Newfoundland and Labrador's Guideline for Prioritization and Use of Personal Protective Equipment (PPE) in Pandemic COVID-19 in Low Prevalence Period

Prepared by: Provincial COVID-19 PPE Task Force

Revised: May 15, 2020 (Replaces April 15, 2020 version)

Purpose

This updated document provides guidance and establishes provincial standards for utilization of personal protective equipment (PPE) for Health Care Workers (HCWs) in Newfoundland and Labrador (NL) during the COVID-19 Pandemic. This includes all staff in acute care, long term care, personal care homes and community including home care settings. The recommendations in this document were developed in response to the identification of COVID-19 cases in NL. As we learn to live with COVID-19 we will need to be nimble in our response to the changing knowledge and epidemiology of the virus as well as in our use of PPE. Given the long-term approach that we need to take this document will be updated as required.

In the event of **pandemic circumstances,** this guideline will be implemented when one or more of the following:

- There is localized or widespread COVID-19 in the community, region or province as determined by the Regional Incident Commanders in collaboration with the Medical Officers of Health, Infectious Disease Specialists and Infection Prevention and Control professionals;
- The supply of PPE is at critical levels;
- There is no clear path to procuring PPE in a timely manner;
- All attempts at procuring PPE have been exhausted; and,
- There is a limited likelihood of restored supply prior to the exhaustion of some or all of the PPE required to care for patients or residents in long-term care who are diagnosed or suspected cases.

The NL PPE Guidelines will assessed when the province reaches Alert Level 1 of Foundation for Living with COVID-19 https://www.gov.nl.ca/covid-19/ Moving between levels will be assessed through the activation process page seven.

Background

As Newfoundland and Labrador continues to adapt to COVID-19 and the unprecedented impacts on the health care system, Regional Health Authorities (RHAs) have taken a provincial approach to recommendations for the use of Personal Protective Equipment (PPE). The global spread of the COVID-19 virus has caused major shortages of PPE. Traditionally, the use of PPE in hospitals has been guided by the recommendations in the provincial Routine Practices and Additional Precautions Guideline[1]. This Pandemic Guideline will focus on COVID-19's changing epidemiology and the enhanced recommendations for PPE while being cognizant of the basic principles of infection prevention and control.

These recommendations may change at any time depending upon the risk of disease and the supply of PPE. The safety of Health Care Workers and clients are paramount (Appendix A).

On April 30, 2020, the Chief Medical Officer of Health (CMOH) announced Newfoundland and Labrador's plan for living with COVID-19. The plan, **A Foundation for Living with COVID-19**, includes five alert levels. Depending on which level the province is in, as determined by the

[1] Routine Practices and Additional Precautions across the Continuum of Care (2014).

CMOH, public health restrictions will be gradually relaxed. The PPE recommendations will be assessed as we progress through each of the five levels, and as epidemiology and supply evolve. Necessary changes will be made to recommendations as required. Alert level four was implemented on May 11, 2020, allowing people more freedom while continuing to maintain the main public health measures.

On May 8, 2020, the Department of Health and Community Services with the Public Sector Unions released a **Joint Statement on COVID-19 and Personal Protective Equipment** to provide clarity on the approach to PPE use in this Province. This Statement has been taken into consideration in the updating of this document. A similar agreement has been released in other Provinces.

This updated guideline focuses on the risk of exposure (e.g., type of activity), the transmission dynamics of the pathogen (e.g., contact, droplet or aerosol) and the local/provincial epidemiology and supply chain stability.

HCWs are on the front lines of the COVID-19 outbreak response and as such are exposed to hazards that put them at risk of infection. This guideline stresses the safety of HCWs and the use of appropriate PPE, which can change depending upon the risk of disease prevalence as determined by the CMOH or designate.

The level of risk and prevalence of COVID-19 will be determined by the Regional Medical Officers of Health (RMOH) and Regional Incident Commanders based on the epidemiology and ongoing surveillance of COVID-19 within the region. This process is replicated at the provincial level through the office of the CMOH and Public Health Division. This is reported to the Department of Health and Community Services Emergency Operations Centre (HCS-EOC) on a weekly basis or more frequently if the surveillance dictates. The HCS-EOC will recommend the movement from Low to High risk, initiating changes required for the appropriate PPE.

