

NB Guide to Managing Personal Protective Equipment in a Shortage: COVID-19

Version 2.0

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1.0 Introduction

Purpose

New Brunswick, like all jurisdictions, is taking all steps necessary to ensure that the province and its residents are prepared to respond to COVID-19, an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), and future pandemics.

The *NB Guide to Managing Personal Protective Equipment in a Shortage: COVID-19*, is designed to help determine what type of personal protective equipment (PPE) could be provided during the COVID-19 pandemic if demand for PPE overwhelms supply. This guide applies to people working in or visiting health-care settings or working with vulnerable persons. In this document, PPE also means cleaning materials such as alcohol-based hand rinse (sanitizers), soap and cleaners/disinfectant as a properly cleaned and disinfected environment is essential to infection prevention and control.

This guidance document was developed through a collaborative effort involving ethicists, administrators, clinical health care providers, procurement experts and regulators from the following organizations:

- Department of Health,
- Vitalité Health Network,
- Horizon Health Network,
- EM/ANB Inc.,
- Department of Social Development,
- WorkSafeNB, and
- Service New Brunswick.

The document was reviewed and approved by the Pandemic Task Force on July 7, 2020. The Pandemic Task Force will be regularly briefed about the status of New Brunswick's PPE, recommendations of recognized national and international authorities, and any significant events that may occur during the pandemic with respect to PPE. Subsequent revisions of this document may be required as the scientific and medical community's understanding of COVID-19 evolves.

Background

Emerging and re-emerging infectious diseases such as SARS, H5N1 (Avian Influenza) and H1N1 (“Swine flu”) have attracted significant attention. The impact on the health system from the additional clinical and operational demands to prevent, protect and treat these diseases is substantial. Although the specific impact to the health-care system associated with an infectious disease outbreak cannot be reliably predicted, an increase in the demand for health-care resources can be anticipated. Establishing an appropriate supply and demand management policy of PPE before a shortage occurs is required to ensure that difficult decisions are made in a safe, ethically just and clinically appropriate manner.

The virulence of COVID-19 worldwide and the subsequent interruptions to the global supply chain have resulted in unprecedented demand for PPE. New Brunswick’s health-system partners have multiple sources of inventory and a strong supply chain process supported by agile teams. However, in the face of this global challenge and the demand for PPE, accurate forecasting of PPE needs is necessary and timely decision-making is critical.

Scope

This guide is specific to PPE in the context of the COVID-19 pandemic and health-care workers, patients, residents and visitors to hospitals, nursing homes and other residential facilities under the jurisdiction of the Department of Social Development and provincial correctional facilities. Ensuring that good infection control practices are in place, diligent hand hygiene, physical distancing where possible and not touching your face are integral to preventing the spread of COVID-19.

Key Ethical Principles

This document aligns with the COVID-19 Ethics Framework developed by New Brunswick’s Provincial COVID-19 Ethics Committee, which is founded on two fundamental principles: utility and equity.

The principle of utility emphasizes the concept of instrumental value. In other words, decisions must attempt to create the most productive outcomes possible. In some circumstances this might include prioritizing certain groups that have higher instrumental value. For example, in a shortage of PPE, some elective services could be reduced and preferential access to certain pieces of PPE given to health-care workers caring for COVID-19 patients.

Utility is not a rule to be followed but is a fundamental ethical principle that must be interpreted given the circumstances of the situation. For example, in any given situation, the moral agent will have to deliberate as to what constitutes good outcomes in this situation, and then endeavor to maximize those good outcomes. Likewise, the agent would have to identify negative outcomes and act in a way as to minimize or avoid them.

Deliberating about what will produce the best outcomes or avoid the most harm, in a given situation, is an explicit ethical thought process. This thought process is fundamentally different than a rule-based process, where a list of rules is provided and then the moral agent attempts to follow them.

Contrast, for example, a rule-based process and an ethical reflection process regarding allocating PPE in a shortage. In a rule-based ethic, the rule might state “reciprocity for health care professionals.” In other words, the rule says that health care professionals are to be provided with PPE in times of shortage. The rationale might be that they are owed a promise of reciprocity because of their contribution to health care.

An interpretation of the principle of utility might reach the same conclusion; however, the decision will not be the result of following a rule, rather it would be the result of a deliberate calculation intended to produce the best outcomes in a situation. Depending on the facts, there might be situations where it will produce the most good to provide PPE to health-care professionals in a shortage; however, if the facts change so may the action that will produce the most amount of good. Therefore, the principle of utility is fundamental and often subsumes many of the rules that are intuitively appealing, such as reciprocity, accountability, fair process, etc.

When there is a risk of a PPE shortage, the utility principle could be interpreted as follows:

- Use best available data/evidence to inform PPE decision-making.
- Ensure the standard of care is met and best practices are utilized whenever possible.
- Ensure PPE utilization is consistent with best practice.
- Prioritize the distribution of PPE in short supply to health-care workers in patient care environments.
- Minimize the need for PPE by using alternatives to face-to-face care where feasible: telemedicine, phone calls, working from home, etc.).
- Prioritize access to scarce PPE based on risk exposure and pathogen transmission dynamics.
- Reduce waste of PPE.

- Use alternative PPE where evidence suggests similar or adequate efficacy.
- When needed, postpone elective procedures/treatments that require the use of PPE that are in limited supply.
- Monitor PPE utilization and distribution to provide for informed decision-making and course correction as required.

The principle of equity refers to the fair distribution of benefits and burdens. Put another way, no person or group should be discriminated against simply to facilitate the objective of achieving the greatest utility. Section 15 of the Canadian Charter of Rights and Freedoms states:

15. (1) Every individual is equal before and under the law and has the right to the equal protection and equal benefit of the law without discrimination based on race, national or ethnic origin, colour, religion, sex, age or mental or physical disability.

The principle of equity could be interpreted as follows:

- Do not discriminate between health-care providers based on factors not relevant to the provision of health-care.
- PPE will be distributed without arbitrarily disadvantaging any health-care worker.
- Similar cases will be treated the same and dissimilar cases will be treated in a manner that reflects the differences.
- PPE will be shared and distributed to where it is most needed throughout facilities and health-care partners in the province.

Occupational Health and Safety Requirements

New Brunswick health-care workplaces must adhere to the requirements under the *Occupational Health and Safety Act* (OHSA) and its Regulations, and this applies to measures needed to protect workers from the risk of COVID-19. New Brunswick employers, supervisors and employees have rights, duties and obligations under the OHSA.

2.0 Recommendations

The working group that prepared this document makes the following recommendations:

- That New Brunswick advocate that national guidance be developed on the use of PPE during the pandemic, including universal masking policies, that factors in the epidemiology of the outbreak in a particular jurisdiction. This would allow provinces to more appropriately utilize their PPE and conserve stores of PPE to prevent shortages.
- That the regional health authorities (RHAs) have *at least a 30-day sustained supply* of PPE and other materials in their stores to conduct elective services.
- Any closure of services should be evaluated on a case-by-case basis, depending on the PPE/materials that are in low supply as it relates to the specific case.
- If a facility operating in a Red Phase due to an active COVID-19 outbreak is short of the necessary PPE to protect its patients/residents and health-care workers, other parts of the health-care system that can respond should adjust their activities as necessary to transfer the needed supplies.
- That the Pandemic Task Force create a Provincial PPE Shortage Response Committee that would recommend actions to the task force in the event of a PPE shortage. The recommendations would be made in accordance with the established principles of utility and equity. These actions could include reducing services, substitutions, reusable PPE, extended use, repurposing of supplies, and the transfer of supplies among partners.
- Regardless of the setting, managers of individuals working in health-care settings or providing care to vulnerable persons must oversee the use of scarce supplies to make sure they are used judiciously. They are also responsible for ensuring that their staff has received appropriate training on the donning and doffing of PPE. The manager must check practices regularly to ensure compliance with infection prevention and control (IPC) guidelines and address problems with the IPC service as needed.

3.0 Assumptions

The guidance in this document is based on the assumptions set out below.

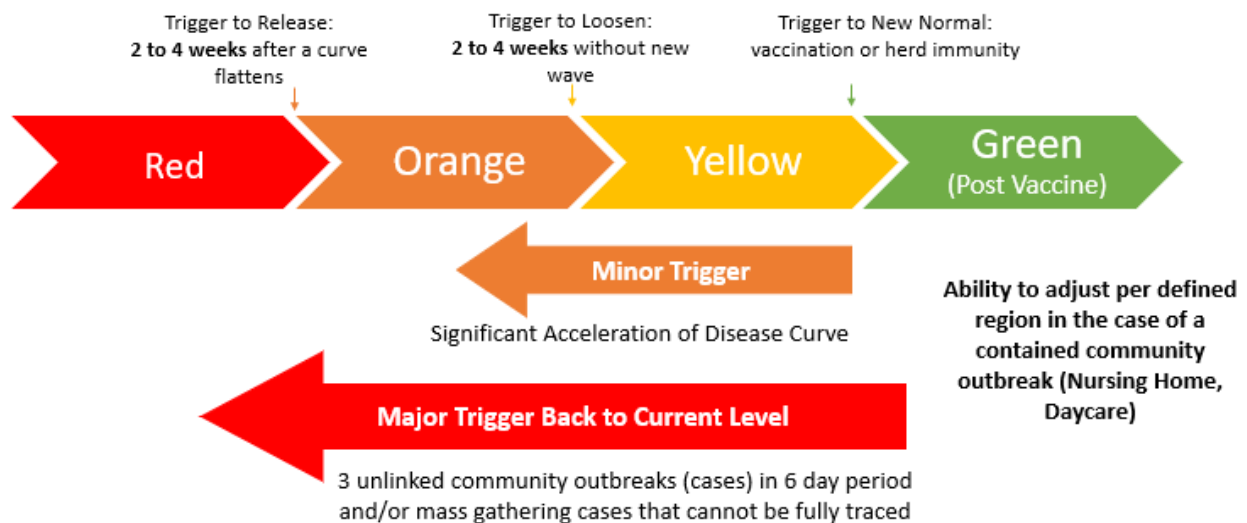
1. It will take at least 12-18 months to develop a vaccine for COVID-19.

