

Pandemic Influenza Plan Annexes Part 2



November 2019

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Pharmacy Plan for Community

Hawke's Bay
Community Pharmacy
Pandemic Plan

Hawkes Bay Community Pharmacy

Pandemic Plan

AUTHORITIES INVOLVED

Hawke's Bay Community Pharmacies

RELATED DOCUMENTS

1. Individual pharmacy's Emergency and Business Continuity Plan.
2. Pharmaceutical Society of New Zealand. Emergency Response and Business Continuity Plan. Pharmaceutical Society of New Zealand, Wellington, 29 May 2014.
https://www.psnz.org.nz/Folder?Action=Download&Folder_id=86&Folder_File=Pharmacyemergencyresponseplantemplate.doc
3. Pharmaceutical Society of New Zealand. Step by Step Workbook. To Prepare your Pharmacy for a Disaster or Other Emergency. Pharmaceutical Society of New Zealand, Wellington, 29 May 2014.
https://www.psnz.org.nz/Folder?Action=View%20File&Folder_id=86&File=Pharmacyemergencyresponseplanworkbook.pdf

INTRODUCTION

Aims and general purpose

The aim is to maintain the community based dispensing of pharmaceuticals and other services provided by community pharmacies during a pandemic.

These include services to, but not limited to:

- The Public
- Residential care facilities (Rest Homes, IHC homes etc)
- Addiction services (Methadone clients)
- Mental health clients (Clozapine)
- General Practices and other medical facilities
- Hawke's Bay Regional Prison

Assumptions

- 1 An influenza pandemic is inevitable.
- 2 There will be little warning. Experts believe there will be between one and six months between the time the novel influenza strain is identified and the time that outbreaks begin in New Zealand.
- 3 Outbreaks are expected to occur simultaneously throughout much of New Zealand.
- 4 The effects on the community will be relatively prolonged compared to most other natural disasters.
- 5 The impact of the next pandemic could have a devastating effect on the health and well being of the public and pharmacy work force. This may affect a pharmacy's ability to provide pharmaceutical services.
- 6 The regular supply of pharmaceuticals to Hawkes Bay may be affected due to world wide production difficulties and transportation problems.
- 7 Pharmacists and staff will be at increased risk due to their frequent contact with the public.

- 8 Illegal attempts by the public to obtain antiviral and antibiotic medications could affect the safety of pharmacy staff. This could result in more aggressive behaviour by some individuals and an increase in pharmacy burglaries.

The Community Pharmacy Pandemic Plan will be implemented at the time the pandemic is identified in New Zealand and Hawke's Bay.

Related Legislation

Emergency legislation modifying the requirements of the Medicines and Misuse of Drugs Acts and their Regulations may be required. While it is not expected that the Pharmaceutical Schedule business rules will be changed an open mind needs to be maintained.

Employment law will be an important consideration and pharmacists should review contracts with their staff and work with them to have an understanding of how they will deal with issues like the temporary closure of a pharmacy.

Operational Structure Relevant to this Plan

The pharmacies of Hawke's Bay are primarily individually owned but are able to work together in a collegial manner in some circumstances.

Each pharmacy has contractual obligations to the HB District Health Board in regards to the provision of pharmaceutical services.

Sector Services reimburse the cost of most medicines and contracted pharmaceutical services, under direction from PHARMAC, from the Hawke's Bay District Health Board (HBDHB) combined community pharmaceutical budget.

Communication Plan

The following communication systems have been organised:

1. HBDHB email / fax system (HealthScape)

Email and fax messages can be sent to all pharmacies in the HB region through the HealthScape database

Entry point: Chief Pharmacist



878 1314 ☎ 878 8109 ext 4617

✉ di.vicary@hbdhb.govt.nz

or

Emergency Management Advisor



878 1374 ☎ 878 8109 ext 4567

✉ sandra.bee@hbdhb.govt.nz

Alternatively:

2. Hawke's Bay Pharmacy Alert System

Entry point: Hawke's Bay Pharmacy Alert

☎ 027 849 7129

✉ pharmacyhawkesbay@gmail.com

Or:

3. Pharmaceutical Society of Hawke's Bay Branch

E-mail messages can also be sent to all pharmacies in the Hawke's Bay region.

Entry point: Flaxmere Pharmacy ✉ hbpsnz@gmail.com

Any messages relevant to a pandemic can be disseminated quickly using either system or both systems simultaneously.

4. Communication within and between cluster groups.

In the event that the two above systems are not able to operate the cluster groups will be used (see Appendix). The link pharmacies in the clusters will also liaise with the hospital pharmacy where appropriate.

Preparedness

Each pharmacy should have a pandemic planning document. Pharmacies pandemic plans should consider areas such as the following:

- Strategic aims of New Zealand's Pandemic Plan
- Powers of the Medical Officer of Health in a pandemic emergency
- Human resource obligations
- Deciding whether a work place should stay open
- Risks to employees and others must be reasonable
- Health and Safety in Employment Act
- Other human resource legislation
- Preparing for the possibility of a workplace or business closing
- Keeping communication open and frequent
- Short, medium and long term planning for the pharmacy
- Influenza manager
- Activation of Pandemic Continuity Plan
- Communication with staff
- Maintaining essential business activities
- Identification of core people and core skills
- Business planning for absence
- Knowledge management
- Communications
- How might shortage of supplies affect business operations
- How we can protect staff and customers from getting sick
- Restrict work place entry of people with influenza symptoms
- Personal hygiene
- Work place cleaning
- Air conditioning
- Increased social distancing
- Managing staff who become ill at work
- Contact management
- Personal protective equipment
- Information sources

The Pharmacy Guild of NZ has also prepared a document *Managing Infection Control in Your Pharmacy during a Pandemic*. This is an advisory note to help pharmacists planning during an influenza pandemic. This document will be updated as new information comes to hand.

METHADONE SERVICE

Pharmacies providing methadone services will continue to do so. If a pharmacy is unable to make their supplies of methadone to clients, the after hours arrangements already in place will be used. The Methadone Clinic has advised that in such an emergency the alternative pharmacy providing the supply will be able to contact the clinic to obtain a prescription (before making the supply).

CLOZAPINE SERVICE

Pharmacies providing clozapine to clients should liaise with the Mental Health In-patient Unit to ensure information, prescriptions and test results are available.

OPERATIONAL PROCEDURES

Hawke's Bay pharmacies have been placed into cluster groups (see Appendix). These groups will work together to ensure a continuity of pharmaceutical services to the community and to mitigate the problems of reduced staffing levels. The groups will also liaise with each other.

The pharmacies nearest the Community Assessment Centres, set up to see suspected pandemic cases, will be seen as a priority for the maintenance of pharmacy services. This is to ensure a pharmacy service to pandemic victims.

Community Assessment Centre	Servicing Community Pharmacy
Wairoa Health Centre	Wairoa Pharmacy
The Doctors Napier	Unichem Munroe Street Pharmacy
City Medical	Napier Pharmacy
Tamatea Medical Centre	Tamatea Pharmacy
Taradale Medical Centre	Taradale Medical Pharmacy
Hastings Health Centre	The Pharmacy @ HHC
The Doctors Hastings	Unichem Russell Street
Te Mata Peak Practice	Denton's Peak Pharmacy
Totara Health Flaxmere	Flaxmere Pharmacy
CHB Health Centre	Unichem Waipukurau Pharmacy

FINANCE

Proprietors of pharmacies should make arrangements with their bank that in the event of Sector Operations not being able to make payments on time (due to staff shortages) the pharmacy is able to carry on business in a regular manner.

WORK FORCE ISSUES

The cluster groups will work together to mitigate the problems of reduced staff levels. The pharmacist in charge needs to ensure staffing levels are adequate to provide appropriate pharmaceutical services.

CDC Pharmaceuticals Ltd (☎ 06 831 0620; 📄 06 831 0057) maintain a register of locum pharmacists.

DELIVERY OF PRESCRIPTIONS

During a pandemic there will be an increased demand for the delivery of prescriptions. This will be due to un-well people requiring deliveries, and suspected pandemic cases will be asked to reduce social contact by staying at home. Pharmacists should make plans to meet this increased demand.

IN THE EVENT OF A PHARMACY NOT BEING ABLE TO OPEN

When a pharmacy closes the Pharmacist in Charge will ensure that:

1. A sign is placed in the window explaining where pharmaceutical services will be available from. A contact phone number will also be displayed.
2. The local doctors will be informed.
3. A backup media (CD, hard-drive or USB) is taken to the pharmacy providing services so appropriate records are maintained and claims for payment can be made.
4. The hospital pharmacy will be informed so patient discharge records can be directed appropriately.

STOCK CONTROL

- Pharmacies will continue to maintain stock levels as well as they can using their computer stock control systems and anticipated stock use.
- The main pharmaceutical wholesaler in Hawke's Bay (CDC) will maintain their stock as best they can. Disruption to deliveries from suppliers is possible.
- Neither CDC nor pharmacies are able to stockpile medication unless specific arrangements, along with funding, are put in place beforehand.
- The Ministry of Health has a plan to stockpile medication and is contracting with suppliers in an effort to ensure supply.

PRESCRIPTION DISPENSING RULES

The Ministry of Health and PHARMAC control the rules for dispensing prescriptions. It is anticipated the rules will be reviewed in the event of a pandemic to help maintain supplies of pharmaceuticals.

Pharmacists are subject to audit and are required to dispense according to current rules. These allow for a repeat supply to be obtained once the previous supply is 'substantially used up'. For a one month supply this is considered to be no sooner than 20 days. An amendment has allowed the overruling of this limitation specifically for a 'Pandemic Emergency Supply'. However in the interests of stability and storage requirements any message to patients should be to advise them to ensure they do not make a habit of running out of their medicines before obtaining a new supply i.e. develop the habit of always having two weeks supply on hand rather than stockpiling an extra lot that may deteriorate in storage.

PANDEMIC PLANNING

Hawke's Bay Pharmacy Cluster Groups

Wairoa
Wairoa Pharmacy - link with Gisborne pharmacies

Napier A
Wairoa Pharmacy - link between Napier and Wairoa groups
Ahuriri Pharmacy - link between the two Napier groups
Unichem UFS Pharmacy (HB)
Life Pharmacy Napier (Gahagans)
Unichem Munroe Street Pharmacy
Napier Balmoral Pharmacy
Napier Pharmacy
Charleston Pharmacy
Gilmours Pharmacy - link between Havelock North and Napier groups

Napier B
Ahuriri Pharmacy - link between the two Napier groups
Marewa Pharmacy
Maraenui Pharmacy
Andrew Spence Pharmacy
Tamatea Pharmacy - link between Napier and Taradale groups
Westshore Pharmacy
Bay View Village Pharmacy

Taradale
Tamatea Pharmacy - link between Napier and Taradale groups
Greenmeadows Pharmacy
Unichem Greenmeadows Pharmacy
Greendale Pharmacy
Glenns Pharmacy
Unichem Taradale Pharmacy
Taradale Medical Pharmacy
Gees Pharmacy
Flaxmere Pharmacy - link between CHB and Taradale groups

Central Hawke's Bay
Flaxmere Pharmacy - link between Taradale and CHB groups
Unichem Waipukurau Pharmacy
Waipawa Pharmacy - link between CHB and Hastings groups

Hastings A
Waipawa Pharmacy - link between CHB and Hastings groups
Life Pharmacy Hastings
Unichem Hastings Pharmacy (@ Pak 'n Save)
Raureka Pharmacy
Unichem Stortford Lodge
Hawke's Bay Hospital Pharmacy
Care Pharmacy Hastings
Taiwhenua Pharmacy
Mahora Pharmacy - link between Hastings two groups

Hastings B
Mahora Pharmacy - link between Hastings two groups
The Pharmacy @ Hastings Health Centre
Bay Plaza Pharmacy
Unichem Russell Street
Hastings UFS Pharmacy
Parkvale Pharmacy - link between Havelock North and Hastings groups

Havelock North
Parkvale Pharmacy - link between Hastings and Havelock North groups
Denton's Peak Pharmacy
Whittaker Pharmacy
Clive Pharmacy
Weleda
Gilmours Pharmacy - link between Napier and Havelock North groups



Primary Care Plan

Pandemic Plan Template for General Practice



October 2019

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INTRODUCTION

Influenza pandemics are typically characterised by the rapid spread of a novel type of influenza virus to all areas of the world, resulting in unusually high morbidity and deaths for approximately two to three years. Factors that need to be present for a pandemic to occur include: the emergence of a new viral subtype; the capacity for the virus to spread efficiently from person to person; and being virulent enough to cause disease.

The primary purpose of this plan is to provide the framework and methodology to efficiently respond to an influenza pandemic in general practice. This purpose must consider as the situation develops primary care response will necessarily evolve with additional forms of care delivery being activated.

Assumptions

1. An influenza pandemic is inevitable.
2. There will be very little warning. Most experts believe that we will have between one and six months between the time that a novel influenza strain is identified and the time that outbreaks begin to occur in New Zealand.
3. Outbreaks are expected to occur simultaneously throughout much of New Zealand, preventing shifts in human and material resources that normally occur with other natural disasters.
4. The effect of influenza on individual communities will be relatively prolonged -- weeks to months -- when compared to minutes-to-hours observed in most other natural disasters.
5. The impact of the next pandemic could have a devastating effect on the health and well being of the New Zealand public. Based on CDC projections it is estimated that in Hawke's Bay alone, over a course of 2 to 3 months:
 - Up to 62 thousand people will become clinically ill
 - Up to 29 thousand people will require primary health care
 - Up to 700 people will be hospitalized
 - Up to 200 people will die (this is a conservative estimate of the impact)Essentially this means that 97% of care delivery will occur in the primary care setting.
6. Effective preventive and therapeutic measures -- including vaccines and antiviral agents -- will likely be in short supply, as well as antibiotics to treat secondary infections.
7. Health-care workers and other first responders will likely be at even higher risk of exposure and illness than the general population, further impeding the care of victims.
8. Widespread illness in the community will also increase the likelihood of sudden and potentially significant shortages of personnel in other sectors who provide critical community services: police, firemen, utility workers, and transportation workers, just to name a few.

PANDEMIC PHASES – DEFINITIONS

For purposes of consistency, comparability and co-ordination of the national, regional and local response, identification and declaration of the following phases will be done at the national level.

WHO Pandemic Phase	Definition
Inter-Pandemic Period (WHO Phase 1)	No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.
Novel Virus Alert (WHO Phase 2)	No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.
Pandemic Alert (WHO Phase 3)	Human infection(s) with a new virus sub-type, but no human-to-human spread, or at most rare instances of spread to a close contact.
(WHO Phase 4)	Small cluster(s) with limited human-to-human transmission but spread is highly localised, suggesting that the virus is not well adapted to humans.
(WHO Phase 5)	Larger cluster(s) but human-to-human spread still localised, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).
Pandemic Period (WHO Phase 6)	Pandemic: increased and sustained transmission in general population.

WHO PERIOD*	WHO PHASE*	NZ STRATEGY	MoH/DHB ALERT CODE
Interpandemic Period	Phase 1	Planning	N/A
	Phase 2		WHITE (Information / Advisory)
Pandemic Alert Period	Phase 3		Border Management
	Phase 4	RED (Activation)	
	Phase 5	Cluster Control	RED (Activation)
	Pandemic Period	Phase 6	
Post Pandemic Period	Post Pandemic Period	Recovery	GREEN (Stand Down)

MINISTRY OF HEALTH CASE DEFINITION

Suspected case of Pandemic Influenza

Person with an influenza like illness of abrupt onset, characterised by:

- History of fever, chills and sweating; or
- Clinically documented temperature $\geq 38^{\circ}\text{C}$; and
- Cough or sore throat

Probable case of Pandemic Influenza

Person with an influenza like illness who has a strong epidemiological link to a confirmed case or defined cluster.

Confirmed case

An individual for whom laboratory testing demonstrates one or more of the following:

- a. positive viral culture for Pandemic Influenza; or
- b. positive RT-PCR for Pandemic Influenza; or
- c. four-fold rise in novel influenza virus specific neutralising antibodies.

PRIMARY CARE MANAGEMENT

During inter-pandemic period:

- Encourage annual influenza immunisation.

During pandemic alert:

- Determine daily activities that can be deferred during the pandemic event.
- Contact at-risk patients to determine coping strategies/action plans, this may include pneumococcal vaccination to reduce incidence and severity of secondary infection.
- Ensure access to updated clinical information on the emerging infectious disease including case definition and management and treatment guidelines.
- Make decisions regarding practice collaboration or referral of influenza-related illness to a larger practice.
- Assess staff availability.
- Purchase sufficient supply of personal protective equipment to cover 7-10 days.
- Promote the public education strategy led by the HBDHB.
- Initiate staff training plan.

During pandemic imminent stage:

- Fully activate the practice response plan.
- Obtain contact details for advice about, and referral of, suspect patients.
- Obtain the influenza hospital admission criteria and treatment guidelines produced by HBDHB.
- Increase cleaning services in all areas.
- Place appropriate visible signage advising patients and others of any restrictions or required actions.
- Educate all patients who think they have influenza to seek advice by phone before presenting at the practice.
- Ensure provision for additional supplies of oxygen (BOC contracted by the DHB), pulse oximetry and radiology services along with increasing supplies of oxygen masks and tubing in consultation with the DHB.

During the pandemic:

- Notify the Medical Officer of Health of all probable cases of influenza and related deaths in the community.
- Administer antiviral agents and vaccine to patients and staff according to national recommendations.
- Utilize telephone service for general practitioners at Hawke's Bay Hospital on 0800 442 312, this service allows direct discussion with a consultant physician for advice and support.

Admission criteria and treatment guidelines will be written by the Infectious Diseases Physicians nationally on confirmation of the virus involved. These will be disseminated to all general practices on completion.

Utilise triage checklist (Appendix 1) to screen suspected cases.

The patient care clinical pathway (Appendix 2) should be followed for all identified suspected cases.

Practice Responsibilities

Every practice must identify a liaison person whose role will be to:

1. Take lead responsibility for all infection prevention and control issues affecting the practice.
2. Ensure that general practitioners, practice nurses and reception staff are kept up to date with current information from the DHB and the Ministry of Health.
3. Ensure that all staff are adequately trained in infection control practice.

OPTIONS FOR SERVICE DELIVERY

Options to consider:

1. Practices with a limited number of staff may elect to take a collaborative approach with another practice.
2. Community Assessment Centres for the provision of primary care surge capacity arising from a sudden increase in demand (triggered by Code Red).

Functions:

- Provision of clinical assessment and advice
- Dispensing of antivirals and antibiotics
- Provision of triage and referral to other primary or secondary care
- Infection prevention and control

These centres would be based around those existing practices with the physical and management structures to support this form of care delivery.

3. Mobile general practitioner and practice nurse teams to manage home visits. Assessment of the patient and their household contacts should be by phone prior to the visit, if possible.

RECOGNITION AND MANAGEMENT

Utilise triage checklist to screen suspected cases. Patient's who telephone and are advised to attend the practice should be asked to bring their current medications with them.

The patient care clinical pathway should be followed for all identified suspected cases. Antiviral medicines will be supplied to patients meeting the criteria, some antibiotics and paracetamol may also be supplied.

Admission and treatment guidelines will be supplied by HBDHB.

Antiviral medicines will be used in the stamp it out phase for:

- The treatment of early cases
- Post-exposure prophylaxis of contacts
- Possibly pre-exposure prophylaxis of health-care workers

Antiviral medicines will be used in the manage it phase for:

- Patients with severe clinical influenza-like illness.
- Patients with influenza-like illness who are at high risk of influenza-related complications (immunocompromised or suppressed patients, pregnant women, severe or poorly controlled congestive heart failure, severe chronic respiratory disease, severe asthma, patients on renal replacement therapy).
- Patients with influenza-like illness who live or work in high risk institutions (residents of aged residential care facilities [ARRC] or other chronic care

facility, people who provide services in relatively closed settings to persons at high-risk).

- Cluster and/or infection control where appropriate on discussion with the Medical Officer of Health.

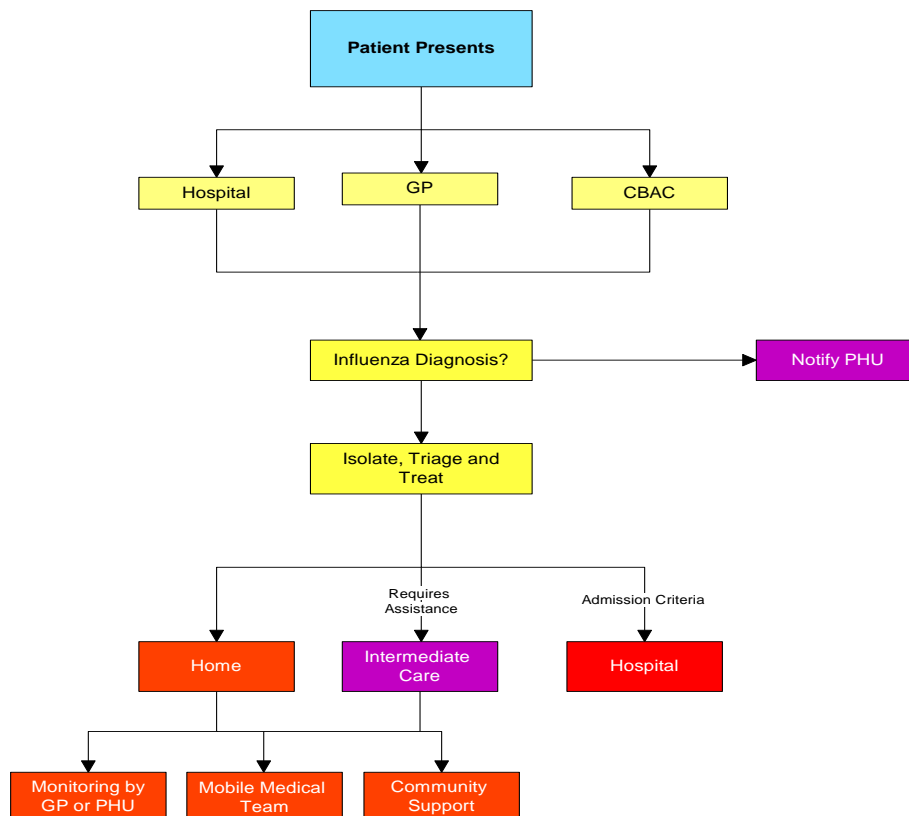
The MOH will be responsible for application to the MoH for release of the national supply to HB hospital pharmacy.

Effective vaccine is unlikely to be available for at least 12-16 weeks at which point the Public Health Unit will coordinate a mass immunisation campaign.

COMMUNITY OUTREACH SERVICE

Patients who are home bound may need to be visited and assessed by a registered nurse following infection prevention and control procedures. See Outreach Service Plan.

Patient Management Pathway



COMMUNICATION PLAN

Name	Title	Contact	Availability
DHB			
Sandra Bee	Emergency Management Advisor	878-8109	On-call
Racquel MacDonald	Infection Prevention and Control Advisor	878-8109	On-call
Debbie Fritz	Infection Prevention and Control Advisor	878-8109	On-call
Public Health Unit			
Dr Nick Jones	Medical Officer of Health	878-8109	On-call
Dr Rachel Eyre	Medical Officer of Health	878-8109	On-call

Useful Websites:

Ministry of Health <http://www.moh.govt.nz/pandemicinfluenza>

WHO <http://www.who.int>

CDC <http://www.cdc.gov>

Daily reports to Emergency Operations Centre at Hawke's Bay Hospital during Phases 5 and 6.

REPORTING CASES

1. Early in the epidemic

Immediate notification of the first suspected cases is crucial. Phone 834-1815 (seven days). Ask to speak to a Medical Officer of Health (MOH). Make sure you speak directly to a MOH, do not leave a message. Detailed information will be required about each case and the MOH will work closely with the practice to formulate an immediate plan of action, including investigation and management of the case and contacts.

2. When the MOH advises that a Hawke's Bay epidemic is established

At this point the MOH will advise all centres that the reporting requirements are to be reduced to a minimum, Pandemic Minimum Data Set (PMDS), e.g. report date, name, age, gender, ethnicity and suburb or street address. PMDS Forms to be faxed to the DHB's Emergency Operations Centre.

SURVEILLANCE

Surveillance means collecting and reporting data about cases to describe the evolving epidemic to help guide a response. Surveillance will be carried out by the Public Health Service (PHS).

Surveillance updates will be available for practitioners on the Hawke's Bay District Health Board website: <http://hawkesbaydhb.govt.nz/> click "Public Health Alerts".

ISOLATION OF SUSPECTED CASES

The separation of routine patients from those suspected of having influenza must be planned. This can be achieved by the following strategies: minimising time spent in waiting rooms, separating suspected patients as quickly as possible, providing separate entrance/waiting rooms for these patients, placing suspected patients directly into a single, dedicated room. Designated staff should manage the patients in this area.

Prompt triage will assist in patient placement. Providing a surgical mask will minimise contamination of others and the environment.

INFECTION PREVENTION AND CONTROL PRECAUTIONS

Initial precautions

Such a major health event can only be handled by the whole general practice or Accident and Medical (A&M) team and the team should be involved in any planning and preparation. Do not forget the cleaner. Your first suspicion of influenza in your community may come through a phone call. Consider how you will deal with this.

It is recommended that all staff be vaccinated each year against seasonal influenza. While this may not protect against pandemic influenza, it will maintain the general wellness of your team. Create an expectation that sick staff should stay at home.

Initial precautions for people dealing with someone suspected of having pandemic influenza include:

- **Keep your distance**
One metre is accepted as safe and significantly reduces your exposure
- **Wear a surgical mask and gloves**
Also offer a mask to any patient and support people
- **Rigorous, frequent hand hygiene**
Use an antimicrobial hand gel or wash in warm water with soap, dry hands with paper towels
- **Where possible try to separate patients with respiratory symptoms from other patients**
- **Ventilation**
Keep windows open if possible, if air conditioning is used, ensure that designated areas can be isolated from the rest of the facility

Each general practice or A&M should promote hand hygiene, the use of tissues when coughing or sneezing, or sneezing/coughing into the elbow.

Include in your plan:

- How to handle patient care equipment and soiled linen (backtraps should be fitted to all bag-mask devices to enable ease of cleaning)
- Environmental cleaning and spills management
- Appropriate waste disposal processes (biohazard bags supplied by the DHB, HB Medical Waste contracted by the DHB to collect waste daily)
- Support for staff to regularly monitor their own health
- Provision for individuals responsible for monitoring staff use of PPE and infection prevention and control practice

Patients should:

- Be isolated if possible, if single rooms are not available, suspected cases may be grouped in one area
- Be encouraged to wear a disposable surgical mask
- Be asked to cough/sneeze into a tissue and to dispose of the tissue afterwards, then wash hands in warm water with soap or use an antiseptic hand gel, hands must be thoroughly dry

Essential supplies

- Gloves
- Surgical masks
- Disposable thermometers
- Tissues – for both waiting and consulting rooms
- Waste disposal bins and medical waste disposal bags – with lids for infection prevention and control
- Antimicrobial hand gel or soap and water and paper towels for drying

DAILY ENVIRONMENTAL CLEANING

Horizontal surfaces should be wiped down with environmental wipes after each suspect patient. Patient care areas must be cleaned at least daily on completion of other routine cleaning.

Protective clothing (mask, gown and gloves) must be worn. Use sodium hypochlorite 100mL in 1L of water (1:10). Clean all horizontal surfaces and all surfaces that are touched by patients and staff. Floors are to wet mopped with clean water and detergent with the mop rinsed thoroughly on completion and inverted to dry. Cleaning cloths should be disposed of in a biohazard bag. All patient equipment unable to be disposed of should be cleaned with environmental wipes followed by sodium hypochlorite 100mL in 1L of water (1:10) and left to dry.

A linen skip and a biohazard bag must be kept in the designated area. Minimal linen should be used and changed after each patient taking care not to shake it. All waste (except sharps) must go into the biohazard bag. Linen and waste must be emptied daily or when containers are two thirds full.

INFORMATION

Messages to the public will be distributed centrally by HBDHB following MoH advice, this will assist in managing expectations. HBDHB will also provide public information on local arrangements.

Information pamphlets are available on the MOH website. (www.moh.govt.nz/pandemic). Regular bulletins will be coordinated through the DHB. A hotline number may be made available through the DHB for updated information on 0800 777 790.

LABORATORY AND RADIOLOGY FACILITIES

Laboratory specimens will only be collected in the early stages of the pandemic. See Appendix 5 for specimen collection procedures.

Patients with suspected pandemic influenza should not be sent to a community laboratory for collection of throat or nasopharyngeal swabs.

Specimens should be double-bagged and couriered to the Laboratory at Hawke's Bay Hospital.

Radiology service arrangements will continue as normal practice arrangements dictate. They will be supported by TRG Imaging for non influenza patients with transport to services the responsibility of the DHB.

SUPPLIES

Supplies of PPE should be held by each practice to manage initial cases with resupply through the national reserve held by HBDHB on release by the MoH.