This updated document has taken into consideration the following guiding principles:

- Study of local or regional epidemiology of COVID-19 on an ongoing basis;
- Capacity to respond to changing indications for testing;
- Availability of testing for COVID-19;
- Ability to quickly identify suspect COVID-19 cases through active surveillance;
- Facility readiness (e.g., availability and supply of PPE; hand hygiene supplies; private rooms; ICU beds; ventilators; ability to provide special separation in triage, at patient access points including diagnostic imaging, outpatient laboratory or anywhere patients directly access health care);
- Ability to quickly and proactively identify, access and utilize alternate patient assessment and patient care sites when current facilities become overwhelmed;
- Facility monitoring of existing supply of PPE;
- Coordinated procurement of supplies with provincial and Federal-Provincial-Territorial (FPT) buying groups to maximize access;
- Anticipation of an increased requirement for infection prevention and control (IPC) professionals and occupational health and safety (OHS) staff;

- Status of HCW training on Routine Practices and Additional Precautions (RPAP), donning and doffing of PPE and the Point-of-care Risk Assessment (PCRA);
- Likelihood of performing aerosol-generating medical procedures (AGMPs) (Appendix B- draft to be confirmed) in the facility, along with training and readiness for HCWs who will be participating in AGMPs;
- The status of HCWs who have been fit tested and instructed in the use of N95 respirators; and
- Training for HCWs to rapidly identify any cases of COVID-19 at entry to the facility, including cases in visitors (active screening/surveillance) and close contacts of cases.

Basic Principles of Infection Prevention and Control (IPAC)

Throughout the pandemic period we will continue to follow the basic principles of infection prevention and control, with modifications as indicated by the epidemiology, knowledge of the disease and supply chain stability.

Source Controls

- Respiratory hygiene – Involves educating and encouraging all individuals (patients, HCWs and visitors) who have the physical and cognitive abilities to practice respiratory hygiene.
- Physical Separation – A two meter physical separation and spacing recommendation to decrease exposure to microorganisms for all patients and visitors in clinical and waiting areas should be implemented.

Routine Practices and Additional Precautions[2]

These are the practices that HCWs use daily in providing care within health care facilities and include, at a minimum, these two fundamental principles:

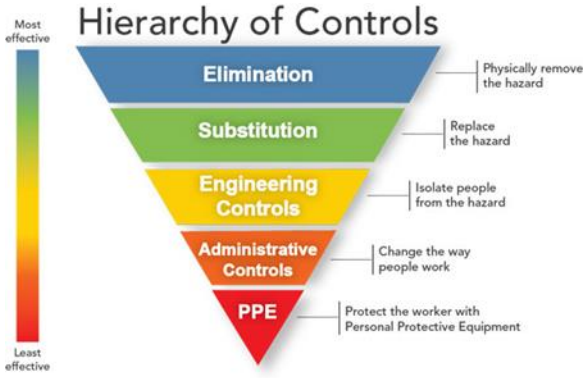
- Hand Hygiene – The single most important way to prevent the spread of infections
  - Perform hand hygiene as per the four moments of hand hygiene
    - Hands must be cleaned after glove use as gloves are not a substitute for hand hygiene.
    - Hands must be cleaned before and after the donning and doffing of PPE.
- Point-of-Care Risk Assessment (PCRA) – A PCRA is an activity whereby HCWs in any health care setting across the continuum of care:
  - Evaluate the likelihood of exposure to an infectious agent for a specific interaction:
    - With a specific patient in a specific environment (e.g., single room, hallway)
    - Under available conditions (e.g., no designated handwashing sink); and
  - Choose the appropriate actions/PPE needed to minimize the risk of exposure for the specific patient, other patients in the environment, the HCW, other staff, visitors, contractors, etc.

Hierarchy of Controls

A hierarchy of controls is an approach for determining how to implement feasible and effective infection prevention and control solutions. The idea behind this hierarchy is that the control methods at the top of the graphic are potentially more effective and protective than those at the

[2] Routine Practices and Additional Precautions across the Continuum of Care.

bottom. Following this hierarchy normally leads to the implementation of inherently safer systems, where the risk of illness has been substantially reduced.



Engineering controls aim to reduce the spread of pathogens and reduce the contamination of surfaces and inanimate objects. This would include isolating a confirmed/suspect COVID-19 patient by placing them in a private negative pressure room, or installing barriers to isolate staff from the risk (i.e. screening desks).