Laboratories around the world are working on a vaccine for COVID-19. However, estimations are it will be a minimum of a year before it is ready for the population and new vaccines may be required over time to maintain immunity as the virus mutates. Currently there is not a specific treatment for COVID-19 and patients are treated symptomatically.

Some experts are predicting a second wave of COVID-19 infection in the fall, coinciding with the influenza season. This may increase the burden influenza and other respiratory viruses place on the province's primary, acute and long-term care services as well as provincial correctional facilities. As pandemics tend to occur in two or more waves there will be a need to ensure the long-term availability of medical supplies and services. New Brunswick's Department of Health maintains a stockpile that can sustain New Brunswick hospitals and EM/ANB for several weeks. However, PPE is in short supply worldwide. Family physicians, pharmacists and others who provide care to vulnerable persons are also seeking access to this supply and it must be judiciously managed.

2. New Brunswick's recovery from COVID-19 will occur in phases.

New Brunswick's COVID-19 Provincial Recovery Strategy establishes four phases of recovery (red, orange, yellow and green). It is expected that the province and the health-care system will move up and down through these phases depending on the prevalence of COVID-19 in our communities.



During the Red Phase, all elective services inside New Brunswick's hospitals are cancelled. In the Orange Phase, a gradual escalation of services will occur inside the RHAs to ensure that all units are able to maintain physical distancing restrictions. Escalation will also consider the impact of increasing patient volumes on diagnostic and therapeutic services. Elective services will further increase in the Yellow Phase.

The very strict measures required in the initial Red Phase might be required again during the pandemic period. These measures could be applied at the local, regional or provincial level. The Office of the Chief Medical Officer of Health has developed criteria, that could trigger a scale back of services. Sufficient PPE for all health-care workers even if cases double, is among the triggers.

EM/ANB Inc. has adjusted its operations in response to the increased risk presented by COVID-19. Bypass protocols are in place to take suspect or confirmed COVID-19 patients to the nearest hospital equipped to treat them. Low acuity calls are transferred to Telecare 811 for response. The Extra-Mural Program is also positioned to enact or increase the frequency of virtual patient visits.

In the Red Phase, New Brunswick's nursing homes, special care homes and adult residential facilities rapidly closed their doors to all visitors to prevent COVID-19 from entering their facilities. Homeless shelters that could not meet social distancing requirements were relocated to other locations. Given residents' vulnerability to COVID-19, a rapid response plan was developed to quickly test all residents in a facility with a confirmed case of the virus. During the Orange Phase, visitor restrictions have been lifted slightly so that two designated family members can provide comfort to their loved ones at end of life in nursing homes. It is likely that visitor restrictions will be further reduced in the Yellow Phase.

Community organizations that support vulnerable populations such as food banks, emergency shelters and transition homes will continue to need PPE as New Brunswick moves into the next phases of pandemic recovery. Essential workers providing services in homes such as child protection, home care, addiction and mental health services, and provincial corrections will also continue to need PPE.

The level of PPE and other required materials such as disinfectant also plays a role in the phase of recovery.

The RHAs must have *at least a 30-day sustained supply* of PPE and other materials in their stores to conduct elective services as is the case in the Orange Phase. The province must also have the ability and resources to test between 500 and 750 people each day, with surge capacity of up to 1,000 people per day. This includes an adequate

supply of testing swabs and reagent to perform the tests.

3. PPE requirements for treating confirmed or suspect cases of COVID-19 will be prioritized.

The use of PPE as per infection prevention and control guidelines will continue and the availability of PPE for health-care workers providing care to these patients will be a continuing priority. A shortage of PPE would impact elective surgery or clinical appointments to ensure PPE is available to provide care to critical and acute COVID-19 patients and suspect cases.

Each health-care partner is tasked with conserving their PPE through careful management and maintenance of their supplies without affecting safety. If a facility operating in a Red Phase due to an active COVID-19 outbreak is short of the necessary PPE to protect its patients/residents and health-care workers, other parts of the health-care system who can respond should adjust their activities as necessary to transfer the needed supplies. It is recognized that each partners' store of supplies may vary to meet their particular needs.

A decision to transfer PPE between partners or facilities will be only made in an actual shortage of supplies. This decision will be made by the Provincial PPE Shortage Response Committee, which is described in Section 4.

4. The conservation of PPE supplies should always be prioritized in co-ordination with outbreak management.

It is recognized that the COVID-19 pandemic may occur in waves across the globe. The principles and approach recommended in this document presume that conservation and monitoring of supply should always occur. However, PPE requirements will be heightened during times of increased community prevalence of the virus, resulting in increased ambulance transports, home visits, isolation requirements in long-term care facilities and admissions to hospital.

5. Service New Brunswick will continue to expand the sourcing and procurement of recommended PPE.

New Brunswick's health-system partners have multiple sources of inventory and a strong supply chain process supported by agile teams. Service New Brunswick is simultaneously seeking new sources for the supply of PPE through its own channels and working with the Government of Canada as part of a national process to secure

PPE. It is also working to secure potential New Brunswick suppliers of PPE. However, in the face of a global pandemic, GNB procurement experts are facing ever-increasing prices, a lack of raw materials, long or unpredictable lead times and increasing freight costs. This will require New Brunswick's health system partners to be able to forecast their needs, make quick decisions and align their requirements.

6. Education and instruction will be important to appropriately maintain and manage the ongoing appropriate use of PPE.

RHA managers must ensure that health-care workers have received appropriate training on the donning and doffing of PPE. The manager must check practices regularly to ensure compliance with IPC guidelines and address problems with the IPC service as needed.

EM/ANB Inc. employees have received and continue to receive education regarding the use of various PPE. This is accomplished through an e-learning platform by means of memos, videos and posters showing the appropriate donning and doffing of their specific PPE.

The Department of Social Development worked with the associations that represent nursing homes and adult residential facilities to provide education to front line workers regarding the use of various PPE and infection, prevention and control. Guidelines were also provided to front-line health-care workers performing home visits, family visits for children in care, services agencies and community partners providing crucial services to clients of the department such as emergency shelters, group homes, etc.

7. Co-ordination of pandemic supplies is required.

The Province is maintaining two stockpiles of PPE to protect workers, patients, residents and vulnerable persons from the risks associated with COVID-19.

The Department of Health stockpile serves:

- RHAs,
- EM/ANB – have their own stockpile but draw the balance from DH,
- Nursing Homes – have their own stockpile but draw the balance from DH,
- Adult Residential Care Facilities – Draws from SD stockpile first, then if unavailable, draws from DH stockpile, then if unavailable, draws from NB EMO stocks.
- Physicians,
- First Nations health clinics and home support workers, and
- Hospice (2 sites: Fredericton and Saint John) – via EM/ANB Inc.

The NB Emergency Measures Organization (EMO) stockpile serves:

- Adult Residential Facilities,
- Home support services,
- Shelters,
- Emergency Food Services,
- Provincial correctional facilities
- Allied health professionals (e.g. respiratory therapists, physiotherapists, dentists, pharmacists, etc.),
- GNB Part I,
- Infusion Clinics,
- Funeral professionals, and
- Other community business partners.

The supply and demand volumes of New Brunswick's PPE and other materials are being monitored daily by the Department of Health and EMO in coordination with health system partners and Service New Brunswick. Each health system partner and department is responsible for managing and monitoring its own supplies once they are received. This includes the Department of Social Development and its partner agencies.

Given global demands for PPE supplies and other materials, the situation is constantly evolving. All partners are collaborating to ensure the essential items needed to help health-care workers protect themselves and patients are provided. The inventory data required to support decisions is being converted into days of supply, based on the average use of each item since the beginning of the pandemic, as well as the anticipated highest use during the pandemic.

