Vancouver Coastal Health

Infection Prevention and Control

Best Practice Guideline	Airborne and Airborne Contact Precautions in Long-Term Care and Assisted Living
Date	October 10, 2024
Reviewed Date	
Revised Date	

A printed version of this guideline may not be the most recent version. The OFFICIAL version is located at www.ipac.vch.ca.

Site Applicability

All Vancouver Coastal Health owned, operated and contracted Long-Term Care and Assisted Living providers.

Scope of Practice

All Staff

Purpose

To provide guidance for staff to implement airborne precautions. Airborne precautions are measures to prevent the transmission of suspected or confirmed infections spread by the airborne route. These are applied in healthcare settings based on known or suspected symptom presentation or identified conditions/situations. Organisms that can be transmitted through the airborne route include *Tuberculosis* (TB), measles, and VZV (chickenpox/varicella and disseminated shingles).

To provide guidance for staff to implement airborne contact precautions. Airborne contact precautions are measures to prevent the transmission of suspected or confirmed infections spread by the airborne route and direct and indirect contact with surfaces and shared equipment. Organisms that can be transmitted through the airborne route include Varicella (chickenpox) and disseminated zoster that spread by direct or indirect contact with vesicle fluid and by the airborne route.

To provide guidance for staff on management of residents who require the use of Aerosol Generating Medical Procedures (AGMP) in LTC with suspected or confirmed VRI.

Background

Airborne Precautions is a form of Additional Precautions. Additional Precautions are required when the transmission characteristics of a specific microorganism and/or set of symptoms are not prevented with the use of Routine Practices alone. Additional Precautions do not replace the need for Routine Practice; rather they are used simultaneously.

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Management of Resident with Suspected or Confirmed Airborne Infection

Accommodation

- Consult with Public Health or Medical Microbiologist prior to transfer residents who have suspected or confirmed TB, measles, varicella or disseminated shingles to an acute care facility if there are no Airborne Infection Isolation Room (AIIR) (i.e., negative pressure room).
    - Residents with confirmed or suspected TB, measles, varicella or disseminated shingles who are being transferred to an acute care facility should wear a medical mask during transfer.
- Post Airborne Precaution signage and Donning sign at entrance and Doffing sign in doffing zone.

Resident on Airborne Precautions

- Maintain resident on Airborne Precautions and consult with the Most Responsible Physician (MRP) and Infection Control Practitioner (ICP) to remove from precautions.
    - Prior to discontinuing precautions, ensure Additional Precautions discharge clean of the room is completed prior to removing the signage from entrance.
- Residents on Airborne Precautions are to wear a medical mask if leaving the room for appointments that cannot be deferred.
- Dedicate equipment when possible.
- Bring only necessary care items into the resident environment.
- Single use equipment is preferred for residents.
    - If single use equipment is not available, dedicate multi-use equipment for the duration the resident remains on Additional Precautions.
    - Clean and disinfect multi-use equipment after every use.
    - If equipment cannot be cleaned and disinfected following the Best practice guideline for Cleaning and Disinfection or Management of Linen in LTC, it must be dedicated to the resident (e.g. items comprised of porous materials).
- Discard any unused supplies or items that cannot be cleaned and disinfected.

Personal Protective Equipment (PPE)

- Staff to don a new N95 respirator prior to entry into the room and remove N95 after exiting the resident room.

Environmental Cleaning

- Clean as per routine environmental cleaning.

Family and Visitors

- Provide support and education to family members/visitors on donning/doffing and hand hygiene.

Information for patients, families, and visitors.

Airborne Precautions

Resident on Airborne and Contact Precautions

- Residents are managed with the same measures as Airborne Precautions above, and with the following additional measures:
    - Post Airborne and Contact Precaution signage at the resident room entrance.
    - Staff to wear a gown, gloves, eye protection and a fit-tested N95 respirator prior to any contact and within 2 meters of the resident and the resident's environment.

Duration of Airborne & Contact Precautions for residents with Varicella and Disseminated Zoster Virus

- Disseminated shingles.
    - Until all skin lesions have crusted and dried.
- Localized shingles
    - Localized rash in severely immunocompromised host.
    - Localized rash in normal host that cannot be covered (i.e., on face).
    - Until 24 hours of effective antiviral therapy completed AND no new lesions, then drop down to Contact Precautions until lesions dried and crusted. If untreated, maintain Airborne and Contact Precautions until all lesions are dried and crusted.
- Exposed nonimmune residents.
        - Should be considered potentially infectious 8 days after first exposure to 21 days after last exposure (28 days if VZIG was given) and be on Airborne and Contact Precautions during that time.

Aerosol-Generating Medical Procedures (AGMP) with Suspected or Confirmed Viral Respiratory Illness (VRI)

1. Residents who are suspected or confirmed for VRI also need to be placed on airborne precautions for the duration of the AGMP procedure (i.e. CPAP/BIPAP/Nebulizer).
2. A private room for Residents who require the use of AGMP's (e.g. CPAP/BiPAP/Nebulizers) is preferred, however, if a private room is not available place or maintain the resident in a multi-bedroom.
3. Keep residents in multi bedrooms in their room with the curtains drawn and the door closed for the duration of the procedure.
4. Create physical barriers by drawing privacy curtains or closing doors when an AGMP is occurring.
5. Staff should be fit tested annually for an N95 respirator.

Refer to the VCH IPAC Best Practice Guideline Aerosol Generating Medical Procedures

For additional reference, visit VCH Diseases and Conditions Table

Notification and Documentation

Nursing staff to document in the clinical record that the resident is on Airborne –Airborne and Contact Precautions and notify the Clinical Services Manager and ICP for the need for transfer to an Airborne infection isolation room (AIIR). After hours, nursing staff to inform the administrator on call for the need for transfer to an AIIR in an acute care hospital.

Admissions/Transfers

- Residents with active TB, measles or Varicella and disseminated zoster will be deferred for admission/transfer to LTC until no longer infectious.
- When transferring a resident, notify the transferring service, receiving unit, or facility/home care agency of the necessary requirements in advance.

Fit Testing Resources

All staff that provide direct care to resident require annual N95 respirator fit testing.

- Contracted and Private LTC homes can access fit testing services and information from SafeCare BC .
- Owned and Operated LTC homes can direct staff to the VCH Fit Testing page to book an appointment for fit testing.

Additional Education

BiPAP and CPAP (Online) (https://learninghub.phsa.ca/Courses/10215/bipap-and-cpap-online)

References

1. BC Centre for Disease Control. Communicable Disease Manual Measles (June 2014)
2. BCCDC Communicable Disease Control Manual. (2019) Chapter 4: Tuberculosis APPENDIX B: INFECTION PREVENTION AND CONTROL
3. Canadian Tuberculosis Standards - 8th Edition. (2022)
4. Canadian Standards Association Group. (2018). CSA Z8000-11: Canadian Health Care Facilities- Planning, Design and Construction (2nd ed).
5. Public Health Agency of Canada. Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings (September 2017)
6. World Health Organization. Measles Outbreak Toolbox (September 2022)
7. https://picnet.ca/guidelines/pathogens/measles/