Administrative controls include ensuring the availability of resources for IPAC, the development of clear IPAC policies, access to laboratory testing, appropriate triage and placement of patients, adequate staff-to-patient ratios, development of policies and procedures and training of staff.

Finally, PPE is the last hierarch of controls and is required when engineering and administrative controls are unable to mitigate the risk of exposure to staff, clients and the public.

Personal Protective Equipment Shortage Strategy

The World Health Organization[3] has recommended that PPE is one strategy in concert with a focus on administrative and engineering controls.

Recognizing the challenges and frustration of global shortages, creative solutions will be required to maximize the use of PPE and to conserve the supply of PPE while being cognizant of the safe care of clients and the safety of HCWs.

- Point-of-Care Risk Assessment (PCRA) – Prior to every patient interaction, HCWs have a responsibility to assess the infectious risk posed to themselves and other patients, visitors and HCWs by a patient, situation or procedure (See Appendices B & C)
- Medical masks will be used for repeated interactions with multiple patients:
  - Masks must be changed if wet, damaged or soiled.
  - Masks are to be worn for one shift maximum of 12 hours
- Eye protection (face shield), when required, will be used for repeated interactions with multiple patients.

[3] World Health Organization. (2020). Rational use of personal protective equipment for coronavirus disease 2019 (COVID-19).

- Gowns may be used for routine patient care if indicated by the PCRA (See Appendices B & C):
  - A gown is to be considered an extension of the uniform; it is to be worn for repeated interactions with multiple patients.
  - The gown is to be changed if wet, soiled or damaged.

Airborne-Contact Precautions

Acknowledging the change to a low COVID-19 prevalence environment, Airborne-Contact precautions should be followed for the performance of AGMPs in patients with signs and symptoms of COVID-19 and suspected or confirmed COVID-19.

N95 respirators or equivalents are required during AGMPs (Appendix B, draft to be confirmed) when COVID-19 is suspected or confirmed. AGMPs generate aerosols and small droplet nuclei in high concentrations. These droplets may contain bacteria or viruses such as SARS, COVID-19, or influenza-like illness. Wearing an N95 respirator when performing an AGMP reduces the likelihood of transmission of these diseases to health care workers.

Patients who do not have symptoms of influenza-like illness or COVID-19 and require an AGMP do not always require an N95 respirator, Routine Practices are sufficient as indicated by a PCRA. Low prevalence of an emerging pathogen should be considered in the PCRA (See Appendices B & C).

PPE Supply and Demand Monitoring

PPE supply and demand volumes are determined by the Provincial Procurement and Supply Chain, Regional Health Authority Operational Leads, Infection Prevention and Control and Occupational Health and Safety professionals. In the event of a catastrophic pandemic, PPE supply and demand are to be monitored and assessed daily (at minimum) at site, regional and provincial levels.

Risk Stratification for HCWs

The following prioritization list attempts to stratify HCWs based on workplace risk. HCWs in Priority A are considered the highest priority for PPE, as they work in areas where transmission and spread are a higher risk.

Table 1: HCWs with Highest Risk

Priority	Health Care Worker
A	Emergency, Paramedicine, Operating Rooms and Critical Care staff
B	Staff working on COVID-19 cohort units or wards
C	Other Acute Care settings and Primary care workers
D	LTC settings
E	Ambulatory Care and Home Care settings

Staged Use of PPE in the Health Care System (Table 2)

During times of potential decreased supply of PPE, it may be necessary to take a staged approach to PPE use, based on six stages of risk (described in Table 2 below). When there is a high probability that at least one PPE item will be depleted within the coming weeks, resource allocation decisions for the provision of health care will involve heightened ethical and societal dimensions. Therefore, it is important that appropriate roles, responsibilities and priority use of PPE is determined in advance. In the event of a pandemic, PPE risk will be, or will be predicted to reach, Stages 4, 5, or 6 (with stages representing escalating shortages of PPE). However, even when PPE risk is at Stage 1, there are required actions that need to be taken to protect the supply. Of note, as PPE supply ebbs and flows the Province may move between the six stages.

Activation

The movement from one stage to another is determined and recommended to the HCS- EOC by the Procurement and Supply advisors, in consultation with unions, other health care professionals and the PPE Task Group. The HCS-EOC then makes the determination for the appropriate Stage.