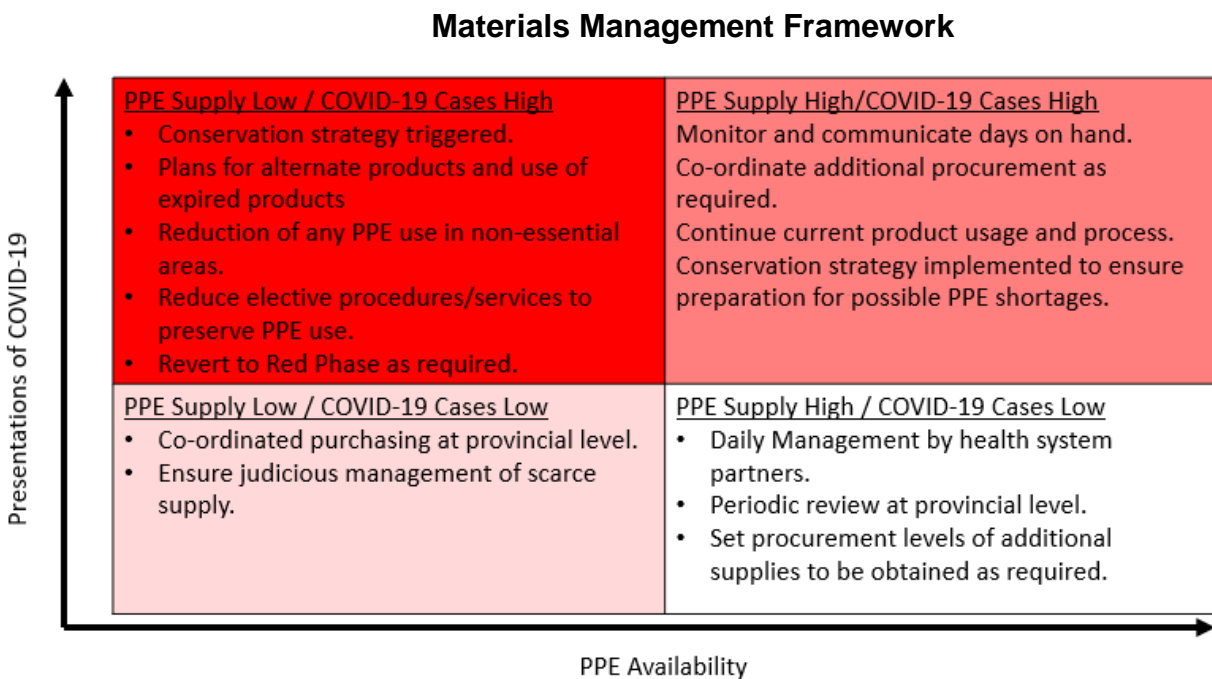
In the long-term, coordination with the pandemic warehouse will be required to ensure that the appropriate turnover of PPE occurs, to minimize expired products. This will allow the appropriate procurement of PPE through a provincially organized approach, and the circulation of PPE for use by health system partners to ensure usage prior to expiration dates.

4.0 Framework for Long-Term Management of Materials

Due to global demands for PPE supplies and other materials, it is recommended that PPE supply be carefully managed by all health system partners and closely monitored by the Pandemic Task Force.

A Provincial PPE Shortage Response Committee should be created by the Task Force to recommend actions in a shortage of PPE or cleaning supplies/disinfectant in accordance with the established principles of utility and equity. These actions could include reducing services, substitutions, extended use, repurposing of supplies, and the transfer of supplies among partners. The committee should be composed of individuals who have expertise in microbiology, infectious diseases, infection prevention and control, public health, occupational hygiene, ethics and supply chain.

The following framework has been developed to guide the management of PPE and other materials based upon supply.



In the event of an anticipated shortage of PPE (less than 60 days' supply provincewide), the following operational activities are recommended:

- Communication by the Pandemic Task Force to all stakeholders receiving supplies from both the Health stockpile and the EMO stockpile of the anticipated shortage and the need for heightened vigilance in the use of PPE.

- Regular reporting of PPE availability broadly with the health-care system.
- Activation of the Provincial PPE Shortage Response Committee

It is also noted that the level of PPE currently being recommended by the Public Health Agency of Canada factors in a high-level of community transmission. It is recommended that New Brunswick advocate for the development of national guidance on the use of PPE during the pandemic that considers the epidemiology of the outbreak in a particular province/territory. This would allow provinces to more appropriately utilize their PPE and conserve stores of PPE to prevent shortages.

5.0 Inventory Control

Supply

Health system partners must have inventory controls in place to manage materials based upon past use, planned allocation or directives issued by management.

Use at point of service

Managers must oversee the use PPE and ensure essential supplies are available at the appropriate locations. Staff must be reminded of the importance of judicious use of PPE, which must be checked daily, addressing gaps in usage volumes.

Inside facilities, the Environmental Services manager or delegate must supervise materials used for cleaning the equipment and the environment to ensure proper use. They must also check the inventory regularly, monitor shelf-life and address discrepancies in use as needed.

Any non-compliance must be addressed through appropriate administrative channels within the organization.

Additional measures

Additional control measures may be implemented as needed, such as asking health-care workers, patients, and visitors to open their bags, suitcases, etc., when leaving the facility.

The addition of staff to manage the allocation of PPE at the service point, at the laundry, in procurement/supply chain management, at Environment Services, etc. may be considered if specific problems exist at a service point.

Safeguard materials and supplies for which inventory control is critical during the COVID-19 pandemic.

6.0 Conservation of Materials

During a pandemic, exceptional measures may be considered to protect inventories of PPE. Such strategies must not be used outside the pandemic situation or when the availability of PPE has returned to normal.

These strategies may be applied during an anticipated or actual shortage or even before they occur to conserve materials. It should be noted that procedures during actual shortages are in addition to those for an anticipated shortage. They can be implemented in all care environments. However, the choice of strategies will need to be adapted in terms of the availability of equipment overall.

Decisions such as these should be made by Provincial PPE Shortage Response Committee, in keeping with the principles of utility and equity as outlined in Section 1 of these documents.

Following are potential conservation strategies that the Provincial PPE Shortage Response Committee could consider for PPE most at risk in a shortage, inspired by documents produced by the Centers for Disease Control and Prevention (CDC) and the Institut national de Santé publique du Québec (INSPQ).

Some strategies proposed in this section are not based on best practices for infection prevention and control or scientific evidence. They are based on current knowledge of COVID-19 and expert opinions and updated in terms of documents and recommendations of recognized national and international authorities.

Personal Protective Equipment -

General Advice

- Use physical barriers such as glass or plastic windows at the reception area and between patients, etc.
- Consider reusable products where possible.
- Ask the community for supplies – veterinary clinics, armed forces, construction companies, and dental clinics may be able to make donations.
- Introduce control of PPE in care units or services.
- Do not leave PPE in public spaces (e.g. masks in entryways).

- Match the level of protection of PPE to potential exposure.
- Stop elective surgeries.
- Reduce the number of patients by postponing non-urgent appointments.
- Cluster care to limit the number of times the room is entered with additional precautions.
- Prevent all staff, volunteers, and all learners who are not directly involved in the patient's care from entering the room of a suspect or confirmed COVID-19 patient case.
- Limit the number of health-care workers in the patient's room – use a resource person if needed.
- Implement COVID-19 cohorts/units.
- Use telemedicine where possible.
- Limit visitor access to the hospital, especially to isolated patients.

Sterile Gowns - Operating Room

- Avoid using sterile gowns as positioning supports; adjust patient's position before the operation and use reusable positioning supports such as cushions.
- Open gowns only as needed, not in advance.
- Move minor cases to ambulatory areas where sterile gowns are not necessary.
- Avoid using extra towels or surgical drapes to reinforce the table cover.
- Do not use a sterile surgical gown as a warm-up scrub jacket.
- Use an L size gown in the personalized kit rather than opening an XL gown, if possible.
- If a gown included in a custom pack is not used, put it aside immediately before the environment is contaminated. This gown could be used on certain designated units as protective equipment.

Isolation gowns

In hospital:

- Where feasible, use reusable isolation gowns for isolation cases EXCEPT in cases of COVID-19 and for aerosol-generating medical procedures (AGMP).
- Use the gown doffing technique so as not to become contaminated.

- As a last resort, wear disposable or reusable gowns for an extended period (without removing it) when caring for several patients on additional precautions for the same infection (e.g. COVID-19 cohort or room with 2 or 4 patients): If visibly soiled or damaged: discard (if disposable) or place in soiled laundry basket (if reusable).
- Consider using Tyvek coveralls for health-care workers when cleaning/disinfecting rooms of suspect or confirmed COVID-19 patients or when cleaning screening centres. Make sure workers have received training on the removal of this type of equipment because there is a greater risk of contamination when removing this equipment.
- Do not use an isolation gown as a warm-up scrub jacket.
- Do not use a sterile surgical gown as an isolation gown.

Gloves

- Gloves do not replace hand hygiene and must not be used as protection outside of additional precautions or care techniques.
- No reuse of gloves is recommended.
- No reprocessing of gloves is recommended.

Surgical or procedure masks

In all settings:

- Prioritize the wearing of masks to patient care areas when a physical distance of 2 metres cannot be maintained.
- Combine the mask with wearing a face shield or goggles that cover the sides of eyes.
- Discard if visibly soiled, damaged, or hard to breathe through.
- Wear mask for an extended period (without removing it).
- Do not touch mask while wearing it. If a healthcare worker touches mask by mistake, perform hand hygiene (or if wearing gloves change gloves and perform hand hygiene).
- Always keep mask on face (Do not wear around neck).
- Maximum suggested wear-time is 4 hours unless wet.
- Use expired masks, checking to ensure their integrity (e.g. elastics).
- Consider non-medical grade masks or face-coverings for employees working in non-clinical settings where social distancing cannot be maintained.

In hospital:

- Limit use of medical masks by patients. Non-medical masks or cloth facial-coverings should be worn by asymptomatic patients who present at Emergency or Ambulatory Care without a face covering of their own.
- The use of face coverings could be considered under the IPC directives for health-care workers in contact with patients with MRSA.

Extra-Mural

- Surgical/procedural masks can be worn in multiple homes.
- Remove the mask per guidance for continuous use when driving between clients.

Current Continuous Masking Directive:

To use masks wisely, it is recommended that:

- Surgical/procedure masks be worn by all health-care workers providing patient care who cannot maintain physical distancing of two metres.
- Non-medical face mask be worn by employees in areas that do not provide care and cannot maintain physical distancing of two metres.
- Non-medical masks or cloth facial-coverings be worn by all patients in ambulatory health-care and emergency services who present with symptoms consistent with identified COVID-19 risk factors.

