IPC Recommendations for Measles

In addition to **Routine Practices**

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Assessment and screening

Acute Care

- All patients (Admitted Inpatients, Emergency Department [ED], Surgery, Obstetrics, Inter-Facility Transfers, Direct Admissions) are to be assessed initially for symptoms and risk factors associated with communicable disease using the Connect Care Communicable Disease Screen. See Communicable Disease (Respiratory) Initial Screening Form #21615 for paper version.
- Refer to Rash Algorithm to assess the need for Additional Precautions
- See Management of Patients Requiring Airborne Precautions for Suspected or Confirmed Measles

Ambulatory Care (stand alone or part of an Acute Care site)

- Assess patients at every visit to Ambulatory Care and Outpatient Department using the Connect Care Communicable Disease Screen. See Ambulatory Communicable Disease Screening Form #21666 for paper version.
- See IPC Diseases and Conditions Table Recommendations for Management of Patients Acute Care. This also applies to ambulatory medical surgical and outpatient settings
- Patients with suspect measles should be directed not to attend primary care clinics and to call 811 for more information.

Continuing Care

- Refer to Managing Rash in Continuing Care to assess the need for Additional Precautions
- See IPC Diseases and Table Recommendations for Management of Residents Continuing Care

Primary Care

- See Infection Prevention and Control Risk Assessment (IPC RA) for personal protective equipment recommendations.
- See Community-based Services Resource Manual
- Patients with suspect measles should be directed not to attend primary care clinics and to call 811 for more information.

Immunocompromised Patients

- See IPC Considerations for Immunocompromised Patients

Discontinuation of Airborne Precautions for Confirmed Measles

- Immunocompetent individuals are considered to no longer be communicable 4 days after start of rash (i.e., date of rash onset is day 0 so can discontinue on day 5).
- For immunocompromised patients: Maintain until all symptoms are gone; discuss with IPC prior to discontinuing.

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Medical Officer of Health (MOH) notification

- Report all measles cases under investigation (confirmed, probable and suspect) to Zone MOH **(see Insite: Population, Public and Indigenous Health Department > Standard Operating Procedure**. Zone MOH-on-call can be contacted through hospital switchboard or via RAAPID.
- MOH will be notified by Alberta Precision Lab (APL) of presumptive and confirmed positive results if testing is done. Contact tracing and follow-up (where needed) will be guided by AHS Public Health. In acute care facilities, this is in collaboration with IPC.

Laboratory Testing for Measles

Symptomatic individual

- **Nasopharyngeal (NP) swab for RT-PCR** (universal transport media)
- **Urine for RT-PCR** (sterile container)
- **Blood: Serology for IgM & IgG**

- All patients with suspected measles (etiology not confirmed): use **Airborne Precautions** **AND** **Contact & Droplet Precautions**.
  - HCW wears fit tested N95 respirator, gown, gloves and eye protection upon entry to room.
  - For facial PPE as part of **Airborne Precautions** **AND** **Contact & Droplet Precautions**., or if otherwise indicated based on Infection Prevention and Control Risk Assessment (IPC RA):
    - Use eye protection with a fit tested N95 respirator only. Do not use procedure mask or double mask.
  - Change all PPE after swabbing (**Exception**: During home collection **and** specimens collected from same family/household.)
  - Refer to lab bulletins for specimen handling, testing and notification for updates. APL will coordinate testing requests. [See *Laboratory Testing for Suspected Measles* – posted 03 April 2024]
- Patients should not be sent to community or outpatient lab collection sites for measles testing. Contact 811 for information.

Accommodation

Acute Care Suscept Case AND Susceptible Close Contacts

- Immediately place procedure mask on patient at first point of entry to a facility or first symptoms if admitted.
- Follow Management of Patients Requiring Airborne Precautions for Suspected or Confirmed Measles
  - Place patient in a negative pressure room (Airborne Isolation room) and implement Airborne Precautions. Patient may remove mask once in negative pressure room with door remaining closed.
  - Use **Airborne Precautions** **AND** **Contact & Droplet Precautions** if other infectious diseases are suspected (i.e., influenza, meningococcemia) have not been ruled out.
  - Once other infectious diseases have been ruled out or measles has been confirmed, use Airborne Precautions and Infection Prevention and Control Risk Assessment (IPC RA)
- If negative pressure room is not available see Management of Patients Requiring Airborne Precautions for Suspected or Confirmed Measles.
- **Airborne Precautions** **AND** **Contact & Droplet Precautions** sign visible on entry to room.
  - In ambulatory care/outpatient areas (including the Emergency Department), shared bathrooms are common. It is preferrable to have patient use a commode or urinal in their room rather than sharing a bathroom. If a shared bathroom must be used, patient on **Airborne Precautions** must wear procedure mask when using a shared bathroom.