Essential supplies recommended by the MOH for primary healthcare include: gloves, surgical masks, at least two higher level PPE kits, disposable thermometers, tissues, waste disposal bins with lids, and antimicrobial hand gel or soap and paper towels for drying.

Equipment for collection of multiple specimens (as describe above) for viral culture and PCR.

Include in your plan:

- A system for management of stock levels and reordering
- Security for critical supplies

TEMPORARY ACCOMMODATION

Arrangements for temporary accommodation for staff who are willing to work but do not wish to go home should be made.

Coordination of temporary accommodation, if required, for patients who live alone will be carried out by HBDHB.

TRAINING

A training plan has been prepared by HBDHB to ensure consistent messages for all staff.

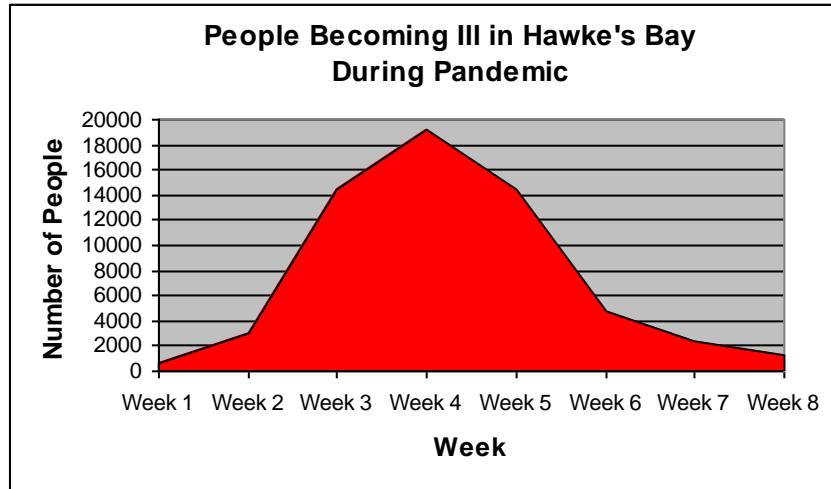
WORKFORCE MANAGEMENT

Workforce management requires sensible rostering, cover for sickness and absenteeism and attention to staff welfare. Volunteers and ex staff may be utilised although considerable thought is required as to the tasks that may be allocated to these groups. Rostering should consider short rotations in influenza care provision and adequate break time.

Discussion with staff in the planning phase is essential to determine who will be most likely to be available, and skills that might be adapted to provide cover.

In the event of practices amalgamating to provide cover, advice should be given to patients using a standardised approach.

Workforce planning should consider the need for increased staffing during the peak of the pandemic.



Note: This is one scenario for a pandemic wave based on a Ministry of Health modelling tool which draws on data from the 1918 pandemic using a "standard planning model" of 40% attack rate and 2% case fatality rate. This would result in 66,244 cases and 3312 deaths in Hawke's Bay.

APPENDIX 1

CHECKLIST – INFLUENZA PANDEMIC STRAIN

Complete the following checklist at first contact with patient, i.e. in triage room or over the telephone.

May 2019

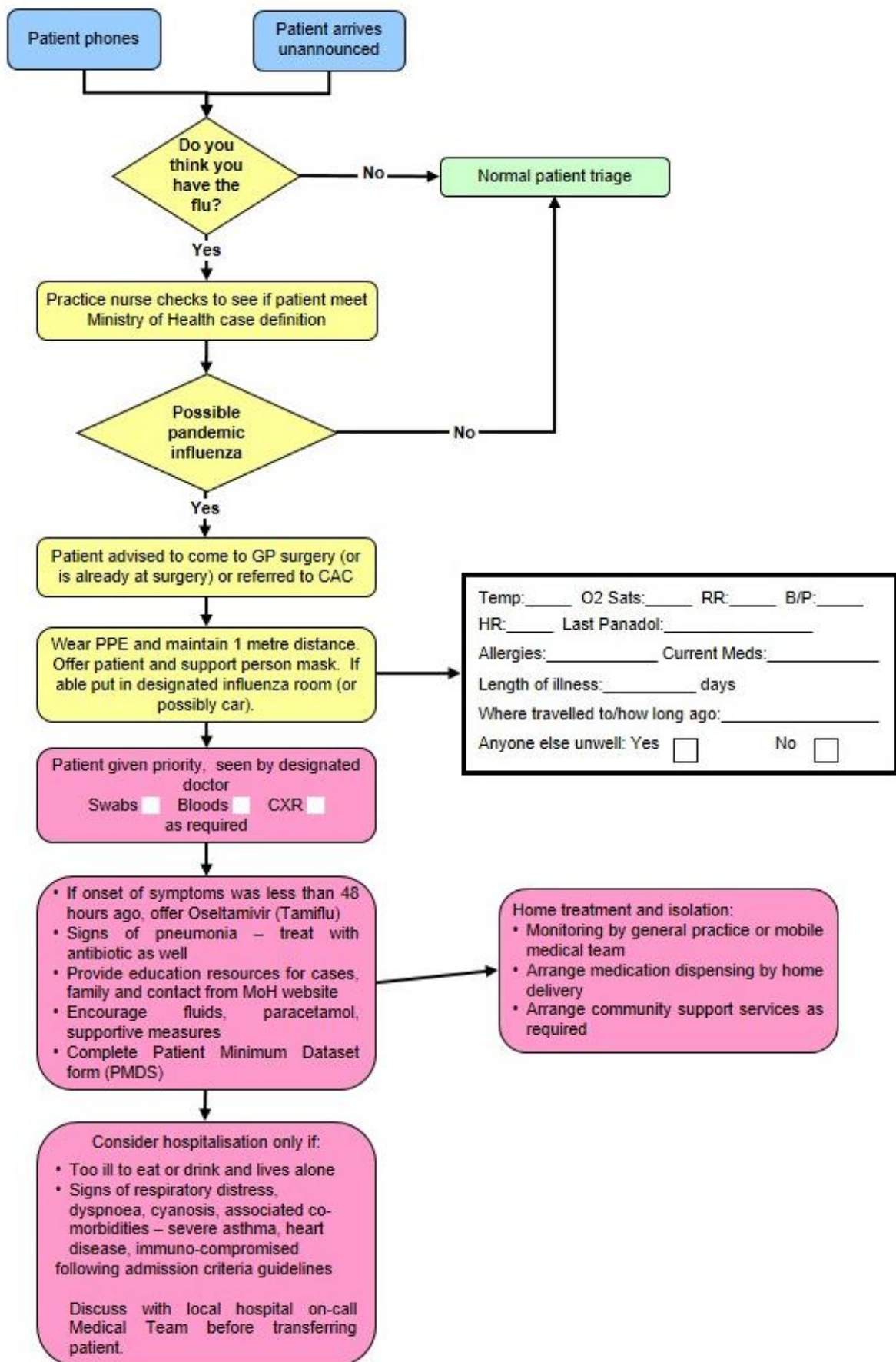
	Yes/No
1. History of fever, chills, myalgia or clinically documented fever $\geq 38^{\circ}\text{C}$	<input type="checkbox"/>
2. PLUS two or more of the following	
Headache	<input type="checkbox"/>
Malaise	<input type="checkbox"/>
Cough	<input type="checkbox"/>
Sore throat	<input type="checkbox"/>

Patients with **both 1 and 2** meet the definition of influenza-like illness.

If you have a suspect case, direct patient to nearest community assessment centre, if activated, or general practice caring for influenza related illness if triage over the phone. If patient has presented at general practice, put a mask on the patient and put on protective clothing immediately, direct the patient to the designated influenza area.

APPENDIX 2

**Primary Health Pandemic Influenza Presentation
Patient Care Clinical Pathway**



APPENDIX 3



**Pandemic Minimum
Data Set**

Name of Practice:	Date:
Clinical Assessor:	Signature:

Name: Given	Middle	Family
Address:		
House Number:		
Street:		
Suburb:		
Town:		

Gender: M / F	DOB:	NHI:		
Ethnicity:	European	Maori	Pacific	Other

Please Circle Appropriate Codes

Category Codes		Antiviral Status Codes	
GEN	General Public	TRT-T	Treatment provided – Tamiflu
HCN	Health Care Nurse	TRT-R	Treatment provided – Relenza
HCD	Health Care Doctor	OWN-T	Antiviral treatment from own supply - Tamiflu
HPA	Health Care Ambulance	OWN-R	Antiviral treatment from own supply - Relenza
HCO	Health Care Other Direct Contact	POP-T	Post exposure prophylaxis with Tamiflu
BOR	Border Worker	POP-R	Post exposure prophylaxis with Relenza
POL	Police	Antibiotic Codes	
DEF	NZDF Member	NIL	No antibiotics provided
COR	Corrections Worker	TRT	Antibiotic treatment provided – evidence of existing respiratory bacterial infection
FIR	Fire Service Worker	PRO	Prophylactic/precautionary antibiotics provided because of unusual vulnerability to bacterial infection (e.g. person with COPD, CHF, asthma or other condition)
SOC	Civilian Social Support Worker	Antibiotic Prescribed	
Treatment Rationale Codes		AUG	Augmentin
ILI	Severe influenza-like illness	COT	Co-Trimoxazole
HRG	High risk group	DOX	Doxycycline
HRI	High risk institution – MUST be discussed with the Medical Officer of Health	FLU	Flucloxacillin

Please fax completed form and copy of prescription to: 0800 856 923

Management of Patient with Influenza-Like Illness

Influenza-like Illness (ILI)

- History of fever, chills, myalgia or clinically documented fever $\geq 38^{\circ}\text{C}$
- **Plus two or more of the following**
- Cough, sore throat, headache, malaise

SIRS Criteria
Clinical Criteria for Severe ILI
 More than one of the following:

- Temperature $\geq 38^{\circ}\text{C}$
- Heart Rate > 90
- Respiratory Rate > 20

High Risk Groups

1. People with influenza-like illness who are at high risk of influenza-related complications:
 - People who are immune compromised or suppressed (transplantation, haematological and solid organ malignancy on chemotherapy/radiotherapy, HIV, autoimmune disorders, etc)
 - Pregnant women – discuss with infectious diseases physician
 - Mental health patients on Clozapine
2. People with influenza-like illness who live or work in residential institutions, (e.g. prisons, boarding schools, nursing homes). Please discuss with Medical Officer of Health ph: 8341815.

Anyone over six months of age with chronic medical conditions, such as:

- Severe or poorly controlled congestive heart failure
- Severe chronic respiratory disease
- More severe asthmatics (e.g. people on oral steroids, high dose steroid inhalers, or steroids and long acting beta-agonists)
- Renal replacement therapy

Does this person meet clinical criteria for Severe ILI?

No

Is patient in a high risk group?

No

Self manage at home.
 Do not prescribe National Reserve Tamiflu or antibiotics

Yes

- Fax prescription(s) to authorised pharmacy
- Fax *Patient Minimum Data Set* form to 0800 856 923
- Instruct patient or relative to collect Tamiflu
- Advise to stay in isolation until well

Consider hospital assessment if patient has any of the following:

- T $> 39^{\circ}\text{C}$
- SBP < 100
- HR > 110
- RR > 25
- Sats < 92
- Vomiting > 1 in 24 hrs
- Confusion
- Rigors
- Pleuritic Chest Pain
- Inability to self care
- Dehydration

These criteria are not prescriptive and can not replace clinical judgement

APPENDIX 5

	DHB _____	Location _____	Date _____	Local code number _____
PATIENT IDENTIFICATION		Compulsory Information		
Date of Birth* ____/____/____	Age* _____	NEXT OF KIN Name _____		
Family Name* _____	Sex* M <input type="checkbox"/> F <input type="checkbox"/>	Address _____		
Given Name* _____	Middle Name* _____	Phone _____		
Address: No.* _____ Street* _____		Relationship to you _____		
Suburb* _____	City/Town* _____	DO YOU HAVE: Yes No Details		
Phone no.* _____	Other phone _____	Lung disease	<input type="checkbox"/>	<input type="checkbox"/>
GP* _____	NHI (if known) _____	Heart disease	<input type="checkbox"/>	<input type="checkbox"/>
OTHER INFORMATION How many days have you been unwell? _____ days		Kidney disease	<input type="checkbox"/>	<input type="checkbox"/>
What are your symptoms?	Yes No	Diabetes	<input type="checkbox"/>	<input type="checkbox"/>
Uncontrollable shivering	<input type="checkbox"/> <input type="checkbox"/>	Liver disease	<input type="checkbox"/>	<input type="checkbox"/>
Drowsiness or confusion	<input type="checkbox"/> <input type="checkbox"/>	Other illnesses?	<input type="checkbox"/>	<input type="checkbox"/>
Severe pain	<input type="checkbox"/> <input type="checkbox"/>	ARE YOU: Yes No Details		
Headache	<input type="checkbox"/> <input type="checkbox"/>	Pregnant	<input type="checkbox"/>	<input type="checkbox"/>
Shortness of breath	<input type="checkbox"/> <input type="checkbox"/>	Disabled	<input type="checkbox"/>	<input type="checkbox"/>
Vomiting	<input type="checkbox"/> <input type="checkbox"/>	Living alone	<input type="checkbox"/>	<input type="checkbox"/>
Cough	<input type="checkbox"/> <input type="checkbox"/>	if living alone have you someone nearby to look after you <input type="checkbox"/> <input type="checkbox"/>		
Red/watery eyes	<input type="checkbox"/> <input type="checkbox"/>	Allergic?	<input type="checkbox"/>	<input type="checkbox"/> What to?
Ear ache	<input type="checkbox"/> <input type="checkbox"/>	MEDICATIONS: Please list _____		
Aching muscles	<input type="checkbox"/> <input type="checkbox"/>	_____		
Sore throat	<input type="checkbox"/> <input type="checkbox"/>	_____		
Diarrhoea	<input type="checkbox"/> <input type="checkbox"/>	_____		
Yellow/bloody/brown sputum	<input type="checkbox"/> <input type="checkbox"/>	_____		
Sharp chest pain on breathing	<input type="checkbox"/> <input type="checkbox"/>	OCCUPATION: General public <input type="checkbox"/> Dr <input type="checkbox"/> Nurse <input type="checkbox"/> Other health care <input type="checkbox"/> Police <input type="checkbox"/> Border worker <input type="checkbox"/> Corrections worker <input type="checkbox"/> Fire Service <input type="checkbox"/> Defence forces <input type="checkbox"/> Civilian social support worker <input type="checkbox"/>		
Other symptoms?	<input type="checkbox"/> <input type="checkbox"/>	_____		
ETHNICITY: European <input type="checkbox"/> Maori <input type="checkbox"/> Pacific <input type="checkbox"/> Asian <input type="checkbox"/> Middle Eastern/Latin American/African <input type="checkbox"/> Other _____				
		TRIAGE NOTES		
Time				
≥200		≥130		
190		120		
180		110		
170		100		
160		90		
150		80		
140		70		
130		60		
120		50		
110		≥40		
100		≥30		
90		25		
80		20		
≤70		15		
≥39		10		
38.5		5		
38		A		
37.5		V		
37.0		P		
36.5		B		
36.0		≥90		
35.5		88-90		
≤35		≥60		
BSL		Pain/10		
MEWS key	1	2	3	
		CBAC Area Initials		
		Move to CBAC area according to MEWS score.		
		CLINICAL NOTES AND TREATMENT		
		ANTIVIRALS: YES Treatment given		
		<input type="checkbox"/> Post-exposure <input type="checkbox"/> Own supply <input type="checkbox"/>		
		Dose _____		
		No Offered & declined <input type="checkbox"/> 48 Hrs+ <input type="checkbox"/>		
		Failed case definition <input type="checkbox"/>		
		ANTIBIOTICS: Underlying condition? Yes <input type="checkbox"/> No <input type="checkbox"/>		
		Given for infection <input type="checkbox"/> or prophylaxis <input type="checkbox"/>		
		Antibiotic _____		
		Dose _____		
		EXIT/PLACEMENT Home (No assistance) <input type="checkbox"/> Home (with assistance) <input type="checkbox"/>		
		CBAC area 1 or 2 <input type="checkbox"/> Hospital <input type="checkbox"/> Other <input type="checkbox"/> Delsite _____		
		Referred to _____		
		CLINICAL ASSESSOR (Area 3) Print name _____		
		Signature _____ Discharged time _____		
		Qualification: RN <input type="checkbox"/> DR <input type="checkbox"/> Other (Please state) _____		

CBAC AREA 1 & 2 INITIAL ASSESSMENT					Local code/number space
Australasian Triage Score (circle) 1 2 3 Record obs. on front sheet					Initials
TREATMENTS All prescriptions must be signed for by Nurse (if standing order) or Prescribing Dr.					
Drug/Fluids/Oxygen	Dose	Route	Signature or Standing order	Given by	Time
OTHER INSTRUCTIONS					Initials
EXAMINATION FINDINGS					
					Initials
POST-TREATMENT FINDINGS					
					Initials
DIAGNOSIS AND OTHER INFORMATION					
					Initials
DISCHARGE ADVICE/TREATMENT					
PRESCRIPTIONS					
ANTIBIOTICS*		ANTIVIRALS*		OTHER MEDICATION PRESCRIBED	
Underlying condition? Yes <input type="checkbox"/> No <input type="checkbox"/>		Yes Treatment given <input type="checkbox"/> Post-exposure <input type="checkbox"/>		<div style="border: 1px solid black; height: 100px;"></div>	
Given for infection <input type="checkbox"/> or prophylaxis <input type="checkbox"/>		Own supply <input type="checkbox"/> Dose _____			
Antibiotic _____		No Offered & declined <input type="checkbox"/> 48 Hrs+ <input type="checkbox"/> Failed			
Dose _____		Case definition <input type="checkbox"/>			
NEEDS REFERRAL TO OTHER SERVICE: Referred time _____ to _____ Referral accepted? _____					
Requires transport to other service? Yes <input type="checkbox"/> No <input type="checkbox"/> Time transport ordered _____					
Time transferred to other service _____ By _____					Initials
CLINICAL ASSESSOR (Area 1 or 2) Print name _____ Signed _____					
Qualification: RN <input type="checkbox"/> Dr <input type="checkbox"/> Other (Please state) _____ Discharge time _____ Place _____					

CHILD		DHB _____ Location _____ Annual Date _____	Local code/number space _____																																																																																																																																																																																											
		Time _____	Compulsory information _____																																																																																																																																																																																											
PATIENT IDENTIFICATION		Date of birth* ____/____/____ Sex* M <input type="checkbox"/> F <input type="checkbox"/>	NEXT OF KIN Name* _____																																																																																																																																																																																											
Family name* _____		Address* _____	Phone* _____																																																																																																																																																																																											
Given name* _____ Middle name* _____		Relationship to child* _____	Who is with the child today? _____																																																																																																																																																																																											
Address: No* _____ Street* _____		Their relationship to the child _____																																																																																																																																																																																												
Suburb* _____ Town* _____		DOES THE CHILD HAVE:																																																																																																																																																																																												
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GP* _____ NIB (if known) _____		Lung disease <input type="checkbox"/> <input type="checkbox"/>																																																																																																																																																																																												
OTHER INFORMATION How many days has the child been unwell? _____		Heart disease <input type="checkbox"/> <input type="checkbox"/>																																																																																																																																																																																												
What are your child's symptoms? Yes No Duration (in days or hours) and other details _____		Kidney disease <input type="checkbox"/> <input type="checkbox"/>																																																																																																																																																																																												
Drowsiness or confusion <input type="checkbox"/> <input type="checkbox"/>		Diabetes <input type="checkbox"/> <input type="checkbox"/>																																																																																																																																																																																												
Severe pain <input type="checkbox"/> <input type="checkbox"/>		Liver disease <input type="checkbox"/> <input type="checkbox"/>																																																																																																																																																																																												
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Vomiting <input type="checkbox"/> <input type="checkbox"/>		Disabled <input type="checkbox"/> <input type="checkbox"/>																																																																																																																																																																																												
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Red/watery eyes <input type="checkbox"/> <input type="checkbox"/>		NUTRITION Yes No Details																																																																																																																																																																																												
Ear ache <input type="checkbox"/> <input type="checkbox"/>		Vomiting after feeds/food <input type="checkbox"/> <input type="checkbox"/>																																																																																																																																																																																												
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Sore throat <input type="checkbox"/> <input type="checkbox"/>		Time last passed urine _____																																																																																																																																																																																												
Yellow/bloody/brown sputum <input type="checkbox"/> <input type="checkbox"/>		Weight (estimated) _____																																																																																																																																																																																												
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Yes Treatment given <input type="checkbox"/> Post-exposure <input type="checkbox"/> Own supply <input type="checkbox"/> Dose _____ Offered & declined <input type="checkbox"/> 48 hrs+ <input type="checkbox"/> Failed case definition <input type="checkbox"/>		Details: _____ Home with: Parent(s) <input type="checkbox"/> Relative <input type="checkbox"/> Family friend <input type="checkbox"/> Other <input type="checkbox"/> Who _____ Address _____																																																																																																																																																																																												
ANTIBIOTICS		Home Phone _____ Cell Phone _____																																																																																																																																																																																												
Underlying condition? Yes <input type="checkbox"/> No <input type="checkbox"/> Given for: Infection <input type="checkbox"/> Prophylaxis <input type="checkbox"/> Antibiotic _____ Dose _____		CLINICAL ASSESSOR (Area 3) First name _____ Signature _____ Discharged time _____ Qualification: RN <input type="checkbox"/> DR <input type="checkbox"/> Other (Please state) _____																																																																																																																																																																																												

CRAC AREA 1 & 2 INITIAL ASSESSMENT					Local identifier space (as on front sheet)
Australian Triage Score (circle) 1 2 3 Record Obs. on front sheet					Initials
TREATMENT					
Drug/Fluids/Oxygen	Dose	Route	Signature or Standing order	Given by	Time
OTHER INSTRUCTIONS					Initials
EXAMINATION FINDINGS					
					Initials
POST-TREATMENT FINDINGS					
DIAGNOSIS AND OTHER INFORMATION					
					Initials
DISCHARGE ADVICE/TREATMENT					
PRESCRIPTIONS					
ANTIBIOTICS		ANTIVIRALS		OTHER MEDICATION PRESCRIBED	
Underlying condition? Yes <input type="checkbox"/> No <input type="checkbox"/>		Yes Treatment given <input type="checkbox"/> Post-exposure <input type="checkbox"/> Ova supply <input type="checkbox"/> Dose _____		Initials	
Given for infection <input type="checkbox"/> Prophylaxis <input type="checkbox"/>		Offered & declined <input type="checkbox"/> 48-Hrs+ <input type="checkbox"/> Failed course			
Antibiotic _____ Dose _____		Definition <input type="checkbox"/>			
NEEDS REFERRAL TO OTHER SERVICE Referred time _____ to _____					
Referral accepted? _____					
Requires transport to other centre? Yes <input type="checkbox"/> No <input type="checkbox"/> Time transport ordered at _____					
Time transferred to other centre _____ By _____					Initials
Person accompanying _____ Relationship to child _____					
CLINICAL ASSESSOR (Area 1 or 2) Print name _____ Signed _____					
Qualification: RN <input type="checkbox"/> Or <input type="checkbox"/> Other (Please state) _____ Discharge time _____					

APPENDIX 6

PERSONAL PROTECTIVE EQUIPMENT

Recommendations for PPE use

Personal protection equipment (PPE) includes masks, eye/face shields, gloves, gowns and aprons. Varying levels and types of PPE are required, depending on the level of exposure and the risk of transmission.

Whatever the level of PPE to be used, education and training is necessary to ensure the equipment is used and disposed of correctly, to maintain the equipment's effectiveness.

Estimate for PPE for GP Practice

One patient requires one GP and one Nurse:

PPE required for 1 patient = 2 masks, 2 pair gloves, 2 gowns

GP sees 4 patients per hour = 8 pair gloves per hour
= 96 patients per 24 hours
= 192 pairs per 24 hours
= 672 patients per week
= 1344 pairs gloves per week

Gloves supplied per box = 100 therefore 26-27 boxes of gloves per week

PFR95 masks \leq 4 hours = 12 per day per one GP and one Nurse
= 84 per week

PFR95 masks supplied per box = 35 therefore 2.4 boxes per week

Surgical masks for patients = 672 patients per week
Surgical masks supplied per box = 50 therefore 13-14 boxes per week

If the gown is to last 4 hours = 12 per day (as for masks)
= 84 per week

Gowns supplied per carton = 50 therefore 2 cartons per week

Gowns - you will need to decide how long your gown should last. In the hospital situation a gown is single use. In the primary care setting you may decide to use one gown for 4-8 hours. This will depend on the contact with patients and the care and contamination of the gown.

Gloves may not be required for all patient contacts. Hand hygiene (antimicrobial hand gel or soap and water wash) will be sufficient in most cases.

NOTE: These numbers are only estimates and may vary during the phases of a pandemic. There are many variables to be considered i.e. practice size, patients seen, acuity, potential for contamination of PPE.

APPENDIX 7

Summary of PPE requirements:

	Entering Room but no close contact (> 1 metre from patient)	Close patient contact (<1 metre from patient)	Aerosol generating procedure being performed (including nose/throat swabs)
PFR95 mask	No	No	Yes
Surgical mask	Yes	Yes	No
Gown, non sterile, long sleeved	No	Yes	Yes
Gloves, non-sterile	No	Yes	Yes
Eyewear, protective	No	No	Yes

Using disposable surgical masks, gloves and gowns/aprons

Disposable surgical masks are recommended for first responders and health care/support workers in a health care setting who are at risk from droplet transmission.

Disposable gloves are recommended as a means of reducing the likelihood of influenza transmission when handling objects contaminated with respiratory secretions. Apart from health care settings, the use of gloves is less important than careful hand hygiene. The use of gloves does not replace the need for hand hygiene.

Disposable gowns or splash resistant aprons may also reduce opportunities for transmitting influenza. However, it may not always be practical to use gowns/aprons outside the health care setting.

Using particulate respirator masks (PFR95), eye protection, gloves and gowns/aprons (full PPE)

Health care workers should wear particulate respirator masks, eye protection, gloves and gowns/aprons (i.e. full PPE) when there is a high risk of direct contact with respiratory secretions, particularly via aerosols. This will apply mostly in inpatient settings during some invasive procedures.

In most other settings a disposable surgical mask (with or without eye protection and disposable gloves) will provide sufficient protection from droplet transmission for health care workers in close contact and/or providing direct personal care to patients with pandemic influenza.

Checklist for Staff before Entering Designated Areas

The following points must be checked before entering a designated area:

- Cellphones or pagers left outside the area along with pens, stethoscopes and tourniquets
- Shoulder length hair must to clipped or tied back
- Shoes should cover and protect feet from splashes and dropped equipment and should have wipeable surfaces
- A mask must be worn and fit securely
- A gown must be worn and be tied firmly
- Gloves must be worn and cover the wrists

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USING PERSONAL PROTECTIVE EQUIPMENT

Order for putting on:

- Change into work clothing, shoes should be either designated work shoes or be suitable for disinfection
- Put on gown or apron
- Fit mask ensuring a good seal (can be worn for 4 hours before being replaced unless wet)
- Put on gloves ensuring they are a good fit

Removal:

- Remove gown/apron and gloves (if worn) taking care to minimise contamination of self and clothes
- Using two hands, untie mask strings and lift off forwards taking care not to touch the pouch of the mask

Perform hand hygiene

Notes:

If any of the following occurs the mask must be changed:

- if you touch it
- if it is grossly contaminated
- if it becomes wet for any other reason
- if it becomes hard to breathe through

Masks should be placed in a biohazard bag after removal.

If at any time gloves become contaminated, they must be removed, hand hygiene performed and clean gloves put on.

Gloves are not a replacement for hand washing.

APPENDIX 7

SPECIMEN COLLECTION

All samples should be sent by the usual Southern Community Laboratories specimen collection service to Hawke's Bay Hospital Laboratory.

Who should be swabbed?

- Swabbing should be reserved for only those patients with influenza-like illness who are in high risk groups or situations.

People on antiviral medication

- Antiviral medication reduces the yield from viral swabs.
- If an adult case has commenced a *twice-daily treatment* course of antiviral medication, do not take swabs. Children excrete a higher viral load. If a child case has been on a *twice-daily treatment* course of antiviral medication for ≥ 48 hours do not take swabs.
- For contacts on *once-daily prophylaxis* with antiviral medication who develop symptoms, a swab is indicated if within 48 hours of commencing antiviral medication.

People not on antiviral medication

- Virus shedding declines with time in untreated patients.
- Do not take swabs from an adult case who has had symptoms for five days or longer.
- Children (especially young children) shed for longer, so untreated children can be swabbed even if they have had symptoms for longer than five days.

Samples required

- Nasopharyngeal swab in viral transport medium

Sample collection

Respiratory specimens should be collected as early as possible in the course of the illness. The likelihood of recovering most viruses and many bacteria diminishes markedly >72 hours after symptom onset. Some respiratory pathogens may be isolated after longer periods.