Masks versus Face Coverings

The Public Health Agency of Canada (PHAC) recommended the wearing of face coverings in public on April 3, 2020. It reiterates that approved medical masks, including surgical and APR masks (such as N95 masks) are reserved for essential health-care workers and other individuals providing direct care to patients with COVID-19. The Agency stipulates that there is no proof that wearing a non-medical mask (e.g. a community cloth mask) in the community protects the wearer.

a non-medical mask is an additional measure to protect other people to reduce transmission of the virus.

Knowledge of the epidemiology of COVID-19 is evolving very quickly. Recently published studies suggest that a significant percentage (from 5 to 75%; extremely variable according to age and according to study) of those infected could remain asymptomatic. Some data also indicates that the contagious period might begin before the appearance of the first signs and symptoms.

No studies have been done to estimate the clinical effectiveness of non-medical or community masks (face coverings) at protecting against viral respiratory infections in a community circulation context. The few studies on this topic have simply assessed their degree of adjustment to the face or their ability to retain certain particles. It seems unlikely that these masks protect the wearer against the virus, but they might limit the projection of droplets in the environment.

References:

Port du masque de procédure en milieux de soins lors d' une transmission communautaire soutenue. Institut national de Santé publique de Québec (April 7, 2020)

Recommandations intérimaires covid-19 : Port d' un couvre-visage par la population générale. Institut national de Santé publique de Québec (April 7, 2020)

N95 Respirator

- Limit fit testing of N95 respirators to health-care workers required in targeted sectors such as emergency, intensive care, COVID cohort units, and the operating room. The fit test outcome is valid even if the test was done over two years ago; the most recent result will be used. The only exceptions are if there was facial surgery or significant weight loss or gain.
- Use N95 respirators past the expiration date for adjustment tests of respiratory protection.
- Use expired N95 respirator, doing a visual inspection to check its integrity (e.g. elastics or nose bridges may degrade and affect seal tightness) and a seal check before entering room. Note that the CDC points out that before using expired N95 respirators, healthcare workers should be informed that they are expired, so it is important to do a visual inspection.
- The following expired N95 respirator models are not recommended: Kimberly-

Clark 46827 and Kimberly-Clark 46727.

- Expired N95 respirator models recommended by the CDC for use regardless of the expiry date are the following:
 - 3M 1860S; 3M 1870;
 - 3M 8210; 3M 9010;
 - Gerson 1730;
 - Medline/Alpha Protech NON27501; Moldex 1512;
 - Moldex 2201.
- Wear respirator for an extended period (without removing it) when caring for multiple patients in a cohort/unit.
- Discard if visibly soiled, damaged, hard to breathe through, not tightly sealed, or if AGMP was previously performed while wearing it.
- Do not touch respirator. If health-care worker touches respirator by mistake, perform hand hygiene (or if wearing gloves, change gloves and perform hand hygiene).
- Always keep respirator on face (do not wear around neck).
- Maximum suggested wear-time is eight hours. However, the WHO does not recommend wearing it for more than four hours because it has been shown that extended use leads to extreme fatigue, respiratory problems, exhaustion. On that basis, it is recommended to wear the N95 for a maximum of four hours.
- Reuse of same N95 respirator by same healthcare worker is not recommended in an anticipated shortage; extended wear is recommended instead. However, during an actual shortage, this option may be considered.
- During a shortage, health-care workers are not required to wear N95 respirators if AGMPs are not in progress (and if there is compliance with wait time for air exchange post-AGMP) or if the patient is intubated (closed-circuit) and stable, wearing a procedure mask is acceptable.
- N95 reprocessing for same worker using hydrogen peroxide plasma sterilizers has been defined. Management policies have been developed and will be implemented when the need for reprocessing has been confirmed.

3M 7500 Series Respirator

Paramedics have been fitted for and issued their own reusable respirator with P100 filters. The mask and filters have been reviewed and are appropriate for use under extreme infection prevention and control conditions such as a pandemic. Paramedics should use their respirators in accordance with guidance they have been provided.

Eye Protection

- Implement a series of strategies to optimize access to eye protection, such as procuring reusable eye protection rather than single-use.
- Prioritize the use of eye protection for certain activities, such as AGMPs or other spatter- or aerosol-generating activities, in operating rooms, intensive care units, COVID units/cohorts, ERs, and screening centres.
- Batch care for patients when eye protection is required to limit the number of times the room is entered.
- As much as possible, limit the number of healthcare workers in a patient's room where eye protection is required.
- Wear eye protection for an extended period (without removing it) when caring for multiple patients in a cohort/unit.
- Discard single use eye protection if visibly soiled, damaged, or hard to see through.
- Do not touch eye protection. If a health-care worker touches eye protection by mistake, that worker must perform hand hygiene (or if wearing gloves, must change gloves and then perform hand hygiene).
- Use expired eye protection, first ensuring its integrity (e.g. elastic, foam).
- Repatriate face shields and visors to units caring for COVID-19 cases or where AGMPs are performed (other units could make more use of safety glasses).
- Reuse of the same single-use eye protection by the same healthcare worker is not recommended in an anticipated shortage; extended wear is recommended instead.
- If reuse of the same eye protection by the same healthcare worker is considered during an actual shortage (removing it between patients or after providing care in a cohort):
 - Discard single-use eye protection if visibly soiled, damaged, or hard to see through.
 - Disinfect between uses in accordance with the attached procedure.
 - Store eye protection in a paper bag identified with the worker's name. Don gloves before retrieving used eye protection and then put eye protection on. Remove gloves, perform hand hygiene, and don new gloves before entering the room.

Disinfecting Single-Use Eye Protection

Depending on the type of protection used, in a real or anticipated shortage of eye protection during the COVID-19 pandemic, follow the directions below:

Single-use Face Shield with a Synthetic Foam Pad (For Positioning on Wearer's Forehead)

Because the protective equipment cannot be disinfected in its entirety, it is not recommended that this type of face shield be reused. If it is impossible to comply with this recommendation, reuse is possible if the face shield is reserved for one health-care worker during one or more shifts (depending on the equipment inventory). If use is not continuous, place the protection in a breathable bag (paper bag) or a clean container identified with the worker's name after disinfection. Workers are responsible for the disinfection and integrity of their personal protective equipment.

Follow the disinfection procedure below:

- Remove all protective equipment in accordance with known and established procedures. The face shield must be removed safely (must be handled by the sides [arms or elastic band]) to avoid touching the front of the face shield.
- Disinfect the equipment in its entirety (interior and exterior) between patients (can be kept on when providing care for several patients [if not soiled] when COVID-19 patients are grouped together) according to established IPC protocols.
- The face shield can be rinsed with tap water if visibility is compromised by the sanitizing product used.
- If the integrity of the face shield is no longer assured, it must be discarded. New equipment will then be required.
- **Note: If soiling is present, clean with water and a detergent (soap) before disinfection.**

Reusable Safety Glasses or Single Use Glasses

Ideally, this equipment should be reserved for one healthcare worker.

If use is not continuous, place the protection in a breathable bag (paper bag) or a clean container identified with the worker's name after disinfection. Workers are responsible for the disinfection and integrity of their personal protective equipment.

If the equipment is not worker dedicated and is placed in a container containing several face shields that will be disinfected by another person, make sure the protective equipment can be disinfected in its entirety (e.g., glasses with synthetic foam pads or fabric straps cannot be disinfected with a wipe); otherwise, the equipment will have to be dedicated to one worker. Follow the disinfection procedure below:

- Remove all protective equipment in accordance with known and established procedures. Safety glasses must be removed safely (must be handled by the sides [arms or elastic band]) to avoid touching the front of the glasses.
- Disinfect the equipment in its entirety (interior and exterior) between patients (can be kept on when providing care for several patients (if not soiled) when COVID-19 patients are grouped together) **in accordance with established IPC protocols.**
- The glasses can be rinsed with tap water if visibility is compromised by the sanitizing product used.
- If the integrity of the glasses is no longer assured, they must be discarded. New equipment will then be required.
- **Note: – If soiling is present, clean with soap and water before disinfection.**

Reference: INSPQ and CDC

7.0 References

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APPENDIX A: PERSONAL PROTECTIVE EQUIPMENT REQUIRED BY HOSPITAL ACTIVITY SECTOR (standard practice; potential actions in an anticipated shortage or actual shortage)

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Healthcare Facilities – Hospitals				< 60 days of inventory	< 14 days of inventory
Main entrance or ER entrance	Screeener at entrance	<p>Preliminary screening not involving direct contact</p> <p>Following assessment: If patient meets criteria for COVID-19, directing patient to ER.</p> <p>If patient does not require ER visit, directing patient to return to car or to go home while waiting for a call for an appointment at the Early Detection Centre.</p>	<p>If physical barrier is available (Plexiglas), no PPE is necessary.</p> <p>If no physical barrier, apply droplets/contact precautions, which include:</p> <ul style="list-style-type: none"> • Isolation gown (reusable cotton or microfibre) • Surgical/procedure mask • Gloves • Eye protection (goggles) <p>Screeener advises patient to wash hands, don a surgical/procedure mask, and wash hands again. Screeener informs triage nurse that patient meets definition of COVID-19 and requires assessment.</p>	Install physical barriers (Plexiglas) and no PPE is necessary.	Install physical barriers (Plexiglas) and no PPE is necessary.
ER	Triage nurse	<p>Suspect or confirmed case of COVID-19</p> <ul style="list-style-type: none"> • Nurse ensures that patient continues to wear surgical/procedure mask. <p>Nurse determines the priority level and severity of the illness</p>	<p>Droplet/contact precautions, which include:</p> <ul style="list-style-type: none"> • Isolation gown (reusable cotton or microfibre) • Surgical/procedure mask • Gloves • Eye protection (goggles) 	<ul style="list-style-type: none"> • Use disposable gown if available. • See strategies for masks and eye protection. 	<ul style="list-style-type: none"> • Use Halyard isolation gowns from the provincial supply and wear two at once. • Add a disposable apron. • See strategies for masks and eye protection.

