where appropriate.
- Monitor control measures by continued surveillance for disease.
- Declare the outbreak over.

Evaluation

Evaluate the management of the outbreak and make recommendations for the future.

Communication

- Consider the best means of communication with colleagues, patients and the public, including the need for an incident room and/or helplines.
- Ensure appropriate information is given to the public, especially those at high risk, including QAS.
- Ensure accuracy and timeliness.
- Include all those who need to know.
- Use the media constructively. Prepare written report for local use, and the Department of Health. Disseminate information on any lessons learnt from managing the outbreak.

Further studies

- Conduct further analytical case control or cohort studies.
- Conduct further microbiological studies.

Appendix 6 to Annex A

Dealing with the media

The Outbreak Control Team (OCT) will endeavour to keep the public and media as fully informed as possible without prejudicing the investigation and without compromising any statutory responsibilities or legal requirements. For incidents involving the deliberate release of a biological agent this should be in conjunction with the QPS.

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At the first meeting of the OCT arrangements for dealing with the media should be discussed and agreed.

Press statements should be prepared on behalf of the OCT by a small group including the PHMO, DEHS and Media Officer.

Press statements will normally only be released by the Media Officer in liaison with the Manager Communicable Diseases Unit on behalf of the OCT. Where media statements involve District Health Services, the District Manager or Executive Officer of that service should also approve the release of the statement. If a Media Officer is not available, the Team will nominate an alternative spokesperson.

No other member of the OCT will release information to the press without the agreement of the Team.

All media enquiries are to be directed towards the Media Officer in the first instance.

Annex B

Agents that may be involved in a biological disaster

Category A Agents

Easily disseminated or transmitted person to person, high mortality, potential for major public health impact, might cause public panic and social disruption, require special actions for public health preparedness:

- Variola major (smallpox)
- Bacillus anthracis (anthrax)
- Yersinia pestis (plague)
- Clostridium botulinum toxin (botulism)
- Francisella tularensis (tularemia)
- Filoviruses (Ebola or Marburg haemorrhagic fever)
- Arenaviruses (Lassa fever, Argentinian haemorrhagic fever)

Category B Agents

Moderately easy to disseminate, cause moderate morbidity and low mortality, require specific enhancement of laboratory capacity and surveillance:

- Coxiella burnetti (Q fever)
- Brucella species (Brucellosis)
- Burkholderia mallei (Glanders)
- Alphaviruses (Venezuelan encephalitis, eastern and western equine encephalomyelitis)
- Ricin toxin from Ricinus communis (castor beans)
- Epsilon toxin of Clostridium perfringens
- Staphylococcus enterotoxin B

Subset including food or water borne pathogens:

- Salmonella species
- Shigella dysenteriae
- Enterohaemorrhagic Escherichia coli
- Vibrio cholerae
- Cryptosporidium parvum

Category C Agents

Potential future use based on availability, ease of production and dissemination, potential for high morbidity, mortality and major health impact:

- Nipah virus
- Hantaviruses
- Tickborne haemorrhagic fever viruses
- Tickborne encephalitis viruses
- Yellow fever
- Multi-drug resistant tuberculosis

References

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Kuhr, S., Hauer, J., “Intergovernmental Preparedness and Response to Potential Catastrophic Biological Terrorism”, *Journal of Public Health Management and Practice*, 2000; 6:50-56.