Activation will include:

- Communication
- Control of the supply of PPE
- Conservation of PPE
- Consider allocation of PPE to health care workers with highest risk and providing the most essential services (Table 1)
- Continued monitoring and reassessment of the supply and associated stage
- Crafting and providing education regarding the changes to PPE requirements at a Regional level following Provincial Guidelines

TABLE 2: STAGED USE OF PPE DURING DECREASED SUPPLY AVAILABILITY

Stage	Description of Supply	Guiding Principles
1	**All PPE item levels are intact and there is low probability that any item will be depleted in the foreseeable future, as identified by the Procurement and Supply Staff.**	Continue to source current PPE items. • Implement infection control practices of diligent hand hygiene, physical distancing where possible, and not touching your face • Implement approval strategies to ensure appropriate allocation of items • Communicate PPE usage and allocation expectations to stakeholders • Monitor usage • Identify appropriate alternative PPE items • Develop contingency plans for implementation of alternative PPE items
2	**All PPE item levels remain intact but there is a possibility that at least one item will be depleted in the coming weeks, as identified by the Procurement and Supply Staff.**	• Source current and alternative PPE items • Communicate PPE usage and allocation expectations to stakeholders • Monitor usage • Initiate all pre-work required to implement contingency plans
3	**All PPE levels remain intact but there is a very high probability at least one item will be depleted within the coming weeks, as identified by the Procurement and Supply Staff.**	Implement contingency plans for implementation of alternative PPE. • Reallocate PPE to priority areas • Communicate with stakeholders • Consider accepting other standards (e.g. European), and sourcing from non-traditional suppliers • Extend use of PPE • Plan for disinfection of single use PPE using Health Canada approved standards • Review third party reprocessing responsibilities
4	**All PPE levels remain intact but at least one item will be depleted within a matter of days, as identified by the Procurement and Supply Staff.**	Implement all contingency plans and further reallocation of PPE to priority areas. • Issue decisions from the Health and Community Services EOC • Communicate with stakeholders • Extend use of PPE • Use N95 beyond manufacturer's stated expiry date • Extend use of N95 if used for Airborne Precautions (e.g. TB) as the situation dictates

Stage	Description of Supply	Guiding Principles
		• Extended use of N95 for AGMPs in COVID unit with multiple critically ill patients • Consider requesting of PPE from federal or other PT sources • **Diligent hand hygiene** is required before and after donning and doffing all PPE to reduce contamination • Cohort patients with confirmed COVID-19 (i.e. COVID unit) • Cohort staff: e.g. should not move between suspect or confirmed COVID-19 patients and non-COVID-19 patients • Use appropriate PPE for routine care of COVID-19 patients (Droplet-Contact Precautions)
5	**One PPE item has been depleted** **Depending upon the item**	• Issue decisions from the Health and Community Services EOC • Communicate with stakeholders • Implement "next level down" PPE item for use for medical masks, gowns or face shields. • Investigate use of PPE approved under standards from other countries when supply is critical if available • When new N95 respirators are depleted, use equivalent respirators; when these are depleted, use N95 respirators beyond manufacturer's stated expiry date; when these are depleted use reprocessed N95 masks • Extend use of reusable half face respirators for repeated close contact encounters with all suspected or confirmed COVID-19 patients, without removing the respirator • Consider requesting of PPE from federal or other PT sources • Disinfect single use PPE using Health Canada approved standards • RHAs may need to review their single use policies • Review third party reprocessing responsibilities
6	**Multiple PPE items have been depleted**	• Issue decisions from the Health and Community Services EOC • Communicate with stakeholders • Implement "next level down" PPE item for use • Implement "homemade" items (e.g. masks) • Use PPE not evaluated or approved

Revised Use of PPE May 15, 2020 Low Prevalence of COVID-19 cases

The level of risk and prevalence will be determined by the CMOH, RMOHs and HCS-EOC based on epidemiology and ongoing surveillance of COVID-19 within the regional and provincial context. The HCS-EOC will update the RHAs as the situation evolves**.**

Guidelines for Health Care Facilities

These recommendations are for PPE usage in a period of Low Prevalence of COVID-19 and include the following recommendations as determined by workplace risk and Point of Care Risk Assessment (PCRA).

Notes for all settings

- Medical mask or approved equivalent standard is to be worn at all times when working in a health care environment.
- If a patient is placed in isolation for a non-COVID-19 reason (e.g. *Clostridium difficille*) the RPAP recommendation for Additional Precautions (e.g. Contact Precautions) must be followed.
- For suspect or confirmed TB, the HCW is to use Airborne Precautions.