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Healthcare Facilities – Hospitals				< 60 days of inventory	< 14 days of inventory
		<p>according to the Canadian Triage and Acuity Scale (CTAS) for Emergency Departments.</p> <p>Following assessment:</p> <ul style="list-style-type: none"> • If symptoms are moderate or severe, nurse escorts patient to an AIIR or a private room (door closed). • If symptoms are mild, nurse advises patient to return to car or to a designated area in the waiting room if to be seen in the ER. 			
	Healthcare worker	Patient presenting moderate/severe symptoms who may require an AGMP	<p>SRI precautions, which include:</p> <ul style="list-style-type: none"> • Isolation gown (disposable) • N95 respirator (seal-checked and fit-tested) • Gloves • Eye protection (face shield) <p>Patient is placed in an AIIR if possible or in a private room with door closed.</p>	<ul style="list-style-type: none"> • If out of disposable gowns, consider using reusable cotton or microfibre gowns. • See strategy for N95 respirators and eye protection. <p>*The N95 respirator must be changed after an AGMP.</p>	<ul style="list-style-type: none"> • Use Halyard isolation gowns from the provincial supply and wear two at once. • Add a disposable apron.

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Healthcare Facilities – Hospitals				< 60 days of inventory	< 14 days of inventory
	Healthcare worker	Patient presenting symptoms with no risk that an AGMP will be necessary.	Droplet/contact precautions, which include: <ul style="list-style-type: none"> Isolation gown (reusable cotton or microfibre) Surgical/procedure mask Gloves Eye protection (goggles) 	<ul style="list-style-type: none"> See strategies for gowns, eye protection, and masks. 	<ul style="list-style-type: none"> Use Halyard isolation gowns from the provincial supply and wear two at once. Add a disposable apron. See strategies for masks and eye protection.
	Healthcare worker	Asymptomatic patient consulting for another reason	<ul style="list-style-type: none"> Surgical/procedure mask 	<ul style="list-style-type: none"> See strategies for gowns, eye protection, and masks. 	<ul style="list-style-type: none"> See strategies for gowns, eye protection, and masks.
ER	Environmental Services employee	<p>After discharge of suspect or confirmed case of COVID-19 presenting moderate/severe symptoms and having been on airborne/contact precautions:</p> <ul style="list-style-type: none"> Do terminal cleaning of room. <p>Room cleaning and disinfection begin only when the time required (in number of air changes per hour) to remove airborne microorganisms after AGMP has elapsed. Consult Infection Prevention and Control Service. *</p>	<p>Droplet/contact precautions, which include:</p> <ul style="list-style-type: none"> Isolation gown (reusable cotton or microfibre) Surgical/procedure mask Gloves Eye protection (goggles) <p>*If room cleaning takes place before the time required to complete the required number of air exchanges: SRI precautions with eye protection, which include:</p> <ul style="list-style-type: none"> Replacing mask with N95 respirator (seal-checked and fit-tested). 	<ul style="list-style-type: none"> Consider using coveralls (e.g. Tyvek). See strategies for gowns, eye protection, and masks. 	<ul style="list-style-type: none"> Use coveralls (e.g. Tyvek). See strategies for eye protection and masks.
	Patient attendant	Entering room of a suspect, presumptive, or confirmed case of COVID-19:	Droplet/contact precautions, which include: <ul style="list-style-type: none"> Isolation gown (reusable 	<ul style="list-style-type: none"> Use Halyard disposable gowns from the provincial supply 	<ul style="list-style-type: none"> Use Halyard disposable gowns from the provincial supply and wear two at

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Healthcare Facilities – Hospitals				< 60 days of inventory	< 14 days of inventory
		<p>Emergency medical care attendants should be allowed only in exceptional situations based on criteria established by the Network.</p> <ul style="list-style-type: none"> ○ Limit visits to one designated person per patient. ○ Screen visitor for COVID-19 symptoms before visitor enters healthcare facility. ○ Assess risk for visitor (e.g., presence of underlying illness that increases risk of contracting COVID-19) and if visitor able to be placed on precautions. ○ Provide visitor, before visitor enters patient’s room, with instructions for hand hygiene, limiting surfaces touched, and use of PPE in accordance with Network guidelines while visitor is in room. ○ Keep a record (e.g., logbook) of all visitors entering patient rooms. ○ Limit visitor access during AGMPs. ○ Prevent visitor from visiting other patients or going into other sectors of the facility. 	<p>cotton or microfibre)</p> <ul style="list-style-type: none"> • Surgical/procedure mask • Gloves • Eye protection (goggles) 	<p>and wear two of them.</p> <ul style="list-style-type: none"> • Add a disposable apron. • See strategies for eye protection. 	<p>once.</p> <ul style="list-style-type: none"> • Add a disposable apron. • See strategies for eye protection.

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Healthcare Facilities – Hospitals				< 60 days of inventory	< 14 days of inventory
Ambulatory Care Regular clinics	Healthcare worker	Providing direct care to an asymptomatic patient	<ul style="list-style-type: none"> Surgical/procedure mask (minimum) Other PPE required as per PCRA <p>If the patient cannot tolerate a mask, is too young to wear a mask or if the procedure/treatment does not permit the wearing of a mask and the patient is coughing or the procedure/treatment could induce a cough</p> <ul style="list-style-type: none"> Add eye protection (goggles) 	<ul style="list-style-type: none"> See strategies for masks and eye protection. 	<ul style="list-style-type: none"> See strategies for masks and eye protection.
Ambulatory Care Specialized clinics	Healthcare worker	Providing direct care to an asymptomatic patient Colonoscopy clinic	PPE according to Health Canada guidelines <ul style="list-style-type: none"> Surgical/procedure mask Disposable level 2 gown Gloves Eye protection (goggles) 	<ul style="list-style-type: none"> If out of disposable gowns, consider using reusable cotton or microfibre gowns See strategies for gowns, eye protection, and masks. 	<ul style="list-style-type: none"> Use Halyard isolation gowns from the provincial supply and wear two at once. Add a disposable apron. See strategies for gowns, eye protection, and masks.
	Healthcare worker	Providing direct care to an asymptomatic patient Clinics where AGMPs are performed for example: Gastroscopy, Bronchoscopy, Laryngoscopy, Nasopharyngeal endoscopy, Transesophageal echocardiography, Sleep clinic (BiPAP, CPAP)	PPE for AGMP <ul style="list-style-type: none"> N95 respirator Isolation gown (reusable cotton or microfibre) Gloves Eye protection (face shield) 	<ul style="list-style-type: none"> See strategies for gowns and eye protection. See strategy for N95 respirators <p>*The N95 respirator must be changed after an AGMP.</p>	<ul style="list-style-type: none"> Use Halyard isolation gowns from the provincial supply and wear two at once. Add a disposable apron. See strategies for gowns, eye protection, and N95 respirator.

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Healthcare Facilities – Hospitals				< 60 days of inventory	< 14 days of inventory
	Environmental Services employee	Clean room after AGMP Room cleaning and disinfection begin only when the time required (in number of air changes per hour) to remove airborne microorganisms after AGMP has elapsed. Consult Infection Prevention and Control Service. *	<ul style="list-style-type: none"> Gloves <p>*If room cleaning takes place before the time required to complete the required number of air exchanges:</p> <ul style="list-style-type: none"> Gloves and N95 respirator (seal-checked and fit-tested). 	<ul style="list-style-type: none"> See strategies for N95 respirators. 	<ul style="list-style-type: none"> See strategies for N95 respirators
COVID unit	Healthcare worker	Patient intubation Or Providing direct care for confirmed case of COVID-19 who may require another AGMP	SRI precautions, which include: <ul style="list-style-type: none"> Disposable isolation gown N95 respirator (seal-checked and fit-tested) Gloves Eye protection (face shield) 	<ul style="list-style-type: none"> If out of disposable gowns, consider using reusable cotton or microfibre gowns. See strategies for N95 respirators and eye protection. 	<ul style="list-style-type: none"> Use reusable cotton or microfibre gowns. Consider using coveralls (e.g. Tyvek). See strategies for N95 respirators and eye protection.
	Healthcare worker	Providing direct care for confirmed case COVID-19 who may not require an AGMP.	Droplet/contact precautions, which include: <ul style="list-style-type: none"> Disposable isolation gown Surgical/procedure mask Gloves Eye protection (face shield) 	<ul style="list-style-type: none"> See strategies for gowns, eye protection, and masks. 	<ul style="list-style-type: none"> Use Halyard isolation gowns from the provincial supply and wear two at once. Add a disposable apron. See strategies for eye protection and masks.
	Environmental Services employee	Entering room of confirmed case of COVID-19 on droplet/contact precautions: <ul style="list-style-type: none"> Clean room 2x per day. Or <ul style="list-style-type: none"> Do terminal cleaning of room 	Droplet/contact precautions, which include: <ul style="list-style-type: none"> Isolation gown (disposable) Surgical/procedure mask Gloves Eye protection (face shield) 	<ul style="list-style-type: none"> Consider using coveralls (e.g. Tyvek). See strategies for gowns, eye protection, masks, and N95 respirators. 	<ul style="list-style-type: none"> Use coveralls (e.g. Tyvek). See strategies for eye protection, masks, and N95 respirators.

