Waitematā
District Health Board

Best Care for Everyone

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15 July 2019

[redacted]

Dear [redacted]

Re: Official Information Act request – Staff who have contracted measles

Thank you for your Official Information Act request received 1 July regarding staff who have contracted measles.

Our responses to your questions are provided below.

Many of our clinical staff come into regular close contact with a cross-section of the public and this increases the chance of them being exposed to a range of illnesses.

We proactively encourage our staff to ensure they are vaccinated to protect themselves, their patients and the public. We offer MMR and other vaccinations to all staff. This is a free service.

1. **The number of staff members employed by the DHB who have contracted measles between March 1 and July 1, 2019, broken down by the department/ward they work in.**

Three staff (out of a total of 7500 staff across the Waitematā DHB) have been confirmed as contracting measles in the time period above. These staff work directly with patients in our hospital services.

As only three individuals are involved, there is already a high risk of those people becoming publicly identifiable and we hold concerns about providing further detail that would exacerbate this risk. Therefore, we have decided to withhold the detail of which services they are employed in under Section 9(2)(a) of the Official Information Act to protect the privacy of natural persons.

If you wish to complain about this decision, you have the right to make a complaint to the Office of the Ombudsman, whose contact details are available via www.ombudsman.parliament.nz.

When a staff member is known to have been exposed to a patient with confirmed measles, then the staff member's immunity status is reviewed (either past history of known or presumed measles, or relevant serology).

If a staff member is considered immune, then no further action is taken and they are able to continue normal clinical work and patient contact.

If a staff member is non-immune, then the staff member does not undertake clinical duty until the incubation period has passed.

The staff member will also be offered the measles (using MMR) vaccination to ensure future immunity.

If a staff member has or develops measles, then they will remain off work until the measles rash disappears or until otherwise medically cleared as fit to return to work.

2. Copies of the DHB's position/policy on staff vaccination.

Please find attached Waitematā DHB's policies on staff vaccination. Several policies on staff vaccination are being updated. However, we have provided the current policy for the purposes of this request.

Waitematā DHB, like other agencies across the state sector, supports the open disclosure of information to assist the public's understanding of how we are delivering publicly-funded health care. This includes the proactive publication of anonymised Official Information Act responses on our website from 10 working days after they have been released.

If you feel that there are good reasons why your response should not be made publicly available, we will be happy to consider them.

We trust this reply satisfies your request.

Yours sincerely

Fiona McCarthy
Director Human Resources
Waitematā District Health Board

Influenza and Influenza-like Illness [ILI] - Plan for the Prevention of In-hospital Spread

Contents

Influenza and Influenza-like Illness [ILI] - Plan for the Prevention of In-hospital Spread

1. Introduction

1.1 Purpose

- This document relates to the prevention of spread of influenza or respiratory viruses causing Influenza-like illness (ILI) in an acute healthcare setting at Waitemata DHB.
- In 2017, seasonal influenza had a significant impact on hospital operations due to highest ILI consultation rate nationally at Waitemata DHB and about 50% of confirmed influenza patients requiring hospitalisation for >2 days due to Influenza, related complications or other co-existing acute illness. In 2018, the impact of Influenza was moderate with 576 confirmed cases, lower healthcare influenza (34 vs 100 cases in 2017) and an on-going predominance of seasonal H3N2 Influenza A strains.
- This document provides guidance to diagnostics, management, and infection prevention and control strategy for ILI presentations to Waitemata DHB acute care facilities.
- For a description of Influenza, epidemiology, clinical features, vaccine etc. refer to MOH website http://www.health.govt.nz/your-health/conditions-and-treatments/diseases-and-illnesses/influenza

1.2 Scope

This document is scoped for Seasonal Influenza only i.e. Influenza A H3N2, H1N1 and Influenza B.

NOTE: It does **not** apply to a pandemic situation e.g. H1N1 pandemic in 2009 or the emergence of a new hyper virulent strain of influenza. Separate guidance will be issued in such a situation.

1.3 Definitions

Influenza like illness (ILI)	A clinical diagnosis based on acute, abrupt onset of respiratory infection characterised by at least **two** of the following**:** fever**,** cough**,** headaches**,** myalgia. Other respiratory viruses that cause ILI include respiratory syncytial virus (RSV), parainfluenza and rhinovirus which can also circulate more commonly in winter periods.
Influenza	Confirmed diagnosis of influenza is by PCR (polymerase chain reaction) testing "Influenza PCR"

2. Influenza Management Strategy

2.1 Key principles

1. Waitemata DHB staff are strongly encouraged to receive annual influenza vaccination to prevent transmission of virus within healthcare facilities to patients and other staff, in addition to their friends and family.
   Influenza can cause sub-clinical illness (i.e. without symptoms or signs of respiratory tract infection). Influenza vaccination can reduce the risk of this and subsequently spread by relatively asymptomatic individuals.
2. Community General Practices have systems and processes to receive, assess and manage patients with influenza in primary health care where at all possible
3. Accident and Medical Centres have systems and processes to receive and assess patients with influenza
4. Patients referred to public hospitals for assessment and treatment are triaged accordingly in view of infection risk to others.
5. Diagnostic PCR rapid testing (Turnaround time is <6 hours from arrival of the specimen in microbiology laboratory in Influenza Season). This is available at both main hospital sites and is used to ascertain infection status.
6. Patients requiring inpatient admission must be cohorted and strict infection control practices are enforced.

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2.2 Activities initiated in preparation for winter

2.2.1	A **staff vaccination programme** is initiated as soon as vaccine is available through Pharmac i.e. April –May and ongoing This includes: • communication and awareness raising for staff using screen saver, posters, messaging • training of in-team vaccinators • scheduling of vaccination opportunities for staff and expectation that staff will take this up • staff awareness of their role in spread of viruses as may be asymptomatic - *Do No Harm*
2.2.2	Stocking of **personal protective equipment (PPE)**, antibiotics and anti-virals so that appropriate protection resources are available
2.2.3	**Enhanced infection control practices teaching and expectations** reinforced in staff teaching, grand rounds, signage, monitoring • Reinforce expected use of standard precautions and hand hygiene • Droplet precautions must be used for all patients with ILI or confirmed influenza due to the potential for spread from fomites • In situations where *excessive respiratory secretions or concomitant gastrointestinal symptoms* with close contact, additional use of gloves and gowns is recommended
2.2.4	**Public education** • *external messaging* through general practices and community media. • Promote vaccination, especially high risk/vulnerable groups e.g. children, elderly, renal, pregnant women. • Provide vaccination to renal patients and patients in AT&R and KMU • Promote vaccination in Aged Residential Care facilities • *internal messaging* regarding not visiting if unwell to prevent spread of viruses to vulnerable patients
2.2.5	**Enhanced hospital bed management** monitoring and staff availability • **daily access meetings** [or more] to review patient flow • If necessary initiate ***Emergency Operations Centre*** to manage increased demand and staff shortages • daily monitoring of staff sickness and availability
2.2.6	Prepare **key wards to cohort** / dedicate to receive patients with influenza in case of increased activity i.e. >5 confirmed cases admitted to medical /surgical wards • North Shore Hospital - Ward 3 • Waitakere Hospital - Anawhata Ward
2.2.7	Prepare for **separate assessment of patients with suspected influenza** GP referrals i.e. dedicated assessment area with doctor and nurse • North Shore Hospital (NSH) • Waitakere Hospital (WTH)
2.2.8	**Senior clinical and management leadership** is required i.e. medical, nursing, maternity, management • Risk mitigation – assessment, monitoring • Readiness - Planning, education, communication, support of vaccination programme • Response – decision making, analysis, advice, visible support of clinical frontline • Recovery planning

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3. Bed placement decision where patient has influenza-like illness

3.1	**Cohorting of patients with ILI should occur** (in patients **not** requiring other specialised ward care) • in designated 'winter' wards **during periods of increased activity and hospitalisations as part of an escalation plan.** • These wards are **Anawhata (WTH)** and **Ward 3 NSH** • Additional wards will be identified by the Incident Management Team if there are increased presentations **including designated areas in rehabilitation wards.** **NOTE:** Cohorting of suspected influenza or laboratory confirmed influenza patients with non-ILI patients is ***not*** *recommended*.
3.2	Use of negative pressure rooms or airborne precautions (N95 or FFP masks) is **GENERALLY NOT** recommended
3.3	In wards with immunocompromised or at risk patients (e.g. haematology, maternity or renal) **single rooms are strongly recommended.** **N.B.** Single rooms are not required for all patients with ILI or confirmed influenza to minimise risk of transmission
3.4	Cubicles or well-spaced and confined bed space (e.g. semi private or 4 bedded rooms with curtains) may be utilised.

4. Management of ED / ADU and inpatients with ILI

The management of ED/ADU and inpatients is shown in the flow chart in **Appendix 1.**

All patients with ILI must have a nasopharyngeal swab taken and sent to the Laboratory for Influenza PCR. If other Pathogens suspected please request Respiratory Pathogens Panel.

Influenza PCR:

This detects Influenza A and Influenza B. It is performed seven days a week during working hours.
Turnaround time is <6 hours from arrival of the specimen in the microbiology laboratory in Influenza Season.

5. Patient Management - Diagnostics

Diagnostic testing for patients with ILI should ideally be performed on initial medical assessment typically in ED / ADU setting.

- Confirmation of diagnosis of Influenza can result in initiation of specific antiviral therapy.
- Diagnosis of non-influenza viral respiratory tract infection in absence of confirmed bacterial co-infection can prevent unnecessary use of antibiotics.

Nasopharyngeal swab is the preferred specimen for patients of ILI.

- Other specimens include nasopharyngeal aspirate and lower respiratory tract specimens like bronchoscopic washings.

Information on how to obtain and process a pharyngeal swab is found in **Appendix 2.**

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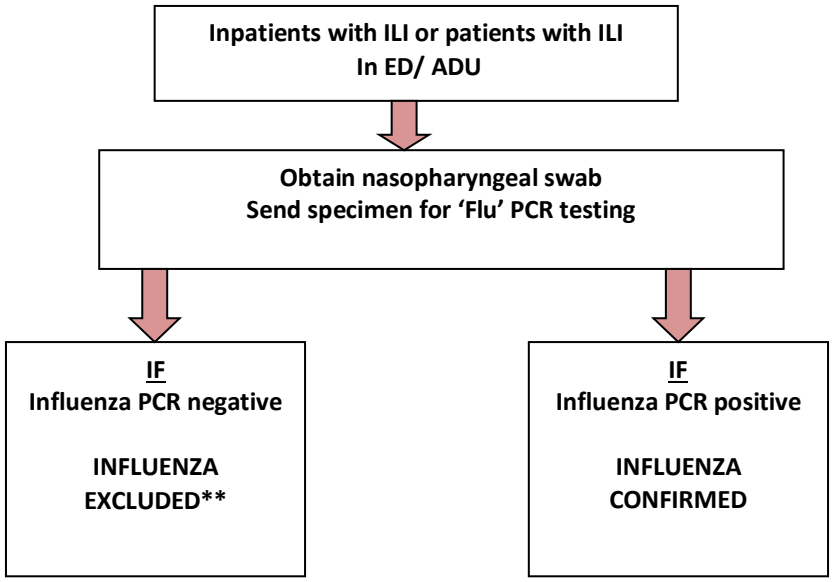

Rapid antigen testing for Influenza is not the preferred test due to its poor sensitivity.

****If testing for other respiratory pathogens is required, please contact the microbiology laboratory to request this.**

6. Infection, Prevention and Control issues

6.1 Transmission

Human influenza viruses are transmitted from person to person primarily via virus-laden droplets. These droplets are generated when infected persons cough or sneeze (particles >5µm in diameter). They may be inhaled and subsequently deposited directly onto upper respiratory tract mucosa.

Susceptible persons who are within the bed space or room of an infected person are at risk of acquiring the virus and developing influenza

Transmission can occur through direct contact with respiratory secretions of an infected patient or by indirect contact with environmental surfaces that have been contaminated with respiratory secretions. For example, transmission can occur by touching contaminated surfaces and then touching the eyes, nose or mouth.

Airborne transmission may also occur during procedures that generate aerosols:

- tracheal suctioning
- nebulising of medications
- bronchoscopy
- intubation – e.g. resuscitation

In addition, airborne transmission has been suspected with certain highly virulent strains of Influenza virus e.g. new H7N9 in China and H1N1 during pandemic in 2009. A detailed description is beyond the scope of this policy and routine use of airborne isolation is **NOT** recommended in a non-pandemic, non-epidemic setting with seasonal influenza.

6.2 Incubation period

- The average incubation period is **1- 4 days**, with an average of **2 days**.
- Patients with influenza are infectious **1–2 days** before symptom onset until **24 hours** after symptoms have resolved (or for at least **7 days**).
- Patients are most infectious during the **first 2–3 days** of illness.

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- Some groups like children, critically ill and immunocompromised persons may shed virus for more prolonged periods. Primary school aged children may shed virus for up 10–14 days and pre-school aged children may shed virus for up to 21 days.
- In general, once patients commence antiviral treatment, infection is dramatically reduced. Infection prevention measures with droplet precautions are generally continued for up to **7 days**.
- In patients receiving antiviral therapy or those with prolonged length of stay with complete resolution of symptoms prior to 7 days, please contact IPC nurse specialist for advice.