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- **Cohorting recommendations**. Patients on Airborne Precautions are **NOT** candidates for cohorting as per Recommendations for Cohorting Inpatients on Additional Precautions in Acute Care Facilities
  - There may be exceptions for households with confirmed measles where there are limited airborne isolation rooms. This is a larger discussion that includes MOH, IPC, and Clinical Operations.
- Admitted susceptible close contacts who are discharged home will be followed up by Public Health: Communicable Disease team.

Post-Exposure Prophylaxis (PEP)

- Decisions about post-exposure prophylaxis (PEP) for susceptible contacts who are inpatients will be made by IPC in collaboration with Public Health/Medical Officer of Health regarding PEP.

Confirmed Case

- **Airborne Precautions** visible on entry to room.
  - In ambulatory care/outpatient areas (including the Emergency Department), shared bathrooms are common. It is preferrable to have patient use a commode or urinal in their room rather than sharing a bathroom. If a shared bathroom must be used, patient on **Airborne Precautions** must wear procedure mask when using a shared bathroom.
- **Cohorting recommendations**. Patients on Airborne Precautions are **NOT** candidates for cohorting as per Recommendations for Cohorting Inpatients on Additional Precautions in Acute Care Facilities
  - There may be exceptions for households with confirmed measles where there are limited airborne isolation rooms. This is a larger discussion that includes MOH, IPC, and Clinical Operations.

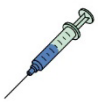
Continuing Care

- If the resident is not in a single room/negative pressure room:
- If possible, remove the roommate from the room AND mask the infected resident
- Close the door(s)
- Implement Airborne Precautions
- Arrange for resident transfer to a negative pressure room.

- Use of Airborne Precautions **AND** Droplet & Contact Precautions with addition of eye protection until other infectious diseases are (i.e., influenza, meningococcemia) are ruled out.
  - If a negative pressure room is unavailable see Management of Patients Requiring Airborne Precautions for Suspected or Confirmed Measles.
- Airborne Precautions **AND** Droplet & Contact Precautions sign visible on entry to room.

Confirmed Case

- **Airborne Precautions** visible on entry to room.
  - In ambulatory care/outpatient areas (including the Emergency Department), shared bathrooms are common. It is preferrable to have patient use a commode or urinal in their room rather than sharing a bathroom. If a shared bathroom must be used, patient on **Airborne Precautions** must wear procedure mask when using a shared bathroom.
- **Cohorting recommendations**. Patients on Airborne Precautions are **NOT** candidates for Cohorting.



Measles vaccination

- Regardless of patient vaccination status, all initial symptom and risk factor assessments should be performed.
- All HCWs are to use a N95 respirator when working with suspected or confirmed measles patients

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regardless of immune status to measles.

- Fit testing should be current (i.e., within 2 years).

Hand hygiene

- Perform hand hygiene using alcohol-based hand rub (ABHR) or soap and water as described in Routine Practices.
- Educate patients and designated family support persons (DFSP)/visitors about how and when to use hand hygiene products.

Masking (N95 respirator)

General principles

- Choose the correct N95 model/size based on your fit testing.
- Wear the N95 respirator so that it covers the nose, mouth and chin.
- **Do not double mask in any combination**.
- If the N95 respirator becomes wet/moist or visibly soiled, leave the room, doff the N95 respirator currently being worn, perform hand hygiene, and don a new one
- Respirators are single use; do not reuse or store in uniform/scrubs or clothing pockets. Do not wear an N95 respirator around the neck.
- Remove the N95 respirator after leaving the patient's room. Doffing an N95 respirator is a deliberate process and should be done carefully to prevent self-contamination.
- Refer to the AHS Donning and Doffing PPE posters for details on careful removal and disposal of N95 respirators.

When using Airborne Precautions AND Contact & Droplet Precautions

- Eye protection can be a face shield, goggles, or personal safety glasses. **Prescription eyeglasses alone are not adequate.**
- Using clean hands, don facial PPE by putting the respirator on first.
- Consider facial PPE to be a single unit of protection; always don/doff both at the same time.
- Change/discard facial PPE if it becomes contaminated, wet or soiled, as directed by additional precaution signs. See the previous general principles section for additional N95 doffing instructions.