A. Staff in COVID-19 dedicated units, COVID-19 ICUs

Health care workers (HCWs) providing direct care will be required to follow Droplet-Contact Precautions:

- A Level II gown or approved equivalent standard
- Medical mask or approved equivalent standard (Appendix D)
- A face shield must be worn when providing patient care
- Nitrile gloves – 12 inch with extended cuffs
- N95 respirator or approved equivalent standard, with face shield, must be worn for AGMPs
- Neck protection for AGMP as determined by PCRA (See Appendices B & C)

B. Staff in COVID-19 Assessment Clinic

Health care workers (HCWs) providing direct care will be required to follow Droplet-Contact Precautions:

- A Level II gown or approved equivalent standard
- Medical mask or approved equivalent standard (Appendix D)
- A face shield must be worn when providing patient care.
- Nitrile gloves – 12 inch with extended cuffs

C. Staff in Paramedicine, Emergency Rooms, Operating Rooms, Non-COVID ICUs, and Case Rooms

A PCRA (See Appendices B & C) will determine if Additional Precautions are required**.**

i. If the screening of the patient reveals that the patient has influenza-like symptoms and/or suspect or confirmed COVID-19, the HCWs should follow Droplet-Contact Precautions**:**
    - A Level II gown or approved equivalent standard
    - Medical mask or approved equivalent standard (Appendix D)

- A face shield must be worn when providing patient care
- Nitrile gloves – 12 inch with extended cuffs
- N95 respirator or approved equivalent standard, with face shield, must be worn for AGMPs
- Neck protection for AGMP as determined by PCRA (See Appendices B & C)

ii. If the patient has a negative screening tool for symptoms of ILI and COVID-19, no exposure history, and a negative swab for COVID-19, then the HCWs performing direct patient care will perform a PCRA (See Appendices B & C) to determine the need for additional precautions.
- Medical mask or approved equivalent standard is to be worn at all times
- PCRA (See Appendices B & C) before all AGMPs[4]

iii. In Emergency Rooms all AGMPs will be performed with Airborne-Contact precautions (see Appendix B)

iv. In Paramedicine PPE should worn be in accordance with the use a risk assessment that was developed with IPAC and distributed by Provincial Medical Oversite (PMO) communications.
- Medical mask or approved equivalent standard to be worn at all times
- Routine practices are sufficient for AGMPs performed on patients with no signs or symptoms of suspected or confirmed COVID-19 during a local epidemiology of low prevalence.

D. Staff who work in an acute care settings with patients who do not have symptoms of influenza-like-illness or signs and symptoms of COVID-19:
- Medical mask or approved equivalent standard is to be worn for direct patient care
- A mask is to be worn at all times when working
  - The mask is to be worn for repeated interactions with multiple patients
  - It must be changed if it becomes wet, damaged or soiled
  - It is to be worn for one shift, maximum of 12 hours
- PCRA (See Appendices B & C) before all AGMPs[5]

E. Long Term Care and Personal Care Homes
- Medical mask or approved equivalent standard is to be worn while working
- A mask is to be worn for repeated interactions with multiple patients
  - It must be changed if it becomes wet, damaged or soiled
  - It is to be worn for one shift, maximum of 12 hours
- If a resident becomes ill with influenza-like symptoms, or is suspected or confirmed to have COVID-19, Droplet-Contact Precautions must be initiated immediately and the resident should be placed in a private room

[4] Routine practices are sufficient for AGMPs performed on patients with no signs or symptoms of suspected or confirmed COVID-19 during a local epidemiology of low prevalence.
[5] Ibid.

- IPAC or Communicable Disease Community Nurse (CDCN) must be immediately contacted to reevaluate the facility risk for COVID-19
- PCRA (See Appendices B & C) before all AGMPs[6]

F. Community and Home Care

- Medical mask or approved equivalent standard is to be worn while performing direct client care
- A mask is to be worn for repeated interactions with multiple patients
  - It must be changed if it becomes wet, damaged or soiled
  - It is to be worn for one shift, maximum of 12 hours
- If a client becomes ill with influenza-like symptoms, or is suspected or confirmed to have COVID-19, Droplet-Contact Precautions must be initiated immediately.
  - Follow recommendations found at https://www.gov.nl.ca/covid-19/long-term-care-and-community-support-services/

G. HCWs not providing direct client care while in the health care setting

- Medical mask or approved equivalent standard is to be worn while working
  - A mask is to be worn for repeated interactions with multiple patients
  - It must be changed if it becomes wet, damaged or soiled

H. Staff working without any contact with patients or patient care areas

- A procedural mask or approved equivalent standard must be worn when in common areas, and/or when the two meter distancing is not feasible
- A procedural mask will be provided per shift, must be changed if becomes wet, damaged or soiled

I. Patients/Clients

Ambulatory care patient or clients will be given a procedural mask and screened for symptoms of COVID-19 upon entering the health care facility before proceeding to treatment or assessment areas.