Equipment:

One pernasal swab with non-wooden shaft and synthetic fibre tip

One green top virology swab with viral transport medium

One pair of scissors

PPE i.e. gloves, gown, PFR95, faceshield, hat

Antimicrobial hand gel

(i) Collection of nasopharyngeal swab

Use a pernasal swab with non-wooden shaft and synthetic fibre tip:

Insert swab into one nostril, parallel to the palate, rotate gently and advance until resistance is felt. (One eye often waters when swab is in the correct position.)

Press swab tip on the mucosal surface of the mid-inferior portion of the inferior turbinate and leave in place for a few seconds, then slowly withdraw using a rotating motion.

Place swab into **green pre-labelled viral transport medium tube.**

Cut off the cap with scissors and discard the cap.

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Lay the medium tube to one side.

(ii) If the viral transport medium is liquid

Cut the swab sticks off just below the level of the bottle - so that there is no swab pressure for the viral media lid to pop off.

Ensure lid is firmly closed on viral specimen and taped to prevent leakage of viral media.

Packaging and Transport:

- The laboratory form should clearly indicate that this is a request for "PCR testing for novel influenza infection". Write "copy result to the Medical Officer of Health". Notifying the MOH is not required before sending the swab.
- Ensure the laboratory request form is fully completed with details including the NHI number and that the specimen container contains the patient name and NHI number.
- Specimens should always be double bagged and ensure that the snap lock is sealed on both bags. Place the request form in the pocket of the outside bag.
- Specimens should be transported by Southern Community Laboratories to the Hawke's Bay Hospital Laboratory.

APPENDIX 8

USE OF ANTIVIRALS

Influenza viruses develop significant resistance quickly for M2 channel blockers and zanamivir is not available in New Zealand. Therefore only oseltamivir (Tamiflu) will be described in detail.

First line health care workers will be using antivirals from the Government's stockpile, because the antiviral medication will be in short supply when the pandemic strikes. The MoH (directly or through Medical Officers of Health) will be communicating guidelines, protocols, and priorities for its use.

Tamiflu might be used prophylactically for exposed travellers, containment of sporadic clusters, essential services staff and therapeutically for all patients (initially), high-risk patients, essential services staff.

Tamiflu is licensed for the treatment of influenza in adults and children ≥ 1 year of age.

Tamiflu is indicated for the prophylaxis of influenza in adults and adolescents ≥ 13 years of age.

Presentation

Tamiflu capsules 75mg blister pack of 10 capsules

Tamiflu powder for oral suspension 12mg/mL bottle pack with 30g of powder

Dosage and Method of Administration

Tamiflu may be taken with or without food. However, Tamiflu taken with food may enhance tolerability in some patients.

Standard Dosage

Treatment of influenza

Treatment should begin within the first or second day of onset of symptoms of influenza.

Adults and adolescents

The recommended oral dose of Tamiflu capsules in adults and adolescents ≥ 13 years is a 75mg capsule twice daily, for 5 days. Adults and adolescents ≥ 13 years of age that are unable to swallow capsules may receive a dose of 75mg Tamiflu suspension bid for 5 days.

Children

Children > 40 kg or ≥ 8 years who are able to swallow capsules may also receive treatment with a 75mg capsule twice daily as an alternative to the recommended dose of Tamiflu suspension (see below).

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The recommended oral dose of Tamiflu suspension for children ≥ 1 year of age is:

Body weight	Recommended dose for 5 days
≤ 15 kg	30mg twice daily
> 15 to 23 kg	45mg twice daily
> 23 kg to 40kg	60mg twice daily
> 40 kg	75mg twice daily

No dose adjustment is necessary for patients with creatinine clearance above 30mL/minute. In patients with creatinine clearance between 10 and 30mL/minute receiving Tamiflu it is recommended that the dose be reduced to 75mg of Tamiflu every other day or 30mg suspension every day. No dosing recommendation is available for patients undergoing routine haemodialysis and continuous peritoneal dialysis with end stage renal disease and for patients with creatinine clearance ≤ 10 mL/minute.

No dose adjustment is required for patients with hepatic dysfunction and no dose adjustment is required for elderly patients.

The safety and efficacy of Tamiflu in children under 1 year has not been established. Tamiflu should not be used in children under 1 year of age.

A bottle of 30g Tamiflu powder for oral suspension contains 25.713g of sorbitol. One dose of 45mg oseltamivir administered twice daily delivers 2.6g of sorbitol. For subjects with hereditary fructose intolerance this is above the recommended daily maximum limit of sorbitol.

Prophylaxis of influenza

The recommended oral dose of Tamiflu for prophylaxis of influenza is 75mg once daily for at least 10 days. Therapy should begin within two days of exposure.

Contraindications

Hypersensitivity to oseltamivir phosphate or any component of the product.

Information derived from pharmacology and pharmacokinetic studies of oseltamivir suggest that clinically significant interactions with other medicines are unlikely.

At present, insufficient data are available in pregnant women taking Tamiflu to enable an evaluation of the potential for oseltamivir cause foetal malformations or foetal toxicity. Tamiflu should therefore be used during pregnancy only if the potential benefit justifies the potential risk to the foetus.

APPENDIX 8

Undesirable Effects

Table 1: Most frequent adverse events in studies in naturally acquired influenza

Adverse Event	Treatment		Prophylaxis	
	Placebo N=1050	Oseltamivir 75mg bd N=1057	Placebo N=1434	Oseltamivir 75mg od N=1480
Nausea (without vomiting)	71 (6.8%)	113 (10.7%)	56 (3.9%)	104 (7.0%)
Vomiting	32 (3.0%)	85 (8.0%)	15 (1.0%)	31 (2.1%)
Diarrhoea	84 (8.0%)	58 (5.5%)	38 (2.6%)	48 (3.2%)
Bronchitis	52 (5.0%)	39 (3.7%)	17 (1.2%)	11 (0.7%)
Abdominal pain	21 (2.0%)	23 (2.2%)	23 (1.6%)	30 (2.0%)
Dizziness	31 (3.0%)	20 (1.9%)	21 (1.5%)	24 (1.6%)
Headache	16 (1.5%)	17 (1.6%)	251 (17.5%)	298 (20.1%)
Insomnia	10 (1.0%)	11 (1.0%)	14 (1.0%)	18 (1.2%)

Single doses of up to 1000mg of Tamiflu have been well tolerated apart from nausea and/or vomiting

HBDHB holds a number of courses for management of a first case and close contacts. The Ministry of Health reserve will be released to DHB's following this and distributed according to a national priority list.

VACCINE

Vaccine Management should be based on the following assumptions:

1. There will be a minimum of 6 months between a novel virus alert and the availability of vaccine.
2. The entire population will be susceptible and may require two doses of vaccine, one month apart, for adequate protection.
3. The proportion of influenza vaccine to be distributed and administered through the public versus the private sector is unknown. Even so, the amount, if not the proportion, of vaccine that will be distributed through the public sector during a pandemic will be greater than the amount distributed by the public sector in non-pandemic years.
4. There will be a national contract for purchase of vaccine.

Vaccine Administration

Vaccinators are authorised by the Medical Officer of Health pursuant to regulation 44a of the Medicines Regulations. Hawkes Bay has authorised vaccinators available with a database being maintained to record all vaccinations. A list of currently authorised vaccinators is held by the PHS. There are other registered nurses who could be rapidly trained and authorised to vaccinate.

Priority Groups List for Receipt of Vaccine

Because vaccine shortage during an influenza pandemic is likely, the MoH, in conjunction with various advisory committees, is in the process of formulating recommendations for a rank-order list of high priority groups for vaccination. The order of these groups will be based on a number of factors, including the need to maintain the infrastructure necessary to carrying out the pandemic response plan; to limit mortality among high-risk groups; to reduce morbidity to the general population; and to minimize social disruption and economic losses.

While any Priority Groups List will be subject to change, the list will most likely include the following groups:

- Health-care workers and public health personnel involved in the distribution of vaccine and antiviral agents
- Persons responsible for community safety and security, e.g. police, fire-fighters, military personnel, corrections officers, "first responders" not included in first priority group (e.g. ambulance officers)
- Other highly skilled persons who provide essential community services whose absence would either pose a significant hazard to public safety (e.g. air traffic controllers) or severely disrupt the pandemic response effort (e.g. persons who operate telecommunications or electric utility grids, care givers at residential facilities). [NOTE: Members of this target group are likely to vary widely from region to region, depending on local circumstances.]
- Persons traditionally considered to be at increased risk of severe influenza illness and mortality:
 - Persons of any age with high-risk medical conditions
 - Pregnant women
 - Persons in aged residential care facilities and other long-term care facilities
 - Persons > 50 years of age without high-risk medical conditions
 - Infants age 6-12 months (if supported by epidemiologic and clinical data)
 - Household contacts of persons with high-risk medical conditions

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- Others who, in the judgement of national and district health officials, provide critical community services (e.g. utility workers, funeral services personnel, personnel involved in the transport of essential goods such as food)
- Healthy persons age 18-49 years
- Pre-school-age (especially day-care-centre attendees) and school-age children (the population least likely to have severe illness)

Vaccination will be coordinated by the Public Health Service at HBDHB.

Information on Quarantine (Home Isolation) for Influenza

You have been asked to stay in isolation because:

1. You have suspected influenza and are infectious to others. Isolation in your home should continue for 72 hours after starting Tamiflu or 7 days from the onset of illness if you are not taking Tamiflu.
2. You may have been exposed to influenza. Isolation in your home should continue for 72 hours after starting Tamiflu or 7 days from the onset of illness if you are not taking Tamiflu.

The period of isolation may be lengthened if somebody else in your household becomes sick with suspected influenza.

We want you to restrict your activities to protect the safety of your family, friends and the community. This information sheet is to tell you what isolation means.

Staying at home.

You must not go to school, work, child care or out in public until cleared by the Public Health Nurse. This means you must not attend shopping centers, movies, parties or any social gatherings at all.

Visitors

You should have no visitors until you come out of isolation. Talk by phone and have things delivered to the door. Sometimes a visitor is essential (for example someone has to come into the house to give you essential home support). The visit should be brief. You and the visitor must both wear a mask. Talk with the visitor outside in the open air if possible and keep at least two metres away from them.

Preventing the spread of infection

Stay in a part of the house where you have minimal contact with other people. Try to keep well people and sick people apart.

Give people who have a fever and/or diarrhoea plenty to drink.

Give Paracetamol for fever. *Do not give Aspirin to children under 12 if they have a fever.*

Open doors and windows and ventilate the house as much as possible.

Cover your mouth and nose with a tissue or toilet paper when you are coughing or sneezing. Put the used tissue straight into a rubbish container. Wash and dry your hands afterwards.

Wash and dry your hands after you use the bathroom or toilet. Wash and dry your hands before you prepare food and eat, and when you are looking after sick people.

If you have more than one toilet, then one should be reserved for use by sick people.

Twice a day clean the following: with 1 part household bleach to 10 parts water:

- toilet handle and door handles of toilet, bathroom and rooms of isolated people
- bathroom sink and taps

Nobody else should use anything that could be contaminated with your throat or nose secretions or coughing or faeces – e.g. towels, handkerchiefs, eating utensils, food, bed linen, cigarettes, marijuana joints, P pipes, kava bowls.

Sharing bedding, clothing and utensils may spread infection, but you do not need to wash a sick person's bedding, clothing and utensils separately from the rest of the family's.

If you wash and dry all these things in the usual way they will then be safe for others to use.

Using face masks

The Public Health Nurse will show you how to wear a mask.

- Sick people should wear a surgical mask if anyone is in their room and if they have to leave their room.
- People who are in quarantine but not sick should wear a particulate respirator (PFR95) mask if they are in the same room as a sick person.
- Essential visitors to the house should wear a particulate respirator (PFR95) mask through their visit.

Used masks should be put in the normal household rubbish.

Coming out of isolation

The Public Health Nurse or your doctor will tell you when you are cleared to come out of isolation. At that time you will be non-infectious to others. It will then be safe for you to resume your normal life.

Questions

Your Public Health Nurse will be happy to answer any questions.



Public Gathering SOP

Closure and re-opening of public places, events and gatherings

Plan for pandemic influenza

Introduction:

This plan is developed as part of a number of workstreams to enhance Hawke's Bay pandemic preparedness.

Definitions

Public place or event – any congregation of people at any premises or place, whether indoors or outdoors, public or private. This may include workplaces. There are a few exceptions - see Related legislation.

Public Health Order (92Z) – on an application by a Medical Officer of Health, the District Court may make a public health order in respect of an individual if the court is satisfied that the individual poses a public health risk.

Abbreviations

CIMS – coordinated incident management system

HBDHB – Hawke's Bay District Health Board

MOH – Medical Officer of Health

PHS – Public Health Service

PPE – personal protective equipment

Related legislation

Epidemic Preparedness Act 2006 repeals and replaces some sections of the Health Act. This Act enables the Prime Minister on the advice of the Director-General of Health to enable use of special powers when there is an outbreak of a stated quarantinable disease. These powers include:

- The MOH would have powers to require premises to close and to forbid people to congregate. These premises and congregations of people may be public or private. "Premises" does not include private dwellings, parliament, courts or prisons. The MOH must publicise an order.
- Powers for police to assist the Medical Officer of Health. Police may consider (as a last resort) using the following statutory provisions to detain anyone who does not comply with MOH requests: Summary Offences Act (obstruction); Crimes Act (criminal nuisance). However the powers under the Epidemic Preparedness Act 2006 should be sufficient.

Related plans of other agencies

New Zealand Influenza Pandemic Plan.

Ministry of Education: Pandemic Planning Kit for Schools and Early Childhood Education (ECE) Services.

<http://www.minedu.govt.nz/index.cfm?layout=document&documentid=10981&indexid=10898&indexparentid=6088>

<http://www.education.govt.nz/school/health-safety-and-wellbeing/emergencies-and-traumatic-incidents/pandemic-planning-kit/>

Aims and general purpose

To describe the purpose and processes for closure and re-opening of public places and events during a pandemic.

Assumptions

Closure of public places and events will achieve social distancing and this will reduce the opportunities for virus transmission.

Some degree of voluntary social distancing will occur spontaneously by the public during a pandemic. Most people will be happy to follow recommendations from the MOH.

Some people and groups will be reluctant or extremely opposed to social distancing which interferes with their planned activities. They will ignore public health recommendations for closure of public places or events. Some people will give cultural and lifestyle considerations priority over the need for social distancing.

Indoor events will be more likely to transmit infection than outdoor ones.

Closure of places and events involving children will have relatively more effectiveness than those involving adults only. Children shed more virus, for longer, and are less likely to be able to observe infection control recommendations.

Closure of places and events involving children will have significant flow-on effects on health and all economic activity because parents will have to cease work to care for children.

Closure of workplaces would lead to significant economic hardship for many people.

Conditions under which the plan comes into force

From the earliest stage in the epidemic, during the “Stamp-it-out” phase focused closure of public places and events should be considered as part of the public health management for every case.

Widespread closure of public places and events should be considered during the epidemic as clusters of cases appear and when cases become widespread.

Operational Structure:

The decision to close public events and places will be made by the Medical Officer of Health who has the necessary legal powers. This decision should be made with the Response Coordinator.

Relationships with other levels of government

Use of MOH powers under s70 and s71 of the Health Act require a public health emergency to be declared by the Director-General of Health or a civil defence emergency to be declared. The MOH may also access these powers if authorized to do so by the Minister for the purpose of preventing the outbreak or spread of infectious disease (for example if no national emergency has been declared and the risk is limited to a certain region/s in the early stages).

Emergency powers of the MOH under the Epidemic Preparedness Act 2006 will only be available when a notice is placed in the Gazette by the Prime Minister.

Communication Plan/Issues:

Types of messages, how they will be distributed, obligations on receipt

Under the Epidemic Preparedness Act 2006, orders by the MOH *must* be communicated via newspaper *and* a TV channel or radio station that most people in the district can receive.

Orders by the MOH will also be communicated to people in the following ways:

General channels

- HBDHB 0800 number and website
- News media – local radio, TV and newspapers
- Local authority community development officers
- Primary healthcare providers, including Māori and Pacific Island NGO providers
- Through Iwi / taiwhenua to marae representatives

Specific to particular groups affected by the closures

- Letters, including to marae committees
- Email bulletins
- Telephone trees
- Text messages
- Websites
- Fax
- Notices at venues e.g. marae, churches, clubrooms etc

Preparedness:

Relationships required

Iwi

Police

Educational institutions

Organisations involved in social, business, tourism and leisure activities

Media

Risk assessment

The public may be unprepared for the possibility of closures because insufficient public communication has been carried out.

People may ignore the closures and police enforcement may be necessary.

Closures may be perceived as unpopular and ineffective because the virus will spread despite closures.

The media may communicate the messages in a way which raises rather than lessens public alarm.

Groups and organisations may have no contingency plans for closures, with resulting confusion and poor implementation.

Public health and police personnel may have insufficient resources to enforce orders. Therefore orders should be realistic and carefully considered.

Some Māori will wish to use their marae as places to take their sick. They will expect treatment services to be there and to be able to leave or remain with their sick according to their preference. Not all Māori will take this course – some will stay away from the marae for fear of infection.

Operational Procedures:

Roles, relationships and tasks

Agency	Role and task	Relationships
MOH	Identify closures needed and make the orders Communicate the details of the orders rapidly. Revoke the closure orders	Response Coordinator The police The public The media
Police	Support the MOH as requested to enforce orders	MOH
Response coordinator	Communicate with Incident Management Team about the orders	MOH

Action required at different alert phases

Closures will be made throughout the epidemic from the first cases or clusters until the epidemic has waned.

Revocation of closures should only be made after consultation with the Incident Management Team. Consideration should be given to the possibility that further epidemic waves might make the revocation premature.

Resources e.g. designated sites, equipment required

Police for enforcement.

Contingency plans needed for all organisations and groups.

Workforce issues

The closures will impact on workforce in industries, including health. If there is widespread civil disobedience of closures they will impact seriously on police and security workload.

Reporting

Daily report on closures in place to Response Coordinator, Police, CACs, Outreach Services and the MoH.

This would form part of the daily PHS report to the Planning and Intelligence Manager.

Names, addresses and contact numbers

Lists held by the HBDHB will be used to communicate closures.

Implications

The CDEM workforce group should examine the issue of whether compensation will be paid for loss of business earnings if premises are closed.

Communication about the possibility of closures should begin before a Hawke's Bay epidemic begins so that closure orders do not come as a surprise. Such communication should include the likelihood that closures will only reduce the rate of transmission, not prevent it entirely. This communication plan should include discussions with Hawke's Bay media so that accurate information can be conveyed which minimises unnecessary alarm.

All groups and organisations need to be advised to develop contingency plans for closures.

Police should consider options for increased workload which may be involved in enforcing closures.

The IMT should be aware that Māori may be expecting treatment services at their marae.

If Māori intend to go to their marae when there is a closure order on public premises or gatherings, the MOH and response coordinator will need to decide:

- How the risk of increased transmission on marae can be clearly communicated to Māori
- How HBDHB can best work with marae to make the marae gatherings as safe as possible



Quarantine and Isolation Plan

Quarantine and isolation plan for pandemic influenza

Introduction:

This plan is developed as part of a number of workstreams to enhance Hawke's Bay pandemic preparedness.

Definitions

Case: someone who is thought by a doctor to meet the case definition for pandemic influenza.

Contact: Anyone who has had:

- Contact with the respiratory secretions of a case in an enclosed space.
- Contact with the faeces of a case.

Household, work and institutional contacts during the infectious period of the case will almost always be defined as contacts.

Isolation means restricting the activities of cases until they are no longer infectious.

Quarantine means restricting the activities of contacts (people who have been exposed to a case but are still not sick) until the incubation period has expired.

Abbreviations

MOH – Medical Officer of Health

PHS – Public Health Service

PPE – personal protective equipment

Related legislation

The Epidemic Preparedness Act 2006 enables the Prime Minister on the advice of the Director-General of Health to introduce a wide range of emergency powers including:

- extension of quarantine powers to cover aircraft as well as ships and to cover pandemic influenza. (Currently the Health (Quarantine) Regulations 1983 do not apply to influenza).
- Medical Officer of Health powers to close public events and requisition resources.
- powers for police to assist the Medical Officer of Health. Police may consider (as a last resort) using the following statutory provisions to detain anyone who does not comply with MOH requests: Summary Offences Act (obstruction); Crimes Act (criminal nuisance). However the powers under the Epidemic Preparedness Act 2006 should be sufficient.
- information to assist contact management
- management of infected people
- disposal of infected things or craft

Powers of Medical Officers of Health under the Health Act at the border in an emergency.

Aims and general purpose

To minimise the spread of pandemic influenza by isolating cases and quarantining contacts.

Assumptions

1. During an epidemic most cases will not be able to be hospitalised (or not be sick enough to be hospitalised).
2. Quarantine will reduce transmission from those contacts who become cases.
3. Isolation and quarantine are important early in an epidemic and may help to slow the spread of the disease. Isolation and quarantine will be enforced early in an epidemic.
4. Isolation of cases as early as possible may help to control the rate of growth of the epidemic in its early stages. Isolation and quarantine are likely to be less effective when an epidemic is established. Enforcement of isolation and quarantine (as opposed to education and persuasion) are not useful when the epidemic is established.
5. Duration of isolation and quarantine will be determined when more is known about the virus. At present it is thought that isolation might last: 8 days for adults, 14 days for children, 21 days for infants. Quarantine for contacts will last seven days.

Conditions under which the plan comes into force

This plan should be followed for all suspected cases of pandemic influenza.

Operational Structure:

The HBDHB is the lead agency during a pandemic. All other agencies are support agencies. The MOH and the staff of the PHS will coordinate all isolation and quarantine events during a pandemic.

At the beginning of an epidemic the PHS will coordinate management of the cases and contacts. Primary health care providers and police will be asked to assist as needed.

When an epidemic is established the PHS will not be able to be involved in individual cases, but will provide guidance for the health care sector and the public about recommendations for isolation and quarantine.

Relationships with other levels of government

Emergency powers of the MOH under the Epidemic Preparedness Act 2006 will only be available when unlocked by the Prime Minister.

The duration of isolation/quarantine and national expectations will be defined by the Ministry of Health.

This plan may be affected by recommendations from the Ministry of Health.

Communication Plan/Issues:

Types of messages, how they will be distributed, obligations on receipt

Cases will be notified to the PHS by health care personnel or the public. It is expected that practitioners will notify by phone early in the epidemic (stamp it out phase) and fax or electronically notify once the epidemic is established.

The PHS will advise the primary care sector when the epidemic has become established. At this point PHS follow-up of cases will cease and hospital and community clinicians will be expected to give advice to cases and contacts.

Cases and contacts need to receive the information in the Appendix 1. This information is to be supplied by:

- the PHU (in the early stages of an epidemic)
- the doctor or practice nurse (when the epidemic is established)

Preparedness:

Relationships required

Doctors (hospital or community)	↔	PHS (for joint management of early cases)
PHS	↔	Police (for enforcement)
PHS	↔	All sectors (to communicate the phases of the epidemic)
PHS	↔	The Welfare Coordinating group organising accommodation (for isolation and quarantine of cases and contacts who have no Hawke's Bay home)

Risk assessment

The biggest risk is that the patient will present late, or the diagnosis will be delayed or the diagnosing doctor will not notify or liaise with public health early enough for isolation and quarantine to be implemented.

Non-compliance with instructions for isolation may stretch police or security resources.

PHS unable to access sufficient support deployed from other parts of the HBDHB and is unable to cope with the intensive workload required.

Operational Procedures:

Roles, relationships and tasks

1. Early in the pandemic (stamp it out phase) i.e. when the first cases are diagnosed and "stamping out" outbreaks is feasible.

Agency	Role and task	Relationships
Medical practitioners	Diagnose and notify cases	MOH
Hospitals	Manage cases meeting hospital admission criteria (arrange lab testing, recommend and enforce isolation, give advice and support including PPE, provide treatment)	MOH (pre-discharge)
PHS, MOH	Manage cases in the community (arrange lab testing, recommend and enforce isolation, give advice and support including PPE, provide treatment)	Medical practitioners
PHS, MOH	Identify and manage contacts (recommend and enforce quarantine, give advice and support, provide prophylaxis)	Medical practitioners
Police	Respond to MOH request for assistance enforcing isolation or quarantine	MOH

HBDHB	Coordinate volunteer and social support for people in isolation and quarantine	MOH, PHS
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2. Once the epidemic is established (manage it phase) i.e. when there are an escalating numbers of clusters and the MOH has declared that the epidemic is established.

Hospitals	Diagnose and notify hospitalised cases Manage cases meeting hospital admission criteria (recommend and enforce isolation, give advice and support including PPE, provide treatment)	MOH and GP (pre-discharge)
Medical practitioners	Diagnose and notify community cases Manage cases in the community (recommend self-isolation, give advice and support including PPE, provide treatment) Identify and manage contacts (recommend quarantine, give advice and support, provide prophylaxis) Laboratory testing will not be required	PHS

Action required at different alert phases

Resources e.g. designated sites, equipment required

Primary care practitioners and the PHU will require copies of the information for cases and contacts.

A memorandum of understanding has been signed between HBDHB and Kennedy Park Top 10 Holiday Resort to use the facility to accommodate those who cannot remain in their own homes.

Workforce issues

Urgent secondment of staff (e.g. nursing or clerical) to assist the PHS from other parts of the DHB and from local authorities would be helpful. This would only be feasible in the stamp-it-out phase and would only be useful at that stage. In the manage it phase individual case follow-up by the PHS will no longer be useful and staff elsewhere in the DHB will be too overloaded to assist the PHS.

Reporting

Daily count of number of cases in isolation and the number of contacts in quarantine. This would form part of the daily PHS report to the Planning and Intelligence Manager.

Operations

Cases who are seriously ill will be admitted to hospital. Once the epidemic is established they will have to meet clinical admission criteria.

Cases and contacts who are not seriously ill will be isolated/quarantined in their own home. In the stamp it out phase they will be subject to daily monitoring (arranged between the doctor and the PHS). In the manage it phase they will be given information only.

Cases and contacts who are not seriously ill and do not have a home in Hawke's Bay will be accommodated at a quarantine centre.

Appendix 1

Information on quarantine (home isolation) for influenza

You have been asked to stay in isolation because:

1. You have suspected influenza and are infectious to others. Isolation in your home should continue for 72 hours after starting Tamiflu or 7 days after the onset of illness if you are not taking Tamiflu.
2. You may have been exposed to influenza. Isolation in your home should continue for 72 hours after starting Tamiflu or 7 days after the onset of illness if you are not taking Tamiflu.

The period of isolation may be lengthened if somebody else in your household becomes sick with suspected influenza.

We want you to restrict your activities to protect the safety of your family, friends and the community. This information sheet is to tell you what isolation means.

Staying at home.

You must not go to school, work, child care or out in public until cleared by the Public Health Nurse. This means you must not attend shopping centers, movies, parties or any social gatherings at all.

Visitors

You should have no visitors until you come out of isolation. Talk by phone and have things delivered to the door. Sometimes a visitor is essential (for example someone has to come into the house to give you essential home support). The visit should be brief. You and the visitor must both wear a mask. Talk with the visitor outside in the open air if possible and keep at least two metres away from them.

Preventing the spread of infection

Stay in a part of the house where you have minimal contact with other people. Try to keep well people and sick people apart.

Give people who have a fever and/or diarrhoea plenty to drink.

Give Paracetamol for fever. *Do not give Aspirin to children under 12 if they have a fever.*

Open doors and windows and ventilate the house as much as possible.

Cover your mouth and nose with a tissue or toilet paper when you are coughing or sneezing. Put the used tissue straight into a rubbish container. Wash and dry your hands afterwards.

Wash and dry your hands after you use the bathroom or toilet. Wash and dry your hands before you prepare food and eat, and when you are looking after sick people.

If you have more than one toilet, then one should be reserved for use by sick people.

Twice a day clean the following: with 1 part household bleach to 10 parts water:

- toilet handle and door handles of toilet, bathroom and rooms of isolated people
- bathroom sink and taps

Nobody else should use anything that could be contaminated with your throat or nose secretions or coughing or faeces – e.g. towels, handkerchiefs, eating utensils, food, bed linen, cigarettes, marijuana joints, P pipes, kava bowls.

Sharing bedding, clothing and utensils may spread infection, but you do not need to wash a sick person's bedding, clothing and utensils separately from the rest

of the family's. If you wash and dry all these things in the usual way they will then be safe for others to use.

Using face masks

The Public Health Nurse will show you how to wear a mask.

- Sick people should wear a surgical mask if anyone is in their room and if they have to leave their room.
- People who are in quarantine but not sick should wear a particulate respirator (PFR95) mask if they are in the same room as a sick person.
- Essential visitors to the house should wear a particulate respirator (PFR95) mask through their visit.

Used masks should be put in the normal household rubbish.