6.3 Summary of infection prevention measures in patients with influenza

Table 1

	No contact Entering or passing through pt./room ≥ 1m (3 feet)	**Casual contact** e.g. talking to patient, physical exam, ≤ 1m (3 feet)	**Close contact** *	**Aerosol generating procedures**
Hand Hygiene	-	✓	✓	✓
Gloves and gown	X	X	✓*	✓
Surgical mask	X	✓	✓	X
N95 mask	X	X	X	✓
Eye protection	X	X	X	✓

X – not required, ✓**- recommended**

**Close contact -in situations where excessive respiratory secretions or concomitant gastrointestinal symptoms with close contact, additional use of gloves and gowns is recommended.*

6.4 Environmental cleaning

Regular environmental cleaning is important. Since influenza viruses can persist on certain environmental surfaces like steel for up to 7 days and on cotton/microfibre for 17-34 hrs. *(Ref: Jour Hosp Infection 2017;95:194-99)*

- The virus is inactivated by a wide range of cleaning products including sodium hypochlorite 0.1%
- Sodium hypochlorite solution is used for daily and terminal cleaning of isolation rooms
- Use disinfectant solution to disinfect patient care equipment that is shared between patients
- The isolation room/area must be cleaned daily as per Cleaning Standards/ specifications
  - The cleaner must wear a surgical mask, gown and gloves
  - The room(s) must be cleaned last.
  - The mop cloth and cleaning cloths must be sent for processing as per the Cleaning Services standard procedure
  - Equipment (used or unused stock) and other waste must be disposed of into a yellow biohazard bag
  - Reusable equipment (stethoscopes, BP cuffs) must be scrupulously decontaminated between each patient according to routine local guidelines. Stethoscopes are to be cleaned with alcohol swabs or disinfectant wipes
  - It is not necessary to leave the room unoccupied after cleaning.

6.5 Isolation Room Details

- If Influenza is laboratory confirmed, then the patient must remain under droplet precautions until defined as no longer infectious. Contact IP&C for discontinuation of droplet precautions
- Cohorting of suspected Influenza patients or laboratory confirmed Influenza patients with non-ILI patients is *not recommended*
- All necessary personal protective equipment (PPE) must be set up *outside of the room*
- Droplet transmission based precautions signage (door sign) must be displayed on the door. If additional protection is required then also place 'Contact Precaution' sign on door.
- PPE is put on, outside of the room, before entering

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- Hand hygiene with alcohol gel should be performed before putting on PPE and after removing PPE
- Patients must be provided with ample supplies of disposable tissues.
- Patients must be taught to cover their mouth and nose when coughing / sneezing and discard the tissues into a rubbish bag after use. Patient must then carry out hand hygiene
- Patients must wear a surgical mask when in transit to ward, department, corridors and public areas
- Receiving departments must be made aware of the patient's isolation status before being transferred

6.6 General

- Gloves are not a substitute for hand hygiene
- PPE is single use only, for each individual patient contact
- Masks must be handled by their strings to avoid hand contamination
- Disposable items placed in yellow biohazard bag
- If reusable eye wear is used, it must be washed in warm water and detergent. Dry well before storage or reuse

7. Management of Healthcare Workers with ILI

7.1 Seasonal 'Flu' Vaccine and rationale for variable efficacy

Seasonal influenza vaccination and adherence to basic infection prevention measures at home or in the workplace remain the most effective means of protection and prevention of spread of Influenza in healthcare workers.

Influenza vaccine is safe* and does not contain live or attenuated virus, hence it **cannot cause Influenza**. Every year more than 1.2 million people in NZ receive 'flu' vaccination.

The two Flu vaccines for **2019** in NZ funded by PHARMAC are INFLUVAC TETRA for both adults and children, and FLUARIX TETRA for children < 3yrs. Both are quadrivalent vaccines which contain the following strains.

- A/Michigan/45/2015 (H1N1) pdm09- like virus
- **A/Switzerland/8060/2017 (H3N2)-like virus**
- **B/Colorado/06/2017-like virus**
- B/Phuket/3073/2013-like virus

Strains in bold are new compared to the 2018 vaccine.
These vaccines are available from early April and offered free of charge to healthcare workers during the annual Influenza prevention campaign till at-least end June.

* There are only 4 cancer treatments in NZ where Influenza vaccine may be contraindicated or need to be delayed- ipilimumab, nivolumab, pembrolizumab and atezolizumab (reference: 2019 'flu kit' available on *https://www.influenza.org.nz*).

The efficacy of yearly seasonal Influenza vaccine is variable and depends on multiple factors including but not limited to circulating strains for the year and 'match' with the vaccine strains, age of vaccine recipient (efficacy low in elderly), co-morbidities and immunosuppression.

Pooled NZ data from the SHIVERS study has shown that the influenza vaccine effectiveness over 2012-15 was 46% (CI 35-55%) in preventing ILI presentations to GP practices and 52% (CI 41-62%) in preventing influenza related hospitalisations. Estimates for 2018 vaccine efficacy were imprecise due to low influenza activity- 38% (CI 1-61%) for preventing ILI presentations to GP's and 35% (CI 12-52%) in preventing influenza related hospitalisations (source *https://www.influenza.org.nz*).

Influenza vaccine is more effective in healthy adults 18-64 yrs (60%) but less effective in elderly >65yrs (39-49%). In the elderly group, Influenza is associated with higher rate of complications including acute coronary events *(NEJM 2018; 378:345)*, pneumonia *(Clin Infect Dis 2000; 181:831-7)*, frailty *(Vaccine. 2005;23: S1-9)*.

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High dose influenza vaccine like *Fluzone (NEJM 2104; 371:635)*, recombinant vaccine *(NEJM 2017; 376:2427)* and adjuvanted vaccine like *Fluad (Vaccine 2103; 31:6122)* are options available elsewhere to improve efficacy rates in elderly patients but these are not readily available or subsided in NZ.

Influenza remains a safe and effective strategy in pregnancy both for the mother and the baby *(Clin Infect Dis May 2019; 68: 1444-53)*

Vaccination remains an important strategy in healthcare settings for reduction in the spread of influenza.

7.2 Treatment and Post exposure prophylaxis for Influenza

Antiviral medications can be used both to treat and prevent influenza. They should not replace yearly influenza vaccine as the recommended strategy for the control of influenza, as they appear to have only modest efficacy.

In New Zealand, two neuraminidase (NA) inhibitors Oseltamivir (Tamiflu®) and Zanamivir (Relenza®) are available with Oseltamivir being the most commonly used. NA inhibitors are active against both influenza A and B viruses.

A recently approved novel agent Baloxavir *(NEJM 2018; 379: 913-23)* inhibits the viral polymerase and is as effective as Oseltamivir in reducing the duration of symptoms of by 1 day. It is given as a single oral dose but is very expensive and not available in NZ.

As influenza is a self-limiting illness, majority of cases do not require hospitalisation and the overall benefit from Oseltamivir as shown in a meta-analysis is only modest *(Lancet, 2nd May 2015; pg.1729–1737),* **we recommend that its use is limited to high risk patients with confirmed influenza who require hospitalisation for influenza or related complications.**

High risk is defined as:

- Age ≥65 years
- Chronic respiratory disease
- Immunosuppression- e.g active malignancy, high dose chronic steroid use, transplant, HIV
- Pregnancy
- Postpartum (up to 6 weeks)
- Residents of aged residential care and chronic care facilities

Oseltamivir is also indicated for post exposure prophylaxis, use should be limited to:

- Patients who are high risk and have had close contact with a confirmed influenza case
- Non-vaccinated healthcare workers who had had close contact with a confirmed influenza case (must be facilitated by the Occupational Health and Safety Team)

See **Appendix 3** for further information on the indications for use of Oseltamivir, dosing, adverse effects and process on discharge.

7.3 Health Care Worker with ILI - Responsibilities and Duration off work

Timely vaccination against influenza, use of appropriate personal protective equipment and compliance with hand hygiene are considered primary responsibilities of every healthcare worker. In addition, staff should educate and encourage colleagues, patients and families about seasonal influenza vaccination and respiratory etiquette.

It should be noted that the respiratory viruses like parainfluenza can be *highly infectious* also and cause ILI in appropriately vaccinated staff.

If a staff member develops ILI symptoms despite the above measures it is then his or her responsibility to

- **promptly notify their manager/ co-ordinator about the illness**
- **and stay away from clinical contact with patients and other staff for the duration of illness.**

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Staff can return to work **once asymptomatic** (if no antivirals given or if non- influenza ILI), or **after 48 hrs of initiation of antiviral therapy e.g. oseltamivir**.

8. Influenza-like illness in Outpatients Department (OPD)

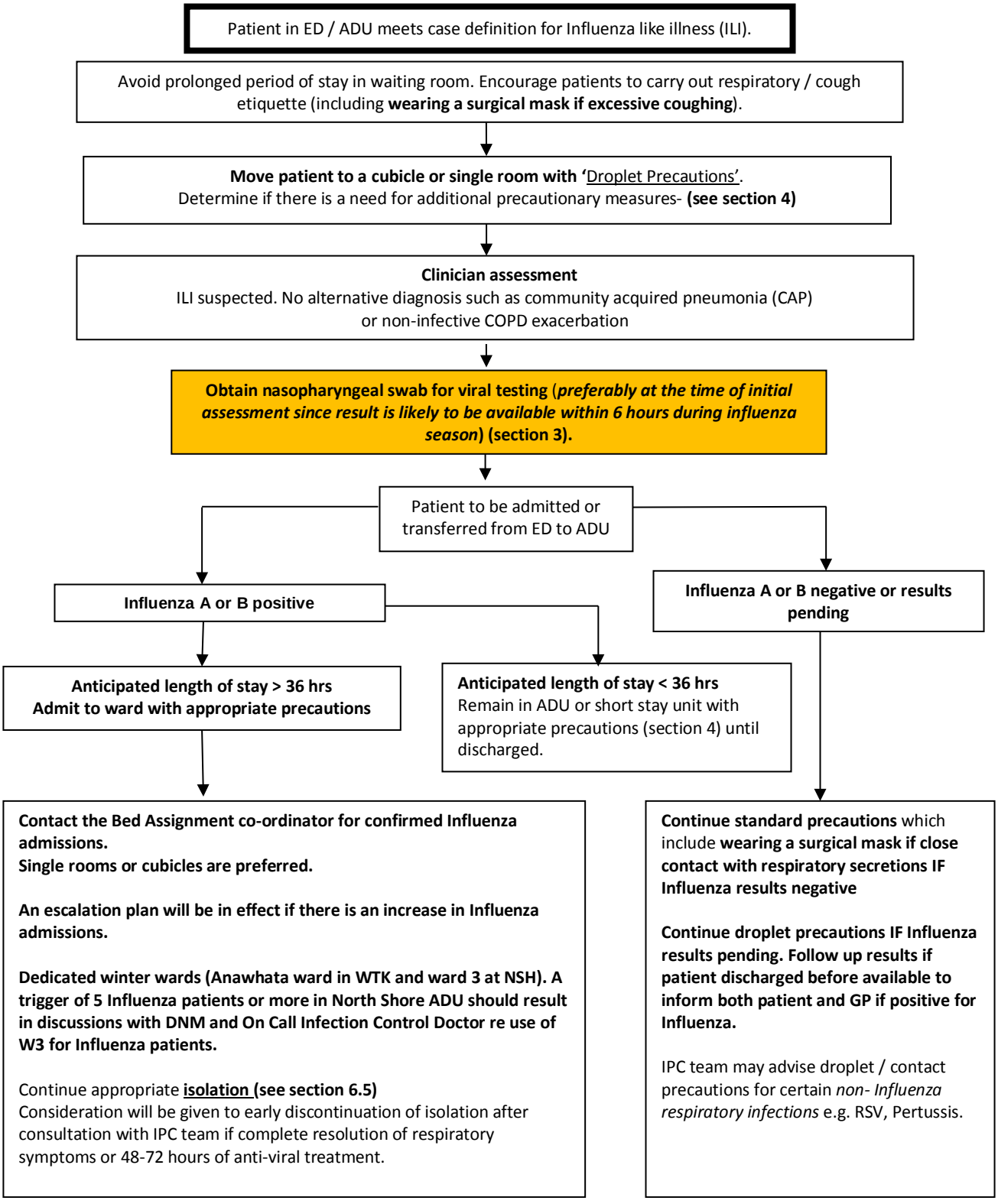
Basic infection prevention practices apply to patients with respiratory infections attending outpatients department also. Any patient with ILI should be educated about possibility of transmission of infection to others in the clinics, including healthcare workers. The following measures are suggested.

- OPD provides alcohol hand gel at the entrance and at the reception desk, for patients to use as they enter the department.
- Signage at the entrance to the department OPD and ED/ ADU – cough etiquette (MOH sign).
- Patients are encouraged to report any acute respiratory illness to reception upon arrival. Reception then notifies clinical staff promptly to initiate any preventive measures in the waiting area.
- Influenza information pamphlets available at each reception.
- Patients may wish or be advised to reschedule non-urgent appointments at the time of reminders (usually <72hrs prior) if suffering from ILI.

***Note** that aerosol generating procedures (section 5.1 of this guideline) require airborne precautions for patients with suspected or confirmed Influenza.

Influenza and Influenza-like Illness [ILI] - Plan for the Prevention of In-hospital Spread

Appendix 1: Flowchart - Patient Flow and Patient Management



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Appendix 2: Nasopharyngeal Swabs for Virology – Including Influenza

How-to-guide for nasopharyngeal swab collection packs

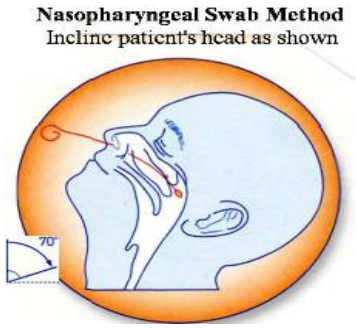
Equipment :

1ml UTM tube with per nasal flocked swab, packed in a kit.
Obtained from Oracle code: **M74678**
or
Clinical Imprest ext. **2873** (NS) or **7964** (Waitakere).

NB Note fine swabs for neonatal use may be ordered as individual packs; Oracle code **M86381**

Collection Instructions

Wearing PPE (Gown, gloves, surgical mask, goggles / eye protection).



1 Have patient sit up upright with back supported by bed head.
2 Insert swab into one nostril straight back (not upwards) and continue along floor of the nasal passage for several centimetres until reaching the nasopharynx. The distance from nose to ears gives an estimate of the distance the swab should be inserted.
3 Do not force swab. If obstruction is encountered before reaching the nasopharynx, remove swab and try the other nostril.
4 Rotate swab for 5-10 seconds to loosen epithelial cells.
5 Remove swab - immediately inoculate viral transport medium by inserting the swab below the surface of the media.
6 Snap the swab stick (a short piece of the swab stick will protrude from the tube).
7 Fit the swab stick end into the red cap. Screw the lid on.