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Healthcare Facilities – Hospitals				< 60 days of inventory	< 14 days of inventory
		Entering room of confirmed case of COVID-19 on SRI precautions: <ul style="list-style-type: none"> Clean after AGMP 	SRI precautions, which include: <ul style="list-style-type: none"> Disposable isolation gown N95 respirator (seal-checked and fit-tested) Gloves Eye protection (face shield) 		
	Visitor	Accompanying a pediatric patient	If visitor leaves room: <ul style="list-style-type: none"> Surgical/procedure mask 	Idem	Idem
Non-COVID unit	Healthcare workers	Providing direct care for suspect or presumptive case of COVID-19 requiring AGMP.	SRI precautions, which include: <ul style="list-style-type: none"> Isolation gown (reusable cotton or microfibre) N95 respirator (seal-checked and fit-tested) Gloves Eye protection (face shield) 	<ul style="list-style-type: none"> Use disposable gown if available. See strategies for eye protection and N95 respirators. 	<ul style="list-style-type: none"> Use Halyard isolation gowns from the provincial supply and wear two at once. Add a disposable apron. See strategies for eye protection and N95 respirator.
	Healthcare worker	Providing direct care for suspect case of COVID-19 who may not require AGMP	Droplet/contact precautions, which include: <ul style="list-style-type: none"> Isolation gown (reusable cotton or microfibre) Surgical/procedure mask Gloves Eye protection (goggles) 	<ul style="list-style-type: none"> Use disposable gown if available. See strategies for eye protection and masks. 	<ul style="list-style-type: none"> Use Halyard isolation gowns from the provincial supply and wear two at once. Add a disposable apron. See strategies for eye protection and masks.

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Healthcare Facilities – Hospitals				< 60 days of inventory	< 14 days of inventory
	Environmental Services employee	Entering room of suspect or presumptive case of COVID-19 on droplet/contact precautions: Clean room 1x per day and frequently touched surfaces 2x per day Or Do terminal cleaning of room	Droplet/contact precautions, which include: <ul style="list-style-type: none"> Isolation gown (reusable cotton or microfibre) Surgical/procedure mask Gloves Eye protection (goggles) 	<ul style="list-style-type: none"> Use disposable gown if available. See strategies for eye protection and masks. 	<ul style="list-style-type: none"> Use Halyard isolation gowns from the provincial supply and wear two at once. Add a disposable apron. See strategies for eye protection and masks.
	Environmental Services employee	Entering room of suspect or presumptive case of COVID-19 subject to SRI procedure: <ul style="list-style-type: none"> Clean after AGMP 	SRI precautions, which include: <ul style="list-style-type: none"> Isolation gown (reusable cotton or microfibre) N95 respirator (seal-checked and fit-tested) Gloves Eye protection (face shield) 	<ul style="list-style-type: none"> Use disposable gown if available. Consider using coveralls (e.g. Tyvek). See strategies for gowns, eye protection, and N95 respirators. 	<ul style="list-style-type: none"> Use coveralls (e.g. Tyvek). See strategies for eye protection and masks.
	Visitor	Entering room of suspect or presumptive case of COVID-19: In situations where visits are permitted according to the criteria set by the Network: <ul style="list-style-type: none"> Limit visits to one designated person per patient. Screen visitor for COVID-19 symptoms before visitor enters healthcare facility. Assess risk for visitor (e.g., presence of underlying illness that increases risk of contracting COVID-19) and if 	Droplet/contact precautions, which include: <ul style="list-style-type: none"> Isolation gown (reusable cotton or microfibre) Surgical or procedure mask Gloves Eye protection (goggles) 	<ul style="list-style-type: none"> Cancel visits except for palliative care, obstetrics, and pediatrics. Use Halyard disposable gowns from the provincial supply and wear two of them. Add a disposable apron. See strategies for eye protection and masks. 	<ul style="list-style-type: none"> Cancel all visits except for accompanying adults (e.g. parent with a sick child). Use Halyard disposable gowns from the provincial supply and wear two of them. Add a disposable apron. See strategies for eye protection and masks.

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Healthcare Facilities – Hospitals				< 60 days of inventory	< 14 days of inventory
		<p>visitor able to be placed on precautions.</p> <ul style="list-style-type: none"> ○ Provide visitor, before visitor enters patient’s room, with instructions for hand hygiene, limiting surfaces touched, and use of PPE in accordance with Network guidelines while visitor is in room. ○ Keep a record (e.g., logbook) of all visitors entering patient rooms. ○ Restrict visitor access during AGMPs. ○ Prevent visitor from visiting other patients or going into other sectors of the facility. 			
Intensive care unit	Healthcare worker	Intubation of patient or ventilated patient	<p>Airborne/contact transmission precautions with eye protection, which include:</p> <ul style="list-style-type: none"> ● N95 respirator (seal-checked and fit-tested) ● Disposable isolation gown ● Double gloves ● Eye protection (face shield) 	<ul style="list-style-type: none"> ● If out of disposable gowns, use reusable cotton or microfibre. ● Use a single thickness of gloves. ● See strategies for eye protection and masks. 	<ul style="list-style-type: none"> ● Use reusable cotton or microfibre gowns. ● See strategies for eye protection and N95 respirators.
	Healthcare worker	<u>Providing direct care for a suspect, presumptive, or confirmed case of COVID-19 who may not require an AGMP.</u>	<p>Droplet/contact precautions, which include:</p> <ul style="list-style-type: none"> ● Surgical or procedure mask ● Disposable isolation gown ● Gloves 	See strategies for gowns, eye protection, and masks.	<ul style="list-style-type: none"> ● Use Halyard isolation gowns from the provincial supply and wear two at a time. ● Add a disposable apron.

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Healthcare Facilities – Hospitals				< 60 days of inventory	< 14 days of inventory
			<ul style="list-style-type: none"> • Eye protection (goggles) 		<ul style="list-style-type: none"> • See strategies for eye protection and masks.
	Environmental Services employee	Entering room of suspect, presumptive, or confirmed case of COVID-19 on droplet/contact precautions: Cleaning room 1x per day and frequently touched surfaces 2x per day or final cleaning	Droplet/contact precautions, which include: <ul style="list-style-type: none"> • Disposable isolation gown • Surgical or procedure mask • Gloves • Eye protection (goggles) 	<ul style="list-style-type: none"> • If out of disposable gowns, use reusable cotton or microfibre gowns. • Consider using coveralls (e.g. Tyvek). • Consider the strategies for eye protection and masks. 	<ul style="list-style-type: none"> • Use coveralls (e.g. Tyvek). • See strategies for eye protection and masks.
		Entering room of suspect, presumptive, or confirmed case of COVID-19 subject to SRI precautions (intubated or ventilated patient): Cleaning room after AGMP or room of ventilated patient	Airborne/contact transmission precautions with eye protection, which include <ul style="list-style-type: none"> • N95 respirator (seal-checked and fit-tested) • Disposable isolation gown • Gloves • Eye protection (face shield) 	<ul style="list-style-type: none"> • If out of disposable gowns, use reusable cotton or microfibre gowns. • Consider using coveralls (e.g. Tyvek). • See strategies for eye protection and N95 respirators. 	<ul style="list-style-type: none"> • Use coveralls (e.g. Tyvek). • See strategies for eye protection and N95 respirators.

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Healthcare Facilities – Hospitals				< 60 days of inventory	< 14 days of inventory
Early screening centre	Healthcare worker	Physical examination of suspect or confirmed case of COVID-19 After and between assessments of suspect or confirmed cases of COVID-19: Clean chairs and care equipment.	Droplet/contact precautions, which include: <ul style="list-style-type: none"> • Surgical or procedure mask • Reusable cotton or microfibre isolation gown • Gloves • Eye protection (face shield) 	<ul style="list-style-type: none"> • If out of disposable gowns, consider using reusable cotton or microfibre gowns. • See strategies for eye protection and masks. 	<ul style="list-style-type: none"> • Use Halyard isolation gowns from the provincial supply and wear two at a time. • Add a disposable apron. • See strategies for eye protection and masks.
	Administrative assistant	Registering patients	Install physical barriers (plexiglass) and no PPE is necessary. Droplet/contact precautions, which include: <ul style="list-style-type: none"> • Isolation gown (reusable cotton or microfibre) • Surgical or procedure mask • Gloves • Eye protection (goggles) 	<ul style="list-style-type: none"> • If out of disposable gowns, consider using reusable cotton or microfibre gowns. • See strategies for eye protection and masks. 	<ul style="list-style-type: none"> • Use Halyard isolation gowns from the provincial supply and wear two at a time. • Add a disposable apron. • See strategies for eye protection and masks.
	Patient	Suspect case of COVID-19	<ul style="list-style-type: none"> • Give patient a surgical or procedure mask if tolerated. • Perform hand hygiene. 	Idem	Idem
	Environmental Services employee	Cleaning 2x per day	Droplet/contact precautions, which include: <ul style="list-style-type: none"> • Isolation gown (reusable cotton or microfibre) • Surgical or procedure mask • Gloves • Eye protection (goggles) 	<ul style="list-style-type: none"> • If out of disposable gowns, consider using reusable cotton or microfibre gowns. • Consider using coveralls (e.g. Tyvek). • See strategies for eye protection and masks. 	<ul style="list-style-type: none"> • Use coveralls (e.g. Tyvek). • See strategies for eye protection and masks.