Coming out of isolation

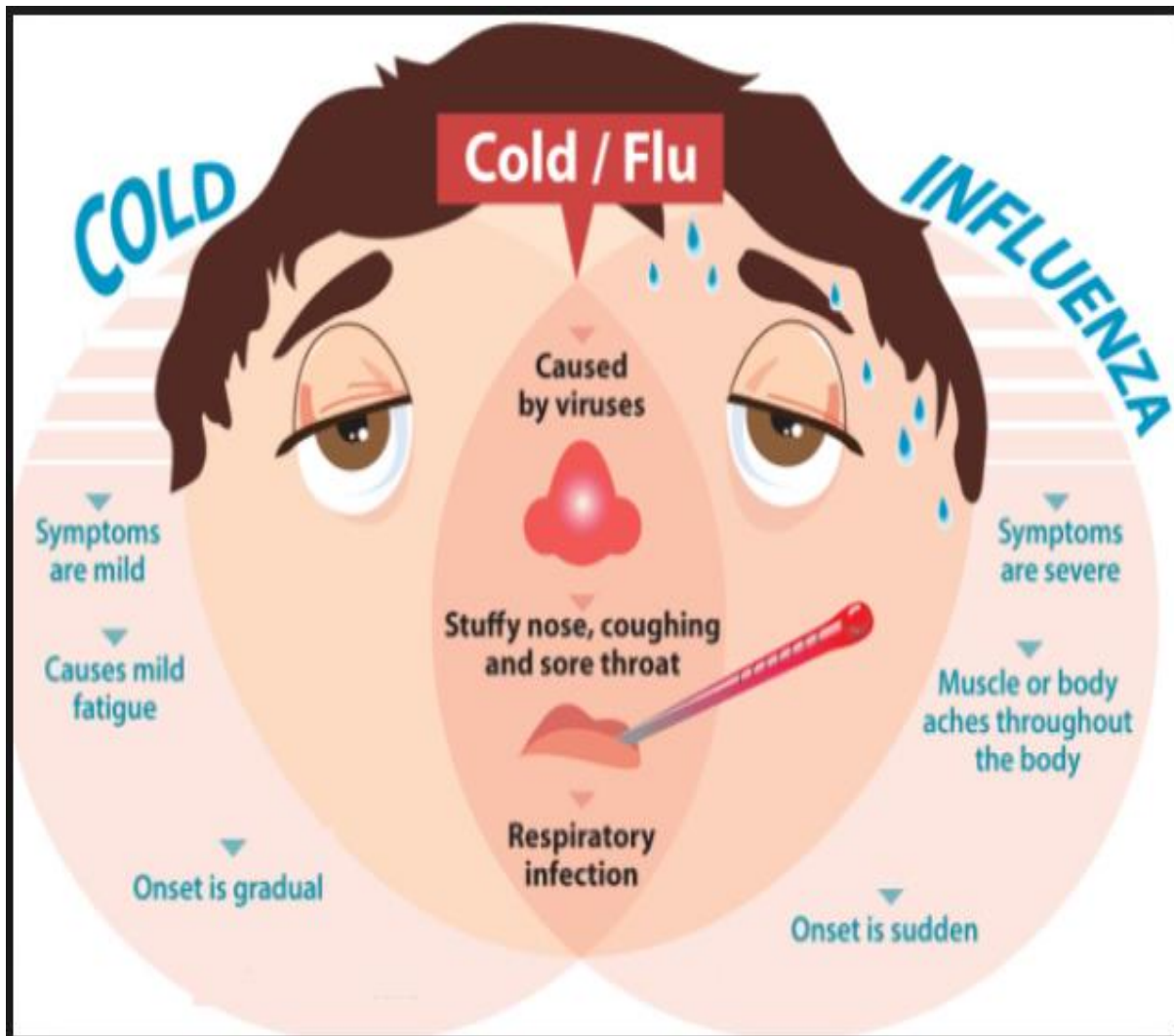
The Public Health Nurse or your doctor will tell you when you are cleared to come out of isolation. At that time you will be non-infectious to others. It will then be safe for you to resume your normal life.

Questions

Your Public Health Nurse will be happy to answer any questions.



Residential Care Plan



Guidelines for the Prevention, Control and Management of Influenza Outbreaks

CONTENTS

OVERVIEW

Preface: Our residents are vulnerable to influenza due to co-morbidities and/or advanced age and the environment of communal living facilitates the spread of respiratory agents.

The purpose of this document: is to provide best practice guidelines for: preparing, preventing, identifying and managing **outbreaks of influenza**. Note: in a pandemic period, outbreak control will be determined by the HBDHB.

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SECTION 1 GENERAL INFORMATION

Influenza

- Influenza viruses are very infectious and can cause acute respiratory disease that can cause serious illness and death
- Our facilities are high-risk environments for influenza due to communal living arrangements and the continual close proximity of residents
- The elderly are particularly vulnerable to influenza due to immune senescence and/or co-morbidities

Description

Influenza viruses are highly infectious causes of influenza, an acute respiratory tract disease. Three types of influenza virus are A, B and C.

- Both type A and B viruses cause large numbers of seasonal influenza cases
- Type C influenza is relatively rare

Transmission, incubation and communicability

- Large droplets are believed to be the primary mode of transmission for influenza viruses, these **droplets** are produced when infected **individuals cough or sneeze**
- Influenza can also be transmitted by **direct contact with respiratory secretions, such as from hard surfaces** where influenza viruses can persist

The incubation period for influenza is short, on average 2 days (range 1-4 days). People infected with influenza are considered infectious from 1 day before onset of symptoms and viral shedding is greatest in the first 3-5 days of illness.

Vaccination is the single most important means for preventing influenza. In each facility we should aim for coverage of 95%.

SECTION TWO CLINICAL

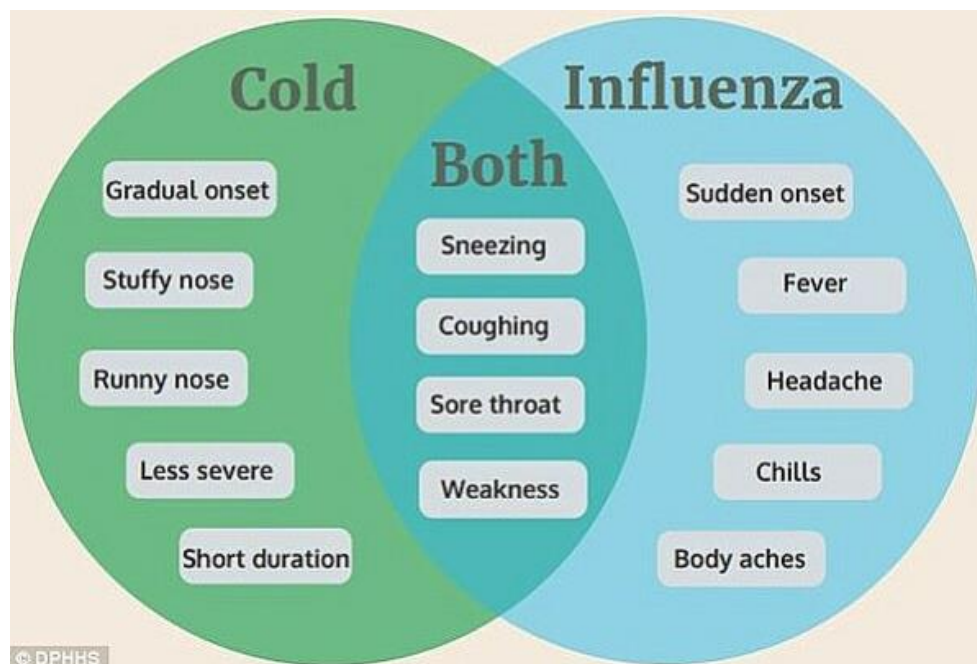
Symptoms and signs

Influenza can be difficult to distinguish from other viral respiratory tract infections on clinical signs alone. **Symptoms and signs of influenza may include the following:**

- Sudden onset of fever ($\geq 38^{\circ}\text{C}$). **Of note**, elderly residents may not necessarily have an elevated temperature with influenza, due to medical conditions or medications masking raises in temperature.
- Respiratory symptoms
 - New or worsening cough
 - Shortness of breath
 - Sore throat
- Systemic symptoms
 - Headache
 - Myalgia (muscle soreness)
 - Malaise

In the elderly, symptoms may also include:

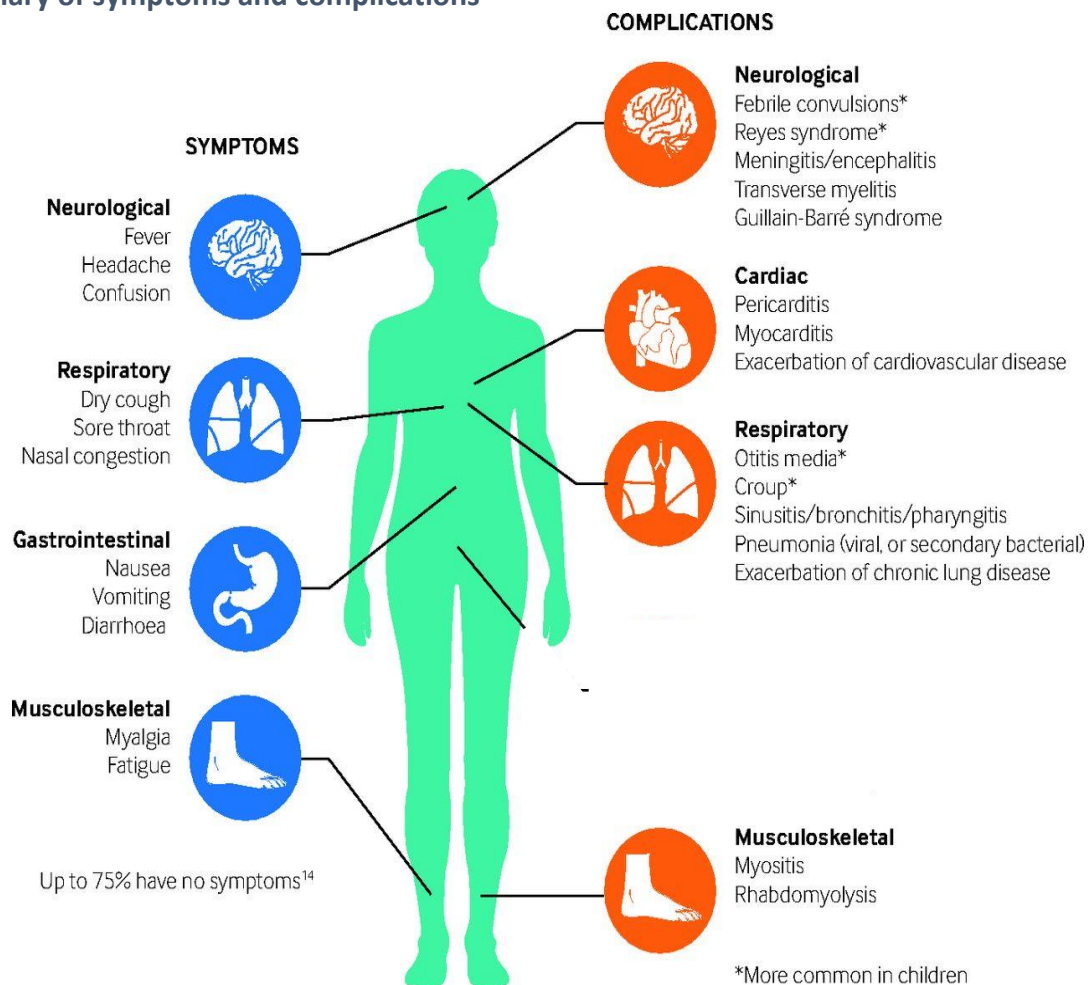
- Onset of, or increase in, confusion
- Worsening of underlying conditions, for example: exacerbation of chronic obstructive pulmonary disease or congestive heart failure



Complications include

- primary viral and secondary bacterial pneumonia
- sinusitis, otitis media
- encephalitis
- Reye’s syndrome when salicylates such as aspirin are used
- increased number of deaths
- exacerbations of chronic conditions
- febrile seizures
- myositis
- increased rates of hospitalisation

Summary of symptoms and complications



SECTION 3 RECOGNISING

Recognising influenza-like illness and outbreaks

- **Three (3) or more people (residents or staff) with influenza like illness (ILI) within the same 3 days (72 hour period) indicates a potential influenza outbreak**
- If an outbreak is suspected, the Public Health Unit may request in a sample of swabbing those infected

Influenza surveillance

The aim of ILI surveillance is to ensure early identification of symptoms in residents and staff that may precede, or indicate early stages of an outbreak.

Prompt detection of outbreaks allows early implementation of control measures.

Early implementation of control measures and notification has been associated with shorter duration of outbreaks.

The following case definition should be used for ILI in staff and residents

- **Sudden onset of:**
 - Fever
 - Chills
 - Myalgia or
 - Clinically documented temperature $\geq 38^{\circ}\text{C}$

PLUS two or more of the following:

- Headache
- Malaise
- Cough (new or worsening)
- Sore throat

Refer to Appendix 1 for a guideline in decision making

RESPONSE TO A SINGLE CASE OF ILI OR INFLUENZA IN A RESIDENT

- Hydration
- Isolate ill resident or cohort and minimise interaction with other residents
- If admission/transfer is required to HBDHB hospital inform in advance that the resident is being transferred and there is potential or confirmed influenza. *Refer to Appendix 3 for a sample transfer advice form (ISBAR).*

SECTION 4 TESTING OF RESIDENTS

Testing of residents

- In an outbreak, a sample of people meeting the ILI case definition should be tested, usually 4 to 6, **be advised by the Public Health Unit (refer to Appendix 2)**
- Nose or throat swabs are collected for influenza testing once three or more cases of ILI occur within 3 days, and at least one has a positive laboratory test for influenza, the outbreak is confirmed
- Further cases of ILI are assumed to be due to influenza and should be treated as such

Antiviral medication during an outbreak - take the lead from Public Health

- GPs are responsible for prescribing antiviral medications.
- Early initiation of antiviral treatment (within 48 hours of symptom onset) in adults with confirmed influenza reduces the risk of secondary complications requiring antibiotic therapy, and hospitalisation.

Antiviral use for prophylaxis – take the lead from Public Health

- The widespread use of antivirals in institutions that house residents at high risk of severe disease and death from influenza is supported by observational cohort studies and one randomised controlled trial.
- During an outbreak, other facility residents will have been, or may become, exposed to infectious residents.
- The provision of antivirals works as early treatment for those incubating disease and reduces shedding in those infected.
- Antiviral prophylaxis should only be used in addition to other outbreak control measures.
- If recommended, to optimise the chances of reducing transmission and bring the outbreak under control, antiviral prophylaxis should be given to ALL asymptomatic residents (regardless of vaccination status) and ALL unvaccinated staff.
- Ideally, antivirals should be commenced by all targeted residents and staff within 24 hours, AND medication safety issues, including renal function/renal insufficiency, must be appropriately considered during the prescribing phase.
- Staff need to be aware of the most common side effects, e.g. nausea and vomiting.

SECTION 5 INFECTION PREVENTION AND CONTROL/TRANSMISSION

Key elements for staff in controlling influenza:

- staff and resident vaccination rates
- hand hygiene before and after and resident care activities
- use of appropriate personal protective equipment (PPE)
- regular cleaning
- increased cleaning of shared equipment
- infected resident placement - isolation and cohorting
- minimising resident transfer or transport

The spread of respiratory viruses can be reduced by hygiene measures (hand hygiene, cleaning), barriers to transmission (masks, gloves, eye protection, gowns), and isolation of ill residents (social distancing).

Transmission-based precautions are “good” work practices (refer to Appendix 5).

Depending upon the extent of the outbreak and the physical layout of the building, a restriction on **admissions** might be applied.

If **transfer to hospital** is required, notify the ambulance service and receiving hospital of the outbreak and the suspected or confirmed diagnosis. A template for resident transfer *refer to Appendix 3*.

Re-admission of residents, who have had influenza and were transferred to hospital or another facility, requires the provision of appropriate accommodation, care and infection prevention and control. The re-admission of residents who have not had suspected or confirmed influenza in the outbreak (i.e. who are not known cases) is generally not recommended during an outbreak.

Visitor restriction and signage

During an outbreak, preferably, minimize the movement of visitors into and within the facility. If recommended by the outbreak management team:

- Suspend group social activities that involve visitors such as musicians
- Postpone visits from non-essential external providers
- Inform regular visitors and families of residents and of the outbreak of influenza and request they only undertake essential visits; discourage unnecessary visitors
- Ask those who do visit an ill resident, to:
 - Visit only one resident
 - Enter and leave directly without spending time in communal areas
 - Use an alcohol based hand rub or wash their hands before and after visiting
 - If giving direct care, use PPE as directed by staff
 - Initiate passive screening for respiratory symptoms using “Attention Visitors” signage (*refer to Appendix 4*) and reminding visitors:
 - Not to visit if unwell
 - To limit visiting to one resident

- To follow signs for the use of PPE, as indicated
- To practice hand hygiene and respiratory hygiene/cough etiquette
- Post “Attention Visitors” signs at the entrance(s) and other strategic locations in the facility (*refer to Appendix 4*)
- Initiate active screening (incoming visitors report to the desk) as required

SECTION 6 STAFFING

Allocation of staff

- Once resident isolation measures are in place, to further reduce the risk of transmission, it is preferable to allocate specific (vaccinated) staff to the care of residents
- These staff members should not move between their section and other areas of the facility, or care for other residents
- Staff members should self-monitor for signs and symptoms of respiratory illness and self-exclude from work if unwell
- When ILI is apparent, influenza can be spread within the facility by unvaccinated staff, who should work only if well and wearing a mask

SECTION 7 MONITORING

Effective outbreak management has four phases:

- Preparation: plan is in place
- Response: to activate the outbreak management plan
- Monitor outbreak progress: assess and modify outbreak control activities
- Conclusion: declare the outbreak over, review events and lessons learned for future outbreaks

Monitoring the outbreak

- Management and Administration should update listing with new information daily, by midday (or another agreed time), or more frequently if major changes occur, and communicate this to the PHU each day (as arranged, by email (preferred), fax or telephone).

Ongoing resident surveillance should include the following



















- Monitoring residents for ILI symptoms
- Addition of all new cases added to resident list
- Updating the status of ill residents: hospitalised, recovered, deceased
- Recording the use of antiviral prophylactic medication and any adverse reactions to or cessation of any prescribed antiviral medication

Ongoing staff surveillance should include all the following:

- Addition of all new staff cases to the staff list
- Identification of staff who have recovered, and confirmation with the PHU of their return to work date

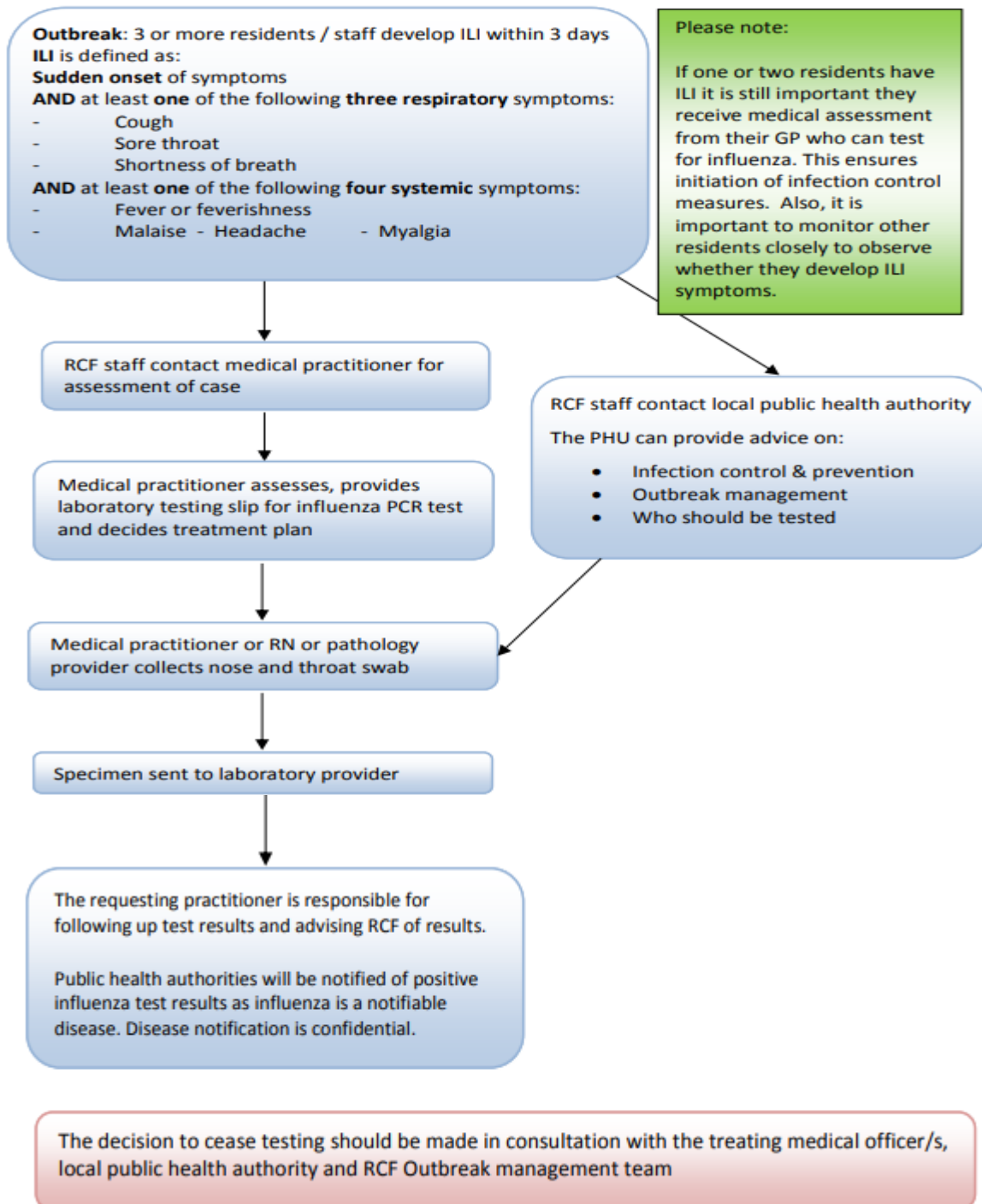
APPENDIX 1

IS IT A COLD OR THE FLU?

COLD	SYMPTOM	FLU
 YES	STUFFY OR RUNNY NOSE	 SOMETIMES
 YES	SNEEZING	 SOMETIMES
 YES, with green or yellow gunk	COUGH	 YES, a dry cough
 YES	SORE THROAT	 SOMETIMES
 MILD head & body aches	BODY ACHES	 SEVERE aches all over
 NO	NAUSEA	 SOMETIMES
 RARE for adults	FEVER	 YES
 NO	CHILLS & SWEATS	 YES
 SLOWLY, over a few days	WHEN DO THE SYMPTOMS COME ON?	 FAST, within hours

APPENDIX 2

What to do when a suspected outbreak of influenza-like illness (ILI) is identified (3 or more residents / staff develop ILI in the same 3 days)



APPENDIX 3

Appendix 3 Resident transfer advice form

To: _____

Please be advised that _____
is being transferred from a facility where there is a:

Suspected influenza outbreak

Confirmed influenza outbreak

Please ensure that appropriate infection control precautions are taken upon receipt of this resident.

At the time of transfer, this resident was:

Confirmed with influenza

Suspected of influenza

Had no symptoms of influenza

This resident was vaccinated with the current influenza vaccine on __/__/____.



Visitors

See a nurse for information before entering the room

For all staff

Droplet Precautions

in addition to Standard Precautions

Before entering room

1


Perform hand hygiene

2


Put on a surgical mask

On leaving room

1


Dispose of mask

2


Perform hand hygiene

Standard Precautions

And always follow these standard precautions

- Perform hand hygiene before and after every patient contact
- Use PPE when risk of body fluid exposure
- Use and dispose of sharps safely
- Perform routine environmental cleaning
- Clean and reprocess shared patient equipment
- Follow respiratory hygiene and cough etiquette
- Use aseptic technique
- Handle and dispose of waste and used linen safely



Attention all visitors

A number of people have influenza-like illness in this facility at present. We are trying to prevent this illness from spreading.

Visitors are advised that there is a risk of acquiring influenza-like illness by visiting this facility at this time.

We ask you not to enter this facility if you currently have symptoms of an influenza-like illness (fever, sore throat, cough, muscle and joint pains, tiredness or exhaustion), or have recently been ill, or have been in contact with someone who is ill.

Please follow the recommended infection control precautions on the signs when visiting.

Thank you for your cooperation.



Droplet precautions

Put on a SINGLE-USE FACE MASK
before entering this room!

Please follow standard precautions at all times:

- **Wash your hands** thoroughly
- **Wear gloves** when touching body fluids or substances and contaminated items or surfaces
- **Wear a gown** or apron during care activities where your clothing may come into contact with body fluids or substances

Thank you for your cooperation.

APPENDIX 5

Transmission-based precautions are “good” work practices

- Use of PPE, maintain a 1 metre distance between the infected resident and others
- Staff must change their PPE after every contact with an ill resident, when moving from one room to another or from one resident care area to another
- All staff must perform:
 - hand hygiene after every contact with an ill resident
 - after being in contact with contaminated surfaces
 - whether or not gloves are worn - when visibly soiled with body fluids and/or substances, use water and liquid soap for hand washing
- Single-use surgical face masks should be worn by staff when exposure to respiratory droplets is likely, that is, when within 1m of an affected resident:
 - The mask should be put on when entering the room
 - Remove the mask after leaving the room, handling only by the tapes, and place in a clinical waste bin
 - Perform hand hygiene after disposing of the mask
 - Never re-use masks
 - When undertaking activities that require an infected resident to leave their room, the resident should wear a mask if tolerated
- Encourage good cough etiquette
- Eye protection includes the use of safety glasses, goggles or face shields but does not include personal eye glasses.
 - Goggles or other protective eyewear must be disposed of, or where approved for re-use, cleaned after use
 - Eyes should be protected where there is potential for splattering or spraying of blood, body fluids, secretions or excretions, including coughing
- Use resident-dedicated equipment where possible
 - Ideally, any care equipment should be dedicated for the use of an individual resident. If resident care equipment must be shared, the items must be cleaned and disinfected between each resident use.
- Allocate ill residents to single rooms
- Enhanced cleaning and disinfection of the ill resident’s environment
 - Influenza viruses can persist on hard surfaces and remain viable for up to 24 hours on hard, non-porous surfaces.
 - Infectious influenza virus can be transferred to hands from these surfaces for at least 2 – 8 hours after contamination of the surface
 - Frequently touched surfaces are those closest to the resident, and should be cleaned more often (for example - bedrails, bedside tables, commodes, doorknobs, sinks, surfaces and equipment close to the resident), use sodium hypochlorite 100mL in 1L of water (1:10 solution)

- Linen should be laundered using hot water and detergent
 - Linen should be dried on a hot setting in a dryer
 - There is no need to separate the linen of ill residents from that of other residents
 - Appropriate PPE should be used when handling soiled linen.
- Crockery and cutlery should be washed in a dishwasher



Hand hygiene

- A most important key to prevention and further spread of infection is good hand hygiene.
- Hand hygiene means rubbing hands with an alcohol based hand rub OR washing them with liquid soap and water and drying with a single-use towel.

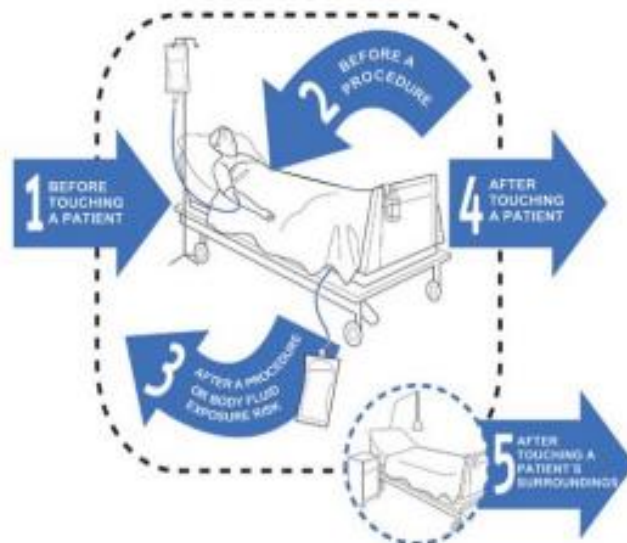
Hand hygiene will NOT be effective if any of the following are present:

- Skin with cracks, cuts or dermatitis – cover all cuts or abrasions
- Hand and arm jewellery
- Nails longer than 3-4mm, or with chipped or worn nail polish, or artificial nails, or nail enhancements.

Hand hygiene must be performed in all situations described in the table below regardless of whether gloves are used. NB: staff must perform hand hygiene before applying gloves and after removing gloves as the removal process can cause contamination resulting in further infections.