- Hand hygiene must be performed prior to donning the procedural mask and the patient instructed that it must remain fully in place for the duration of the visit
- The mask must be worn for all encounters and should be changed if it becomes wet, damaged or soiled
- If the patient cannot tolerate wearing a mask this must be addressed on a case by case basis

J. Visitor restriction must be strongly enforced in all healthcare facilities

See link: https://www.gov.nl.ca/search/?q=visitors+to+hospitals

Visitors that are permitted to enter will be given a procedural mask and screened for symptoms of COVID-19.

[6] Routine practices are sufficient for AGMPs performed on patients with no signs or symptoms of suspected or confirmed COVID-19 during a local epidemiology of low prevalence.

- Hand hygiene must be performed prior to donning the procedure mask and the visitor instructed that it must remain fully in place for the duration of the visit
- The mask must be worn for all encounters and should be changed if it becomes wet, damaged or soiled

For more details, visit https://www.gov.nl.ca/covid-19/ and
PHAC: https://www.canada.ca/en/public-health.html

Definitions

Healthcare Worker: Individuals who provide health care or support services. For this purpose, includes HCWs working in the intensive care unit, emergency room, environmental services (selected employees), laboratory services (selected employees), paramedicine/emergency medical service (public and private), community health nurses and home care workers who visit homes.

Direct patient care: Any aspect of the health care of a patient, including treatments, counselling, self-care, patient education and administration of medication. For this purpose, it will be defined as direct care within 6 feet of the patient.

COVID-19 Unit: A unit designated by the facility as special care for COVID-19 patients.

APPENDIX A: Staff Safety

Staff Safety

Suggestions to help minimize risk to you and your loved ones

Before Work

Leave watches and jewelry at home

Wear clean street clothes into work

Change into uniform/work clothes and footwear at work

Bring lunch in a disposable bag

Maintain a clean shaven face for those who require fit testing and who may need to wear a respirator during their shift

No nail polish, artificial nails, or nail enhancements. Keep nails trimmed

During Work

Sanitize phone, ID badge, and glasses with alcohol swab

Sanitize work station and equipment with accel wipes or alcohol swabs

Practice hand hygiene before and after each patient and when touching new surfaces

Sanitize eating surface with accel wipes before eating

No handshaking or fist bumps

Wear appropriate PPE as directed

After Work

Change into street clothes. Take soiled work clothes or uniform home and wash in washer

Sanitize phone, ID badge, glasses, or other equipment

Wipe down work shoes and leave at work

Shower immediately at home

Leave outside shoes in garage or outside front door

Clean water bottles and containers in the dishwasher

Focus on wellness activities at least one hour per day.

EAP support is available at each Regional Health Authority

APPENDIX B: List and Rationale for use N95s for AGMPs

The Provincial Personal Protective Equipment (PPE) Task Force as being aerosol-generating medical procedures (AGMPs) has approved the following procedures.

List of AGMPs
Autopsy involving respiratory tissue AND/OR the use of high-speed oscillatory tools
Bronchoscopy
Chest compressions
Bag-valve mask ventilation
Intubation
Extubation
High flow oxygen/oxygen via nasal prongs > 5L/min**
High frequency oscillatory ventilation
Non-invasive positive pressure ventilation (CPAP, Bi-PAP)
Open airway suctioning (e.g. deep insertion for nasopharyngeal or tracheal suctioning, NOT inclusive of anterior oral suctioning)
Administration of nebulized medications (Note: Avoid if possible; use of alternatives such as meter-dose inhaler with spacer are preferred)
Sputum induction (i.e. inhalation of nebulized hypertonic saline solution to liquefy and produce secretions, NOT natural coughing to bring up sputum) includes cough assist devices
Tracheostomy insertion/care/tube change/decannulation. Note: Tracheostomy care does not include dressing changes or tie changes
Surgery involving general anesthesia, electrocautery or significant risk of spray of bodily fluids/tissues
Upper endoscopy
Chest tube insertion under positive pressure ventilation