Repackaging Instruction

1 Place the labelled, red transport medium containing swab inside a biohazard bag specimen bag.
2 Place the completed request form in the **outside** pocket.
3 Send specimen to the laboratory via Lamson tube or orderlies ASAP.

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Appendix 3: Oseltamivir (Adults)

Background

Antiviral medications can be used both to treat and prevent influenza, however they should not replace yearly influenza vaccine as they have only modest efficacy. In New Zealand there are two neuraminidase inhibitors available, Oseltamivir (Tamiflu®) and Zanamivir (Ralenza®). Both these agents are active against influenza A and B viruses however oseltamivir is the most readily available and should be used in preference to Zanamivir. Older antivirals such as amantadine are no longer recommended due to high levels of resistance.

Benefit of oseltamivir is greatest when commenced within two days of illness onset. Clinical trials show that early treatment can shorten the duration of fever and symptoms, reduces viral shedding and may reduce the risk of influenza complication such as pneumonia and respiratory failure.

In a recent meta-analysis of both published and unpublished data of 4300 patients with ILI *(The Lancet* published online 30th Jan'15*)* those with laboratory confirmed Influenza treated with oseltamivir within 36 hours of onset of symptoms had a significantly shorter time (97 vs 122 hrs) to alleviation of all symptoms, less LRTI progression after 48 hrs (4.2% vs 8.7%, RR 0.56), less hospitalisation rate (0.6% vs 1.7%, RR 0.37) but higher nausea (10% vs 6.2%) and vomiting (8% vs 3.3%). The benefit was even higher in patients over 65yrs age and with chronic lung disease.

Observational studies, during the 2009 pandemic, also showed that antiviral treatment commenced after 48 hours of symptom onset in severe or complicated influenza may still be beneficial.

Indication

Treatment

As influenza is a self-limiting illness in the majority of cases, not all patients will require or benefit from treatment with neuraminidase inhibitors. Therefore use of Oseltamivir should be limited to:

- Patients who are hospitalized with influenza and have severe or progressive illness or are at high risk of severe outcomes.

High risk is defined as:

- Age ≥65 years
- Chronic respiratory disease
- Immunosuppression
- Pregnancy
- Postpartum (up to 6 weeks)
- Residents of aged residential care and chronic care facilities

The benefit of oseltamivir is greatest when commenced early (within two days of symptom onset), however oseltamivir should only be started once influenza has been confirmed. Laboratory results are generally available within 24 hours.

The benefit of oseltamivir is greatest when commenced early (within two days of symptom onset).
Recent international guidelines released by Infectious diseases society of America (IDSA) also support use of neuraminidase (NA) inhibitors for treatment of Influenza in high risk groups *(CID 2019; 68:895)*.

Post Exposure Prophylaxis

- Post exposure prophylaxis in high risk patients who have had close contact with a confirmed influenza case.
- Post exposure prophylaxis in non-vaccinated healthcare workers with close contact with confirmed influenza case (this must be facilitated through Occupational Health)

Dose

Treatment

75mg PO twice daily for 5 days

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There is no evidence to support higher doses e.g. 150mg twice daily or use of steroids in patients with severe influenza

Post Exposure Prophylaxis
75mg PO once daily for 10 days (up to 6 weeks in rare situations)

Discharge

Inpatients initiated on oseltamivir will be supplied with a full pack of 10 tablets from the inpatient pharmacy (5 day supply for treatment and 10 day supply for prophylaxis). This pack should be given to the patient on discharge to complete the course.

Take home packs are available from the After Hours Cupboards at North Shore and Waitakere Hospitals. Packs may be supplied to patients (in accordance with the above indications) who are discharged from hospital outside normal pharmacy working hours. Dosing instructions must be added to the label by the prescriber before supplying to the patient.

⚠ **HML Restriction**

Oseltamivir is restricted to use in hospitalised patients. Patients who are seen in the Emergency Department and discharged on oseltamivir will need to be given a prescription. As oseltamivir is not a funded medication this will incur a charge of approximately $65.

Adverse Effects

Common

- Gastrointestinal disturbance
- Headache

Uncommon

- Hypersensitivity reactions
- Hepatitis
- Neuropsychiatric disorders (predominantly in children and adolescents) including convulsions, altered level of consciousness, confusion and abnormal behaviour
- Gastrointestinal bleeding
- Thrombocytopenia

Disease Specific Management A-Z

Contents

Introduction

Purpose

The following Disease Specific A-Z guide is a reference indicating:

- The Transmission Based Precautions required for a particular infectious disease i.e. Contact, Droplet, Airborne or Enteric.
- Whether a single room is required
- What the infective material is
- The duration of precautions required
- Notifiable diseases.

This policy also provides a framework about any contact tracing activities that the WDHB Infection Prevention & Control Service is required to perform.

Scope

- ALL Waitemata DHB employees, full, part-time, casual and volunteers
- Visiting health professionals, administrative staff and students working in any Waitemata DHB facility
- Internal and external contractors e.g. Medirest (kitchen).

Associated Documents

Type	Title
WDHB Policies	• Standard Precautions Policy • Waste Management/Minimisation Policy

Disease Specific Management A-Z

Type	Title
	• Hazard Management (Occupational Health) Policy • MRO Policy • Transmission Based Precautions Policy • Hand Hygiene Policy • Occupational Health and Safety • Infectious Diseases – Employee Transmission Minimisation Policy
NZ Legislation and Standards	• Health and Disability Services (Safety) Act 2001 • Health and Disability Commissioner Code of Rights 1996 • NZS8134.3:2008 Infection Control Standard • NZS8134:2001 Health & Disability Sector Standard • Notifiable Infectious Diseases under the Health Act 1956 – updated October 2013 • Health and Safety in Employment Act 1992
Other	• Healthcare Infection Control Practices Advisory Committee (2007) *Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings*, United States of America • National Health & Medical Research Council (2010) *Australian Guidelines for the Prevention and Control of Infection in Healthcare, Commonwealth of Australia*

Definitions

WDHB	Waitemata District Health Board
MRO	Multi-Drug Resistant Organism
CRE	Carbapenem Resistant Enterobacteriaceae is a bacteria that has genetic resistance to virtually all microbials available worldwide.
ESBL	Extended Spectrum Beta-Lactamase producing organism
MRSA	Methicillin Resistant *Staphyloccocus aureus*
VRE	Vancomycin Resistant Enterococci
CRAB	Carbapenum Resistant Acinetobacter baumanaii
VRSA	Vancomycin Resistant *Staphyloccocus aureus*
VISA	Vancomycin intermediate *Staphyloccocus aureus*
TB	Tuberculosis
TBP	Transmission Based Precautions
Hand Hygiene	A general term that applies to the process of either hand washing, antispetic hand wash, antiseptic hand rub or surgical hand scrub.
Transient	An organism carried superficially on a healthcare workers hands for a short period, not colonising.
Healthcare facility	Any hospital including inpatient and outpatient facilities, residential care facility, long term care facility.
IP&C	Infection Prevention & Control
Cohort	a group of persons sharing a particular statistical or demographic characteristic e.g. ESBL-E. coli that are grouped together
OH&S	Occupational Health & Safety

Disease Specific Management A-Z

Fomite	An inanimate object or substance that is capable of transmitting infectious organisms (such as germs or parasites) from one individual to another
Notifiable	Auckland Regional Public Health Service must be notified of patients with notifiable diseases.
ARPHS	Auckland Regional Public Health Service

Disease Specific Table

Refer to the Transmission Based Precautions Policy for further information on requirements for Contact, Droplet, Airborne and Enteric Precautions.

Disease or Infection	Transmission Based Precautions	Single Room Required	Infective Material	Duration Of Precautions Required	Comments
A.					
Adenovirus	**Paediatrics: Contact Plus Droplet** **Adults: Droplet**	Yes	Faeces, respiratory/eye secretions & fomites	Can be ceased after 5 days from onset and afebrile	
Abscess / Wound infection **Major infection with drainage** **Minor drainage**	**Standard & Contact** **Standard**	No	Exudate Exudate	Until drainage can be contained	
B					
Bronchiolitis	**Paediatrics: Contact Plus Droplet** **Adults: Droplet**	Yes	Respiratory secretions	Can be ceased after 5 days from onset and afebrile	Note cohorting of children with similar pathogen e.g. RSV may be considered If considering cohorting please contact a member of IPC team A nasopharyngeal swab is required for PCR for confirmation of viral pathogen.
Burkholderia cepacia	**Standard**	No	Environmental	N/A	Must not be cohorted with other patients with lung disease e.g. Cystic fibrosis Bronchiectasis
C.					

Disease Specific Management A-Z

Disease or Infection	Transmission Based Precautions	Single Room Required	Infective Material	Duration Of Precautions Required	Comments
Campylobacter	**Standard** **Use contact precautions in incontinent patients and diapered patients.**	No	Contaminated food and water, faecal matter	Contact precautions can be ceased once diarrhoea has stopped (Diarrhoea = Bristol Stool scale 6 – 7)	**Notifiable Disease**
Chicken Pox Varicella (Primary VZV)	**Airborne & Contact**	Yes (Negative pressure room)	Respiratory secretions, vesicles/lesions	Until lesions crusted over	**Contact IP&C IMMEDIATELY** For staff exposure contact OH&S Only immune staff should look after the patient
Chlamydia trachomatis	**Standard**	No	Lesions, blood, vaginal & penile discharge, seminal fluids	N/A	
Cholera Vibrio Cholerae	**Standard Contact*** *(if a patient unable to control bowel motions, or a diapered child)	Yes	Contaminated food and water, faecal matter	Until no diarrhoea or vomiting for >48 hrs (Diarrhoea = Bristol Stool scale 6 – 7)	**Contact Infectious Diseases IMMEDIATELY** **Notifiable Disease**
Clostridium botulinum	**Standard**	No	Contaminated food	N/A	
Clostridium difficile	**Enteric Precautions plus wearing of N95 mask if patient is vomiting**	Yes Including own toilet NB Utilise individual commode of own toilet unavailable	Faeces, fomites	To be determined by IPC case by case	**Contact IP&C IMMEDIATELY**
Clostridium perfringens	**Standard**	No	Incorrectly stored meats & poultry (e.g. deli meats)	N/A	
Coxsackevirus ***See Hand Foot and Mouth Disease***					
Conjunctivitis (Adenovirus)	**Standard**	No	Purulent exudate	N/A	
Corona Virus (Novel) e.g. SARS or MERS-CoV	**Airborne & Contact (Including eye protection)**	Yes (Negative pressure room)	Respiratory secretions	In discussion with Public Health and Infectious Diseases	**Contact Infectious Diseases IMMEDIATELY** **Notifiable Disease**

Disease Specific Management A-Z

Disease or Infection	Transmission Based Precautions	Single Room Required	Infective Material	Duration Of Precautions Required	Comments
Creutzfeldt-Jacob Disease CJD	**Standard**	No	CSF, neural tissue & blood	N/A	Refer to the CJD Policy for further information. **Contact Infectious Diseases IMMEDIATELY** **Notifiable Disease**
Carbapenem Resistant Enterobacteriacaea CRE	**Contact**	Yes	Direct contact with infected /colonized person or their environment	Duration of hospitalisation and all subsequent admissions	Organism that is highly resistant to virtually all antimicrobials **Contact IP&C IMMEDIATELY**
Croup	**Paediatrics: Contact Plus Droplet** **Adult: Droplet**	Yes	Respiratory secretions via contaminated hands or surfaces	Can be ceased after 5 days from onset and afebrile	A nasopharyngeal swab is required for PCR for confirmation of viral pathogen.
Cryptosporidium	**Standard Contact* *(if an incontinent patient, or a diapered child)**	Yes Including toilet (if contact precautions required)	Faeces, contaminated food & water	Until diarrhoeal agent no longer isolated or x1 stool obtained from a continent, competent patient (Diarrhoea = Bristol Stool scale 6 – 7)	Contact IP&C **Notifiable Disease**
Cytomegalovirus CMV	**Standard**	No	Urine, respiratory secretions	N/A	Keep separate from other immuno-compromised patients. Contact IP&C
D.					
Diarrhoea	**Contact if presumed infectious and etiology unknown**	Yes	Faecal matter	Until no diarrhoea or vomiting for >48 hrs (Diarrhoea = Bristol Stool scale 6 – 7)	**Refer to each individual listing** • **Adenovirus** • **Campylobacter** • **Norovirus** • **Giardia** • **Rotavirus** • **Salmonella** • **Shigella** • **Cholera** • **Typhoid**
Dengue Fever	**Standard**	No	Infected mosquitoes	N/A	
Diphtheria	**Droplet**	Yes	Respiratory secretions, wound exudate	Until x2 -ve cultures taken (nose, throat, wound) >24hrs apart & >24hrs after cessation of antibiotic therapy	**Contact IP&C and Infectious Diseases IMMEDIATELY** **Notifiable Disease**
E.					