Figure: The 5 moments of hand hygiene

1	BEFORE RESIDENT CONTACT	WHEN? WHY?	Clean your hands before touching a resident. <i>To protect the resident against harmful organisms carried on your hands.</i>
2	BEFORE ASEPTIC TASK	WHEN? WHY?	Clean your hands immediately before any aseptic task and before donning gloves. <i>To protect the resident against harmful organisms, including the residents own organisms, entering his or her body.</i>
3	AFTER BODY FLUID EXPOSURE	WHEN? WHY?	Clean your hands immediately after an exposure risk to body fluids and after glove removal. <i>To protect yourself and the care environment from harmful organisms.</i>
4	AFTER RESIDENT CONTACT	WHEN? WHY?	Clean your hands after touching a resident and his or her immediate surroundings, when leaving. <i>To protect yourself and the care environment from harmful organisms.</i>
5	AFTER CONTACT WITH RESIDENT SURROUNDINGS	WHEN? WHY?	Clean your hands after touching any object or furniture in the resident's immediate surroundings, when leaving – even without touching the resident. <i>To protect yourself and the care environment from harmful organisms.</i>




Based on the 'My 5 moments for Hand Hygiene'. URL: <http://www.who.int/gpsc/5may/background/5moments/en/index.html> © World Health Organization 2009. All rights reserved.

How to Handwash?

WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB

 Duration of the handwash (steps 2-7): 15-20 seconds

 Duration of the entire procedure: 40-60 seconds



Wet hands with water;



Apply enough soap to cover all hand surfaces;



Rub hands palm to palm;



Right palm over left dorsum with interlaced fingers and vice versa;



Palm to palm with fingers interlaced;



Backs of fingers to opposing palms with fingers interlocked;



Rotational rubbing of left thumb clasped in right palm and vice versa;



Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



Rinse hands with water;



Dry hands thoroughly with a single use towel;



Use towel to turn off faucet;



Your hands are now safe.



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Patient Safety


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SAVE LIVES

Clean Your Hands

How to Handrub?

RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED

 Duration of the entire procedure: 20-30 seconds



1a Apply a palmful of the product in a cupped hand, covering all surfaces;



2 Rub hands palm to palm;



3 Right palm over left dorsum with interlaced fingers and vice versa;



4 Palm to palm with fingers interlaced;



5 Backs of fingers to opposing palms with fingers interlocked;



6 Rotational rubbing of left thumb clasped in right palm and vice versa;



7 Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



8 Once dry, your hands are safe.



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SAVE LIVES

Clean Your Hands

Respiratory hygiene information

- Respiratory hygiene and cough etiquette is one element of standard precautions.
- Covering sneezes and coughs can minimise or prevent infected persons from dispersing respiratory secretions into the air.
- Large droplets are believed to be the primary mode of transmission for influenza viruses and these occur when infected individuals cough or sneeze.
- The droplets do not remain suspended in the air and generally travel short distances (up to 1 metre).
- Hands should be washed with soap and water or alcohol hand rub after coughing, sneezing, using tissues, or after contact with respiratory secretions or objects contaminated by these secretions. It is important to keep contaminated hands away from the mucous membranes of the eyes and nose.

Cough Etiquette



- **When coughing or sneezing, use a tissue to cover your nose and mouth**
- **Dispose of the tissue afterwards**
- **If you don't have a tissue, cough or sneeze into your elbow**



- **After coughing, sneezing or blowing your nose, wash your hands with soap and water**
- **Use an alcohol-based hand cleanser if you do not have access to soap and water**

Remember: hand hygiene is the single most effective way to reduce the spread of germs that cause respiratory disease.

- Anyone with signs and symptoms of respiratory infection, regardless of the cause,**
- **should be instructed to cover their nose/mouth when coughing or sneezing;**
 - **use tissues to contain respiratory secretions;**
 - **dispose of tissues in the nearest waste receptacle after use; and**
 - **wash or cleanse their hands afterwards.**

Personal protective equipment (PPE) PPE is an important element of standard precautions

- Explain to residents that PPE is used for everybody's safety!
- PPE for resident care staff during an influenza outbreak includes the following:
 - Gown
 - Gloves (Gloves are single-use items)
 - Single-use surgical facemask with or without face shield
 - Eye protection (if there is potential for mucous membranes to come into contact with body fluids, for example a coughing person)

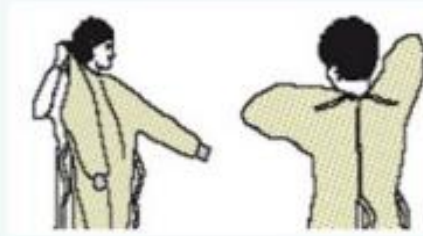
Another important sequence is the removal of PPE before leaving the resident-care area, i.e. at the door, and to place the PPE in an appropriate waste receptacle.

The use of PPE alone is not enough— YOU MUST perform hand hygiene before putting on and after removing the protective item.

SEQUENCE FOR PUTTING ON PPE

GOWN

- > Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- > Fasten at the back of neck and waist



MASK

- > Secure ties or elastic bands at middle of head and neck



PROTECTIVE EYEWEAR OR FACE SHIELD

- > Place over face and eyes and adjust to fit



GLOVES

- > Extend to cover wrist of isolation gown



SEQUENCE FOR REMOVING PPE

REMOVE PPE AT DOORWAY OR IN ANTEROOM

GLOVES

- > Outside of gloves is contaminated!
- > Grasp outside of glove with opposite gloved hand; peel off
- > Hold removed glove in gloved hand
- > Slide fingers of ungloved hand under remaining glove at wrist
- > Peel glove off over first glove
- > Discard gloves in waste container



PERFORM HAND HYGIENE

PROTECTIVE EYEWEAR OR FACE SHIELD

- > Outside of eye protection or face shield is contaminated!
- > To remove, handle by head band or ear pieces
- > Place in designated receptacle for reprocessing or in waste container



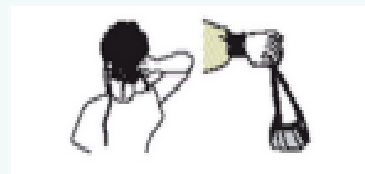
GOWN

- > Gown front and sleeves are contaminated!
- > Unfasten ties
- > Pull away from neck and shoulders, touching inside of gown only
- > Turn gown inside out
- > Fold or roll into a bundle and discard



MASK*

- > Front of mask is contaminated – DO NOT TOUCH!
- > Grasp bottom, then top ties or elastics and remove
- > Discard in waste container



Environmental cleaning

Step 1: Cleaning

Note: rooms of well residents should be cleaned first.

- Use warm water with a neutral detergent
- Refer to the product material Safety Data Sheet and product labels for additional information
- Rinse and dry
- Note: Some chlorine/detergent products with 1000ppm sodium hypochlorite can be used as a one-step cleaning/disinfection process
- Cleaning staff must wear PPE
- Cleaning cloths should be disposed of in a biohazard bag

Step 2: Disinfect

- A general recommendation is to use either a neutral detergent followed by 1000ppm sodium hypochlorite, *or*
- A one-step product with 1000ppm sodium hypochlorite (more practical)
- Disinfection is an additional step to cleaning and does not replace cleaning
- Use either chlorine disinfectant or alternatively, alcohol
- Disinfect all:
 - Horizontal surfaces
 - Bedside table – over bed table
 - Chairs
 - Commodes
 - Doorknobs
 - Toilet flushers
 - Taps
 - Handrails
 - Basins
 - Walking frames
 - Note: Floors require cleaning with warm water and neutral detergent
 - Clothes and bed linen can be laundered as usual

Step 3: Chlorine solutions

- If using chlorine solution, leave on for 10 minutes then rinse off with hot or cold water and dry
- Preparing chlorine solutions at concentrations required for disinfection
 - Chlorine solutions must be freshly made up and used within 24 hours, as chlorine deteriorates over time.
 - A general recommendation for the use of a sodium hypochlorite solution is a concentration of 1000ppm, 100mL in 1L of water (1:10 solution)
 - At this strength, in a one-step product, it is not necessary to rinse off
 - Follow the manufacturer's instructions for use of this product
- Important safety notes when using chlorine as disinfectant
 - Follow safety and handling instructions on all chlorine containers

- It is safer to add chlorine to the water - do not add water to chlorine
- Always use cold or warm (tepid) water to make up chlorine solutions
- Use gloves when preparing and handling chlorine solutions
- Use chlorine carefully as it may irritate the skin, nose and lungs and it bleaches fabrics
- Do not dispense chlorine solutions from a spray bottle
- Chlorine is corrosive to metals
- Rinse off
- Use in well ventilated areas
- Do not mix with strong acids to avoid release of chlorine gas

Step 3: Alcohol disinfectant

- Use on surfaces not suitable for chlorine disinfectants
- Do not dilute
- Do not rinse off
- Not particularly practical for large areas
- Flammable, toxic, avoid inhalation, use in well ventilated area, keep away from heat sources, flames, electrical equipment and hot surfaces

APPENDIX 6

Testing for influenza fact sheet

Why test for influenza viruses during flu season?

- It is important to identify the pathogen causing illness to determine whether there is an outbreak of influenza in a facility, as many respiratory illnesses have similar signs
- Confirmation of influenza helps clinicians make appropriate clinical decisions about treatment of those who are sick, and reduces inappropriate use of antimicrobials
- Knowing the infectious agent helps the public health authority advise and assist in managing the outbreak, control the spread of the illness, and prevent further cases
- Specialised testing provides important information on the types of influenza viruses circulating in the community, and contributes to assessing how effective current vaccines are and in developing new vaccines

When should you test and who should be tested?

- When an outbreak of influenza-like illness (ILI) occurs, that is, if three or more residents or staff develop symptoms of ILI during the same 3-day time period
- If a resident has symptoms of an influenza-like illness (ILI) including:
 - Sudden onset of fever, chills, myalgia or clinically documented temperature of $\geq 38^{\circ}\text{C}$ PLUS two or more of the following
 - Headache
 - Malaise
 - Cough
 - Sore throat
- The resident's GP can assess the ILI and request a test for influenza and other pathogens
- Testing should be performed as soon as possible after the onset of ILI symptoms
- During an outbreak, a sample of people with ILI should be tested (usually 4-6 people with ILI)
- Rapid antigen testing is carried out at the Laboratory at Hawke's Bay Hospital. The decision to send for PCR testing lies with the Medical Officer of Health.
- The most definitive test is a reverse transcription Nucleic Acid Amplification Test (NAAT or NAT). This is also known as a Polymerase Chain Reaction (PCR) test. This test is used because:
 - It is the most sensitive (best able to correctly identify patients who have influenza)
 - It is the most specific (best able to correctly identify people who don't have influenza)
 - It is relatively rapid
 - It enables us to differentiate

Swab collection procedure

1. Before performing swab
 - Obtain required materials:
 - Personal protective equipment (PPE) for the health care worker taking the swab, including gown, gloves, eye protection (goggles or face shield), and surgical mask.
 - One dry, sterile, flocked swab.
 - One viral culture swab with viral culture medium. IMPORTANT NOTE: Contact laboratory for current local advice about swabs.
 - Swabs should only be collected from residents or staff with acute symptoms (onset within the preceding 3 days, i.e. 72 hours).
 - Do not use bacterial swabs for specimen collection. If in doubt, check!
2. Performing the swabs
 - Preparation:
 - Perform hand hygiene
 - Don PPE in the order of gown, surgical mask, eye protection, and gloves
3. Explain the procedure to the resident and obtain consent

Deep nasal swab procedure:

- Stand at the side of the resident's head and place your non-dominant hand on the patient's forehead with your thumb at the tip of the nose
- With the other hand, insert the flocked end of a dry, sterile swab horizontally into the resident's nostril, approx. 2-3 cm (gently pushing the swab directly back rather than up)
- Place lateral pressure on the swab to collect cells from the midline nasal septum
- Rotate the swab twice (2 x 360 degree turns) against the turbinate in the nostril to ensure the swab contains epithelial cells (not mucus) from the nostril
- Withdraw the swab from the nostril
- Place the swab back in its labelled tube or bottle.



Throat swab procedure:

- Stand at the side of the resident's head and ensure their head is resting against a wall or supporting surface
- Place your non-dominant hand on the patient's forehead
- Ask the resident to open his/her mouth widely and say "aaah"

- Use a wooden spatula to press the tongue downward to the floor of the mouth, this will avoid contamination of the swab with saliva
- Using the viral culture swab, insert the swab into the mouth, avoiding any saliva
- Place lateral pressure on the swab to collect cells from the tonsillar fossa at the side of the pharynx
- Rotate the swab twice (2 x 360 degree turns) against the tonsillar fossa to ensure the swab contains epithelial cells (not mucus)
- Remove the swab, and place directly into its labelled tube or bottle



- **IMPORTANT NOTES**
 - Choose an area for the procedure where the resident can rest their head against a wall or on a high-backed chair with room for you to stand beside (not in front of) the patient
 - Ensure the area is well lit, with hand washing and infectious waste disposal facilities
 - Remember to **WASH AND DRY HANDS** before and after the procedure!
 - Gloves, respiratory protection and eye protection **MUST** be worn when collecting nose and throat swabs
 - Masks should **NOT** be touched during wear and should **NOT** be worn around the neck at any time
 - When removed, handle the mask by the ties of the mask only.
- After performing the swab labelling and storage of specimen
 - Label the tube or bottle containing the swabs with the resident's full name, date of birth, specimen type and date of collection
 - The accompanying request form should include the ARC facility name
 - Remove PPE safely (remove gloves, perform hand hygiene, remove goggles or face shield, gown and mask and perform hand hygiene again)
 - Specimens should be sent on the day of collection, or at worst, the following day, refrigerate the specimen until it is sent to the laboratory (do **NOT** freeze the specimen)
 - **IMPORTANT NOTE:** Dispose of gloves, gowns and masks in an infectious waste bag

APPENDIX 7 MANAGEMENT

Outbreak Management Team tasks during an influenza outbreak

Outbreak Management Team (OMT) comprises of:

- Clinical Director
- Quality Co-Ordinator
- Clinical Co-ordinators
- Nominated Infection Prevention and Control Representatives of each Facility

Key areas

- Quality Co-Ordinator
 - Decide on and organise ongoing OMT meetings and location
 - Arrange and undertake a debrief at the conclusion of the outbreak
 - Public health authority liaison (HBDHB), ensure that telephone contact numbers for the PHU (including out-of-hours) are available to facility staff
 - Inform the PHU immediately by phone of hospitalisations or deaths in residents or staff
 - Confirm the implementation of the exclusion policy for staff who refuse vaccination or antiviral medications
 - Communication - prepare and implement a communication plan, including a draft media release if required
 - Prepare internal communications for resident, family and staff groups
- Clinical Director/Clinical Co-Ordinators
 - Update the list daily and communicate
 - Liaise daily with the PHU to discuss results of testing, and for advice on infection prevention and control measures, as needed
 - Infection prevention and control within Facility
 - Ensure staff have adequate training and equipment for infection prevention and control measures
 - Manage resident movement within the Facility, including isolation and cohorting, restrict group activities for residents, and defer transfers out, and new admissions into
 - Review the vaccination status of staff and residents and recommend/offer vaccination to those who are unimmunised
 - Implement contingency plans for staffing
 - Placement of signs
 - Update staff regularly on outbreak management and control measures and progress
 - Communicate, as needed, with GPs on individual resident results (where testing was requested by the PHU) and the outbreak in general
 - Vaccination. In consultation and with advice from appropriate local medical practitioners, determine if influenza vaccination clinics are required for unvaccinated

residents or unvaccinated staff and if needed, how they will be arranged. PHUs may be able to assist in some circumstances.

- Antiviral medication for treatment or prophylaxis
 - In consultation with and advice from GPs, arrange antiviral medications for treatment of ill residents and staff, as appropriate
 - When recommended by the PHU, consult with GPs of residents and arrange antiviral prophylaxis, as prescribed by GPs, for (preferably) all asymptomatic residents and unvaccinated staff

Outbreak Planning

Planning actions:		<input checked="" type="checkbox"/>
1.	Do you have an influenza/respiratory infection outbreak plan? <i>*Make sure it covers all the areas identified below</i>	
2.	Have you updated the influenza/respiratory infection outbreak plan this year?	
3.	Have the relevant healthcare providers/organisations in the community (e.g. associated GPs) been involved in the planning process?	
4.	Does the plan contain an agreement between your facility and associated GPs to provide medical care during weekends and public holidays?	
5.	Are facility staff aware of the plan and their roles and responsibilities?	
Vaccination actions:		
6.	Does your facility achieve a high (>90%) rate of annual vaccination of both staff and residents?	
7.	Does your facility have an up-to-date (at mid-April) consolidated line listing of all residents' influenza and pneumococcal vaccination status?	
8.	Does your facility have up-to-date (at mid-April) consolidated listing of all staff members' influenza vaccination status?	
Outbreak recognition actions:		
9.	Does your facility routinely assess residents for influenza-like illness from April to October?	
10.	Does your facility encourage staff to report influenza-like illness symptoms from April to October?	
11.	Does a process exist to notify the Clinical Director and Outbreak Co-coordinator (infection prevention and control practitioner) and public health unit as soon as practicable and within 24 hours of when outbreak is suspected?	
Antiviral actions:		
12.	Have you consulted with visiting GPs to develop the antiviral component of the plan?	
13.	Are mechanisms for prescribing antivirals for treatment and prophylaxis in a timely manner identified?	
Staffing actions:		
14.	Do you have a staffing contingency plan in case 20% - 30% of staff fall ill and are excluded for 5 -6 working days?	

15.	Have you developed a plan for cohorting staff in an outbreak (well unvaccinated staff only working in areas with no resident cases)?	
16.	Have you developed plans to support staff during an outbreak, such as through provision of antiviral treatment or prophylaxis?	
Planning actions:		
Communication actions:		
17.	Do you have a contact list for the public health unit?	
18.	Do you have a plan for communicating with staff, residents, volunteers and family members during an outbreak?	
19.	Have key personnel been designated to manage the needs of media e.g. by preparing draft media releases?	
Resident management actions:		
20.	Have you considered the need for restriction of movement, and, access to group/communal living areas, as well as external transfers?	
Visitor actions:		
21.	Do you have a contact list for regular visitors including residents' families, allied health, and service providers such as hairdressers?	
22.	Do you plan to discourage visitors with ILI from entering the facility during an outbreak, as well as external transfers?	
23.	Have facility personnel been designated to control and respond to issues that arise due to visitors?	
Training:		
24.	Does your outbreak plan include appropriate training for staff? For example – caring for self, hand hygiene, PPE use, contact/isolation precautions	
25.	Do you provide outbreak education material at staff orientation to raise staff awareness?	
Cleaning:		
26.	Does the plan identify who is responsible for overseeing increased frequency of cleaning, liaison with contractors or hiring extra cleaners as necessary?	
27.	Does the plan include arrangements for increased emptying of bins?	

Infection control checklist for outbreaks in facility	Task	<input checked="" type="checkbox"/>
<p>Do we have an outbreak? “3 or more residents/staff fall ill with influenza-like illness within 3 days”</p>	<p>If yes: Activate Influenza management plan by following the steps listed below:</p>	
	<p>Inform most senior Facility management staff on duty</p>	
	<p>Access Influenza outbreak stores</p>	
<p>Notifications Inform staff, residents, public health authorities, doctors of ill residents, and visitors</p>	<p>Inform all staff of potential outbreak and advise of increased hygiene measures</p>	
	<p>Inform all residents of possible outbreak of ILI; provide information, including symptoms and hygiene measures.</p>	
	<p>Notify the Public Health Unit (PHU).</p> <ul style="list-style-type: none"> ➤ Email (preferred) or fax a list of current unwell residents/staff to PHU (update daily). ➤ Ensure onset-of-illness dates are recorded for each ill resident. ➤ Notify PHU within 24 hours of deaths or hospitalisations (and record these on the list) ➤ Once a pandemic is established daily reporting is required to the Emergency Operations Centre at Hawke’s Bay Hospital (see page 42) 	
	<p>Advise resident’s GPs of the possible outbreak.</p> <ul style="list-style-type: none"> ➤ Unwell residents should be reviewed by their GPs 	
	<p>Inform visitors by notices in facility; provide information on influenza, discourage non-essential visits</p>	
<p>Infection control Implement additional infection control measures</p>	<p>Isolate/cohort ill residents in one area; separate infected from uninfected residents, where possible</p>	
	<p>Restrict infected (ill) residents to their room.</p> <ul style="list-style-type: none"> ➤ Ensure signage is posted outside ill residents rooms 	
	<p>Ensure adequate supplies</p> <ul style="list-style-type: none"> ➤ Ensure supplies of liquid soap, paper towels, alcohol gel or hand rub ➤ Ensure adequate supplies of person protective equipment (PPE) – masks, gloves, gowns 	
	<p>Implement enhanced infection and prevention controls.</p> <ul style="list-style-type: none"> ➤ Increase hygiene measures for all staff – standard hygiene plus additional measures ➤ Instruct cleaning staff in regards to extra cleaning 	

Infection Control Cont...	Restrict visitors: <ul style="list-style-type: none"> ➤ Place signs on facility entrance door to restrict visitors to a minimum ➤ Ensure those with weakened immune systems are discouraged from visiting the facility, where practicable. (Particularly young children & people with compromised immune systems, e.g. people with HIV, major illness and those taking immunosuppressant drugs) ➤ Restrict the movement of visitors within the facility ➤ Ensure visitors practice hand hygiene ➤ Exclude visitors with influenza-like illness for at least 5 days after last symptoms 	
Confirm the cause of outbreak i.e. arrange collection of appropriate laboratory samples	Through residents' GPs, arrange nose and throat swabs for respiratory PCR testing from four to six cases with acute symptoms (ideally within 48 hours of onset of symptoms)	
	Liaise with the Public Health Unit about sending the swabs to the laboratory, if needed	
	Record on the list residents who have swabs taken, update with results when available and email to public health unit	
Manage Staff	Only vaccinated staff should care for residents with respiratory illness, where possible	
	Exclude infected staff from work for 5 days from onset of illness, or 24 hours after resolution of fever	
	Unvaccinated staff should be excluded from work unless they are asymptomatic and wearing a mask, or asymptomatic and taking appropriate antiviral prophylaxis (Unvaccinated staff are recommended to only work if asymptomatic; AND taking prophylaxis or using PPE.)	
Vaccination	Offer influenza vaccinations for all well, unvaccinated staff and residents, if appropriate.	

*This checklist is designed for the review of infection prevention and control procedures by the outbreak coordinator and to prompt other actions to optimize infection

Name of facility:

Date: ___ / ___ / ___

Contact details /Contact person:

Y/N	Questions/Prompt	Comments
Facility Information:		
	Total number of residents at the facility	
	Total number of staff at the facility	
	Date of onset of first illness	
	Number/locations of ill residents	
	Number/work location of ill staff	
	Dementia unit: <ul style="list-style-type: none"> <input type="checkbox"/> Is there a dementia unit at the facility? <input type="checkbox"/> Does the outbreak involve dementia patients? <input type="checkbox"/> Can the unit be isolated? 	
	Restriction of non-essential visitors: <ul style="list-style-type: none"> <input type="checkbox"/> For example, hairdressers 	
	Restrict transfer of residents to other facilities: <ul style="list-style-type: none"> <input type="checkbox"/> Advice: The facility should notify hospital and ambulance service of the outbreak, if residents require hospitalisation <input type="checkbox"/> Preferably, do not admit people for respite care until the outbreak is over (or discuss with family re risk) 	
	Restrict movement of residents: <ul style="list-style-type: none"> <input type="checkbox"/> Suspend communal resident group activities <input type="checkbox"/> If possible, minimize movement of residents within facility 	
	Notification: <ul style="list-style-type: none"> <input type="checkbox"/> Notify Public Health Unit re outbreak, hospital transfers, deaths, additional cases 	
	Signage: <ul style="list-style-type: none"> <input type="checkbox"/> Advice: Consider warning signage <ul style="list-style-type: none"> - At entry to the facility - At entry to ill residents' room - Hand hygiene signs Resources: <ul style="list-style-type: none"> <input type="checkbox"/> Fact sheets for visitors/families 	

Y/N	Questions/Prompt	Comments
Staff:		
	Stress the importance of hand hygiene	
	Advice re exclusion of ill staff: <ul style="list-style-type: none"> <input type="checkbox"/> Staff should monitor their health during the course of the outbreak <input type="checkbox"/> If symptoms of influenza are experienced, the staff member should not attend work until 5 days after the onset of illness or until symptoms have completely resolved (whichever is longer) 	
	Restrict movement of staff: <ul style="list-style-type: none"> <input type="checkbox"/> Staff working in the affected area should not work in other areas of the facility during the outbreak <input type="checkbox"/> If possible, designated vaccinated staff should care for ill residents <input type="checkbox"/> Staff should not work at other facilities during the outbreak 	
	Agency staff: <ul style="list-style-type: none"> <input type="checkbox"/> Are agency staff employed at the facility? <input type="checkbox"/> Are agency staff also employed at other facilities? <input type="checkbox"/> Recommend that agency staff employed at the facility not work at other facilities during the outbreak 	
	Isolate/cohort ill residents: <ul style="list-style-type: none"> <input type="checkbox"/> Do ill residents have single rooms with ensuites? <input type="checkbox"/> If no ensuite, can ill residents share a bathroom with other ill residents? <input type="checkbox"/> Advice: Ill residents should be isolated in their rooms until 5 days after the onset of acute illness or until symptoms have completely resolved (whichever is longer) 	
Hand Washing Facilities:		
	<ul style="list-style-type: none"> <input type="checkbox"/> Stress importance of handwashing <input type="checkbox"/> Are liquid soap and paper towels available? <input type="checkbox"/> Where are they located? <input type="checkbox"/> Advise: Use of alcohol hand rub <ul style="list-style-type: none"> o Staff o <i>Residents</i> - e.g. in dining room; at bedside if practicing respiratory hygiene and cognitively able to use hand rub o <i>Visitors</i> - On entry and departure to the facility 	
Personal Protective Equipment (PPE):		
	<ul style="list-style-type: none"> <input type="checkbox"/> Should be readily accessible; location outside ill resident's rooms <input type="checkbox"/> Dispose of used PPE into yellow infectious waste bags <input type="checkbox"/> Gloves, long sleeve gowns, masks- to be worn by: <ul style="list-style-type: none"> o Staff or visitors caring for ill residents o Staff cleaning ill resident's rooms/bathrooms 	

Y/N	Questions/Prompt	Comments
Cleaning:		
	<ul style="list-style-type: none"> <input type="checkbox"/> Are cleaners wearing appropriate PPE? <input type="checkbox"/> Are they cleaning with correct detergent and water? <input type="checkbox"/> Increase frequency of wiping frequently touched surfaces with detergent and water, e.g. hand rails, door handles, counter tops <input type="checkbox"/> Are cleaners moving FROM clean to 'dirty' areas? <input type="checkbox"/> Segregate equipment used for cleaning ill resident's rooms from other cleaning equipment 	
Laundry:		
	<ul style="list-style-type: none"> <input type="checkbox"/> Is the laundry cleaned on site? <input type="checkbox"/> Are laundry staff wearing appropriate PPE? <input type="checkbox"/> Are there handwashing facilities in the laundry? <input type="checkbox"/> Washing of resident's personal items requires an appropriate detergent and hot water <input type="checkbox"/> NB Contaminated linen does not need to be held or transported separately from other laundry 	
Infectious Waste:		
	<ul style="list-style-type: none"> <input type="checkbox"/> Where is it stored? 	

Resident Illness Report and Tracking Form

*Update daily and email or FAX each weekday to Public Health Unit.

Table A13.2 Resident illness report – example line list

FACILITY NAME:			RESIDENT illness						DATE PUBLIC HEALTH NOTIFIED:					TIME PUBLIC HEALTH NOTIFIED:			
TELEPHONE: AFTER HOURS CONTACT:																	
FAX:																	
EMAIL:																	
FORM COMPLETED BY:																	
FACILITY AREA(S):			DATE:						DATE OUTBREAK DECLARED:					DATE OUTBREAK DECLARED OVER:			
Name of resident (Surname, Initial)	Sex	D.O.B	New or worse cough Y/N	Fever Y/N	Sore Throat Y/N	Joint Pain or Muscle Ache Y/N	Extreme Fatigue Y/N	Runny Nose Y/N	Other Symptom Specify or put NONE Or no other sx	Date First Onset of symptom DD/MM/YY	Date Swab Test Taken DD/MM/YY	Result Flu A, B, RSV etc.	Date of Last Flu Vaccine MM/YY	Date Antiviral Started DD/MM	Date of Recovery DD/MM	Date of resident Hospital admission DD/MM	Resident Date of Death DD/MM

Staff Illness Report and Tracking Form (Example) - Update daily and email or FAX each weekday to Public Health Unit.