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Healthcare Facilities – Hospitals				< 60 days of inventory	< 14 days of inventory
Surgical suite	Surgeon and scrub nurse	Surgical procedure on a suspect or confirmed case of COVID-19 - ventilated patient	SRI precautions, which include: <ul style="list-style-type: none"> • N95 surgical respirator (seal-checked and fit-tested) • Disposable sterile surgical gown, level 2, 3, or 4, depending on procedure to be performed • Sterile gloves • Eye protection (face shield) • Standard hair cover for surgical procedures 	<ul style="list-style-type: none"> • Consider using sterile coveralls (e.g. Tyvek). • See strategies for gowns, eye protection, and N95 respirators. 	<ul style="list-style-type: none"> • Use sterile coveralls (e.g. Tyvek). • See strategies for eye protection and N95 respirators.
	Anesthesiologist Respiratory therapists Other healthcare workers	Patient intubation or other AGMPs Providing care for suspect or confirmed case of COVID-19 in a ventilated patient	SRI precautions, which include: <ul style="list-style-type: none"> • N95 respirator (seal-checked and fit-tested) • Disposable gown • Gloves • Eye protection (face shield) • Standard hair cover for surgical procedures 	<ul style="list-style-type: none"> • Consider using coveralls (e.g. Tyvek). • See strategies for gowns, eye protection, and N95 respirators. 	<ul style="list-style-type: none"> • Use Halyard isolation gowns from the provincial supply and wear two at a time. • Add a disposable apron. • See strategies for eye protection and N95 respirators.

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Healthcare Facilities – Hospitals				< 60 days of inventory	< 14 days of inventory
	Environmental Services employee	Do terminal cleanup/disinfection after surgery on a suspect, presumptive, or confirmed case of COVID-19.	<ul style="list-style-type: none"> • Disposable isolation gown • Surgical or procedure mask • Gloves • Eye protection (goggles) 	<ul style="list-style-type: none"> • Consider using coveralls (e.g. Tyvek). • See strategies for gowns, eye protection, and masks. 	<ul style="list-style-type: none"> • Use coveralls (e.g. Tyvek). • See strategies for eye protection and masks.
	Surgeon, scrub nurse, and Anesthetist performing the epidural.	Epidural/local anesthesia for a suspect or confirmed case of COVID-19 in a non-ventilated patient .	<p>Droplet/contact precautions, which include:</p> <ul style="list-style-type: none"> • Surgical mask • Disposable level 2, level 3, or level 4 sterile surgical gown, depending on the procedure • Sterile gloves • Eye protection (face shield) • Standard hair cover for surgical procedures 	<ul style="list-style-type: none"> • Consider using sterile coveralls (e.g. Tyvek). • See strategies for eye protection and masks. 	<ul style="list-style-type: none"> • Use sterile coveralls (e.g. Tyvek). • See strategies for eye protection and masks.
	Health-care workers	Epidural/local anesthesia for a suspect or confirmed case of COVID-19 in a non-ventilated patient .	<p>Droplet/contact precautions, which include:</p> <ul style="list-style-type: none"> • Surgical mask • Disposable gown • Gloves • Eye protection (face shield) • Standard hair cover for surgical procedures 	<ul style="list-style-type: none"> • Consider using coveralls (e.g. Tyvek). • See strategies for gowns, eye protection, and masks. 	<ul style="list-style-type: none"> • Use coveralls (e.g. Tyvek). • See strategies for eye protection and masks.

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Healthcare Facilities – Hospitals				< 60 days of inventory	< 14 days of inventory
	Environmental Services employee	Perform cleaning/terminal disinfection after epidural/local anesthesia of a suspect or confirmed case of COVID-19 in a non-ventilated patient .	Droplet/contact precautions, which include: <ul style="list-style-type: none"> • Disposable isolation gown • Surgical or procedure mask • Gloves • Eye protection (goggles) 	<ul style="list-style-type: none"> • See strategies for gowns, eye protection, and masks. 	<ul style="list-style-type: none"> • Consider using coveralls (e.g. Tyvek). • See strategies for gowns, eye protection, and masks.
Medical Device Reprocessing Unit (MDRU)	MDRU technician, decontamination room	Cleaning/disinfecting medical devices	Usual personal protective equipment: <ul style="list-style-type: none"> • Splash-proof face shield and visor or waterproof face shield that extends below the chin • Level 3 waterproof surgical gown • Tear-resistant and chemical-resistant long surgical gloves • Hair cover • Shoe covers 	<ul style="list-style-type: none"> • Consider using coveralls (e.g. Tyvek). • See strategies for gowns, eye protection, and masks. 	<ul style="list-style-type: none"> • Use coveralls (e.g. Tyvek). • See strategies for eye protection and masks.
	MDRU technician, clean side	Preparation of trays and materials for sterilization	<ul style="list-style-type: none"> • Mask only if physical distancing of six feet/two metres is not possible. • Hair cover • Beard cover 	Idem.	Use face cover.
Laundry	Laundry worker	Sort and wash soiled linen	Usual individual protective equipment <ul style="list-style-type: none"> • Perforation-resistant gloves; • Splash-proof gowns 	<ul style="list-style-type: none"> • Consider using coveralls (e.g. Tyvek). • See strategies for gowns, eye 	<ul style="list-style-type: none"> • Use coveralls (e.g. Tyvek). • See strategies for eye protection and masks.

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Healthcare Facilities – Hospitals				< 60 days of inventory	< 14 days of inventory
			<ul style="list-style-type: none"> • Face shield • Safety glasses • Waterproof mask 	protection, and masks.	
	Laundry worker	Sort and fold clean linen	<ul style="list-style-type: none"> • Procedure/surgical mask 	<ul style="list-style-type: none"> • Personal face cover if physical distancing of six feet/two metres is not possible. 	Idem.
Pharmacy	All health-care workers except those mentioned below	Receiving, preparation of non-sterile products, and delivery	<ul style="list-style-type: none"> • Surgical or procedure mask if physical distancing of six feet/two metres is not possible. 	Idem.	Idem.
	Pharmacist/Technician/Housekeeping	Preparation of non-hazardous sterile products	<ul style="list-style-type: none"> • 12-inch powder-free sterile gloves • Lint-free isolation gown • Surgical or procedure mask • Shoe covers or dedicated shoes • Hair cover 	<ul style="list-style-type: none"> • Consider using coveralls (e.g. Tyvek). • See strategies for gowns, eye protection, and masks. 	<ul style="list-style-type: none"> • Use coveralls (e.g. Tyvek). • See strategies for eye protection and masks.
	Pharmacist/Technician/Housekeeping	Preparation of hazardous sterile products	<ul style="list-style-type: none"> • Scrubs • Chemical-resistant gown for dangerous chemical, must be changed every two to three hours • N95 or N 100 respirator with adjuster or integral chemical cartridge • ASTM D-6978 gloves with outer sterile gloves, changed every 30 minutes 	<ul style="list-style-type: none"> • Consider using coveralls (e.g. Tyvek). • See strategies for gowns, eye protection, and masks. 	<ul style="list-style-type: none"> • Use coveralls (e.g. Tyvek). • See strategies for eye protection and masks.

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Healthcare Facilities – Hospitals				< 60 days of inventory	< 14 days of inventory
			<p>or immediately in case of tearing, perforation, or contamination</p> <ul style="list-style-type: none"> • Hair cover • Beard cover • Shoe covers (two pairs) 		
		On care units	<ul style="list-style-type: none"> • Mask only if physical distancing of six feet/two metres is not possible. • Hair cover • Beard cover 	• Face cover.	• Idem.
		Unwrapping hazardous products	<ul style="list-style-type: none"> • Two pairs of gloves complying with the American Society for Testing Materials (ASTM) standard. • A gown approved for the preparation of sterile hazardous products and change it every two to three hours. • Cap • Mask • Beard cover • Shoe covers • Safety glasses and a face shield or mask covering entire face; • Mask with a chemical cartridge. 	<ul style="list-style-type: none"> • Consider using coveralls (e.g. Tyvek). • See strategies for gowns, eye protection, and masks. 	<ul style="list-style-type: none"> • Use coveralls (e.g. Tyvek). • See strategies for eye protection and masks.

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Healthcare Facilities – Hospitals				< 60 days of inventory	< 14 days of inventory
Food services	Dietician, cooks, servers	Preparing and serving meals, delivering meal trays.	<ul style="list-style-type: none"> • Mask only if physical distancing of six feet/two metres is not possible. • Hair cover • Beard cover 	<ul style="list-style-type: none"> • Face cover 	Idem.
	Cafeteria staff	Serving meals, cashier	<ul style="list-style-type: none"> • Mask only if physical distancing of six feet/two metres is not possible. • Hair cover • Beard cover 	<ul style="list-style-type: none"> • Face cover 	Idem.

APPENDIX B: PERSONAL PROTECTIVE EQUIPMENT REQUIRED BY CARE SETTING: NURSING HOME (standard practice; potential actions in an anticipated shortage or actual shortage)

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Nursing Homes				< 60 days of inventory	< 14 days of inventory
Resident Room (non-COVID wing)	Health-care worker (including resident attendant)	Providing direct care for suspect case of COVID-19 who may not require AGMP	Droplet/contact precautions, which include: <ul style="list-style-type: none"> Isolation gown (disposable) Surgical/procedure mask Gloves Eye protection (goggles) 	<ul style="list-style-type: none"> Use disposable gown if available. See strategies for eye protection and masks. 	<ul style="list-style-type: none"> Use Halyard isolation gowns from the provincial supply and wear two at once. Add a disposable apron. See strategies for eye protection and masks.
		Providing direct care for suspect or presumptive case of COVID-19 who require or may require AGMP. If AGMP is medically necessary, resident should be in single room with hard walls with the doors closed (during the procedure).	Airborne precautions, which include: <ul style="list-style-type: none"> Isolation gown (disposable) N95 respirator (seal-checked and fit-tested) Gloves Eye protection (face shield) 	<ul style="list-style-type: none"> Use disposable gown if available. See strategies for eye protection and N95 respirators. 	<ul style="list-style-type: none"> Use Halyard isolation gowns from the provincial supply and wear two at once. Add a disposable apron. See strategies for eye protection and N95 respirator.
	Environmental Services employee	Entering room of suspect or presumptive case of COVID-19 on droplet/contact precautions: Clean room 1x per day and frequently touched surfaces 2x per day Or Do terminal cleaning	Droplet/contact precautions, which include: <ul style="list-style-type: none"> Isolation gown (disposable) Surgical/procedure mask Gloves Eye protection (goggles) 	<ul style="list-style-type: none"> Use disposable gown if available. See strategies for eye protection and masks. 	<ul style="list-style-type: none"> Use Halyard isolation gowns from the provincial supply and wear two at once. Add a disposable apron.