Disease Specific Management A-Z

Disease or Infection	Transmission Based Precautions	Single Room Required	Infective Material	Duration Of Precautions Required	Comments
E. Coli Enterohaemolytic (STEC) **Verotoxin producing or Shiga toxin producing**	**Contact**	Yes	Faeces	Duration of illness or until x2 consecutive cultures are –ve.	**Contact Infectious Diseases IMMEDIATELY** **Notifiable Disease**
Enterovirus infections	**Contact**	Yes	**Respiratory, faecal and lesion secretions**	Duration of illness	
Ebola See Viral Haemorrhagic Fever VHF	**Contact Plus Airborne**	Yes (Negative Pressure Room)	**Contact with body fluids**	In discussion with Public Health and Infectious Diseases	**Contact Infectious Diseases IMMEDIATELY** **Notifiable Disease**
Eczema **See abscess**					
Encephalitis **e.g. Herpes Simplex**	**Standard**	No	**CSF**	N/A	
Epiglottitis **due to Haemophilic influenzae type B**	**Droplet**	Yes	**Respiratory secretions**	Until 24hrs after commencing antibiotic therapy	**Contact IP&C** **Notifiable Disease**
Epstein-Barr Virus **Glandular Fever**	**Standard**	No	**Respiratory secretions, saliva**	N/A	Also known as Infectious Mononucleosis
ESBL KP **Extended Spectrum Beta Lactamase Klebsiella Pneumoniae**	**Contact**	Yes or cohorted with other ESBL KP	**Direct contact with infected /colonized person or their environment**	Duration of hospitalisation and all subsequent admissions	**Refer to the WDHB MRO policy for further information**
ESBL *other organism* **Extended Spectrum Beta Lactamase** **e.g. E coli, enterobacter, oxytoca, citrobacter**	**Contact**	No Can be mixed in multi bed room with non-MRO patients	**Direct contact with infected /colonized person or their environment**	Duration of hospitalisation and all subsequent admissions	**Refer to the WDHB MRO policy for further information**
G.					
Gastroenteritis See Diarrhoea					

Disease Specific Management A-Z

Disease or Infection	Transmission Based Precautions	Single Room Required	Infective Material	Duration Of Precautions Required	Comments
German Measles Rubella	**Droplet**	Yes	Respiratory secretions	Until x7 days after the onset of the rash	**Contact IP&C and Infectious Diseases IMMEDIATELY** For staff exposure contact OH&S Only immune staff should look after the patient **Notifiable Disease**
Giardiasis	**Standard**	No	Contaminated food and water, faecal matter	N/A	**Contact IP&C** **Notifiable Disease**
Glandular fever Refer to Epstein Barr Virus					
Gonorrhoea Neisseria gonorrhoea	**Standard**	No	Lesions, blood, vaginal & penile discharge, seminal fluids	N/A	
Guillain-Barre Syndrome	**Standard**	No	N/A	N/A	
H.					
Haemophilus Influenzae type B (HiB) **Pneumonia**	**Adults: Standard** **Children: Droplet**	Yes for children	Respiratory secretions	Until 24 hours of appropriate intravenous antibiotics	**Notify Infectious Diseases and IP&C IMMEDIATELY** **Notifiable Disease**
Haemophilus Influenzae type B (HiB) **Meningitis**	**Droplet**	Yes	Respiratory secretions	Until 24 hours of appropriate intravenous antibiotics	**Notify Infectious Diseases and IP&C IMMEDIATELY** **Notifiable Disease**
Hand-Foot-&-Mouth Disease (Coxsackie virus)	**Contact**	Yes	Respiratory Secretions, lesion secretions and faeces in diapered child	Until stools have returned to patients normal consistency for 48hrs (Diarrhoea = Bristol Stool scale 6 – 7)	**Contact IP&C**
Hepatitis A HAV	**Contact**	Yes	Faeces	Duration of hospitalisation	**Contact IP&C** **Notifiable Disease**
Hepatitis B HBV	**Standard**	No	Blood & body fluids	N/A	Acute HBV is a **Notifiable Disease**
Hepatitis C HCV	**Standard**	No	Blood & body fluids	N/A	Acute HCV is a **Notifiable Disease**
Hepatitis D HDV	**Standard**	No	Blood & body fluids	N/A	Acute HDV is a **Notifiable Disease**
Hepatitis E HEV	**Contact**	Yes	Faeces	Duration of hospitalisation	**Contact IP&C** **Notifiable Disease**

Disease Specific Management A-Z

Disease or Infection	Transmission Based Precautions	Single Room Required	Infective Material	Duration Of Precautions Required	Comments
Herpes Simplex **HSV-1** Oro facial **Encephalitis**	**Standard** Recurrent Lesions **Contact** Neonatal, disseminated infections & primary, severe lesions Standard	Yes (if contact precautions required)	Saliva, lesions	Until all lesions crusted over	Patients/staff with herpetic lesions <u>should not</u> have contact with: • Neonates • Children with eczema • Burns patients • Immuno-compromised patients
Herpes Simplex **HSV-2** Genital **Viral meningitis**	**Standard** Recurrent Lesions **Contact** Neonatal, disseminated infections & primary, severe lesions Standard	Yes (if contact precautions required)	Lesions, sexual fluids & via the birth canal (in utero or postpartum)	Until all lesions crusted over	Patients/staff with herpetic lesions <u>should not</u> have contact with: • Neonates • Children with eczema • Burns patients • Immuno-compromised patients
Herpes Zoster **Refer to Shingles**					
HIV (Human Immunodeficiency Virus)	**Standard**	No	Blood & Body Fluids	N/A	Contact IPC for further advice **AIDS is a Notifiable Disease**
Human metapneumovirus **HMPV**	**Paediatrics: Contact Plus Droplet** **Adult: Droplet**	No	Respiratory secretions Fomites	Can be ceased after 5 days from onset and afebrile	
Human Papilloma Virus **HPV**	**Standard**	No	Warts, lesions vaginal & penile discharge, seminal fluids	N/A	
I.					
Impetigo **(School Sores)**	**Contact**	Yes	Exudate	Until 24 hrs after commencement of effective antimicrobial therapy	Usually caused by bacterial infection of staph aureus or streptococcus
Influenza /ILI	**Paediatrics: Contact Plus Droplet** **Adult: Droplet**	Yes	Respiratory secretions, Fomites	Can be ceased after 5 days from onset and afebrile If immuno-compromised patient can be ceased after 7 days from onset and afebrile	**Contact IP&C** A nasopharyngeal swab is required for PCR for confirmation.
L.					

Disease Specific Management A-Z

Disease or Infection	Transmission Based Precautions	Single Room Required	Infective Material	Duration Of Precautions Required	Comments
Legionnaires Disease *Legionella pneumophila*	**Standard**	No	Aerosolisation from cooling tower/hot water system	N/A	**Contact IP&C and Infectious Diseases** **Notifiable Disease**
Lice *Pediculosis* - corporis (body lice) -capitis (head lice) -pubis (pubic lice)	**Standard**	Yes	Infested items e.g. hair, clothing, bedding, linen of patient	N/A	**Contact IP&C** Treatment is required with an appropriate pediculocide; discuss with the ID Physicians.
Listeriosis (*Listeria monocytogenes*)	**Standard**	No	Soil, contaminated water	N/A	**Contact IP&C** **Notifiable Disease**
M.					
Malaria	**Standard**	No	Infected mosquitoes	N/A	**Contact IP&C** **Notifiable Disease**
Measles (English or Morbilli)	**Airborne & Contact**	Yes (Negative pressure room)	Airborne and direct contact with infected throat or nasal secretions	From onset of the catarrhal stage till 4 days after the rash appears Immuno-compromised patients require precautions for the duration of their hospitalisation	**Highly Communicable** **Contact IP&C IMMEDIATELY** For staff exposure contact OH&S Only immune staff should look after the patient **Notifiable Disease**
Meningitis Bacterial 1. Neisseria meningitidis **2.Haemophilus influenzae B (HiB)**	**Droplet**	Yes	Respiratory secretions	Until 24hours of appropriate intravenous antimicrobial therapy	**Contact Infectious Diseases and IP&C** **Notifiable Disease**
Meningitis Bacterial **Streptococcus Pneumoniae**	**Standard**	No	N/A	N/A	
Meningitis (Fungal, Cryptococcus)	**Standard**	No	Environmental	N/A	
Meningitis (Viral)	**Standard**	No		N/A	Most common causes of Viral meningitis are enteroviruses and HSV
MERS CoV See Corona Virus (Novel)					

Disease Specific Management A-Z

Disease or Infection	Transmission Based Precautions	Single Room Required	Infective Material	Duration Of Precautions Required	Comments
MROs • **CRAB** • **CRE** • **VISA** • **VRSA** • **VRE** • **ESBL** • **MRSA**	**Contact**	Yes Should have designated toilet bathroom.	Direct contact with infected /colonized person or their environment	Duration of hospitalisation and all subsequent admissions	**Refer to the WDHB MRO policy for further information** **Refer to individual listing:** • **CRE** • **ESBL** • **MRSA** • **VRE**
MRSA (Methicillin Resistant Staphylococcus Aureus)	**Contact**	Yes Including toilet (Not cohorted)	Direct Contact with infected colonised patient and their environment	Duration of hospitalisation unless otherwise specified by a member of the Infection Prevention & Control Team	**Refer to WDHB MRO policy for further information**
Mumps Infectious Parotitis	**Contact & Droplet**	Yes	Respiratory secretions	Until x 9 days after the onset of parotid swelling	**Contact IP&C** For staff exposure contact OH&S Only immune staff should look after the patient **Notifiable Disease**
Mycoplasma pneumonia	**Standard**	Yes	Respiratory secretions	Duration of illness	
N.					
Necrotising Fascitis	**Contact** **Please confirm *Group A Streptococcus***	Yes	Direct Contact with infected colonised patient and their environment	In discussion with IPC and Infectious Diseases	**Contact IP&C and Infectious Diseases IMMEDIATELY**
Norovirus Norwalk-like virus	**Enteric Precautions plus wearing of N95 mask if patient is vomiting**	Yes **Cohort only after discussion with IPC staff**	Faeces, vomitus	Until no diarrhoea or vomiting for >48 hrs (Diarrhoea = Bristol Stool scale 6 – 7)	**Contact IP&C IMMEDIATELY if suspected** **Highly infectious pathogen**
P.					
Parainfluenza Virus	**Paediatrics: Contact Plus Droplet** **Adult: Droplet**	No	Respiratory secretions	Can be ceased after 5 days from onset and afebrile	
Parvovirus B19 Slapped Cheek, Erythema Infectiosum, 5th Disease	**Droplet**	Yes	Respiratory secretions	If chronic illness maintain for duration of illness. For patients with transient aplastic or red cell crisis maintain for x7 days	**Contact IP&C** For staff exposure contact OH&S Pregnant women not to provide care or interventions unless known to be Parvovirus IgG positive

Disease Specific Management A-Z

Disease or Infection	Transmission Based Precautions	Single Room Required	Infective Material	Duration Of Precautions Required	Comments
Pertussis **Whooping cough, Bordetella pertussis**	**Droplet**	Yes	Respiratory secretions	For x5 days after commencing effective antibiotic therapy OR Until x3 weeks after onset of paroxysms if no antibiotic therapy	**Contact IP&C** For staff exposure contact OH&S Only immune staff should look after the patient **Notifiable Disease**
R.					
Respiratory virus (suspected) awaiting laboratory confirmation	**Paediatrics: Contact plus Droplet** **Adults: Droplet**	Yes	Respiratory secretions	Await laboratory results	**Refer to each individual listing:** • **Human Metapneumovirus** • **Influenza** • **Parainfluenza** • **Respiratory Syncytial Virus** • **Rhinovirus** • **Croup** • **Bronchiolitis**
Respiratory Syncytial Virus (RSV)	**Paediatrics: Contact Plus Droplet** **Adult: Droplet**	**Paediatrics:** Single room or cohort with other +RSV patients **Adults:** No	Respiratory secretions	Can be ceased after 5 days from onset and afebrile	Note – cohorting of children with RSV may be considered
Rheumatic Fever	**Standard**	No	N/A	N/A	**Notifiable Disease**
Rhinovirus	**Standard**	No	Respiratory Secretions	N/A	
Ringworm **Tinea Corporis**	**Standard**	No	Lesions	N/A	Decontamination of equipment Exclude from swimming pools
Rotavirus	**Contact**	Yes	Faeces, fomites	Until no diarrhoea or vomiting for >48 hrs (Diarrhoea = Bristol Stool scale 6 – 7)	
Rubella **Refer to German measles**					
S.					
Salmonella Infections Also see Typhoid	**Contact** if a patient is incontinent or a diapered child	Yes Including toilet (if contact precautions required)	Contaminated food and water, faecal matter	Until no diarrhoea or vomiting for >48 hrs (Diarrhoea = Bristol Stool scale 6 – 7)	**Contact IP&C**

Disease Specific Management A-Z

Disease or Infection	Transmission Based Precautions	Single Room Required	Infective Material	Duration Of Precautions Required	Comments
SARS See Corona Virus (Novel)					
Scabies	**Contact**	Yes	Infested area (the patient), fomites e.g. linen, clothing	Until 24 hours of effective skin treatment (treat again in 7 days)	**Contact IP&C**
Schistosomiasis	**Standard**	No	Larvae (cercariae)	N/A	
Shigella	**Contact** if patient is incontinent or a diapered child	Yes Including toilet (if contact precautions required)	Contaminated food and water, faecal matter	Until no diarrhoea or vomiting for >48 hrs (Diarrhoea = Bristol Stool scale 6 – 7)	**Contact IP&C** **Notifiable Disease**
Shingles (Herpes Zoster) localised disease in immune competent patients	**Contact**	Yes	Secretions from lesions	Until all lesions have crusted over	**Contact IP&C** **Definition of *localised* = affects 1 to 2 dermatomes**
Shingles (Herpes Zoster) Disseminated in immuno-compromised patients	**Contact plus Airborne**	Yes	Secretions from lesions and respiratory Airborne and direct contact with infected throat or nasal secretions	Until all lesions crusted over	**Contact IP&C IMMEDIATELY** **Definition of *disseminated* = affects 3 or more dermatomes**
Staphylococcal Disease (Scalded Skin Syndrome, Toxic Shock Syndrome)	**Standard If localised** **Contact** ** ** if wide-spread, disseminated**	Yes (if contact precautions required or patient has poor hygiene or is a neonate)	Wound exudate, vaginal secretions, skin scales, burns	**Until treatment effective e.g. no wound drainage or able to cover wounds	**Contact IP&C**
Streptococcal Disease (Endometritis, Impetigo) **(Pharyngitis, Scarlet Fever)**	**Standard* *If localised Contact** ** if wide-spread, disseminated Droplet*** ***with pharyngitis and scarlet fever**	Yes (if contact or droplet precautions are required)	Vaginal secretions, wound exudate, skin scales	Until Q24hours after the commencement of appropriate intravenous antimicrobial therapy	**Contact IP&C**
Syphilis	**Standard *Contact*if skin or mucous membrane lesions & if patient is a neonate**	Yes (if contact precautions required or patient is a neonate)	Wound exudate, mucous membrane lesions	Until Q24hours after the commencement of appropriate intravenous antimicrobial therapy	**Contact IP&C**
T.					