FACILITY NAME:			STAFF ILLNESS							DATE PUBLIC HEALTH NOTIFIED:								
															TIME PUBLIC HEALTH NOTIFIED:			
TELEPHONE: AFTER HOURS CONTACT:																		
EMAIL:									FAX:									
FORM COMPLETED BY:																		
FACILITY AREA(S):			DATE:						DATE OUTBREAK DECLARED:					DATE OUTBREAK DECLARED OVER:				
Name of Staff Member (Surname, Initial)	Sex	D.O.B	New or worse cough Y/N	Fever Temp Y/N	Sore Throat Y/N	Joint Pain or Muscle Ache Y/N	Extreme Fatigue Y/N	Runny Nose Y/N	Other Symptom Specify or put NONE Or no other sx	Date First Onset of symptom DD/MM/YY	Date Swab Test Taken DD/MM/YY	Result Flu A, B, RSV etc.	Date of Last Flu Vaccine MM/YY	Date Antiviral Started DD/MM	Date of Recovery Y DD/MM	Date last worked at RC? DD/MM	Date returned to work at facility DD/MM	Work at other RCF? DD/MM

Reporting During the Pandemic

Daily reports to Emergency Operations Centre at Hawke's Bay Hospital.

Number of beds in facility	
Occupancy	
Number of very unwell	
Number of deaths	
Number of staff – working	
Number of staff – required for assistance	
Stock requirement	



Security Plan

Security Procedures: Pandemic

Preface

This Plan relates to the Hawke's Bay District Health Board area and has been prepared by Police on behalf of the Hawke's Bay District Health Board.

1. Introduction

This Plan serves as a guideline in relation to security issues associated to a pandemic event.

Enabling legislation includes the New Zealand Health Act 1956, the Civil Defence and Emergency Management Act 2002, Crimes Act, Summary Offences Act, The National Civil Defence Plan, the Ministry of Health Influenza Pandemic Action Plan, the Hawke's Bay District Health Board Pandemic Influenza Plan and the Eastern District Police Pandemic Influenza Response Plan.

Consultation occurred with a representative from the Hawke's Bay District Health Board, Pharmacies (local), St Johns Ambulance Service and New Zealand Police.

Therefore the aim of the Plan is to:

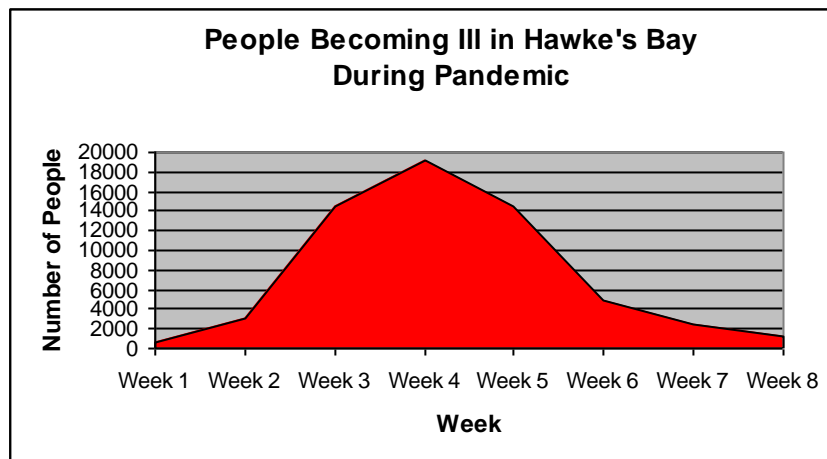
1. Outline roles, responsibilities and procedures to be adopted.
2. Provide effective and timely co-ordination.
3. Provide a generic framework within which key partners can operate and develop contingency plans appropriate to their role during a Pandemic event.

2. Local Situation

Based on considerable information, both nationally and internationally it is evident a proportion of the population will become ill within with influenza should human to human transfer of Pandemic Influenza occur and the Hawke's Bay area be affected. A proportion of the population will require out-patient visits, hospitalisation and some will die as a result of influenza related illness.

Police will support the Medical Officer of Health and deliver upon their core function of maintaining law and order during a pandemic event.

3. Vulnerability and Risk Analysis of local population



The following organisations are likely to be more at risk during this Pandemic due to the resources they hold and/or the level of expertise they have.

Potentially at risk premises, processes and infrastructure include

1. DHB facilities including community assessment centres that may be set up.
 - Targeting of medicines
 - Families, relatives, friends wanting to see patients
 - Bereaved families wanting access to deceased persons
2. DHB personnel.
 - Spokesperson may become target of aggrieved public
3. Pharmacies.
 - Targeting of medicines
4. Supermarkets and food outlets.
 - Public wanting basic food items
 - Targeting of non prescription medicines
5. Petrol stations.
 - Public demand for petrol
6. St John Ambulance Service.
 - Targeting of medicines
 - Risk to personnel as pandemic takes effect

4. Legal and Jurisdictional Responsibilities

Police will operate in support of the Medical Officer of Health and following notification from the Medical Officer of Health that a Pandemic is present in the Hawke's Bay, will respond to calls for service on a priority deployment basis commensurate with risk and capability.

5. Local Emergency Management Resources

The District Health Board will, during this phase, retain the role of lead agency with Police in support.

Police will make every effort to meet their statutory and common law obligations during such an event.

Individual Organisations must, prior to a pandemic event make appropriate provision for security arrangements as a preventative measure.

There may be a need for 24 hour security at certain premises and this will be the responsibility of individual organisation to arrange

6. Police: Eastern District

The NZ Police will aim to provide a "priority one" capability. This is an immediate response to all calls involving actual threat to life or property happening now, violence being used or threatened, serious offence/incident in progress and offenders present or leaving the scene, serious vehicle crashes.

The NZ Police communication centres will be supplied with a current list of high risk facilities to ensure immediate response to any calls for assistance.

The NZ Police will monitor public reaction at each level that the Pandemic passes through and re evaluate at "risk facilities" in relation to security arrangements.

The NZ Police will provide advice on security.

The NZ Police will liaise with local security firms in relation to high priority facilities in terms of need, risk and action required.

The NZ Police will consider swearing in temporary Constables in order to assist with maintaining law and order. The local territorial army force may be a useful source for these staff.

7. Hawke's Bay District Health Board

The DHB will be responsible for the security of all buildings and public access areas within their boundaries and under their control including mortuary facilities.

The DHB will be responsible for the security of all medicines and medical supplies under their care including the movement of medical supplies to other facilities and the storage of medical supplies at Community Assessment Centres.

The DHB will be responsible for the safety of all personnel working for them.

The DHB will immediately inform police of any threats against any of their personnel, facilities or supplies.

8. Pharmacies

Pharmacies will be responsible for the security of their buildings and stock.

Pharmacies will coordinate themselves as to when they may consolidate and share resources.

9. St John Ambulance Service

The ambulance service is responsible for their station, medical and staffs security.

Ambulance staff in the field will use the national communication centre to call for assistance if required.

10. Supermarket/Petrol Stations

These service industries are responsible for their own security. Many already have very good in house security arrangements.

They may take direction from their parent companies that will have a business continuity plan in place for such matters.

11. Structure of local emergency command system

HBDHB is the lead agency during a pandemic. A Response Coordinator and Incident Controller will be in place during the response phase.

The NZ Police will support the DHB along with the Ministry of Civil Defence and Emergency Management and the local Recovery Manager during a Pandemic event.

12. Police Facilities and Deployment

The NZ Police will monitor community activity on a daily basis and allocate policing priorities based on the most recent intelligence through the Police Daily Tasking and Coordination process.

The NZ Police will aim to operate from currently designated Police Stations and Community Policing Centres where able along with a mobile response capability.

13. Arrangements for testing, disseminating and updating the plan

This plan has been prepared and submitted to Hawkes Bay District Health Board following consultation. Distribution of the Plan is the responsibility of HBDHB.

The plan combines practical and academic knowledge and was prepared following a field exercise namely 'Exercise Flubuggers', a DHB led interagency exercise relating to a pandemic event.

The plan should be reviewed annually at the direction of HBDHB. Police will be responsible for completing the review on behalf of HBDHB.

Community Direction and Control

Position	Name/Agency	Telephone
HBDHB Response Coordinator	Craig Climo HBDHB	878 8109 027 837 6232
HBDHB Incident Controller	John Burns HBDHB	878 8109 027 263 1629
HBDHB Incident Controller	Ken Foote HBDHB	878 8109 027 224 6143
HBDHB Incident Controller	Colin Hutchison HBDHB	878 8109 027 703 5651
Medical Officer of Health	Dr Rachel Eyre HBDHB	878 8109 027 256 9896
Medical Officer of Health	Dr Nicholas Jones HBDHB	878 8109 027 233 5315
Emergency Management Advisor	Sandra Bee HBDHB	878 8109 027 245 3692
Infection Prevention and Control Advisor	Racquel McDonald HBDHB	878 8109 027 234 6304
Infection Prevention and Control Advisor	Debbie Fritz HBDHB	878 8109 027 599 9413
Infectious Disease Physician	Dr Andrew Burns HBDHB	878 8109 Pager 3229
Communications Manager	Anna Kirk HBDHB	027 234 3667
Police	Jeanette Park Area Commander NZ Police	831 0721
Fire	Ken Cooper Area Commander Eastern Fire Region	835 2114
Ambulance Service	Brendon Hutchinson Operations Manager HB Ambulance Service	844 1950
Hawkes Bay Regional Council	General Manager HBRC	835 1961
Hawkes Bay Hospital	Call Centre HBDHB	878 8109
CHB Health Centre	Reception HBDHB	06 858 9090
Wairoa Hospital	Reception HBDHB	06 838 7099
Royston Hospital	Reception	873 1111



Training Plan

PANDEMIC TRAINING PLAN

Prior to activation of the training plan a meeting of all involved trainers will be held to ensure preparedness and to update any training material as required. This meeting will be facilitated by HBDHB's Emergency Management Advisor. At this point a plan for session delivery will be formulated.

Package	Facilitator	Target Groups	MoH Code WHO Phase	Method
Pandemic Influenza – An Introduction	Emergency Management	HB Community	Code Yellow WHO Phase 3	Presentation Discussion
Infection Control – Basic Hygiene	Infection Prevention and Control	HB Community	Code Yellow WHO Phase 3	Presentation Discussion
Specimen Collection	Laboratory Scientist	Primary Care Front Line Secondary Care	Code Yellow WHO Phase 4	Discussion Demonstration Practice
Infection Control – Level One	Infection Prevention and Control	Primary Care Secondary Care Ambulance Service Residential Homes Prison Service Police Cleaning Services Community Pharmacy Local Authorities (relevant staff) Education Providers Funeral Directors Child Care Centres	Code Red WHO Phase 5	Presentation Demonstration
Managing Challenging Behaviour	Mental Health Educator	All staff of involved agencies	Code Red WHO Phase 5	Workshop Discussion
Debriefing and Stress Management	Occupational Health	Front line staff of all involved agencies	Code Red WHO Phase 5	Presentation Discussion

Intensive Care Orientation	ICU Nurse Educator	Registered Nurses relocating to ICU	Code Red WHO Phase 5	Presentation Workshop Demonstration Practice
Cause of Death Certification	Clinical Director Medical and Acute Services	Approved Level 4 Registered Nurses	Code Red WHO Phase 6	Mini Lecture Discussion
Volunteer Orientation	Nurse Educators	Volunteers	Code Red WHO Phase 6	Mini Lecture Discussion Workshop Practice
Infection Control – Level Two	Infection Prevention and Control	Primary Care Secondary Care Ambulance Service Residential Homes Prison Service Police	Code Red WHO Phase 6	Demonstration Practice
Patient Management	Infection Control Committee	Primary Care Secondary Care Ambulance Service Residential Homes Prison Service	Code Red WHO Phase 6	Presentation Discussion
Vaccination System Preparation	Public Health Service	All staff involved in mass vaccination campaign	Code Red WHO Phase 6	Discussion Workshop

The facilitators are responsible for the preparation of training sessions. Training may be delivered by a variety of trainers using a train the trainers approach to enable efficient and timely coverage of all individuals and agencies. Resources required will be provided to all agencies with a central database of training attended maintained by the DHB.

Pandemic Training Plan Sessions



Pandemic Influenza An Introduction



PANDEMIC INFLUENZA - AN INTRODUCTION



Sandra Bee
Hawkes Bay District Health Board



Influenza

A highly infectious viral disease recognized by the onset of high fever, sore throat, dry cough, aches/pains, sickness

- Spread by airborne droplets and hand/mouth transfer
- Incubation period 1-3 days, illness 7 days
- Infectious from onset for 3-7 days
- Disease damages respiratory tract linings, secondary pneumonia, meningitis and infections take hold.
- 100 per year die of influenza



Transmission: small and large droplets




Corbis.com



How influenza differs from the common cold ?

Influenza	A Cold (commonly referred to as the flu)
Severe illness lasting 7 - 10 days	Symptoms last 1 - 2 days
Usually a high fever	Sometimes a mild fever
Shivering attacks	A runny nose
Muscular pains	No muscular pain
Headache (may be severe)	Mild headache (congested sinuses)
Dry cough may become moist	Sometimes a cough
Vomit occasionally	
Bedridden	

Can suffer severe complications:
hospitalisation
pneumonia, bronchitis
worsening of a chronic disorder
worsening of asthma
diabetes may become unstable

Vaccine available  No Vaccine

Influenza makes you really sick... a cold doesn't.

Influenza Pandemics in the 20th Century



1918: "Spanish Flu"

~50 million deaths

H1N1



1957: "Asian Flu"

1-4 million deaths

H2N2



1968: "Hong Kong Flu"

1-4 million deaths

H3N2



Pandemic Influenza is Different

- Not seasonal – may come any time of year
- May impact on any age group (rather than mostly the young and elderly)
- May have a very high attack rate
- May have a very high case fatality rate
- May come in several waves over months or years
- Can't be predicted - but we might get some warning
- WILL come one day (maybe soon)



Potential impacts of pandemic in modern NZ

- No community history of anything remotely like this
- Immense impact on society and economy
- Health services unable to provide direct care
- Full community mobilisation needed (as in 1918)
- Health service role - coordination and support of community mobilisation, assistance where possible
- All government and many community agencies involved in whole of society response



WHO Pandemic Phases

1	No new subtype
2	New subtype in animals
3	New subtype found in humans but no spread
4	Small clusters of human to human spread
5	Large localised clusters of human to human spread
6	Sustained transmission in human populations



Pandemic Influenza Predicted Impact on Hawke's Bay

OVER A 6 - 8 WEEK PERIOD:

- Between 25 and 50% of population will have severe influenza illness
- 62 000 sick
- 29 000 visit the doctor
- 700 hospital admissions
- 200 deaths



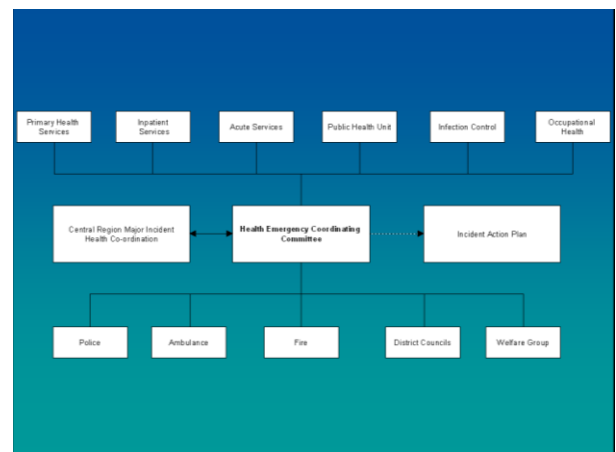
Roles and Responsibilities During a Pandemic

- Hawke's Bay District Health Board – lead agency
 - Primary and secondary care
 - Public health advice
- Ministry of Health – national leadership, surveillance
- CDEM – activation of Welfare Group, manage community response



Issues in a Pandemic

- Increased workload with decreased staffing resource
- Effects are relatively prolonged (weeks to months)
- Effective vaccines and antiviral agents in short supply



Potential Health Care Impact

- Shortfall of ICU beds and critical care resources
- Shortage of medication required
- Need for additional treatment centers
- High demand of mortuary/funeral services
- High demand for social and counseling services



Potential Impact on Society

- Prohibition of public gatherings
- Schools closed and child care provision reduced
- Business hours reduced
- Shortage of foodstuffs
- Vulnerability of infrastructure
- Emergency service response reduced
- Social isolation



Tamiflu

- Antiviral medication used for treatment and prevention
- MOH national stockpile
- Restricted resource
- Prioritised release dependant on recognition and epidemiology of the disease



Vaccines

- Viral strains reviewed twice a year
- Vaccines are virus-specific
- Pandemic vaccine dependant on identification of specific virus
- Current vaccines do not provide protection against a novel influenza virus



Case definition

(simplified)

Person with acute lower respiratory tract illness of abrupt onset, characterised by:

- fever (temperature >38 C); and
- sore throat; and
- cough; and/or
- difficult or laboured breathing;

AND

- contact with a confirmed case or
- recent exposure in an area where there has been an outbreak

<http://www.moh.govt.nz/pandemicinfluenza>



Personal Responsibilities

- Stay at home if unwell
- Good personal hygiene
- Hold a personal survival kit of food and water
- Annual influenza vaccination



Infection Control Precautions

- Hand hygiene
- Social distancing
- Cough etiquette
- Cleaning
- Ventilation



Surveillance of Personal Wellness

- If you have any of these symptoms:
 - high temperature
 - difficulty breathing
 - cough
 - sore throatcontact your doctor by telephone.



Infection Control

Basic Hygiene



Infection Control

Pandemic Influenza Training Guidelines



Introduction

- This document is intended to provide guidelines to minimise the risk of cross infection in the event of a pandemic
- Guidelines are linked to the MOH pandemic codes
- The level of knowledge and PPE required will depend on the tasks/contact and may be greater as the pandemic progresses



Be Prepared

- Encourage annual influenza vaccine
- Establish a staff wellness policy i.e. personal hygiene, avoiding close contact, stay home if unwell
- Identify personal protection equipment



Education

- Basic infection control principles
 - Hand washing
 - Cough etiquette
 - Social distance
- Transmission of influenza
- Correct use of protective equipment
- Management of waste
- Personal health monitoring



Code White - be prepared

- Pandemic alert phase
- Human infections with a new virus
- No human to human spread
- Review infection control practice and update staff and public education



Code White

- Practice basic hygiene
 - Frequent hand hygiene
 - Cough etiquette
 - Cleaning regime for equipment and environment
- Ventilation
- Stay at home if unwell

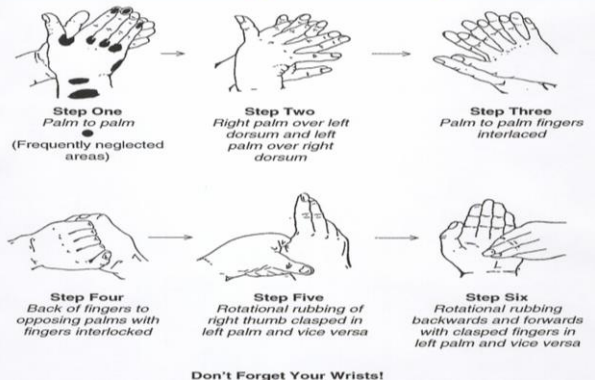


Cough Etiquette

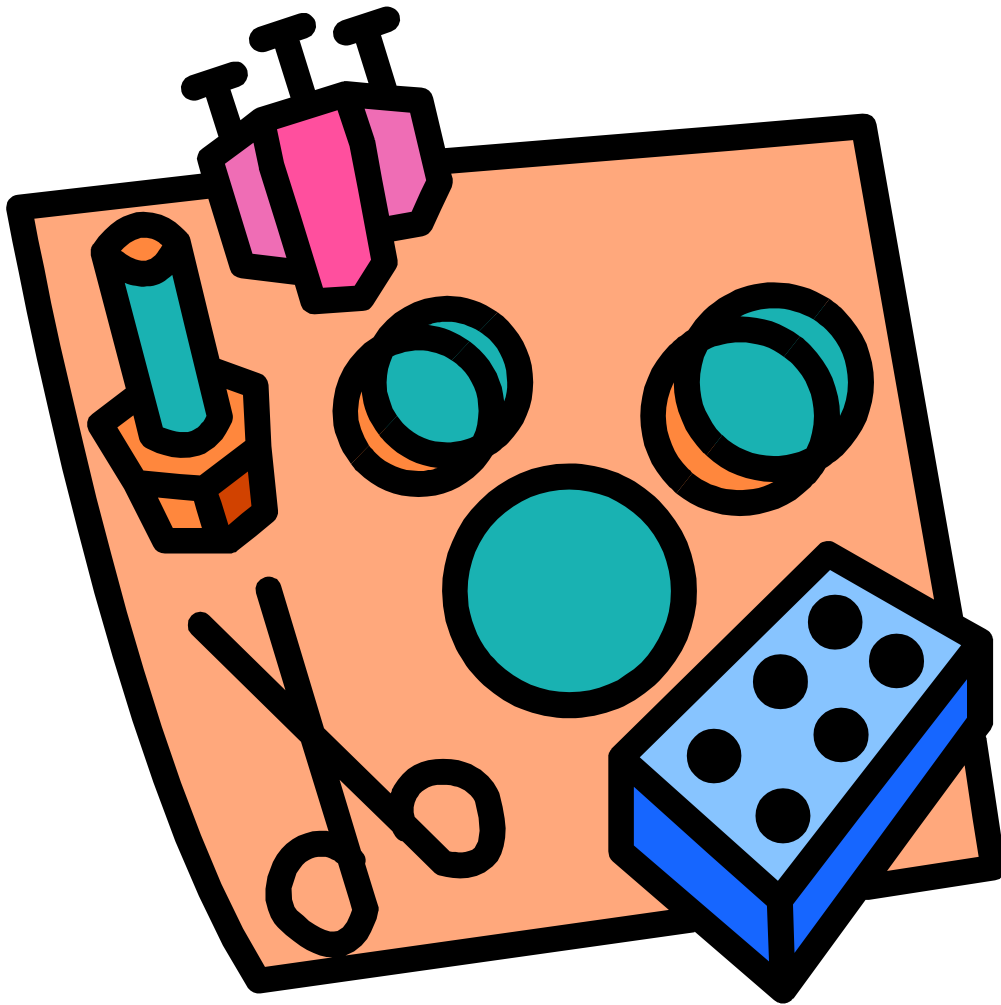
- Cover your nose and mouth when coughing or sneezing
- Use a tissue
- Dispose of tissue into a covered bin after use
- Hand hygiene after coughing/sneezing and using a tissue



Five Finger Technique



Specimen Collection



Session Plan

Client: Pandemic Specimen Collectors

Title: Specimen Collection to Identify Pandemic Influenza

Aim:

To provide front line clinical staff with the skills necessary to collect the specimens required for pandemic influenza diagnosis.

Learning Objectives:

By the end of this session you will have:

- Discussed the specimens required
- Practised the collection of identified specimens
- Discussed the system for specimen handling

Number of participants: 20 to 30

Methods:

Demonstration and Practice, Discussion

Lesson Plan

Teaching Points	Facilitator	Time
Introduction: <ul style="list-style-type: none"> • Course overview • Learning objectives 	Laboratory Technologist	5 mins
The Specimens of Choice: <ul style="list-style-type: none"> • Nasopharyngeal swabs • Throat swabs • Blood for serology (acute and convalescent) 	Laboratory Technologist	10 mins
Specimen Collection: <ul style="list-style-type: none"> • Precautions • Practical demonstration 	Laboratory Technologist	30 mins
System for Handling: <ul style="list-style-type: none"> • Infection control precautions • Packaging • Transport to HBH 	Laboratory Technologist	10 mins
Conclusion: <ul style="list-style-type: none"> • Learning objectives attained? • Questions? 	Laboratory Technologist	5 mins

Laboratory

Pandemic Training



Introduction

- Specimens required
- Collection of specimens
- Handling of specimens-Infection control precautions
- Packaging
- Transport to HBH laboratory



Specimens Required

- Blood
- Nasopharyngeal swabs
- Throat swabs



Collection of Blood

- Use protective equipment i.e. gloves, PFR95 mask, gown and face shield
- Collect sufficient blood using normal process
- Blood request form for culture, full blood count U & E and creatinine



Nasopharyngeal Swab- collection of

- Use only sterile dacron or rayon swabs with plastic shafts
- Insert swab into nostril parallel to the palate
- Leave for a few seconds to absorb secretions
- Swab both nostrils
- Place into vial with 2mL sterile transport media
- Break applicator stick off
- Seal tightly with cap



Handling of specimens

- Staff involved in handling of specimens must observe routine precautions i.e. gloves, and prevent aerosol production
- Face protection in addition to normal protective laboratory clothing must be worn while processing specimens



Handling of specimens cont.

- Respiratory
 - place in Class 2 Biohazard cabinet, turn cabinet on and register specimen as usual.
- Blood
 - use gloves and prevent aerosols. All bloods requiring centrifuge are spun in capped buckets.



Packaging for Transport

- All specimens must be double bagged in biohazard bag
- Place specimens in labelled chillibin
- Blood cultures must be protected with bubble wrap or similar
- Respiratory specimens must be transported with ice



Transport to HB Hospital

- Notify laboratory of impending arrival of specimens
- Contact courier re transport
- Courier to hand deliver specimens directly to laboratory registration



Infection Control Level One



Infection Control

Pandemic Influenza Training Guidelines



Introduction

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- The level of knowledge and PPE required will depend on the tasks/contact and may be greater as the pandemic progresses



Be Prepared

- Encourage annual influenza vaccine
- Establish a staff wellness policy i.e. personal hygiene, avoiding close contact, stay home if unwell
- Identify personal protection equipment



Education

- Basic infection control principles
 - Hand hygiene
 - Cough etiquette
 - Social distance
- Transmission of influenza
- Correct use of PPE
- Management of waste
- Personal health monitoring



Code White - be prepared

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Code White

- Practice basic hygiene
 - Frequent hand hygiene
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 - Cleaning regime for equipment and environment
- Ventilation
- Stay at home if unwell

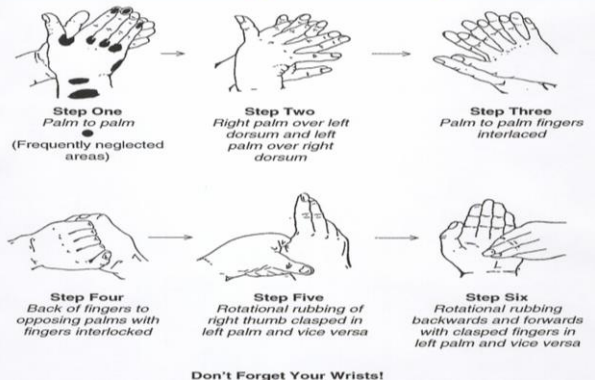


Cough Etiquette

- Cover your nose and mouth when coughing or sneezing
- Use a tissue
- Dispose of tissue into a covered bin after use
- Hand hygiene after coughing/sneezing and using a tissue



Five Finger Technique



Code Yellow - standby

- Standby period
- Human infections with new virus
- Rare instances of spread to a close contact
- Review essential supplies and plans for management
- Education on use of PPE

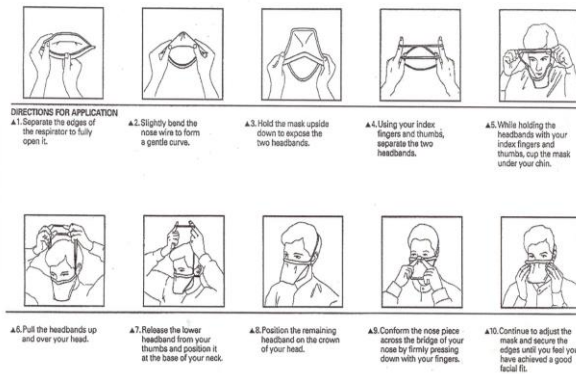


Essential Supplies

- Gloves
- Masks - PFR95, duckbill (surgical) masks
- Tissues
- Rubbish bins with lids
- Biohazard bags with high tensile ties
- Access to hand washing facilities/hand hygiene products



How to use a mask



Managing Challenging Behaviour



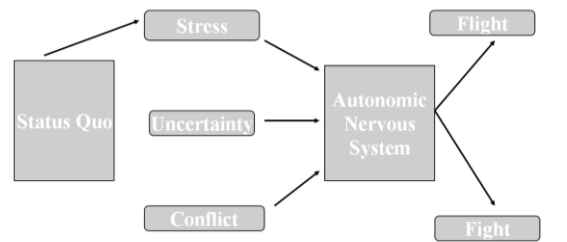
Healthy Workplace

Understanding Violence & Aggression & De-escalation

1



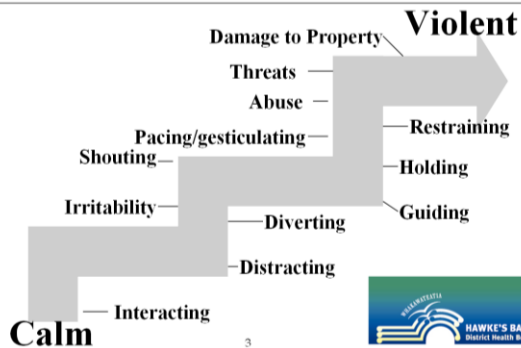
Understanding Violence



2



From Calm to Violent



3



De-escalation

- ◆ Verbal Intervention
- ◆ Personal Space
- ◆ Body Language

4



Calming Aspects

- ◆ Calm manner
- ◆ Consistency
- ◆ Continuous observation
- ◆ Allow freedom
- ◆ Encourage client to take deep breaths
- ◆ Recognition of own feelings
- ◆ Offer hope
- ◆ Maintain eye contact
- ◆ Consider your stance
- ◆ Use hands & sense of touch
- ◆ Try not to cover exits
- ◆ Empowerment
- ◆ Good rapport

5



Calming Aspects

- ◆ Partnership
- ◆ Open body language
- ◆ Active listening
Reflection/paraphrasing
- ◆ Options/reasons/choices
- ◆ Look for cues, signs of change
- ◆ Show: Confidence
Concern
Empathy
Efficiency
- ◆ Model Behaviour
- ◆ Mirroring vs contrast
- ◆ Patience
- ◆ Continual Assessment re-evaluate
- ◆ Diversion
- ◆ Re-direction
- ◆ Be calm yourself
- ◆ Use environment/staff
- ◆ Awareness of safety

6



Setting Limits

- ◆ Setting Limits – Directive
An approach in which a staff member takes control of a potentially escalating situation by setting limits.