** Oxygen delivery methods that are not considered AGMP are:

1. Nasal prongs up to 5 Lpm
2. Non-rebreather/HiOX/FLO2 up to 15 Lpm
3. Simple face mask up to 10 Lpm

	Low Prevalence	Intermediate/High Prevalence
Planned AGMP **Examples include:** - **chronic CPAP or BiPAP** - **elective surgical procedures**	All planned AGMPs will be treated as "regular" procedures provided that the patient is **asymptomatic**, has a **negative COVID screening tool** and a **single negative COVID swab**. If the patient is symptomatic, the screening tool is positive or the COVID swab is positive, the procedure will be rescheduled if possible. If rescheduling is not possible, the AGMP will be treated as needing airborne/contact precautions.	All planned AGMPs will be treated as "regular" procedures provided that the patient is **asymptomatic**, has a **negative COVID screening tool** and **two negative COVID swabs done 24 hours apart**. If the patient is symptomatic, the screening tool is positive or a COVID swab is positive, the procedure will be rescheduled if possible. If rescheduling is not possible, the AGMP will be treated as needing airborne/contact precautions.
ER Patients (all AGMPs)	All AGMPs will be performed with airborne/contact precautions in a private room +/- AIIR.	
Unplanned AGMP Hospitalized Patients[1] **Examples include:** - **chest compressions** - **intubation** - **non-invasive ventilation (CPAP, BiPAP) for acute indications (such as CHF and hypercarbic respiratory failure)**	Unplanned AGMPs in hospitalized patients outside the ER will be treated as "regular" procedures if the patient has a negative COVID screening tool and a negative COVID swab. If either the COVID screen is unknown or positive, OR a COVID swab status is unknown or positive, the AGMP will be performed with airborne/contact precautions in a private room +/- AIIR.	Unplanned AGMPs in hospitalized patients outside the ER will be treated as needing airborne/contact precautions in a private room +/- AIIR **unless** the patient has all three of the following: no COVID symptoms, a negative COVID screening tool and two negative COVID swabs within 24 hours of each other upon admission. If all 3 criteria are met (the patient has no COVID symptoms, a negative COVID screening tool and two negative COVID swabs within 24 hours of each other upon admission[2]), the AGMP may proceed with usual pre-pandemic precautions.

1: Consider implementing universal swabbing of patients in the ER and hospitalized patients. This should extend to long-term care facilities and personal care homes.