Disease Specific Management A-Z

Disease or Infection	Transmission Based Precautions	Single Room Required	Infective Material	Duration Of Precautions Required	Comments
Tuberculosis Pulmonary	**Airborne**	Yes (Negative pressure room)	Sputum & sputum contaminated items	Until x 14 days after commencement of therapy (with medical confirmation of effectiveness) or until proven smear negative. In discussion with Respiratory Physician and Infectious Diseases.	**Contact IP&C IMMEDIATELY** For staff exposure contact OH&S Visitors must be restricted. Children are not allowed to visit. **Notifiable Disease**
Tuberculosis Extra pulmonary	**Standard** **NB N95 mask required** when changing wound dressings doing pleural aspirates or taking biopsies (e.g. in theatre)	No	Exudate from infected site	N/A	**Notifiable Disease**
Tuberculosis Meningitis	**Airborne**	Yes (Negative pressure room)	Respiratory secretions if pulmonary TB	Required until pulmonary disease/ involvement excluded. In discussion with Respiratory Physician and Infectious Diseases.	**Contact IP&C** **Notifiable Disease**
Typhoid Salmonella Typhi	**Standard** **Contact*** *(if a patient unable to control bowel motions, or a diapered child)	Yes	Faeces and fomites	Until no diarrhoea or vomiting for >48 hrs (Diarrhoea = Bristol Stool scale 6 – 7)	**Contact Infectious Diseases IMMEDIATELY** **Notifiable Disease**
V					
Varicella Zoster Refer to Chicken Pox					
Viral Haemorrhagic Fever (VHF) • **Crimean-Congo** • **Ebola** • **Lassa** • **Marburg** • **Rift Valley**	**Airborne Plus Contact**	Yes (Negative Pressure Room)	Contact with body fluids	In discussion with Public Health and Infectious Diseases	**Contact Infectious Diseases IMMEDIATELY** **Notifiable Disease**

Disease Specific Management A-Z

Disease or Infection	Transmission Based Precautions	Single Room Required	Infective Material	Duration Of Precautions Required	Comments
Vomiting	**Enteric Precautions plus wearing of N95 mask if patient is vomiting**	Yes	Vomitus and faecal matter	Until no diarrhoea or vomiting for >48 hrs (Diarrhoea = Bristol Stool scale 6 – 7)	**Notify IP&C** Likely Norovirus infection
Vancomycin Resistant Enterococcus VRE	**Contact**	Yes	Direct contact with infected colonised patient/ pts environment contaminated equipment	Duration of hospitalisation and on readmission	**Refer to WDHB MRO policy for further information**
W					
Whooping Cough- Refer to Pertussis					
Y					
Yersinia	**Standard Contact* *(if an incontinent patient, or a diapered child)**	Yes Including toilet (if contact precautions required)	Faeces	Until no diarrhoea or vomiting for >48 hrs (Diarrhoea = Bristol Stool scale 6 – 7)	**Contact IP&C** **Notifiable Disease**
Z					
Zika Virus	**Standard**	No	Infected mosquitoes Sexual intercourse with infected person	N/A	**Contact Infectious Diseases IMMEDIATELY** **Notifiable Disease**

Uncommon infections

For all infections documented below (suspected or confirmed) contact the Infectious Diseases Physician immediately.

- ***Clostridium botulinum*** **(Botulism)**
- ***Clostridium tetani*** **(Tetanus)**
- ***Entamoeba histolytic***
- ***Mycobactererium leprae*** **(Leprosy)**
- **Poliomyelitis**
- **Rabies**
- **Yellow fever**
- **Plague**
- **Q fever**
- **Anthrax**

Disease Specific Management A-Z

- **Brucellosis**
- **Rickettsial diseases**
- **Leptospirosis**

Contact Tracing for Inpatients Exposed to a Communicable Disease

In the instance of WDHB inpatients being exposed to a communicable disease the IP&C service is responsible to perform contact tracing of the exposed inpatients. OH&SS are responsible for contact tracing of exposed staff see **Infectious Diseases – Employee Transmission Minimisation policy**.

The contact tracing process that the IP&C service performs will follow the below steps:

Step	Action
1	IP&C is notified by ARPHS / laboratory of hospital inpatient with an infectious disease
2	ARPHS / Infectious Diseases Consultant advises IP&C of parameters for contact tracing
3	IP&C advises OH&SS about any hospital inpatient with infectious disease and the need for contact tracing
4	Meeting is set up by IP&C / OH&SS, and includes IP&C, OH&SS, CNM, Occupational Physician and Infectious Diseases Consultant.
5	All information about exposure is discussed including the parameters of the contact trace
6	If contact trace is indicated then: • The CNM compiles a contact trace list of all employees/workers and patients who have had close contact with the infectious patient source • Contact list of employees/workers with contact details is given to OH&SS for follow up • Contact list of exposed patients is given to IP&C for follow up
7	List of patient contacts are forwarded to ARPHS
8	IP&C service will liaise with Infectious Diseases Physician and ARPHS on correct prophylactic treatment if indicated
9	If prophylaxis treatment is indicated then ID physician will liaise with the medical team of each exposed inpatient

10	If inpatient is discharged to the community they will be followed by ARPHS

Contact Tracing of Outpatients & Visitors to WDHB Facilities who are Infectious with Pertussis

IP&C services in the Auckland region are responsible for contact tracing of any outpatients or visitors to DHB facilities who are infectious with pertussis (Auckland Regional Public Health directive). This requirement for IP&C involvement does not apply to any other communicable disease.

People with pertussis are infectious from the beginning of the catarrhal stage (a runny nose, sneezing, low-grade fever, symptoms of the common cold) through the third week after the onset of paroxysms (multiple, rapid coughs) or until 5 days after the start of effective antimicrobial treatment.

Contact tracing will be necessary if any inpatients, staff, outpatients or known visitors were potentially exposed to pertussis from close contact with a confirmed pertussis infected individual. The contact tracing process for the IP&C service performs will follow the below steps:

Step	Action
1	Infection Prevention & Control is notified of the visitor or outpatient with an active pertussis infection by either Public Health, Laboratory or Infectious Disease Doctor
2	IP&C review available information of the visitor or outpatient and work on the epidemiology
3	Infectious Disease Consultant or Auckland Regional Public Health Service will advise IP&C if contact tracing is needed. The definition and parameters of the contact tracing will be created by the Infectious Diseases Consultant or Auckland Regional Public Health Service. Definitions of "***case"*** and "***close contact"*** are set.
4	IP&C advises OH&SS about the details of the incident and arranges an initial meeting
5	Included in the meeting are: IP&C, OH&SS, CNM of the area involved, Infectious Diseases Consultant and OH&S Consultant will attend the meeting (if available).
6	IP&C will provide the CNM with the contact trace sheet for patients and staff with the definition of the "***close contact***".

	IP&C will also provide the CNM with the name and phone numbers of the Infectious Diseases Registrar, Infectious Diseases Consultant and Clinical Microbiologist. IP&C will provide the CNM with information about pertussis specific information, any recommended prophylaxis and any infection prevention guidance.
7	The CNM compiles contact trace list of all patients and staff who meet definition of the ***close contact***.
8	CNM forwards the patient list to the IPC and the staff list to OH&SS for follow up
9	CNM informs the Medical Teams of the identified ***close contact*** patients and their potential risk of pertussis exposure.
10	The Medical Team liaises with Infectious Diseases Registrar, Infectious Diseases Consultant or Clinical Microbiologist regarding treatment and prophylaxis of any infectious or ***close contact*** patients.
11	The Medical Team provides any infectious patients and any close contact patients with information, advice and any recommended prophylaxis treatment.
12	IPC will provide any infectious patients and any ***close contact*** patients with pertussis specific information such as pamphlets and communicate further information if required
13	Future monitoring may be required by Medical Team or by the patient's General Practitioner

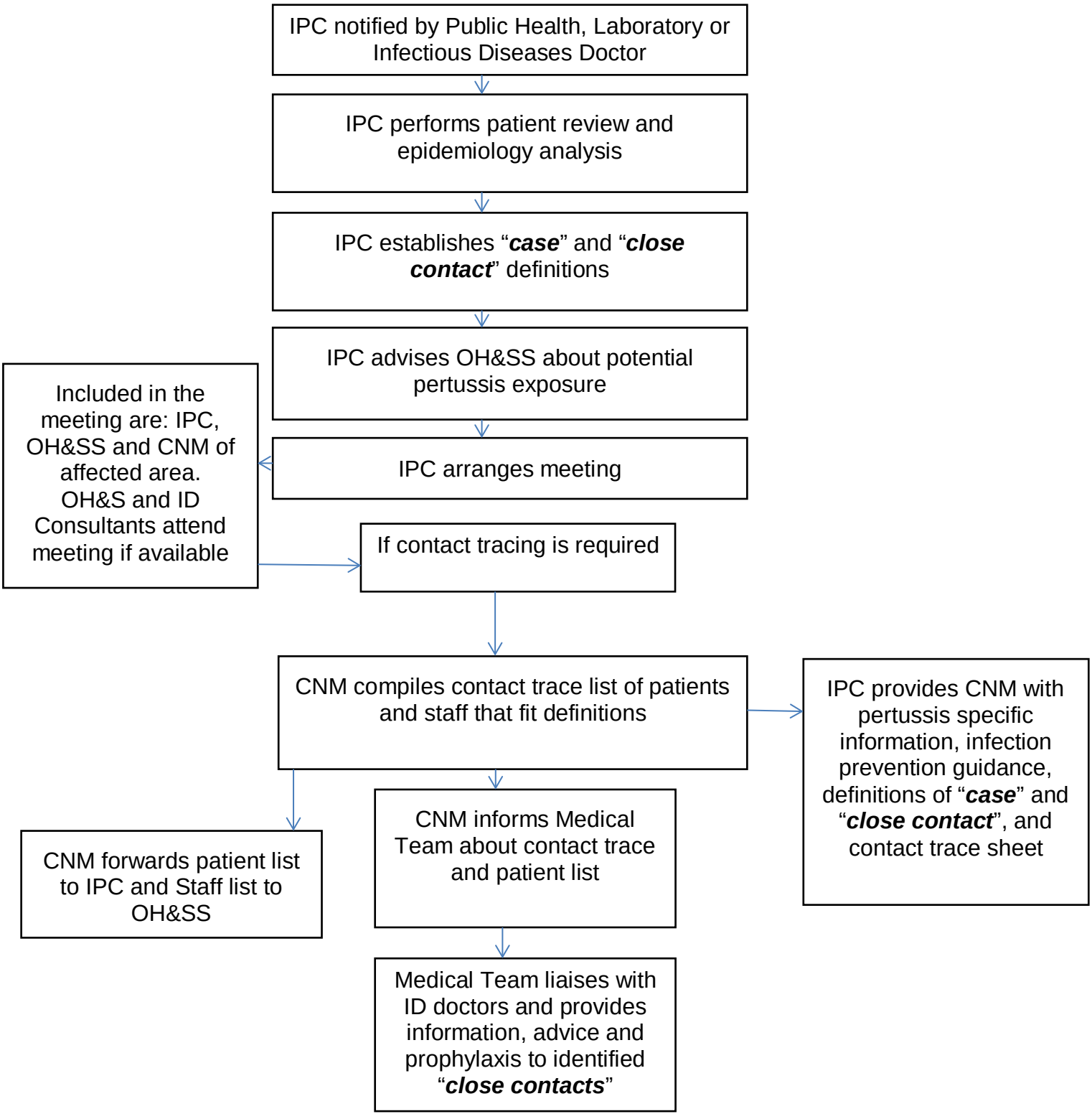
References

Healthcare Infection Control Practices Advisory Committee (2007) *Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings*, United States of America, available online: http://www.cdc.gov/hicpac/2007ip/2007isolationprecautions.html

National Health & Medical Research Council (2010) *Australian Guidelines for the Prevention and Control of Infection in Healthcare, Commonwealth of Australia*, available online: https://www.nhmrc.gov.au/guidelines-publications/cd33

Disease Specific Management A-Z

Flow Chart for Contact Tracing Process of Outpatients and Visitors to WDHB Facilities who are Infectious with Pertussis



Transmission Based Precautions

Contents

Transmission Based Precautions

1. Overview

This document outlines expected practice for prevention of transmission of known and suspected communicable diseases between staff, patients and visitors in any Waitemata DHB facility.

The type of transmission-based isolation management is determined by:

- the patient's diagnosis
- the organism's mode of transmission
- and/or the patients past medical history.

Transmission-based isolation management should be used by staff, when required, **in addition** to Standard Precautions (see Standard Precautions).

1.1 Purpose

- This document explains transmission-based isolation management practices.
- The aim is to practice effectively, ensuring staff safety and minimizing the chances of cross-infection occurring.

1.2 Scope

- All Waitemata DHB employees, full, part-time and casual.
- Visiting health professionals, administrative staff and students working in any WDHB facility.
- Internal and external contractors e.g. food services.

1.3 Definition

The table below identifies terms and abbreviations used in this document.