7



The Art of Setting Limits

- ◆ When you set limits you are offering choices, as well as stating the consequences of those choices
- ◆ Limits usually are better received when the positive choice and consequence are stated first
- ◆ Limits are most effective when they are:
 - Simple/Clear
 - Reasonable
 - Enforceable

8



The Art of Setting Limits

- ◆ Explain to the person exactly what type of behaviour is acceptable
- ◆ Explain why the other behaviour is inappropriate
- ◆ Give reasonable choices and explain consequences
- ◆ Allow time for them to decide
- ◆ Enforce consequences

9



Crisis Development

Escalating Behaviour	De-escalating Behaviour
1. Anxiety	1. Verbal Intervention
2. Threatening	2. Setting Limits
3. Acting Out	3. Physical Management
4. Tension Reduction	4. Re-establish Rapport

10



Integrated Experience

The concept that the behaviour and attitude of staff has an impact on the behaviour and attitude of the client and visa versa.

11



Personal Space

- ◆ Personal space varies depending on who is approaching
- ◆ The invasion of an individual's personal space will increase that person's anxiety

12



Body Language

- ◆ This includes facial expressions, gestures, posture and movement
- ◆ Our behaviour can serve to escalate or de-escalate a given situation

13



Safe Stance

- ◆ Communicates respect
- ◆ Non-threatening and offers an escape route
- ◆ Assists with personal safety



14



Paraverbal Communication

Tone = Total

- ◆ Try to avoid inflections of impatience, condescension, inattention, etc

15



Paraverbal Communication

Volume = Voice

- ◆ Keep the volume appropriate for the distance and the situation.

16



Paraverbal Communication

Cadence = Control

- ◆ Deliver your message using an even rate and rhythm.

17

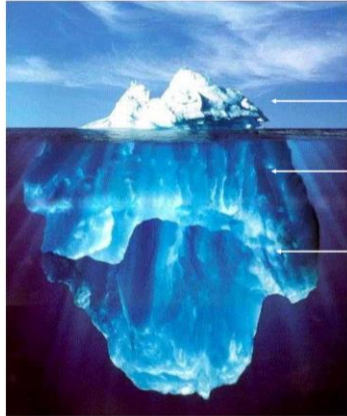


Communication

It is essential to be aware of not only **what we say** to an individual, but **how we say it**.

How is equally, if not more important, than the words we use.

18



- ◆ 7% Verbal (words)
- ◆ 38% Para verbal (how it is said)
- ◆ 55% Non verbal (body language)

19



Verbal Escalation

Questioning

Information Seeking

- ◆ A rational question seeking a rational answer

Intervention

- ◆ Give a rational response

20



Verbal Escalation

Questioning

Challenging

- ◆ Questioning authority or being evasive

Intervention

- ◆ Stick to the topic (redirect), set limits if individual persists

21



Verbal Escalation

Refusal

- ◆ Non compliance, slight loss of rationalisation

Intervention

- ◆ Set limits

22



Verbal Escalation

Release

- ◆ Acting out, emotional outburst, loss of rationalisation. Blowing off steam, screaming, swearing. High energy output.

Intervention

- ◆ Allow to let off steam.
- ◆ Remove audience or acting out individual
- ◆ Use an understanding, reasonable approach.
- ◆ Be prepared to enforce limits.

23



Verbal Escalation

Intimidation

- ◆ Individual is verbally or non verbally threatening staff in some manner

Intervention

- ◆ Seek Assistance
- ◆ Avoid individual intervention
- ◆ Take seriously

24



Verbal Escalation

Tension Reduction

- ◆ Drop in energy levels.

Intervention

- ◆ Re-establish rapport with the person

25



Empathic Listening

Key Elements

- ◆ Be non-judgemental
- ◆ Give undivided attention
- ◆ Listen carefully to what the person is saying (focus on feelings, not just facts)
- ◆ Allow silence for reflection
- ◆ Use restatement to clarify messages

26



Precipitating Factors

- ◆ Loss of personal power
- ◆ Need to maintain self-esteem
- ◆ Fear
- ◆ Failure
- ◆ Attention seeking
- ◆ Displaced anger
- ◆ Psychological/physiological causes

27



Precipitating Factors

Understanding these can help staff:

- ◆ Prevent aggressive behaviour
- ◆ Depersonalise crisis situations
- ◆ Avoid becoming a precipitating factor ourselves

28



Rational Detachment

The ability to remain in control of our own behaviour

1. Controlling our response to aggressive behaviour
2. Maintaining a professional attitude
3. Finding a positive way to release our own feelings after the event

29



Staff Fear & Anxiety

Fear and anxiety are universal human emotions. Our response to them is both psychological and physiological.

- ◆ Non-productive reactions
- ◆ Productive Reactions

30



Non-productive Reactions

- ◆ Freezing
- ◆ Overreacting
- ◆ Responding Inappropriately

31



Productive Reactions

- ◆ Increased speed and strength
- ◆ Increased sensory acuteness
- ◆ Decreased reaction time

32



Ways to Control Fear and Anxiety

1. Understand what makes us afraid.
2. Learn techniques to protect both ourselves and acting out individuals in a crisis.
3. Use a team approach – don't respond alone.
4. Learn techniques to control acting out individuals, if necessary

33



Making Request Effectively

- ◆ Gain & maintain attention
- ◆ Use the person's name at the beginning
- ◆ Be courteous
- ◆ Rule of 5
- ◆ Explain why a request is made
- ◆ State what the behaviour requested is
- ◆ Use a calm, firm voice
- ◆ Make appropriate eye contact
- ◆ Re-direct the person to an alternative behaviour
- ◆ Where possible give the person a choice

34



Tips and Techniques

DO'S

- ◆ Remain calm
- ◆ Isolate the situation
- ◆ Enforce limits
- ◆ Listen
- ◆ Be aware of nonverbals
- ◆ Be consistent

DON'TS

- ◆ Overreact
- ◆ Get into a power struggle
- ◆ Make false promises
- ◆ Fake attention
- ◆ Be threatening
- ◆ Use jargon (it tends to confuse and frustrate)

35



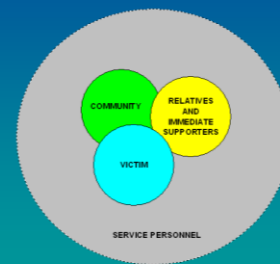
Debriefing and Stress Management



DEBRIEFING AND STRESS MANAGEMENT



Impact of a Traumatic Event



Critical Incident Stress is:

- The reaction a person or group has to a critical incident and is characterised by a wide range of cognitive, physical, emotional and behavioural signs and symptoms.
- This response is seen as "normal" human behaviour.



Post Traumatic Stress Disorder

- The person has been exposed to a traumatic event.
- The event is persistently re-experienced.
- There is persistent symptoms of increased arousal.
- The above lasts for at least 1 month.
- The disturbance causes significant distress in social, occupational or other areas of functioning.



Symptoms of Post Traumatic Stress Disorder

- Tension – general agitation
- Sleep disturbances
- Dreams and nightmares
- Fearfulness
- Intrusive memories and feelings
- Numbing
- Irritability
- Depression and/or anxiety



Symptoms of Post Traumatic Stress Disorder

- Social withdrawal
- Physical sensations – headaches, nausea etc
- Poor concentration
- Self medication



Psychological Debriefing

Psychological debriefing is:

“A structured group meeting, emphasising ventilation of feelings, discussion of reactions to the event, and education and information about the coping strategies”.



Debriefing is:

1. Expression of feelings, thoughts, impressions, reactions.
2. Clarify how others saw the event to get perspective.
3. Decrease level of tension in individuals and group.
4. Increase coping skills by sharing.
5. Promote acceptance of each person's reactions as "normal".
6. Build our own understanding of stress and its effects on us



What is stress?

Stress is the adverse reaction people have to excessive pressures or other types of demand placed on them.

Stress is not a disease in itself, but can lead to ill-health (physical and mental).

It is the result of the interaction between the individual and the working environment, (both physical and psychosocial).



Primary Sources of Stress at Work

- Job type, e.g. police work, health, dealing with violence/emotive material
- Demands such as workload
- Control of the way we work
- Support from others
- Relationships with others
- Role clarity
- Change management
- Personal factors can contribute, e.g. health, relationships, financial circumstances, personality type



Managing Your Stress

- Identify your stressors, and report them
- Recognize what you can change
- Reduce the intensity of your emotional reactions
- Learn to moderate your physical reactions
- Build your physical reserves
- Maintain your emotional reserves



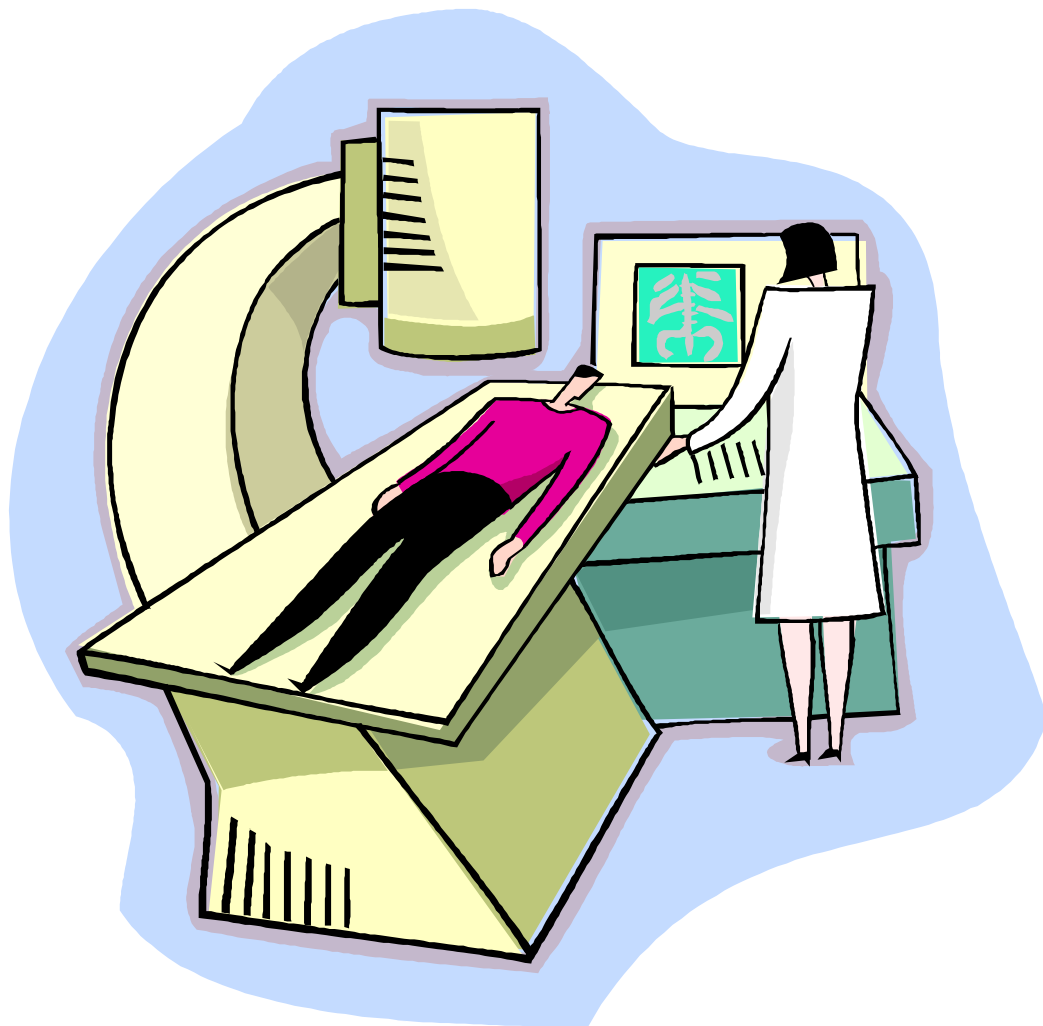
Managing Your Stress

- Learn from mistakes and errors when they occur – not apportion blame.
- Finish tasks or take a break if unable to complete.
- Meet with manager to discuss stressors.
- Seek assistance/support from Occupational Health or EAP Service (external confidential staff support service) etc.



Intensive Care Orientation

(To be completed on human to human transmission)



Cause of Death Certification System



Session Plan

Client: Registered Nurses Certifying Cause of Death

Title: Cause of Death Certification

Aim:

To provide approved Level 4 registered nurses with the skills necessary to certify life extinct and cause of death.

Learning Objectives:

By the end of this session you will have:

- Discussed the legal requirements for life extinct and cause of death certification
- Examined the documentation required
- Discussed the process required

Number of participants: 20 to 30

Methods:

Mini Lecture, Discussion

Lesson Plan

Teaching Points	Facilitator	Time
Introduction: <ul style="list-style-type: none"> • Course overview • Learning objectives 	Emergency Management	5 mins
Legal Requirements: <ul style="list-style-type: none"> • Relevant legislation • The role of the coroner 	NZ Police	20 mins
Documentation: <ul style="list-style-type: none"> • Certificate of life extinct • Death certificate 	Medical Director	10 mins
Process: <ul style="list-style-type: none"> • Life extinct determination • History taking • Determining cause of death 	Medical Director	20 mins
Conclusion: <ul style="list-style-type: none"> • Learning objectives attained? • Questions? 	Emergency Management	5 mins

Volunteer Orientation



Session Plan

Client: Pandemic Volunteers

Title: Orientation to Healthcare

Aim:

To provide volunteers to healthcare during a pandemic with the skills and confidence necessary to assist in the healthcare response. This is an introductory session only, to be followed by area specific orientation when the volunteer is allocated.

Learning Objectives:

By the end of this session you will have:

- Discussed the healthcare environment, its hierarchy, systems and general layout
- Discussed the tasks allocated to volunteers
- Demonstrated an understanding of the alarms present and response to these
- Examined an action plan for a fire event
- Practised cardiopulmonary resuscitation and basic first aid
- Discussed relevant health and safety issues
- Demonstrated an understanding of the use of the occupational health service and access to same
- Discussed infection control principles and practice and demonstrated an understanding of same
- Demonstrated an understanding of customer service
- Practised basic patient care and manual handling techniques (if applicable)

Number of participants: 20 to 30

Methods:

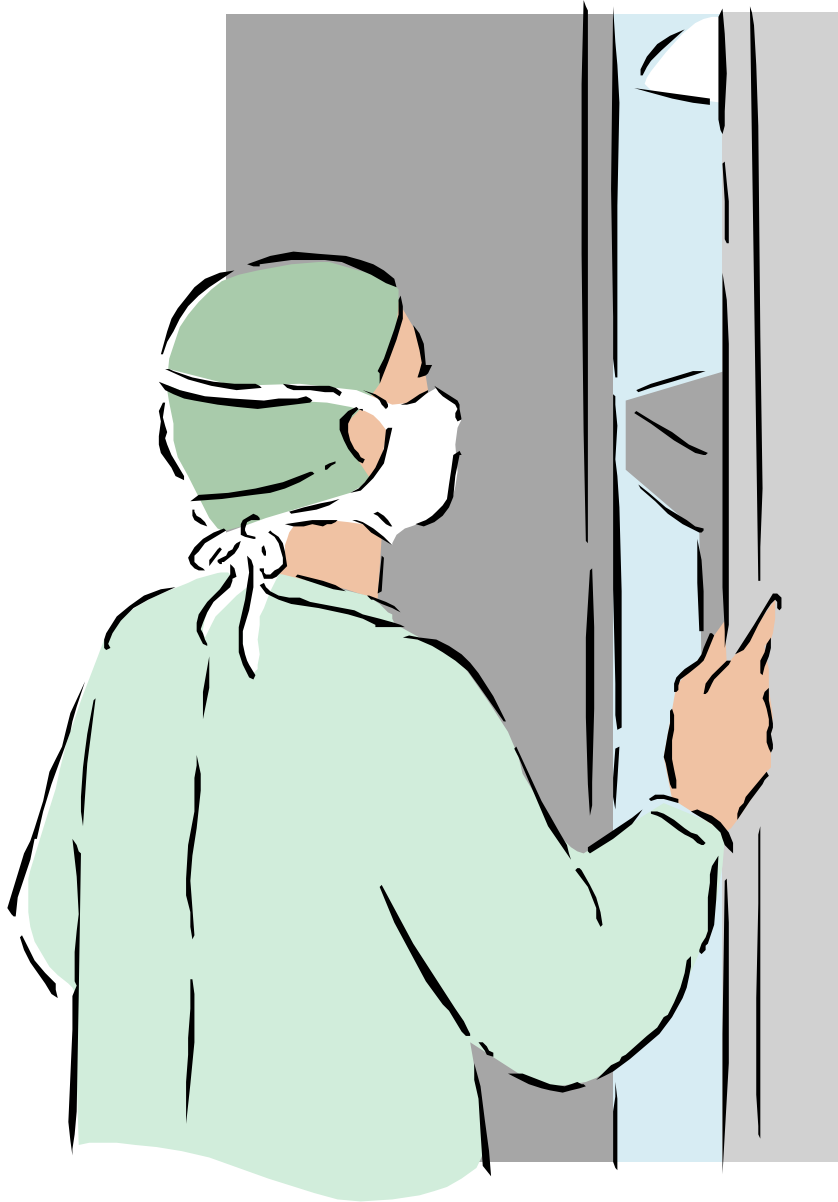
Buzz Groups, Demonstration and Practice, Mini Lecture, CPR Audit, Video Presentation, Discussion

Lesson Plan

Teaching Points	Facilitator	Time
Introduction: <ul style="list-style-type: none"> • Course overview • Learning objectives 	Nurse Educators	5 mins
The Healthcare Environment: <ul style="list-style-type: none"> • Layout of facility • Management structure • Uniforms, identification • Access to areas • Confidentiality 	Nurse Educators	20 mins
Volunteer Tasks: <ul style="list-style-type: none"> • Task list • Supervision and delegation • Limits of authority 	Nurse Educators	15 mins
Alarms: <ul style="list-style-type: none"> • Types • Response required 	Emergency Management	10 mins
Fire: <ul style="list-style-type: none"> • Alarm systems • Fire protection systems • Floor and building wardens • Action plan 	Emergency Management	15 mins
Cardiopulmonary Resuscitation: <ul style="list-style-type: none"> • Steps of CPR - Safety, Airway, Breathing, Circulation • Ratios and rates - adult 30 to 2, child 30 to 2, infant 30 to 2, 100-120/minute • Reasons to stop CPR – recovery, medical assistance, exhaustion • Recovery position • Obstructed airway • Barrier devices First Aid: <ul style="list-style-type: none"> • Unconsciousness • Bleeding • Burns • Fractures • Medical emergencies 	Resuscitation Trainer	60 mins

<p>Health and Safety:</p> <ul style="list-style-type: none"> • Hazards and reporting of same • Safe working practice 	Health and Safety Advisor	20 mins
<p>Occupational Health Service:</p> <ul style="list-style-type: none"> • How to contact • Service available • Reporting of injuries or illness • Employee Assistance Program • Hospital chaplains 	Occupational Health	10 mins
<p>Infection Prevention and Control:</p> <ul style="list-style-type: none"> • Handwashing • Cough etiquette • Social distance • Transmission of influenza • Personal health monitoring • Personal protective equipment • Management of waste 	Infection Prevention and Control	50 mins
<p>Customer Service:</p> <ul style="list-style-type: none"> • Answering the telephone • Taking messages • Dealing with the difficult enquiry 	QIPS Team	30 mins
<p>Basic Patient Care:</p> <ul style="list-style-type: none"> • Washing a patient • Feeding a patient • Toileting • Manual handling • Assisting the registered nurse • Bedmaking 	Nurse Educators	120 mins
<p>Conclusion:</p> <ul style="list-style-type: none"> • Learning objectives attained? • Questions? 	Nurse Educators	5 mins

Infection Control Level Two



Infection Control

Pandemic Influenza Training Guidelines



Introduction

- This document is intended to provide guidelines to minimise the risk of cross infection in the event of a pandemic
- Guidelines are linked to the MOH pandemic codes
- The level of knowledge and PPE required will depend on the tasks/contact and may be greater as the pandemic progresses



Be Prepared

- Encourage annual influenza vaccine
- Establish a staff wellness policy i.e. personal hygiene, avoiding close contact, stay home if unwell
- Identify personal protection equipment



Education

- Basic infection control principles
 - Hand hygiene
 - Cough etiquette
 - Social distance
- Transmission of influenza
- Correct use of PPE
- Management of waste
- Personal health monitoring



Code White - be prepared

- Pandemic alert phase
- Human infections with a new virus
- No human to human spread
- Review infection control practice and update staff and public education



Code White

- Practice basic hygiene
 - Frequent hand hygiene
 - Cough etiquette
 - Cleaning regime for equipment and environment
- Ventilation
- Stay at home if unwell

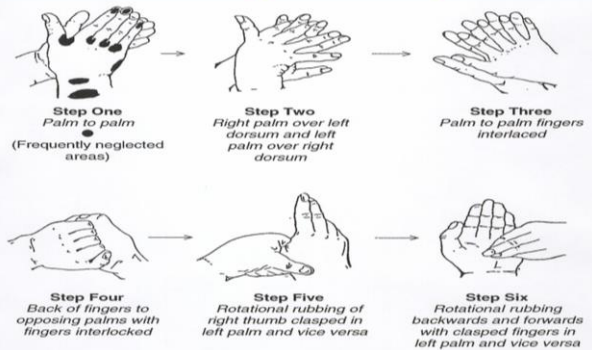


Cough Etiquette

- Cover your nose and mouth when coughing or sneezing
- Use a tissue
- Dispose of tissue into a covered bin after use
- Hand hygiene after coughing/sneezing and using a tissue



Five Finger Technique



Don't Forget Your Wrists!

Code Yellow - standby

- Standby period
- Human infections with new virus
- Rare instances of spread to a close contact
- Review essential supplies and plans for management
- Education on use of PPE

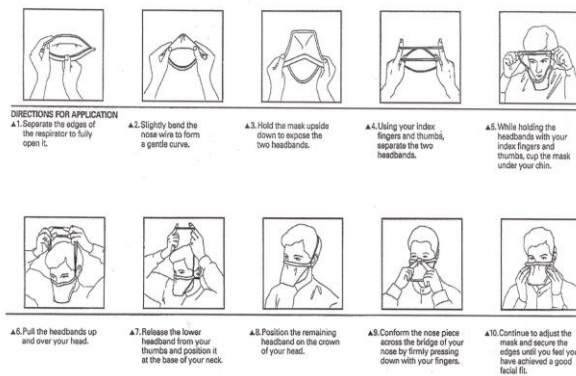


Essential Supplies

- Gloves
- Masks - PFR95, duckbill (surgical) masks
- Tissues
- Rubbish bins with lids
- Biohazard bags with high tensile ties
- Access to hand washing facilities/hand hygiene products



How to use a mask



Red Phase - action

- Clusters with human to human spread
- Progressing to larger clusters of human to human spread
- Leading to increased transmission in the general population
- Increased education for frontline workers in use of protective equipment



Level of Risk

- Level of PPE depends on level of risk and workplace situation
 - Low risk - may be able to keep distance
 - Medium risk - duckbill mask, gloves, gown
 - High risk - PFR95 mask, face shield, gown



Donning PPE - Order

- Perform hand hygiene
- Gown
- Mask, PFR95 or duckbill-fit test to ensure seal
- Face shield
- Disposable gloves - ensure correct fit and wrists are covered



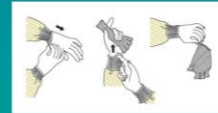
Removal of PPE - Order

- Remove gloves
- Perform hand hygiene
- Remove gown-fold inwards and roll up
- Perform hand hygiene
- Remove face shield
- Remove mask using strings
- Perform hand hygiene



Gloves - removal of

- Grasp outside of glove with opposite gloved hand; peel off
- Hold removed glove in gloved hand, slide fingers of un-gloved hand under remaining glove at wrist
- Peel glove off over first glove
- Discard gloves in waste container
- Perform hand hygiene



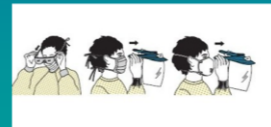
Gown - removal of

- Unfasten ties
- Pull away from neck and shoulders, touching inside of gown only
- Turn gown inside out
- Fold or roll into a bundle and discard



Face shield

- To remove, touch only the head band
- Place in designated receptacle for reprocessing or in waste container
- Perform hand hygiene



Mask - removal of

- Grasp bottom, then top ties or elastics and remove
- Discard in waste container
- Perform hand hygiene



Disposal of Used Equipment

- Used supplies i.e. clothing and other disposables should be placed into a yellow biohazard bag
- Tie these off with high tensile ties when ¾ full
- Store apart from clean supplies for collection and disposal



Disposal of Sharps

- Used needles, syringes and other sharps should be disposed of into a hard shell sharps container
- Hard shell containers are to be replaced when $\frac{3}{4}$ full
- Secure lid in approved manner
- Store for collection apart from clean supplies



Cleaning and disinfection

- All surfaces should be cleaned first with environmental wipes
- Surfaces should then be wiped with sodium hypochlorite (household bleach) 100mL/1L and left to dry



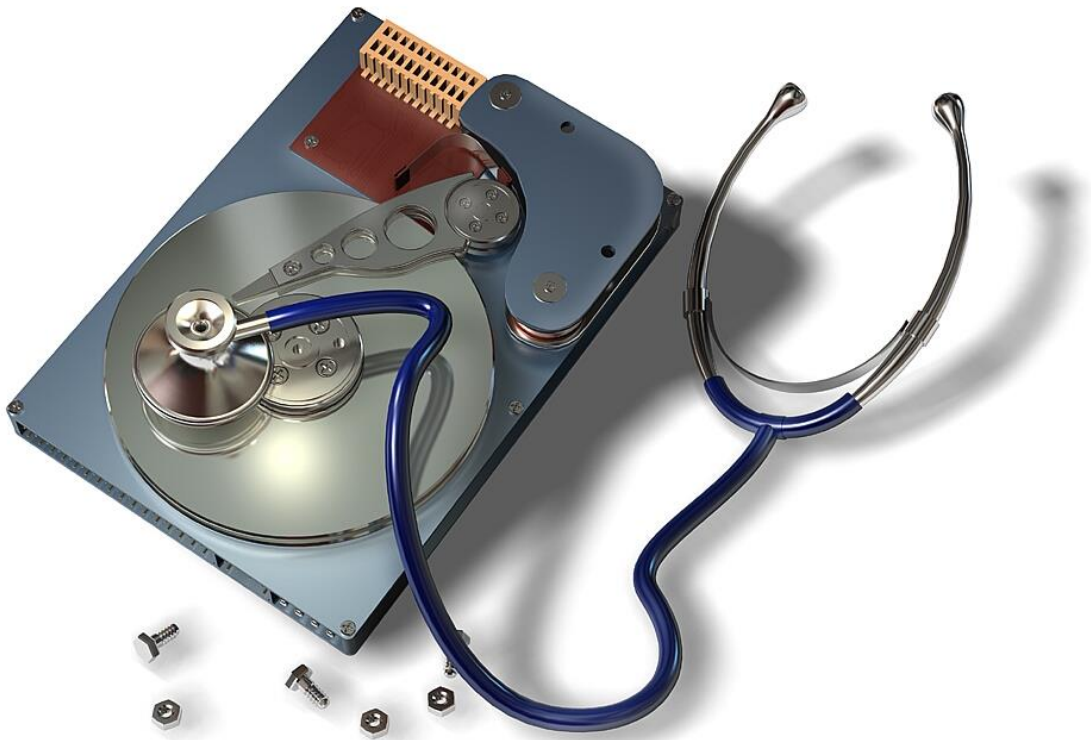
Personal Monitoring

- Keep safe by practicing good hygiene
- Report any possible contamination when donning/removing protective clothing
- Report any blood/body fluid exposure
- Report any personal symptoms i.e. temperature, cough

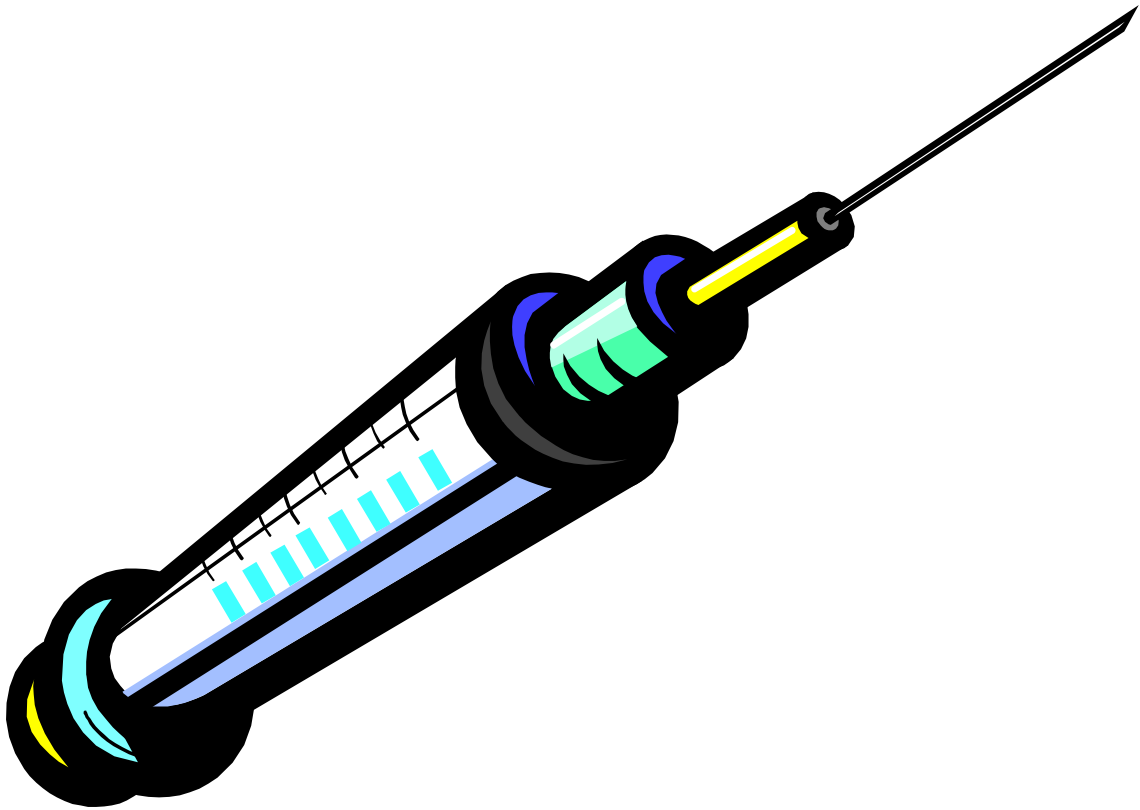


Patient Management

(To be completed on human to human transmission)



Vaccination Campaign Systems



Session Plan

Client: Vaccination Program Staff

Title: Vaccination Campaign Systems

Aim:

To provide staff responsible for the pandemic influenza vaccination program with the knowledge and skills necessary to carry out the campaign.