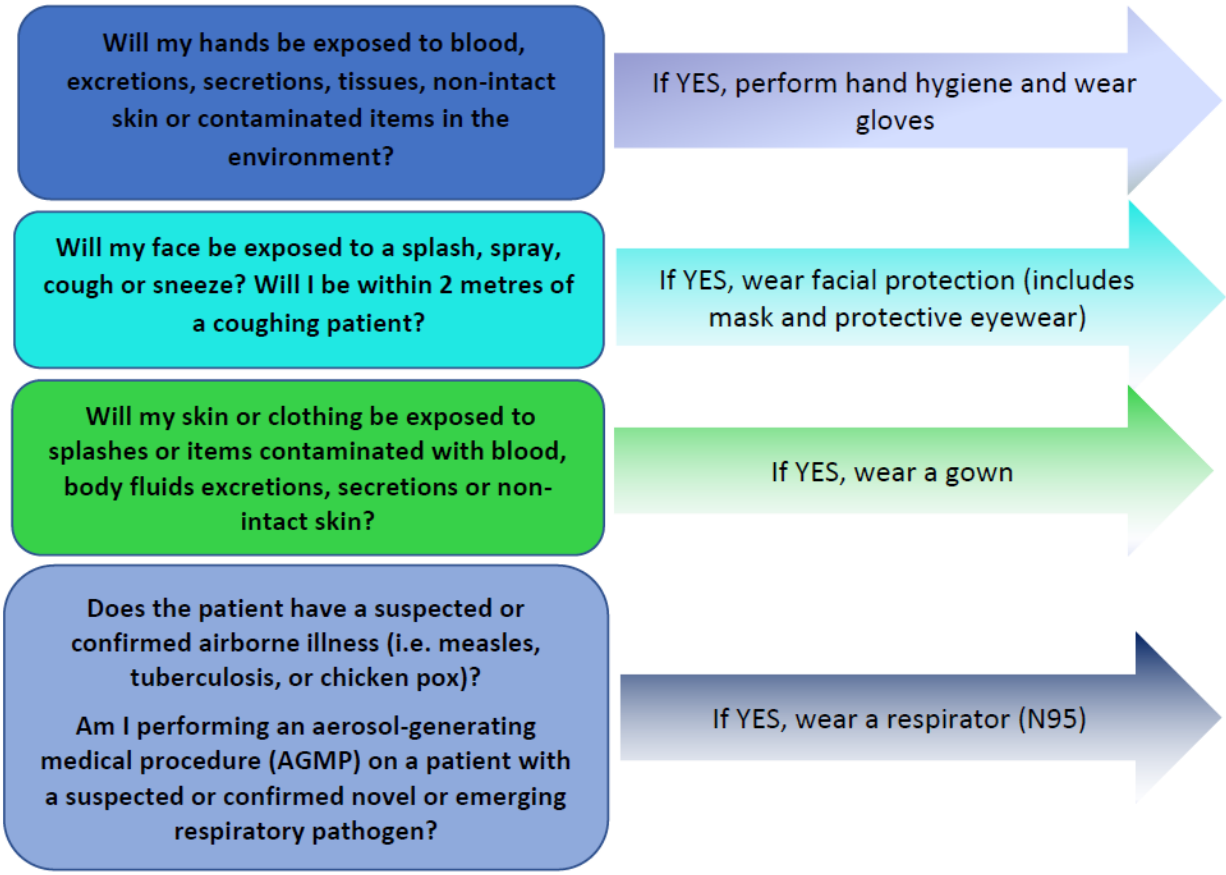
ER: Emergency Room; AIIR: Airborne Infection Isolation Room (AKA Negative Pressure Room); AGMP: Aerosol Generating Medical Procedure

APPENDIX C: Point-of-Care Risk Assessment for COVID-19

BEFORE each patient/resident/client interaction, the health care worker (HCW) completes a 'Point of Care Risk Assessment' (PCRA) to determine the risk of exposure and appropriate Routine Practices and Additional Precautions required for safe care by asking the following questions:

- **What is the prevalence of COVID-19 in the RHA?**
- **What are the patient's symptoms?**
- **What is the degree of contact?**
- **What is the degree of contamination?**
- **What is the patient's level of understanding and cooperation?**
- **What is the degree of difficulty of the procedure being performed and the experience level of the care provider?**
- **What is my risk of exposure to blood, body fluids, excretions, secretions, non-intact skin and mucous membranes?**

The PCRA allows the HCW to determine what personal protective equipment (PPE) to select and wear for that interaction.



APPENDIX D: Mask Descriptions

There are several types of masks available for use in the health care system. A point-of-care risk assessment should be performed to determine which offers appropriate protection.

Each country has their own certification standard for each mask type. For example, US/Canada use the American Society for Testing and Materials (ASTM) standard, Europe uses the EN 14683 standard for medical masks, and China uses the YY 0469 standard. Each standard varies by country, however they are broadly similar.

An ASTM rating is used to determine if the mask design, fit and filtration matches the protection needed. ASTM ratings range from levels 1, 2 & 3.

The ASTM standard ASTM F2100-11 (2011) and the European standard EN 14683 are both intended to help facilitate the choice of medical face masks in the US/Canada & European markets by standardizing the information and performance data required for the masks.

ASTM level 1 and 2 masks are suitable for routine care of patients with COVID-19

- All masks without ASTM rating of Level 1 or 2 must be reviewed to determine if the mask design, fit and filtration matches the intended use.

There are two types 1) medical 2) procedural

- A medical mask is used inside the operating room or within other sterile procedure areas to protect the patient environment from contamination. It also protects the clinician from contaminated fluid or debris generated during the procedure. Medical masks have ties so that they can be adjusted for fit, and are tied over the top of a surgical hat or bouffant cap.

- A procedural mask is used for performing patient procedures, or when patients are in isolation to protect them from potential contaminants. Procedural masks are used to protect both patients and staff from the transfer of respiratory secretions, fluids or other debris. Procedural masks are generally used for “respiratory etiquette” to prevent clinicians, patients and visitors from spreading germs when talking, coughing or sneezing. Procedural masks have ear loops for quick donning and doffing, they do not slide on hair, they can be worn without a surgical cap.