Term/ Abbreviation	Description
WDHB	Waitemata District Health Board
MRO	Multi-Drug Resistant Organism
Nosocomial infection	Hospital acquired infection
Contaminant	Dirt, proteinaceous material, blood or body substances (i.e. urine, feaces)
Hand Hygiene	A general term that applies to the process of either hand washing, antiseptic hand wash, antiseptic hand rub or surgical hand scrub.
Alcohol Hand gel	An alcohol containing preparation designed as a substitute for soap and water, for application to the hands to reduce numbers of viable micro-organisms
Hand washing	Washing hands with soap and water.
Visibly soiled hands	Hands showing visible dirt or visibly contaminated with proteinaceous material or other body substances (e.g. faecal matter).
Transient	An organism carried superficially on a healthcare workers hands for a short period, not colonising.
Healthcare facility	Any hospital including inpatient and outpatient facilities, residential care facility, long term care facility.
Single Use Only	An item or piece of equipment that is used on one patient once (while completing a procedure or process) it is then removed and discarded.
TBP	Transmission Based Precautions

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IP&C	Infection Prevention & Control
Cohort	a group of persons sharing a particular statistical or demographic characteristic e.g. ESBL-E. coli
TB	Tuberculosis

2. Accepted Practice

2.1 Responsibility

All staff must apply the expected practices outlined in this document to contain and prevent the transmission of communicable/infectious diseases from healthcare workers, patient to patient, visitors and the community.

Any breaches of accepted practice should be challenged by colleagues, reported to the person in charge at the time, and an Incident report completed (Risk Pro).

Staff are required to ensure patients and visitors are aware of any Transmission Based Precautions that may be required and when and how they may apply to them.

2.2 Indications for Isolation

Patients should be placed in isolation:

- If they present with symptoms suggestive of an infection or an organism that may be transmitted to others (refer to Infection Prevention & Control Disease Specific Issues A-Z Management Policy).
- At the request of Infection Prevention Control team or the ID Physicians.
- According to the MRO Policy and the alert and NHI warning systems.

2.3 Categories

Transmission Based Precautions should be used for patients with specific diseases/organisms where the mode of transmission is known.
They are divided into three main categories:

- Contact precautions
- Airborne precautions
- Droplet precautions.
- Special enteric precautions

TBP can be used alone (as well as Standard Precautions) or in combination e.g. Contact and Droplet Precautions, Contact and Airborne Precautions

3. Contact, Droplet Airborne

3.1 Contact precautions

For patients either *known* or *suspected* to be colonised/infected with a micro-organism that can be transmitted by direct contact with the patient or indirect contact with the patients environment or care equipment.

- Including but not limited to: MRSA, ESBL, VRE, and any other multidrug resistant organisms. Scabies

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3.2 Droplet precautions

Droplet transmission involves exposure of the conjunctiva, mucous membranes of the nose or mouth of a susceptible person and large particle droplets containing micro-organisms (larger than 5 µm).

Droplets are generated by an infected person, when talking, sneezing, or coughing and may also be produced during some procedures, such as suctioning or bronchoscopy.

Transmission of droplet borne organisms requires close contact between the source and the recipient, as droplets do not remain suspended in the air and only travel short distances (usually 1-2 metres or less) through the air.

- Including but not limited to: Influenza, mumps, Meningococcal meningitis, Pertussis.

3.3 Airborne precautions

Are implemented for patients *known* or *suspected* to have an organism that is transmitted via the dissemination of airborne droplet nuclei (less than 5 µm) or dust particles containing the infectious agent.

Droplet nuclei can remain suspended in the air for long periods and can be widely dispersed by air currents.

- Pulmonary Tuberculosis, chickenpox, measles.

3.4 Special enteric precautions

Are implemented for patients known or suspected to have an organism that is transmitted via fecal oral route
This can include but not limited to C. difficile and Norovirus

4. Patient Management (Contact, Droplet, Airborne, Special Enteric)

	Contact Precautions	Droplet Precautions	Airborne Precautions	Special Enteric Precautions
Hand Hygiene *As per the Five Moments and the Hand Hygiene Policy*	Yes	Yes	Yes	Yes NB after patient contact, wash hands with soap and water
Personal Protective Equipment (PPE) – Gloves	Yes For contact with patient and/or contaminated surfaces/equipment	Yes For contact with respiratory secretions and/or contaminated surfaces/equipment	Yes For contact with respiratory secretions	Yes For direct contact with patient and or patients environment
PPE – Gown	Yes For contact with patient and/or contaminated surfaces/equipment	No as per standard precautions	No As per standard precautions	Yes For contact with patient and/or surfaces equipment
PPE – Mask	No	Yes *Surgical Mask*	Yes *High particulate*	Yes High particulate N95

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		When within 1-2 metres of the patient	*filter mask - N95* Before entering the room remove after exiting room and closing door	mask if patient has suspected Noro Virus and is actively vomiting

	Contact Precautions	Droplet Precautions	Airborne Precautions	Special Enteric precautions
PPE – Protective Eyewear	Yes As per standard precautions	Yes As per standard precautions	Yes As per standard precautions	Yes As per standard precautions
PPE Application & Disposal	Must be applied (as required) *before entering* the patients room and disposed of *before leaving* the patients room	Must be applied (as required) *before entering* the patients room and disposed of *before leaving* the patients room	Must be applied (as required) *before entering* the patients room N 95 mask should not be removed until after exiting patients room	Must be applied (as required) *before entering* the patients room ,N 95 mask if indicated should not be removed until after exiting patients room
WDHB IP&C Door Sign	Yes The Contact Precautions door sign must be displayed	Yes The Droplet Precautions door sign must be displayed	Yes The Airborne Precautions door sign must be displayed	Yes The Special Enteric Precautions door sign must be displayed
Linen	Yes	Yes	Yes	Yes
Yellow Bag *(for heavily blood & body fluid soiled items)*	Yes	Yes	Yes	Yes
Isolation Room (Single/cohort)	Yes Door may stay open	Yes Door may stay open	Yes A negative pressure ventilated room if possible. Door must stay closed at ALL times	Yes With dedicated bathroom facilities
Isolation Trolley/Shelf required	Yes	Yes	Yes	Yes

Note: Some patients may require a combination of the above precautions e.g. Contact and Airborne Precautions for Chicken Pox. Refer to IPC Disease Specific Issues Policy for further details of isolation requirements.

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4.1 Removal of a patient from Transmission Based Precautions

Patients may **only** be removed from Transmission Based Precautions or cleared from isolation, by:

- I**nfection Prevention & Control** *OR*
- **Infectious Diseases Consultant** *OR*
- As **recommended** in the **Disease Specific Table**.

4.2 Alerts/ Warnings

Patients with MROs are identified on the Alerts +/- the NHI warnings system (available on PiMS and Concerto).

- MRO warnings will be stated on the patient's front sheet.
- Staff can contact Infection Prevention & Control for further assistance with identifying patients with MROs.
- Other organisms/diseases may also be identified on the Alerts system, especially in an outbreak situation.
- 'Alert' stickers are applied to known MRO positive patients front sheets on their admission to hospital by unit clerk.

4.3 MRO Report

- An MRO report is available on the Infection Prevention & Control intranet site.
- This report identifies healthcare facilities where there has been evidence of MRO (or other organism) cross-transmission.

5. General Considerations

5.1 Impact of isolation

Isolation can be psychologically depressing for the patient.

- Staff **must continue to maintain patient contact while observing the required Transmission Based Precautions.**
- A verbal explanation should be given to the patient regarding the reason for the required isolation precautions.
- The isolation brochure, available on the wards (and the IP&C intranet site) should be given to patients to ensure their understanding and compliance.
- Isolation should never compromise the level of patient care.
- Where possible, patients no longer requiring TBP should be removed from isolation as soon as possible, to relieve possible patient distress.
- A patient in isolation should not have their care compromised if transfer to other services/units for diagnostic or medicinal procedures (that can't be effectively completed in the patient's room) is required.

5.2 Patient placement

- Placement of patients is important in preventing the transmission of organism/infections in the hospital setting.

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- It may be possible for patients infected/colonized with the same organism to cohort. This should be done in consultation with IP&C or the ID Physician.
- As well as their rooms, patients in isolation should also (where possible) have dedicated bathrooms facilities. If this is not possible, the patient in isolation should use the bathroom last with the room then decontaminated using the WDHB approved disinfectant.

5.3 Bathroom (toilet, shower) allocation

- Patients who are known to have an MRO are to be allocated a specific toilet/shower.
- It is the responsibility of the ward staff to ensure that toilet seats, handrails, shower chairs and fittings etc. are decontaminated before and after each patient use.

5.4 Post mortem precautions

- Standard Precautions must be used by all staff.
- IP&C or the ID Physician may recommend further precautions are taken.
- Contact IP&C for further guidance.

5.5 Patient movement

- Patients in isolation should remain in their rooms as much as possible.
- Access to communal ward/unit areas should be discouraged.
- Mobility aids (wheelchairs etc.) must be decontaminated after use by the accompanying staff member (e.g. orderly) before they are used again. This must be done with the current WDHB approved disinfectant.
- If the patient is in Droplet *or* Airborne isolation – the ***patient*** must wear the appropriate mask when they are out of their room e.g. going for procedure outside of room, transferring between wards
- It is the responsibility of the transferring ward/department to notify the receiving healthcare facility (in or out-patient) of the patient's isolation status before transferring.
- It is recommended that patients when transported via ambulance remain in isolation. It may be possible to cohort patients – contact IP&C.
- The Ambulance Service must be informed of the patient's isolation status when the booking is made.

5.6 Meal tray

- Disposable meal trays, dishes or utensils are GENERALLY not required for patients in isolation.
- Meal trays should be removed from the isolation room and placed directly onto the tray trolley. After the tray has been placed on the tray trolley staff must perform Hand Hygiene.
- Late meal trays should be placed in the ward/unit kitchen on the trolley or on the shelf provided.

5.7 Clinical records

- Clinical records, if taken into an isolation room, should not be placed on any surface within the patient's environment.
- If records do come into contact with surface they should be decontaminated with WDHB approved disinfectant wipes upon their removal from the room.

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5.8 Patient equipment

- Where possible patients in isolation should have dedicated equipment, which should remain in their room e.g. stethoscope.
- If patient care equipment is unable to be dedicated, it must be decontaminated with the WDHB approved disinfectant upon removal from the room. Refer to the Cleaning and Disinfection Policy.
- All non-essential equipment and linen should be removed from the isolation room before the patient is admitted into it.
- **Do** not **overstock the isolation room** (e.g. with equipment, linen) as it must be discarded upon the patients discharge/transfer.

5.9 Rubbish disposal

- Waste disposal for isolation rooms is as per Standard Precautions.
- A yellow rubbish bag should be used for all waste generated from an isolation room.

5.10 Linen handling

- Linen disposal for laundering is as per Standard Precautions.
- A white bag should be used for ALL linen unless it is heavily blood/body fluid soiled – it should then go into a yellow topped waterproof linen bag.
- Linen trolleys are not required to be stored in or taken into isolation rooms – the trolley should be taken to the door of the patients' room, as required.

5.11 Specimen collection

Specimens from ALL patients are considered hazardous and should be appropriately labeled and bagged (in the Biohazard bag) prior to them being sent to the Laboratory.

- Do not take the biohazard bag into the room.
- Ensure the specimen is clearly labelled for each site being sampled.
- Double bagging isn't required unless specified by IP&C/the laboratory.

Staff need to be careful to not contaminate the outside of the Biohazard bag through handling. Staff should perform hand hygiene and change gloves after collecting the specimen and before depositing it into the biohazard bag.

5.12 Neutropenic patients

Severely neutropenic patients with an absolute neutrophil count (ANC) of below 1000 /mm ^{3} require isolation to protect them from potential sources of infection.

These patients are at risk for bacterial infections from exogenous and endogenous sources.

- They require a single room, with the door to be shut at all times.
- Neutropenic patients **must not** be placed in a negative pressure room.
- Standard precautions only required with reverse isolation, unless patient is also MRO colonised e.g. ESBL +ve then contact precautions would be necessary.
- Hand Hygiene must be performed before entering the room.
- The patient should have dedicated equipment.
- A 'Reverse Isolation sign must be placed on the door

- Visitors and staff should not enter the room if they have a cough, cold, rash or respiratory infection. If they have to enter they must wear a surgical mask.
- The patient should wear a surgical mask if they leave the room.
- Flowers, pot plants and animals are not permitted in the room.
- If possible nursing staff should not care for both neutropenic patients and either *known* or *suspected* infectious patients.

5.13 Isolation trolley set up

Contents of Isolation room trolleys/shelves should include:

- Protective eye wear (goggles)
- High particulate filtered masks (N95) for airborne precautions
- Surgical Masks
- Long sleeved gown yellow gowns
- The WDHB approved disinfectant
- Disposable tourniquet

6. Cleaning practices

6.1 Daily cleaning

- Isolation rooms must be cleaned daily as per the WDHB cleaning services schedule.
- Housekeeping/cleaning staff should be made aware if a patient is in isolation (either verbally or thru signage).

6.2 Level 1 Cleaning upon patient discharge

It is essential isolation rooms be cleaned to a high standard to ensure the next patient in the room is not put at potential risk.

Level 1 cleaning/ Deprox of an isolation room is required when a patient:

- Has had a highly infectious disease (as per IP&C, ID Physician or the Disease Specific Table) ***OR***
- Has had an organism/disease known to survive in the environment for long periods ***OR***
- Has been involved in an environmental contamination (an outbreak).
- Patient has a known Multidrug resistant organism e.g. ESBL ,VRE,
- Contact IP&C for further advice, if needed regarding when Level one cleaning /Deprox is required.

Cleaning Staff Practice

The ward/unit nursing staff log a request for cleaning via Task Manager and identify the level of cleaning required (Level 1 , Deprox or Discharge clean/Level 2).Advise which type of precautions have been used in the room e.g. contact, airborne , droplet, special enteric.

- Cleaning of the isolation room is to take place as soon as possible after the patient's discharge/transfer. The room may be used as soon as the floor/furniture is dry .The exceptions to this is when a patient has been in airborne precautions for e.g. Measles ,Pulmonary TB. Chicken Pox. The door should remain shut and no patients admitted for 1 hour, unless that patient is known to be immune to Measles or Chicken Pox. Cleaners should wear N95 mask if cleaning room immediately after and up to an hour post discharge.