Learning Objectives:

By the end of this session you will have:

- Reviewed the immune system
- Discussed pandemic influenza and related legislation
- Demonstrated the skills required to prepare and administer the vaccine
- Discussed the recognition and management of anaphylaxis
- Discussed informed consent and documentation requirements
- Discussed the system and process required and demonstrated an understanding of same
- Practised cardiopulmonary resuscitation and basic emergency care

Number of participants: 20 to 30

Methods:

Discussion, Demonstration, Mini Lecture, CPR Audit

Lesson Plan

Teaching Points	Facilitator	Time
Introduction: <ul style="list-style-type: none"> • Course overview • Learning objectives 	PHU Team	5 mins
Overview: <ul style="list-style-type: none"> • The immune system • Pandemic influenza – the disease, NZ epidemiology, vaccination strategy • Legislation 	PHU Team	40 mins
The Pandemic Vaccine: <ul style="list-style-type: none"> • The vaccine • Storage and handling • Drawing up, labelling • Vaccine administration 	PHU Team	40 mins
Anaphylaxis: <ul style="list-style-type: none"> • Recognition • Management 	PHU Team	15 mins
Informed Consent: <ul style="list-style-type: none"> • Process • Legal requirements • Documentation 	PHU Team	15 mins
Documentation: <ul style="list-style-type: none"> • Forms required • Completion of forms • Legal requirements 	PHU Team	30 mins
System: <ul style="list-style-type: none"> • Scheduling • Rostering • Team roles 	PHU Team	30 mins
Process: <ul style="list-style-type: none"> • Set up of area • Equipment required 	PHU Team	30 mins
Emergency Procedures: <ul style="list-style-type: none"> • CPR • Emergency care • Calling for help 	PHU Team	60 mins
Conclusion: <ul style="list-style-type: none"> • Learning objectives attained? • Questions? 	PHU Team	5 mins



Vaccination Plan

Vaccination Plan

Introduction

Related legislation

Medicines Regulations, Regulation 44a (Authorised Vaccinators)

Aims and general purpose

To develop a contingency plan for the mass vaccination of the population of Hawke's Bay in the event that a vaccination against pandemic influenza becomes available.

Assumptions

1. There may be a delay of 3-6 months in the availability of a vaccine following human-to-human transmission of the novel influenza.
2. New Zealand may, or may not be disease-free when the vaccine becomes available, but it is unlikely that New Zealand would remain disease-free for as long as six months.
3. Given the above, there will be implications for:
 - workforce availability
 - prioritisation for administration of the vaccine
 - development of a plan for mass vaccination to gain maximum coverage in the shortest possible time

Conditions under which the plan comes into force

The plan will come into force when it is advised that a vaccine will be made available.

It is expected that there will be time to make a detailed plan once advice is received that a vaccine is in production.

It is expected that any mass vaccination plan will be directed by the Ministry of Health.

Operational Structure:

The Public Health Service will be responsible for planning and implementation of a mass vaccination programme in partnership with Health Hawke's Bay, the Primary Health Organisation..

This will form part of the HBDHB's operational response and reporting will flow from the Public Health Coordinator to the Incident Controller as indicated on the HBDHB Incident Plan.

Clear guidance and direction is expected from the Ministry of Health.

Communication Plan/Issues:

A variety of media will need to be employed to communicate:

- Information about the disease
- How to protect self and others from disease
- About the vaccination
- How and where to get the vaccination

The communication methods will need to be in formats that will reach target or prioritised groups, and take into account cultural/ethnic differences, and geographical spread of the population.

A dedicated communications advisor will be required to achieve this level of community awareness raising, in conjunction with media and key community groups such as Maori and Pacific providers.

Preparedness

Relationships required

Good communications with Authorised Vaccinators (Immunisation Facilitator holds a register)

Pandemic preparedness as part of the regular Authorised Vaccinator Updates

Communication with Public Health Nurses, and support workers, who participate in School Based Immunisation Programmes

Contact with Primary Health Organisations, Practice Nurses and Maori and Pacific Health Providers

Linkages with the National Immunisation Register and the Immunisation Coordinator

Linkages with the Ministry of Health Immunisation Team, and IMAC

Linkages with Public Health Nurse Manager and Public Health Nurses

Linkages with Community Pharmacists

Identification of other occupational groups who may be trained to vaccinate (see Appendix 5)

Responsibilities of different agencies

All health agencies need to maintain the professional development of their staff so that there are adequate Authorised Vaccinators within their services.

Authorised Vaccinators are required to attend two yearly updates.

Risk assessment

1. If New Zealand is disease-free when the vaccine becomes available, there may be insufficient time to vaccinate the whole population to prevent occurrence of the disease.
2. If there is disease present when the vaccine becomes available, there may be issues around staff shortages, and prioritising the administration of the vaccine, adding considerable complexity to the planning and implementation.
3. Demand for the vaccine outstrips the supply, creating a need for “rationing”.
4. The security of the vaccine is threatened at delivery, storage and vaccinating centres.
5. The vaccine arrives too late to be effective against disease spread.
6. Inadequate information systems may jeopardise the collection and accuracy of vaccine administration details, particularly in the event that multiples doses are required.

Operational Procedures

- These roles are specific to the Pandemic Vaccination Plan.

Role	Responsibility
Vaccination Coordinator	Manage planning and implementation Report strategy to Incident Controller
Planning Coordinator	Plan vaccine delivery details
Operations Coordinator ➤ Information and Communications Coordinator	Organise vaccine delivery Manage community awareness campaign e.g. road shows, media Provide and receive information via HBDHB Communications Manager
Logistics Coordinator ➤ Human Resources Coordinator	Resource vaccine, equipment, transport, facilities Support logistics coordinator in resourcing staff

Action required at different alert phases

The decision to vaccinate may occur at any stage of the alert phases.

On the announcement of the vaccine being in production:

- Activate operational procedures
- Delegate tasks and roles
- Develop a vaccination plan
- Plan the logistics
- Begin operationalising the plan to at least include:
 - Implement Training Plan
 - Implement community awareness raising plan, including early engagement with cultural/ethnic groups
 - Resource nursing and support staff
 - Develop information system to record vaccination administration information

Resources

See Appendix 1 Population and Logistics.

Workforce Issues

It is possible that the available workforce (nurse vaccinators, community pharmacists) will be affected by the need for staff to care for sick people, sickness within the family, or unwillingness to put self at risk. See Appendix 1 Population and Logistics.

Reporting

Internal reporting to the HBDHB using CIMS procedure.

Other reporting as required to HBDHB, Ministry of Health and key community agencies.

Vaccine/equipment storage and distribution

- There may be a need for a storage site depending on whether the vaccine is delivered to a single regional site or a wide distribution network (e.g. to GP surgeries)
- Security will be an issue

Information centres

- Telephone, web site, written information
- Advice on locations and availability of vaccine

Vaccine delivery centres

- A decision will need to be made on whether vaccination will occur through GPs and/or in community locations
- Requires space for reception/administration/data entry, informed consent process, vaccination, and post-vaccination observation areas, secure storage and cold chain facilities
- Mobile facilities will be required for population who are homebound, or live in remote locations
- Electoral Voting Centres could provide suitable facilities

Appendices:

Appendix 1 Population Data and Logistics

Appendix 2 Cold Chain Management

Appendix 3 Training Requirements

Appendix 4 Other Occupational Groups who may be trained to vaccinate

Appendix 1

Projected Population and Logistics

Assumptions

1. Not all people will have the vaccination (anti-immunisation, history of anaphylaxis, not well enough at the time, allergy to component of the vaccine)
2. There will not be enough vaccine for all
3. Calculations are based on 80% uptake

Vaccinating rates

Table 1. Hours to Vaccinate 80% of Population

(Based on the principles that younger children can take longer, and that some environments or circumstances may slow the rates.)

No. of vaccinations per hour/vaccinator	Hours to vaccinate 80% of population (120,000)	Hours to vaccinate 120,000 using 50 vaccinators	Hours to vaccinate 120,000 using 100 vaccinators
15	7500	150	75
20	6000	120	60
25	4800	96	48

Vaccinating could occur for example, for a fifteen hour day (8am to 11pm), rostering staff through these time frames, and catering for peak demand times.

In addition to vaccinating time, there may be a requirement for drawing up time if the vaccine does not come in a pre-filled syringe. A nurse can draw up approximately 60-90 vaccinations in an hour.

Factors affecting rates include

- Frightened or distressed children
- Interruption to supply of vaccine
- "Quiet" periods
- Rostered staff shortage/sickness
- Down time e.g. fire alarm, power cut, other unplanned interruption

Staff and Roles

The School Based Immunisation Programme has processes and roles to manage the entire operation.

1. Site Coordinator - Overall responsibility for the site, leadership, liaison with school, briefing and debriefing.
2. Triage - Assess people unwell on the day.
3. Recovery - Manages post-vaccination waiting time (20 minutes) 1 nurse to 20 people.
4. Vaccinators - Prepare vaccine, vaccinate consented people.
5. Float - Overview of progress, support people being vaccinated, manage flow of people, draw up additional vaccines, communication with administration team.
6. Administration/Support - Documentation of vaccination.
7. Administrator/Support - Meet/greet, removal of clothing from arm, check health status, positive identification of individuals.

8. Cold Chain Manager - Manage cold chain, monitor vaccine distribution, count of vaccine, associated documentation.

For a high school of approximately 1000 students, vaccinating over a school day, a team would comprise:

Site Coordinator – 1 RN

Triage – 1 RN

Recovery – 4 RN (some could be 1st aiders)

Vaccinators – 6 RN

Float – 2 RN

Administrators – (pre- and post- vaccination) – 4

Cold Chain Manager – 1 (non RN)

Additional staff and facilities would be required to manage data entry and other administrative tasks at a central location.

In the event of a pandemic vaccination programme, the need for security staff and parking attendants needs to be evaluated.

Equipment and Supplies

Facilities are required for bulk storage and security of supplies at a central point.

PPE could be required in addition to other equipment and supplies.

Emergency resuscitation equipment is required at each vaccinating centre.

Daily packing of supplies, and unpacking at the end of the day, is an exacting task, requiring dedicated staff resources.

Transport of supplies, messages/errands, waste, sharps, and biohazard bag disposal also requires dedicated resource, and access to suitable transport.

Cold Chain monitoring equipment.

See “*Equipment List-MeNZB Programme*” and “*Supplies-MeNZB Schools*”.

References

Meningococcal B School Based Vaccination Programme, Team Roles for School Vaccination Day, Public Health Nurses, Child Health Unit, 2005.

Equipment List-MeNZB Programme, Public Health Nurses, Child Health Unit, 2005 (daily packing list).

Supplies-MeNZB Schools, Gaynor Anderson, Procurement, 2005 (list and costings).

Appendix 2

Cold Chain Management for an Influenza Pandemic Vaccination Programme for the Hawkes Bay District Health Board

The success of an immunisation programme is dependent on the maintenance of vaccine potency. To achieve this, the recommended temperature must be maintained during storage and distribution to avoid cumulative irreversible loss of potency from thermal insult (heat or freezing). The cold chain is the system of transporting and storing vaccines at 2-8°C from the place of manufacture to the point of vaccine administration (the patient)". (Immunisation Handbook 2017)

Cold Chain Accreditation:

All Immunisation Providers in Hawke's Bay are expected to have cold chain accreditation or compliance.

Vaccine Pharmaceutical Fridges:

All vaccines must be stored in pharmaceutical fridges.

Providers of Immunisation:

All authorised vaccinators have a clear understanding of the cold chain process and other nurses involved with immunisation should also work within the cold chain standards.

There is a data base recording information of all authorised vaccinators within the Hawkes Bay District Health Boards region. (K drive/Comm disease/immunization/authorized vaccinators/vaccinators database 2007 and register of vaccinating community pharmacists)

Transport of Vaccine:

Vaccines are transported from distribution depots which are currently based in Wellington and Auckland. Courier services are used to deliver the vaccines, packed within the cold chain standards.

For transport to vaccinating venues cold chain approved chilly-bins fitted with data loggers must be used. These are available from Public Health staff at Napier Health Centre.

Appendix 3

Training Requirements for Vaccinators and Support Staff Participating in a Mass Vaccination Campaign

1. Introduction and Overview

Immune System

Pandemic Influenza (the disease, NZ epidemiology, vaccination strategy)

Legislation

2. The Pandemic Vaccine

The vaccine

Storage and handling

Drawing up, labelling

Vaccine administration

3. Anaphylaxis-recognition and management

4. Informed Consent

5. Documentation Process

6. Scheduling, Rostering, Team Roles

7. Process, Set-up, Equipment

8. Emergency Procedures

References:

Vaccinator Training Courses for Non Medical Vaccinators.

Appendix 4

Other Occupational Groups who could be trained to vaccinate in a pandemic campaign.

Community Pharmacists
Plunket Nurses
Dentists, Dental Therapists
MeNZB Nurses
Student Nurses
Occupational Health Nurses
Other health practitioners (e.g. PTs, OTs)
Defence Forces
Vets
Farmers

The range of other occupational groups who could be trained would depend on the mode of administration-oral, sub-cut etc.



Volunteer Plan

Volunteer Management

A volunteer is a person who freely chooses to perform work, unpaid, for the common good.

Volunteers will be an essential resource during pandemic response, nevertheless, the safety of patients/consumers and staff is paramount.

Agency Commitment and Responsibility

An important component of volunteer involvement is the consideration of agency responsibility for providing services that are safe, sensitive to the needs of end users, and provide quality training and support for volunteers.

Job descriptions are the best and easiest way of keeping all workers, paid or voluntary, clear about their roles and “on track” with their tasks. Job descriptions are one of the best ways of eliminating the problem of lack of role clarity that is commonly identified by volunteers. Job descriptions are also the principal means by which an agency can check for acceptable standards of performance, both individually and over the whole service. They are therefore a major means of meeting accountability requirements and managing risks.

The job description will include the following elements:

- Job title
- Primary objectives (these should be easily understood, specific, practical, attainable and measurable)
- Key tasks
- Skills required
- Limits of authority

Agreements are the method by which the agency clarifies the mutual commitments between the volunteer and the organisation. When properly formulated they are a clear, two-way agreement that not only asks a commitment of the volunteer, but also demonstrates the commitment of the agency to the volunteer.

The types of things that could be included in an agreement are undertakings by the volunteer to:

- Undertake in-service training requirements
- Fulfil administrative procedures required of them
- Honour confidentiality requirements

And undertakings by the agency to:

- Reimburse approved expenses
- Provide in-service training and personal development opportunities

Selecting Volunteers

Although it can be tempting to accept any offers of help, a little time and thought at this stage will go a long way towards ensuring volunteers are well matched to the organisation.

An application will provide an initial screening of the volunteer, which should be followed by vetting by the Police and a health check if required.

Obtaining details about whether a potential volunteer has a criminal record requires first obtaining the person's permission to ask for this information and then seeking this information by sending the signed disclaimer to the NZ Police at the local station.

Procedure

- Maintain a record of all people who enquire about volunteering, even if they cannot be used at the time
- Request the volunteer to complete an application form (appendix 1)
- Complete the volunteer register (appendix 2) for all potential candidates documenting skills
- Ensure the health clearance question on the application form is completed, if doubt as to suitability occurs contact the Occupational Health Service
- Request permission to conduct a criminal record check if required (appendix 3)
- Confirm volunteer status and agency/area of work, provide job description (appendix 4) and written agreement (appendix 5) and certificate of acceptance (appendix 6)
- Book onto generic orientation programme
- Provide organisation identification and uniform if required
- Inform nominated person in proposed work area and ensure briefing and area specific orientation prepared (appendix 7)
- Appoint a supervisor

Reception and recruitment of volunteers will be carried out centrally with placement of volunteers being made according to the information supplied by each agency detailing tasks that may be allocated, skills required and exclusion criteria.

Legal Considerations

There are a number of legislative areas that need to be taken into consideration when setting policies and practices for volunteers. The main areas are:

- The Privacy Act 1993
- The Human Rights Act 1993
- The Health and Safety at Work Act 2015

The Accident and Rehabilitation and Compensation Insurance Act 1992 has some provisions which volunteers should be aware of.

The legislation protects a volunteer who personally suffers an accident. Payments are limited to medical expenses, assistance under social rehabilitation regulations and the independence allowance. Earnings-related compensation is not payable, as volunteers are not seen as being involved in economic activities under the definition of the act.

In many circumstances an organisation is responsible for the conduct of its employees and volunteers. It can be liable for negligence for other "torts" or "civil wrongs" if one of its employees or volunteers act negligently in the course of his/her activities on behalf of the

organisation. This applies even if the organisation has not committed a wrongful act or omission.

A tort is a civil wrong which breaches the duty of care between citizens and organisations to respect others' rights. A civil wrong can occur even if there is no contract between those affected or no statute (law) is breached. Torts include negligence (failure to take reasonable care), nuisance (causing an annoyance), defamation and passing off (misrepresenting the source of goods or services).

It is irrelevant whether the employee or volunteer is being paid for his or her services or has a contract of engagement with the organisation. The key issue is whether or not the person is acting on behalf of the organisation in the course of his or her commitment to it.

Protection for Agencies

If agencies are apprehensive about possible difficulties and liabilities where their volunteers are concerned, it is suggested they look at a range of insurance options which would provide them with protection.

These options could be by means of:

- Public liability insurance: this indemnifies agencies against claims for injury, accidents or property damage and covers against claims for all persons other than employees. It should protect individually volunteers from claims from clients or the public and other agency members, either volunteers or employees.
- Employers liability insurance: this involves obtaining an extension on an existing policy to cover liability from claims from volunteers.
- Personal accident insurance: this is for volunteers. It provides payments of injuries or death in the course of work for the agency, thus providing protection where the Accident and Rehabilitation and Compensation Insurance Act does not apply.
- Professional indemnity insurance: this applies where agencies offer advice to clients or members of the public and clients take action to recover resultant financial loss. To avoid liability, the agency would need to prove reasonable care was taken to give correct advice. This is an expensive insurance, the need for which would need to be balanced against perceived risk.

As with all legal matters agencies should consult with their legal representative when making decisions about insurance and related policies.

Supporting Legislation

Privacy Act 1993

The Privacy Act governs the responsibilities of a person who is collecting, or who has in their possession, personal information about another individual. It applies to any organisation that collects, stores, discloses or uses personal information about identifiable individuals.

Special rules apply when the information collected, stored, disclosed or used by an organisation relates to the health or disabilities of identifiable individuals.

The Privacy Act applies only to personal information about an identifiable individual. It does not apply to information about organisations, companies or other bodies.

Clean Slate Act 2004

Under the Criminal Records (Clean Slate) Act, an individual who has a minor conviction and has not re-offended for seven years does not have to declare this information in some circumstances. This excludes all sexual offending. Full criminal records will still be available during police investigations or court proceedings, when applying for a firearms licence or for sensitive types of employment, such as the care of children or national security.

Health and Safety at Work Act 2015

Its principal aim is to provide for the prevention of harm to employees at work. The act covers volunteers who work for an employer on an ongoing/regular basis and whose work is an integral part of the business of the employer.

Volunteers need to have sufficient knowledge and experience to work safely, or an experienced person should supervise them. Organisations or groups should train and supervise volunteers if appropriate.

Only volunteers properly trained in using certain kinds of machinery, equipment or chemicals should be permitted to use them.

Volunteers should be informed of:

- All existing potential hazards
- Emergency procedures and location of emergency equipment
- Hazards the volunteer may be exposed to while at work
- Hazards the volunteer may create while at work which could harm others
- Ways to minimise the likelihood of those hazards becoming a source of harm
- Appropriate policies and procedures

this information should be provided verbally before work starts.

Practicable steps ensuring the safety of employees and volunteers include:

- Identifying and controlling hazards in the workplace (eliminate, isolate, minimise)
- Providing information to ensure that employees can work safely
- Having emergency procedures and ensuring people know about them
- Recording accidents/incidents and near misses properly
- Giving training for tasks that volunteers and employees carry out with appropriate documentation to demonstrate competence

Appendix 1

Application Form

The information on this form will help us to find the most appropriate position for you.

Personal Details

Name _____

Home Address _____

Telephone Number _____

Occupation _____

Emergency Contact Details

Name _____

Home Address _____

Telephone Number _____

Skills and Experience

Please list the skills and experience you believe may be relevant to your volunteer work.

Appendix 1

Health

Are there any health problems, physical limitations which might limit your ability to work as a Volunteer? Yes No

Signature _____ Date _____

All information given on this form will be absolutely confidential to the Volunteer Management Team and the agency to whom you are assigned.

Appendix 2

VOLUNTEER REGISTER

Date: _____

No.	Name	Contact Details	DOB	Drivers Licence	Qualifications/Skills/Occupation	Accepted

Appendix 4

Consent to Disclosure of Information

I, _____
(Surname) (Forename/s)

(Maiden or other names used)

Sex ___ (M/F) Date and place of birth _____

Nationality _____ Residential Address _____

Suburb _____ City _____

NZ Driver Licence Number _____

hereby consent to the disclosure by the New Zealand Police of any information they may have pursuant to this application, to _____. I understand that any record of criminal convictions I might have will be automatically be concealed if I meet the eligibility criteria stipulated in Section 7 of the Criminal Records (Clean Slate) Act 2004.

Signed _____ Date _____

Position Applied for: Volunteer

COMMENTS OF THE NEW ZEALAND POLICE:

PLEASE RETURN TO: Volunteer Coordinator
Emergency Operations Centre
Hawke's Bay Hospital

Appendix 4

Job Description

Agency _____

Job Title _____

Responsible to nominated supervisor.

Primary Objective

To increase the capacity of the agency to respond to the pandemic event.

Key Tasks

- To meet the agency's professional standards therefore minimising the risk of harm to consumers, staff and others.
- To be responsive to the needs of consumers and staff.

Specific tasks to be added by each agency.

Skills Required

Specific skills to be added by each agency.

Limits of Authority

The volunteer is to work within the limits set by the agency they are assigned to and under the specific direction of their assigned supervisor.

Training

The volunteer must be prepared to attend the generic orientation programme provided by Hawke's Bay District Health Board and related training provided by the agency they are assigned to.

Acceptance

Acceptance of volunteer status implies acceptance of this job description.

Appendix 5

Agreement

We require volunteers to follow the standards below. Please do not sign this agreement until all your questions relating to this agreement have been answered to your satisfaction. Each agency reserves the right to decline an application to be a volunteer. Volunteers must be 18 years of age or over.

1. Advice should be sought before commencing any activity with which the Volunteer is unfamiliar or about which he/she is unsure.
2. Safety concerns or injury, accident or significant near-miss event, or identification of a hazard must be reported to the supervisor as soon as possible.
3. Authority to perform the work of a Volunteer may be immediately revoked without a reason being given but especially if safety is compromised.
4. All information which may be divulged to you, or that you might hear, is to be treated as confidential. Relevant information may be shared with your supervisor.
5. The Volunteer will not comment or pass opinion on actions made by the agency they have been assigned to.
6. Volunteers are not expected to perform professional duties for the agency they have been assigned to rather to support the actions taken by completing tasks as assigned by their supervisor.
7. Volunteers are expected to be sensitive to a person's religious, spiritual, cultural and individual needs and views and are to refrain from imposing their own views or beliefs on others.
8. Volunteers are expected to maintain a reasonable standard of dress, hygiene and conduct and to wear identification provided by the agency they have been assigned to.
9. Volunteers are not to accept personal gratuities/gifts/monies.
10. If a volunteer is required to transport people, resources or information they agree to comply with all traffic and other regulations and exercise all care.
11. Volunteers must complete a timesheet at the completion of each period of work.
12. Volunteers will receive no remuneration, whether salary or wages of any kind.

Declaration

I have read and understand the Volunteer Service's Standards for Voluntary Workers. I agree to abide by them.

Volunteer Name: _____
(please print)

Signature: _____ Date: _____

Agency Representative: _____
(please print)

Signature: _____ Date: _____

Appendix 6

Certification of Acceptance

Personal Details

Name: _____

Volunteer Status: Meets criteria

Skills:

Clerical	<input type="checkbox"/>	HT License	<input type="checkbox"/>
Typing	<input type="checkbox"/>	Forklift License	<input type="checkbox"/>
Database Entry	<input type="checkbox"/>	Gun License	<input type="checkbox"/>
Reception	<input type="checkbox"/>	Manual Labour	<input type="checkbox"/>
Information Systems	<input type="checkbox"/>	Tradesman	<input type="checkbox"/>
Telecommunications	<input type="checkbox"/>	Domestic	<input type="checkbox"/>
Finance	<input type="checkbox"/>	Food Preparation	<input type="checkbox"/>
Caregiving	<input type="checkbox"/>	Security	<input type="checkbox"/>

Signature: _____ Date: _____
(Volunteer Management Team)

Appendix 7

Induction Checklist

Name of Volunteer: _____

Supervisor Responsible for Volunteer: _____

Staff Member Conducting Induction: _____

The staff member conducting the induction and the Volunteer are to initial and date only when both are satisfied the Volunteer understands and can locate and correctly use the facilities. Further training must be provided if that understanding is incomplete. This completed form will be retained as a record of safety induction completion.

Facilities	____/____/____	Volunteer _____	Inductor _____
• Toilets		Yes	No
• Cafeteria/kitchen		Yes	No
• Smoke-free policy		Yes	No

First Aid	____/____/____	Volunteer _____	Inductor _____
• First aid facilities/location		Yes	No
• Avoiding contact with body fluids		Yes	No

Accident and Hazard Reporting	____/____/____	Volunteer _____	Inductor _____
• Agency health and safety policy		Yes	No
• Reporting hazards and accidents		Yes	No

Building Emergency Plan	____/____/____	Volunteer _____	Inductor _____
• Evacuation procedures		Yes	No

Instructions	____/____/____	Volunteer _____	Inductor _____
• Confirm limits of tasks		Yes	No
• Confirm emergency procedures		Yes	No