Assessing the Need for Additional PPE

- When a patient is on Additional Precautions, follow PPE requirements as indicated AND perform an Infection Prevention and Control Risk Assessment (IPC RA). Different or more PPE may be required based on the IPC RA.

Handling Patient Care Items and Equipment (including charts and electronics)

- Use disposable patient equipment when possible.
- Dedicate reusable equipment for a single patient use only until discharge.
- If re-usable equipment cannot be dedicated for a single patient use, clean and disinfect between patients. Handling, Cleaning & Disinfecting Mobile DI Devices
- All rooms should contain a dedicated linen bag; double bag only if leaking.
- Do not share items that cannot be cleaned and disinfected.
- For shared computers, laptops and tablets, follow recommendations for the Bedside Computers and Electronic Devices.
- Meal trays and dishes do not require special handling. Disposable dishes and utensils are not required.
- Special handling of linen or waste is not required; general waste from patients on Additional Precautions is not biomedical waste.
- Paper is not a means of transmission. Handle all paper with clean hands; clean any shared items (like chart binders, pens or binders) with a low-level disinfectant wipe.

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Intra-Facility Transport and Patient Ambulation Outside Room, Bedspace or Transfer

- Patients should leave the room or bedspace for essential purposes only. Exceptions require IPC consultation.
- Sites should have a clearly documented process for transport of patients on Airborne Precautions.
- Use pre-determined transport routes to minimize exposure for healthcare workers, other patients and DFSP/visitors.
- Before departure, notify the receiving area that the patient requires Airborne Precautions or Airborne Precautions **and** **Contact & Droplet Precautions**
- Before patients leave their room or bedspace,
  - assess whether they can wear a procedure/surgical mask for the duration of the transport
  - educate or assist them to put on a procedure/surgical mask;
  - consider alternate strategies for patients who cannot tolerate a mask, e.g., neonates, infants, toddlers; cuddle with care provider;
  - for patients with tracheostomy, cover site with surgical mask (with ties);
  - perform hand hygiene;
  - put on clean clothing or hospital gown/housecoat;
  - ensure dressings and incontinence products contain any drainage;
  - provide an escort for the patient.
- A team member or Protective Services member clears the transport path & elevator (if used)
- Elevator to be placed out of service for 2 hours following patient transport if patient is not masked during transport.

Transport Staff should choose clean personal protective equipment (PPE) if necessary, to handle the patient during transport and at the transport destination, using Infection Prevention and Control Risk Assessment (IPC RA). PPE is to be removed when patient handling is complete

- Staff assisting with transport do not require an N95 respirator after leaving the room unless patient is unable to wear a procedure/surgical mask for the duration of transport
- Transport the patient directly into a negative pressure capable room in the receiving area. Bypass any holding areas.
- Avoid performing aerosol-generating medical procedures (AGMP) enroute.

Air Clearance Time (also called "settle time")

- After patient discharge or transfer, or if Airborne Precautions are discontinued:
  - Keep room door closed for the minimum time to maintain negative pressure and air exchanges to allow the room air to be cleared of airborne particles.
  - Consult IPC as air clearance times vary based on air exchanges per hour for a facility (or for particular rooms within a facility).
  - The room may be entered without using a N95 respirator for discharge or transfer cleaning after the air clearance time has lapsed
  - If HCWs must enter before minimum air clearance time, wear fit tested N95 respirator and door must remain closed.

Note: Although the term "settle time" is often used, this period does not mean that airborne viral particles are falling or "settling" to the floor.

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Environmental Cleaning

- Room surfaces and equipment cleaning/disinfection is required daily or more frequently if directed by IPC using AHS approved products and procedures.
- If staff must enter before minimum air clearance time, wear fit tested N95 respirator and door must remain closed.

Designated Family/Support Persons (DFSP) and Visitors

- Encourage visitors to perform hand hygiene.
- Instruct family or visitors on how to don, perform a seal-check and safely doff an N95 respirator.
- The Airborne Isolation Precautions patient care handout can be provided to visitors.
- Keep the number of visitors to a minimum.
- Door must remain closed except when entering or leaving the room.

Signs, posters and videos

- Airborne Precautions Sign Acute Care
- Contact and Droplet Precautions Sign Acute Care
- Patient Symptom Alert Poster
- Airborne Precautions Sign Continuing Care
- Droplet and Contact Precautions Sign Continuing Care
- 3M N95 Donning and Doffing Video
- Donning and Doffing Personal Protective Equipment Video

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