- Ward/unit staff should first remove all equipment/disposable items from the room.
- All unused linen in the room should be sent to Taylors for laundering
- All unused surgical items e.g. dressing packs, gauze, incontinence sheets should be discarded. Such items may be contaminated, so should not be returned to general stock.
- Curtains used for patients having Contact Precautions to be sent for laundering if patient has been in a room for longer than 24 hours .

6.3 Hydrogen Peroxide System (Deprox)

A new no-touch area decontamination system was introduced to the organisation to improve level 1 clean.

This system performs isolation cleaning after the discharge of patients with known pathogenic microorganisms mainly MROs. This system is based on the use of Hydrogen Peroxide vapour (HPV) to decontaminate surfaces. As an oxidizing agent, hydrogen peroxide is effective against all vegetative bacteria, viruses, fungi and even spores. HPV can be used to reach awkward or inaccessible areas, however, areas not exposed to the vapour will not be disinfected; all surfaces must be positioned for optimum exposure. The vapour decomposes to water and oxygen.

HPV disinfection does not replace regular cleaning – organic soiling reduces the efficacy of disinfection so surfaces to be disinfected must be clear of soil. Thus, whole room disinfection systems can only be used in areas that are unoccupied during the disinfection process. Rooms need to be vacant; all vents sealed, doors sealed and fire alarm properly covered to avoid triggering alarm by vapour. The system can only be used on unoccupied rooms. In other words, bed spaces will have to be level 1 cleaned unless vacated and sealed for the cycle to operate effectively.

For further details refer to the WDHB Clinical Support Services Decontamination Machine Cleaning and Setup Procedure Policy.

6.4 Ward/ unit cleaning

- In the event of an outbreak, a whole ward/unit may require a Level 1 clean/ Deprox decontamination
- A ward/unit clean would be organised with the Charge Nurse Manager, Daily Operations Centre and with advice of and with the assistance of IP&C, as well as WDHB Clinical Support Services, who would implement the plan.

7. Area Specific Recommendations

7.1 Visitor practices

- Visitor compliance with isolation requirements is determined by:
  - the potential risk to the visitor themselves,
  - the risk to other patients they may come into contact with.
- Signage should be available for visitors indicating isolation requirements and for them to see the nurse or nurse in charge before visiting.
- Remember (staff) –visitors may be infectious and may potentially expose patients to organisms/diseases e.g. siblings visiting with childhood rashes.
- Children and adults should not be visiting if they are currently sick or if they've been exposed to a communicable disease in the last three weeks.

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- While maintaining client confidentiality, visitors should be provided with an explanation for the required isolation and WDHBs expectations.
- Vistiers must wear masks when patients are in Airborne/Droplet isolation.
- Children may be restricted from visiting isolation rooms, depending on the reason for the precautions, their ability to comply and their safety.
  E.g. Children are not to enter *known* or *suspected* **TB** patients rooms.
- Visitors who have had contact with a communicable disease such as measles or chickenpox should not visit for at least 3 weeks post exposure if they are non- immune or do not know their immune status.
- Depending upon their patient interactions e.g. if visitors assist staff with the patients personal cares- toileting, they may be asked to wear PPE.
- If staff have any concerns about patients visitors they should speak to the ward/unit Charge Nurse or IP&C for support or assistance.
- Visitors should not sit on patients beds.

	Contact Precautions	Droplet Precautions	Airborne Precautions	Special Enteric precautions
Visitors Precautions	Perform Hand Hygiene Yes Limit visitors to two at a time Yes	Perform Hand Hygiene Yes Limit visitors to two at a time Yes	Perform Hand Hygiene Yes Limit visitors to two at a time No children under 5.	Yes Visitors should be made aware of transmission risk if patient has suspected or confirmed Noro Virus and directed to use appropriate PPE Children should not visit

7.2 Theatre practices

Theatres Standard Operating Procedures are enough to prevent cross-transmission of MRO's, although Pre-op and Recovery must use TBP as outlined in this Policy to prevent cross-transmission from occurring.

7.3 Orderlies practices

- The orderlies must wear gown and gloves (as part of Contact Precautions), when in direct contact with the patient e.g. when transferring the patient from bed to chair.
- Prior to transporting the patient the orderly must remove the gloves and gown, perform Hand Hygiene and put on a clean pair of gloves to transport the patient to the intended destination.

7.4 Transit care practices

Transit Care Staff should apply the appropriate PPE prior to entering an isolation patient's room and continue to wear it while they accompany the patient during their transportation to their intended destination.

Transmission Based Precautions

7.5 Ambulatory settings (Outpatients, Day Stay) practices

- In ambulatory settings, effectively practised Standard Precautions are recommended for use by ALL staff with ALL patients. Where necessary, Airborne or Droplet precautions may be used as required.
- The transmission of communicable diseases (especially via Airborne or Droplet route) can potentially be enhanced in these settings due to the nature of the environment – congregation and comingling of patients.
- Patients should be encouraged (via signage and staff) to indicate if they have any signs/symptoms of diarrhoea, respiratory illness, a rash or have had contact with someone with a known communicable disease e.g. chicken pox, measles.
- Ideally such patients should be separated from others as soon as possible.
- Patients with **respiratory illness** signs/symptoms should wear surgical masks, use respiratory etiquette (cough into an arm/tissue), practice social distancing and if possible their appointment should be rescheduled to another time.

Communication

- Patients contacted by phone prior to their appointment, staff can question regarding illness or contact with others that may be ill.
- Patients contacted by mail with appointment letters can have accompanying leaflets sent out informing patients to contact the unit should they become ill.

8. Hand Hygiene

- ALL staff should practice as per the WDHB Hand Hygiene Policy.
- All patients should be encouraged by staff to wash their hands or use the readily available alcohol hand gel at the appropriate times.

9. PPE

This should be worn as per the Standard Precautions Policy.

10. Cleaning

- Decontamination of all surfaces and patient equipment, after use/contact, should occur as per the Cleaning & Disinfection Policy.

11. Community practices

The following IP&C recommendations should be used in conjunction with area specific policies.

ALL staff should use Standard Precautions with all patients.

- Airborne or Droplet precautions should also be used as required.

Hand Hygiene

- Hand Hygiene should be performed by ALL staff, as per the WDHB Hand Hygiene Policy.

- Hand Hygiene products are not always available or adequate in home care environments; for this reason, ALL community healthcare workers should have a supply of alcohol hand gel available to them.

PPE

PPE should be worn as per the Standard Precautions Policy.

Sterile Supplies

- Sterile or clean supplies (e.g. dressing packs) may be stored in patient's homes, in a manner that ensures their continued integrity and protection.
- When the patient is discharged from the service any supplies remaining and no longer required by the patient should be discarded (not returned back into general circulation). For this reason, staff needs to ensure that oversupplying in patient's homes does not occur.
- Products stored in patient's homes need integrity checks before each use.

Equipment

- All equipment (regardless of the patient's infectious status) should be decontaminated before its removal from a patient's home.
- When transporting items, equipment cross contamination must be prevented. Separation and containerisation is essential.

12.Chaplains/ Kaumatua

- For compassionate reasons, certain staff may be exempt from wearing disposable gloves, as part of patient Isolation Management.
- E.g. A Chaplain or Kaumatua giving last rites or spiritual comfort to a patient, leaving their hands free to provide contact and comfort.
- Gowns must still be worn at this time, as part of Contact Precautions.
- Hand Hygiene must be performed after contact with the patient.

13.Associated documents

WDHB Policies

Standard Precautions Policy
Waste Management/Minimisation Policy
Hazard Management (Occ Health) Policy
MRO Policy
Disease Specific Management A-Z
Hand Hygiene Policy
Infectious Diseases –Employee Transmission Minimization Policy, (Occupational Health and Safety)

NZ Legislation and Standards

Health and Disability Services (Safety) Act 2001
Health and Disability Commissioner Code of Rights 1996
NZS8142:2000 Infection Control Standard
NZS8134:2001 Health & Disability Sector Standard
Notifiable Infectious Diseases under the Health Act 1956

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Health and Safety in Employment Act 1992

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Infectious Diseases: Employee Transmission Minimisation

Contents

1. Overview

Purpose

The purpose of this document outlines the responsibilities, processes and guidelines to ensure that the risks of the transmission of infectious disease between employees/workers and the patients/visitors are minimised. It identifies the process to be followed when risk is identified.

Infectious diseases may be transmitted between individuals due to close contact in the settings of clinical care and the handling of blood and body fluids.

Scope

All employees/workers / students / contractors, with patient and/or patient blood and body fluid contact.

Infectious Diseases: Employee Transmission Minimisation

2. Definitions

At-risk groups	Paediatrics < 2yrs, neonates, pregnant women, immunocompromised patients
High risk areas	Maternity, SCBU, Paediatrics, ICU, CCU, ADU, ED, Theatres
IP&C	Infection Prevention and Control
OH&SS	Occupational Health & Safety Service
Areas A-D	Departments that staff are employed in.

3. Assumptions

- An effective pre-employment screening (PES) programme is in place to ensure that the risk posed by potentially infectious new employees/workers, is managed appropriately (see WDHB PES policy).
- Risk to patients and employees/workers is minimised by knowing the immune status of new employees/workers, for infectious/communicable diseases, as set out in the PES requirements.
- Students/contractors have participated in an effective PES programme through external agencies.
- Policy and procedures exist to
  - control the risk of exposure of employees/workers to infectious diseases (e.g. needle-less IV systems and safety needle devices
  - use of standard precautions
  - personal protective equipment (PPE)
  - and isolation of patients with transmissible diseases, vaccination, education and training).

4. Responsibilities

Line Managers	are responsible for acting on advice of Occupational Health & Safety Service (OH&SS)
OH&SS advisors	are responsible for identifying the risk (high risk organisms for staff working/being employed in high risk areas), and providing advice about risk and options for risk minimisation. Managers and Human Resources (HR) decide about suitability of employment.
Individual	OH&SS will require the individual to sign a “Decline of Vaccination” form if they refuse vaccination
Waitemata DHB	The organization reserves the right to make the final decision about suitability of employment on a case by case basis to include the relevant General Manager, Infection Prevention & Control (IP&C), Consultant Microbiologist and OH&SS.

5. Employee responsibility

Health care workers have a responsibility to minimise the risk of transmission of infectious diseases to protect both patients and employees/workers.

Minimisation will be managed through:

- participation in and completion of PES process
- screening/monitoring of existing employees/workers
- restrictions to duties as required
- vaccinations where appropriate
- participation in contact tracing by exposed employees/workers

Infectious Diseases: Employee Transmission Minimisation

- following standard precautions
- using appropriate Personal Protective Equipment (PPE).

5.1 Notification, advice and support

All employees/workers must report any unprotected exposure to a known infectious patient/employee (to themselves or others) to their Manager. An electronic incident report should be completed (Risk MonitorPro).

Any WDHB employees/workers with concerns or questions regarding potential work related risks and/or an exposure to an infectious disease, should contact OH&SS or IP&C to discuss their work-related risk.

6. Exposure management

- Employees/workers who have been exposed to an infectious disease (e.g. measles, varicella, TB, meningococcal meningitis or pertussis), will be managed by OH&SS and IP&C in accordance with New Zealand Standards and Guidelines.
- Where indicated, employee screening/testing will be co-ordinated by OH&SS.
- IP&C is responsible to provide advice and manage the patient screening/testing components.
- Where indicated employees/workers may require vaccination, chemoprophylaxis and/or a stand-down period.

7. Records

- Employee test results and treatment records will be maintained and securely stored by the OH&SS.
- Managers will be advised of employee immune status to enable them to manage the risk on behalf of WDHB.
- The required notification to Auckland Regional Public Health Service (ARPHS) of notifiable diseases will be followed.

8. Blood and body fluid accidents

In any circumstances where a blood and body fluid incident occurs, it will be managed as per the WDHB Employee Incidents at Work policy - Blood and Body Fluid Incidents.

9. Pre-employment Screening

9.1 Requirements

All potential employees/workers must complete Pre-employment Screening (PES) as part of the recruitment process, before commencing employment. This is stated in PES policy. OH&SS sign off is required.

It is essential that employees/workers working in patient areas are screened for infectious diseases and immune status according to the PES policy before employment is commenced.

“At-risk groups” may require additional screening. I.e. pregnant women, immunocompromised patients, neonates and children below 2 years of age

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9.2 Employment

An unexpected result or antibody negative status could impact on the induction plan of the individual and may require a course of treatment or vaccination **before patient/client contact can commence**.

Situations of this nature will be managed by the Hiring Manager in conjunction with the potential employee on the advice of OH&SS & IP&C. HR will advise on suitability of employment.

9.3 At-risk-groups/Management

At risk- groups are determined by IP&C & OH&SS based on the risk to employees/workers and/or patients

Risk Categorisation

This table identifies the roles at risk of Infectious diseases.

Category	Risk	Role
A	**Direct contact with blood or body fluids**. Likely to have direct contact with blood or body fluids and exposure to infections spread by the airborne or droplet routes	Dentists, medical practitioners, nurses, midwives, allied health practitioners, healthcare assistants, ambulance, health care students, laboratory staff, mortuary workers, maintenance engineers who service equipment, sterilising service staff, cleaners, orderlies who transport patients around health facilities, and staff responsible for the decontamination and disposal of contaminated materials. Community staff.
B	**Indirect contact with blood and body substances.** Rarely have direct contact with blood or body substances. These employees/workers may be exposed to infections spread by the airborne or droplet routes, but are unlikely to be at occupational risk from blood borne diseases.	Ward clerks and Food services.
C	**Minimal Patient contact**	Clerical staff in non-clinical areas, gardening staff and Food Services.
D	**Contact with visitors** where exposure is no greater than the general public.	volunteers

9.4 Risk if not immunised as per Pre Employment Policy.

This table takes categories A-D from table 9.3 and measures the risk according to area that these roles are in.

Areas		Hospital Operations	Medical/ health of Older Person	Surgical/ Ambulatory	Mental Health	Child/Woman/ Family
	Category					
	A	high	high	high	high	high
	B	high	mod	mod	mod	mod
	C	Low	low	low	low	low
	D	low	low	low	low	low

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For employees/workers who work in a high risk area or are a high risk category, Managers would need to seek advice from OH&SS re risk and with HR re the considerations for Redeployment.

10. Existing Employees/workers: Screening/ Monitoring

10.1 Screening Policy

Refusal to undergo screening

Where an employee refuses to undergo screening, OH&SS will

- consider the risk to patients (high risk areas/ category) and the infectious disease
- advise the Manager of the risk.

The Manager will take the appropriate action i.e. redeployment, to minimise the risk in conjunction with advice from HR if necessary

The Manager may seek advice re the risks from OH&SS and advice on employment issues from HR.

Screening results

The results of screening will be assessed as:

- immune or non-immune
- infectious or non-infectious.

10.2 MRSA outbreak management

Selective screening may be requested by IP&C during an outbreak of MRSA (See MRSA Outbreak Management IP&C).

11.Contact Tracing

11.1 Requirements

Contact tracing will occur when employees/workers have had unprotected exposure to an infectious disease whilst at work. The exposure could be to a patient or another employee with an infectious disease.

Contact tracing will be in accordance with Auckland Regional Public Health Service (ARPHS) guidelines and will involve IP&C, OH&SS, and the CNM / Service Manager of the area.

11.2 Process - employee exposure to infectious disease

The table below outlines the employee screening process where the employee is identified as being exposed to a patient with an infectious disease.

Step	Action
1	IP&C is notified by ARPHS/Laboratory, of an in hospital patient with an infectious disease.
2	ARPHS/Infectious Diseases Consultant advises IP&C of parameters for contact tracing.
3	IP&C advises OH&SS about in-hospital patient with infectious disease and the need for contact tracing.
4	Meeting is set up by IP&C/ OH&SS, and includes IP&C, OH&SS, CNM, Occupational Physician and Infectious Diseases Consultant. (If required and is available or notifies Infectious Diseases Consultant by phone).

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5	All information about exposure is discussed including the parameters of the contact trace.
6	If a contact trace is indicated then: • The CNM compiles a contact trace list of all employees/workers and patients who have had **close** contact with the infectious patient source. • Contact list of employees/workers with contact details is given to OH&SS for follow up • Contact list of patients is given to IP&C for follow up.
7	OH&SS contact employees/workers on list to establish: • extent of contact / exposure • immune status (if appropriate) • if prophylactic treatment, follow up, restriction to duties are required as per ARPHS and IP&C Standards and Guidelines, OH&SS will provide information regarding the disease and risk to employees/workers and their external contacts. • Suitability for continued employment in the clinical area or options to minimise the risk OH&SS advise on the risk. The Manager and HR need to look at suitability for continued employment or Re deployment.
8	If employee meets the criteria for a close contact: • they may require a blood test to establish a baseline or immunity status and vaccination if appropriate • they may be offered prophylactic treatment by Occupational Physician or Infectious Diseases Consultant • future monitoring may be required by OH&SS as per ARPHS guidelines.

11.3 Process: Employee identified with an infectious disease

Step	Action
1	OH&SS and or IP&C are notified of an employee with an infectious disease by Auckland Regional Public Health Service (ARPHS)/Employee/Charge Nurse Manager (CNM).
2	Meeting is set up by OH&SS and includes OH&SS, IP&C, CNM, Service Manager, Occupational Physician, and Infectious Diseases Consultant (if required and is available or notifies Infectious Diseases Consultant by phone).
3	Plan is formulated: • Clear roles and responsibilities are identified. • Work colleagues are identified by CNM. • Contact tracing of employees/workers by OH&SS as per list provided by CNM. • Contact tracing of Patients and Public by IP&C/ARPHS. • Support of infectious employee by OH&SS. • Support of exposed employees/workers by OH&SS. • Communication and advice to affected work colleagues by (if required) Service Manager and IP&C.
4	OH&SS contacts the employee to advise that they are aware of their health issue and have involved ARPHS, CNM, Service Manager and IP&C to formulate a plan.
5	OH&SS schedules a meeting with employee to discuss plan and on-going support.
6	OH&SS organises further update meetings with coordination group.
7	If employee is confirmed as infectious:

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	• they may be certified fully unfit for work • they may be offered treatment by ARPHS/ Infectious Diseases Consultant /Occupational Physician • future monitoring may be required by OH&SS as per ARPHS Guidelines.

12. Vaccinations

12.1 Screening results

Appropriate actions will be taken according to the screening outcomes to ensure minimisation of the risk to employees/workers or patients.

- **Immune result**
  No further action will be required for those who are immune
- **Non-immune result**
  Appropriate vaccinations are provided for non-immune individuals where the risk/benefit ratio is appropriate

13. MRSA Treatment

13.1 MRSA positive employees/workers

- IP&C advise OH&SS about the MRSA positive status of Employee.
- OH&SS will contact the employee to advise re MRSA positive status and arrange an appointment
- Treatment and follow up plan will be discussed and prescribed as per standing orders.

14. Restriction to duties

14.1 Affected employees/workers

Employees/workers who become aware they have an infectious disease/condition must contact the OH&SS.
These individuals will be managed as per the Guidelines for Work Restrictions Table 11.
Appropriate OH&SS & IP&C policies and protocols will be implemented to manage and minimise the risk of infection.

14.2 Restrictions to duties

Where appropriate vaccination has been offered but refused, even following a full explanation of the implications, OH&SS will advise the Manager that the employee has declined vaccination colleagues and require the individual to sign a “Decline of Vaccination” form.
OH&SS will advise on the risks to patients and staff.

The Manager may seek advice re the risks on a case by case basis from OH&SS and advice on employment issues from HR.

Restrictions to duty due to an employee’s infectious disease/condition status will be in accordance with the IP&C and OH&SS guidelines.

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14.3 Guidelines for Work Restrictions

This Table is to be used as a guideline when looking at restriction of duties for infected employees/workers. For further advice please contact. OH&SS.

Disease	Work Restrictions	Duration of Infectivity	Comments
Conjunctivitis	Exclude from duties and food handling.	Until discharge ceases	
Diarrhoeal diseases/ Norovirus Acute stage -diarrhoea with other symptoms	Exclude from duties.	Until 48 hours after last symptoms	Ensure Hand Hygiene performed Consult with ARPHS regarding need for negative stool cultures for food handling personnel
Diphtheria	Exclude from duty	Until two negative nose and throat cultures at least 24 hours after antimicrobial therapy stopped	Contact Medical Practitioner
Enteroviral Infections Including hand, foot and mouth disease.	Exclude from Duties	Until symptoms resolve	
Glandular Fever (Mononucleosis)	No	May work as able	Stress importance of Hand Hygiene
Hepatitis A	Restrict from patient contact , patient's environment , and food handling	Until 7 days after the onset of the illness	Clinical cases, especially if jaundiced, unlikely to be fit for any work. Contact Occupational Health and Safety for advice.
Hepatitis B Acute or Chronic	Some restrictions may be imposed depending on work description		Discuss with Occupational Medicine Specialist Stress importance of Standard Precautions. Educate about transmission.
Hepatitis C	As above		As above
Herpes Simplex - Genital	No restriction	Until lesions heal	
Herpes Simplex – Hands / Herpetic Whitlow	Remove from patient contact and contact with patient's environment	Until lesions heal	
Herpes Simplex – Oro-Facial	Evaluate for need to restrict from care of high - risk patients	Until lesions heal	Avoid contact with neonates, immuno-suppressed patients, severe skin diseases and burns patients

Infectious Diseases: Employee Transmission Minimisation

Disease	Work Restrictions	Duration of Infectivity	Comments
Herpes Zoster (Shingles)	If localised then cover lesions and avoid exposure with high risk immunocompromised patients. Otherwise no need to exclude from work.	Until lesions dry and crusted	Cases pose an infectious risk to susceptible patients/colleagues and should remain off work until lesions have dried and crusted.
Human Immuno-deficiency Virus (HIV)	Some work restriction may be imposed depending on work description. Refer to Occupational Health and Safety guidelines – "Infectious diseases"		Occupation Health and Safety can provide advice and counselling. Education about disease transmission is essential. Stress importance of Standard Precautions.
Influenza	Exclude from duties for 48hrs until afebrile.	3-21 days	Contact occupational health And Safety Service for advice.
MRSA	Some restrictions may be imposed on work depending of area of work and site of infection.	Until three consecutive clear swabs are obtained from nose, and any skin lesions	Individual cases will be discussed with IP&C and OH&S and appropriate clearance given Clinical Microbiologist involved with complex cases. Employee may be assigned to non-clinical work.
Measles (Morbilli) - acute **Contacts of the above (susceptible employees/workers)**	Exclude from duty Exclude from duty	Until 7 days after the rash appears From 5th day after first exposure through 21st day after last exposure and /or 4 days after rash appears	Adults with measles unlikely to be fit for work and pose an infection risk to susceptible patients/colleagues even in restricted employment. Should stay off work until non-infectious Please notify ARPHS
Meningococcal infections	Exclude from duty	Until 24 hour after start of effective therapy (may be longer if has pneumonia)	

Infectious Diseases: Employee Transmission Minimisation

Disease	Work Restrictions	Duration of Infectivity	Comments
Mumps - acute **Contacts of the above (susceptible employees/workers)**	Exclude from duty Exclude from duty	Until 9 days after the onset of parotitis or until all gland swelling subsides and patient clinically recovers As per measles?	Cases of mumps should stay off work until non-infectious
Norovirus	Exclude from duty	Until symptom free for at least 48 hours	If outbreak in work area is suspected contact infection control promptly for investigation and management
Paronychia	Restrict from patient contact and contact with patient's environment or food handing. If purulent and on fingers then some restriction with direct patient contact esp. mucus membrane and broken skin.	Until wound healed	
Paronychia (Fungal)	No restriction. Cover		
Pertussis - acute **Contacts of the above (asymptomatic employees/workers)**	Exclude from duty No restriction; prophylaxis recommended Exclude from duty	From the onset of catarrhal stage through 3rd week after onset of paroxysms or until 5 days after start of effective antimicrobial therapy Until 5 days after start of effective therapy	Whooping cough uncommon in adults and cases likely to be unfit for work. In any event, confirmed cases should stay off work until non-infectious
Rubella (German Measles) -acute **Contacts of above (susceptible employees/workers)**	Exclude from duty As above	Until 5 days after the rash appears From 7th day after 1st exposure through 21st day after last exposure	Contact Occupational Health and Safety department for advice
Scabies	Exclude from Duties.	Until cleared by medical evaluation	Occupational Health and Safety for advice
Staphylococcus aureus **Active draining lesions, including in food handlers active acne**	Restrict from contact with patient and patients environment or food handling	Until lesions have resolved	Well-localised lesions may be adequately protected by occlusive dressings in which case patient contact in non-high risk areas may be permitted

Infectious Diseases: Employee Transmission Minimisation

Disease	Work Restrictions	Duration of Infectivity	Comments
Group A Streptococcal Infections (pharyngitis; scarlet fever)	Exclude from duties	Off work until 24 hours after effective treatment started	
Tuberculosis TB Active	Exclude from duty	Must have had 2 weeks of effective anti TB chemotherapy + is responding clinically and have been proven to be non -infectious by the ID Physician	Notifiable to ARPHS
Viral haemorrhagic fevers Including Ebola	Exclude from Duty	2-21 days incubation period	Consult with Occupational health and Safety service for advice.
Viral Respiratory/ RTI Infections / acute febrile	Consider excluding from care of high risk patients or contact with their environment during community outbreak of Respiratory Syncytial Virus (RSV) and influenza	Until acute symptoms resolve	Consult with Occupational Health and Safety department for advice
Varicella (Chicken Pox) Active disease **Contacts of above (susceptible employees/workers)**	Exclude from duty Exclude from duty	Until all lesions dry and crusted From 10th day after 1st exposure through 21st day (28th day if VZIG)after last exposure or, if varicella occurs, until all lesions dry and crusted	Cases pose an infectious risk to susceptible colleagues and should remain off work until non-infectious. Contact Occupational Health and safety for advice

15. Associated documents

Organisational Policy/Process

- Hazard Management (Occupational Health and Safety Service (OH&SS)
- Employee Incidents at Work (OH&SS)
- Reportable events Management
- Pre-employment Screening (OH&SS)
- Recruitment Human Resources (HR)
- Impairment at Work (HR)
- Employee Rehabilitation (OH&SS)
- MRSA Outbreak Management (Infection Prevention and Control (IP&C))
- Transmission based Isolation Precautions (IP & C)

Legislation

- Health and Safety in Employment Act (1992) and Amendment Act (2002)
- Human Rights Act 1993

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- Accident Compensation Act 2001
- Employment Relations Act 2000

Other DHB resources

- Infection Prevention and Control Policies and Procedures
- A Safe Way of Working (OH&SS)

Other resources

- Guidelines for Tuberculosis Control in New Zealand 2010 (Ministry of Health)
- Health and Disability Services Standard NZS8134:2008 Infection Control Section NZS8134.3.2.2008
- Immunisation Handbook 201 (Ministry of Health)

STOP

Visitors: Please report to reception area or nursing staff before entering the room

KEEP DOOR CLOSED AT ALL TIMES

Airborne precautions

in addition to standard precautions

Before entry to room

Perform hand hygiene

Put on N95 respirator mask

Check that mask fits tightly around face*

After patient contact

Perform hand hygiene

After room exit

Dispose of mask

Perform hand hygiene

* Please refer to the WDHB N95 respirator mask fitting guideline

Waitematā District Health Board

Best Care for Everyone

STOP

Visitors: Please report to reception area or nursing staff before entering the room

Droplet precautions

in addition to standard precautions

Before patient contact

Perform hand hygiene

Put on surgical mask

Immediately after patient contact

Dispose of surgical mask

Perform hand hygiene

Waitematā District Health Board

Best Care for Everyone