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Nursing Homes				< 60 days of inventory	< 14 days of inventory
					<ul style="list-style-type: none"> • See strategies for eye protection and masks
		<p>Entering room of suspect or presumptive case of COVID-19 on airborne precautions: Clean after AGMP</p>	<p>Airborne precautions, which include:</p> <ul style="list-style-type: none"> • Isolation gown (disposable) • N95 respirator (seal-checked and fit-tested) • Gloves • Eye protection (face shield) 	<ul style="list-style-type: none"> • Use disposable gown if available. • Consider using coveralls (e.g. Tyvek). • See strategies for gowns, eye protection, and N95 respirators. 	<ul style="list-style-type: none"> • Use coveralls (e.g. Tyvek). • See strategies for eye protection and masks.
	<p>Visitor (including auxiliary staff and external agencies, e.g. extra mural program, foot care etc.)</p>	<p>Entering room of suspect or presumptive case of COVID-19:</p> <p>In situations where visits are permitted according to the criteria set by OCMOH:</p> <ul style="list-style-type: none"> ○ Limit visits to one designated person per patient. ○ Screen visitor for COVID-19 symptoms before visitor enters healthcare facility. ○ Assess risk for visitor (e.g., presence of underlying illness that increases risk of contracting COVID-19) and if visitor able to be placed on precautions. 	<p>Droplet/contact precautions, which include:</p> <ul style="list-style-type: none"> • Isolation gown (disposable) • Surgical or procedure mask • Gloves • Eye protection (goggles) 	<ul style="list-style-type: none"> • Cancel all visits except for compassionate reasons for palliative care • Use Halyard disposable gowns from the provincial supply and wear two of them. • Add a disposable apron. • See strategies for eye protection and masks. 	<ul style="list-style-type: none"> • Cancel all visits except for compassionate reasons for palliative care. • Use Halyard disposable gowns from the provincial supply and wear two of them. • Add a disposable apron. • See strategies for eye protection and masks.

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Nursing Homes				< 60 days of inventory	< 14 days of inventory
		<ul style="list-style-type: none"> ○ Provide visitor, before visitor enters patient's room, with instructions for hand hygiene, limiting surfaces touched, and use of PPE in accordance with Network guidelines while visitor is in room. ○ Keep a record (e.g., logbook) of all visitors entering patient rooms. ○ Restrict visitor access during AGMPs. ○ Prevent visitor from visiting other patients or going into other sectors of the facility. 			
	Dietician, cooks, servers	Preparing and serving meals, delivering meal trays.	<ul style="list-style-type: none"> • Mask only if physical distancing of six feet/two metres is not possible. • Hair cover <ul style="list-style-type: none"> • Beard cover 	<ul style="list-style-type: none"> • Face covering 	<ul style="list-style-type: none"> • Idem.
	Health-care worker (including resident attendant)	Providing direct care for suspect case of COVID-19 who may not require AGMP	Droplet/contact precautions, which include: <ul style="list-style-type: none"> • Isolation gown (disposable) • Surgical/procedure mask • Gloves • Eye protection (goggles) 	<ul style="list-style-type: none"> • Use disposable gown if available. • See strategies for eye protection and masks. 	<ul style="list-style-type: none"> • Use Halyard disposable gowns from the provincial supply and wear two of them. • Add a disposable apron. • See strategies for

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Nursing Homes				< 60 days of inventory	< 14 days of inventory
					eye protection and masks.
Food service/ Dining Areas	Dietician, cooks, servers	Preparing and serving meals, delivering meal trays.	<ul style="list-style-type: none"> • Mask only if physical distancing of six feet/two metres is not possible. • Hair cover • Beard cover 	<ul style="list-style-type: none"> • Face covering 	<ul style="list-style-type: none"> • Idem.
Resident Room (COVID wing)	Health-care worker (including resident attendant)	Providing direct care for suspect case of COVID-19 who may not require AGMP	Droplet/contact precautions, which include: <ul style="list-style-type: none"> • Isolation gown (disposable) • Surgical/procedure mask • Gloves • Eye protection (goggles) • 	<ul style="list-style-type: none"> • Use disposable gown if available. • See strategies for eye protection and masks. 	<ul style="list-style-type: none"> • Use Halyard isolation gowns from the provincial supply and wear two at once. • Add a disposable apron. • See strategies for eye protection and masks.

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Nursing Homes				< 60 days of inventory	< 14 days of inventory
		<p>Providing direct care for suspect or presumptive case of COVID-19 who require or may require AGMP.</p> <p>If AGMP is medically necessary, resident should be in single room with hard walls with the doors closed (during the procedure).</p>	<p>Airborne precautions, which include:</p> <ul style="list-style-type: none"> • Isolation gown (disposable) • N95 respirator (seal-checked and fit-tested) • Gloves • Eye protection (face shield) 	<ul style="list-style-type: none"> • Use disposable gown if available. • See strategies for eye protection and N95 respirators. 	<ul style="list-style-type: none"> • Use Halyard isolation gowns from the provincial supply and wear two at once. • Add a disposable apron. • See strategies for eye protection and N95 respirator.
	Environmental Services employee	<p>Entering room of suspect or presumptive case of COVID-19 on droplet/contact precautions:</p> <p>Clean room 1x per day and frequently touched surfaces 2x per day</p> <p>Or</p> <p>Do terminal cleaning</p>	<p>Droplet/contact precautions, which include:</p> <ul style="list-style-type: none"> • Isolation gown (disposable) • Surgical/procedure mask • Gloves • Eye protection (goggles) 	<ul style="list-style-type: none"> • Use disposable gown if available. • See strategies for eye protection and masks. 	<ul style="list-style-type: none"> • Use Halyard isolation gowns from the provincial supply and wear two at once. • Add a disposable apron. • See strategies for eye protection and masks.
		<p>Entering room of suspect or presumptive case of COVID-19 on airborne precautions:</p> <p>Clean after AGMP</p>	<p>Airborne precautions, which include:</p> <ul style="list-style-type: none"> • Isolation gown (disposable) • N95 respirator (seal-checked and fit-tested) • Gloves • Eye protection (face shield) 	<ul style="list-style-type: none"> • Use disposable gown if available. • Consider using coveralls (e.g. Tyvek). • See strategies for gowns, eye protection, and N95 respirators. 	<ul style="list-style-type: none"> • Use coveralls (e.g. Tyvek). • See strategies for eye protection and masks.

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Nursing Homes				< 60 days of inventory	< 14 days of inventory
	Visitor (including auxiliary staff and external agencies, e.g. extra mural program, foot care etc.)	<p>Entering room of suspect or presumptive case of COVID-19:</p> <p>In situations where visits are permitted according to the criteria set by OCMOH:</p> <ul style="list-style-type: none"> ○ Limit visits to one designated person per patient. ○ Screen visitor for COVID-19 symptoms before visitor enters healthcare facility. ○ Assess risk for visitor (e.g., presence of underlying illness that increases risk of contracting COVID-19) and if visitor able to be placed on precautions. ○ Provide visitor, before visitor enters patient's room, with instructions for hand hygiene, limiting surfaces touched, and use of PPE in accordance with Network guidelines while visitor is in room. ○ Keep a record (e.g., logbook) of all visitors entering patient rooms. ○ Restrict visitor access during AGMPs. ○ Prevent visitor from visiting other patients or going into other sectors of the facility. 	<p>Droplet/contact precautions, which include:</p> <ul style="list-style-type: none"> • Isolation gown (disposable) • Surgical or procedure mask • Gloves • Eye protection (goggles) 	<ul style="list-style-type: none"> • Cancel all visits except for compassionate reasons for palliative care • Use Halyard disposable gowns from the provincial supply and wear two of them. • Add a disposable apron. • See strategies for eye protection and masks. 	<ul style="list-style-type: none"> • Cancel all visits except for compassionate reasons for palliative care • Use Halyard disposable gowns from the provincial supply and wear two of them. • Add a disposable apron. See strategies for eye protection and masks.

**APPENDIX C: PERSONAL PROTECTIVE EQUIPMENT REQUIRED BY CARE SETTING: ADULT RESIDENTIAL FACILITIES
(standard practice; potential actions in an anticipated shortage or actual shortage)**

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Adult Residential Facilities, Shelters, Group Homes				< 60 days of inventory	< 14 days of inventory
Resident Room (non-COVID wing)	HCWs (including resident attendant)	Providing direct care for suspect case of COVID-19 who may not require AGMP.	Droplet/contact precautions, which include: <ul style="list-style-type: none"> • Isolation gown (disposable) • Surgical/procedure mask • Gloves • Eye protection (goggles) 	<ul style="list-style-type: none"> • Use disposable gown if available. • See strategies for eye protection and masks. 	<ul style="list-style-type: none"> • Use isolation gowns (level 1) from the provincial supply and wear two at once. • Add a disposable apron. • See strategies for eye protection and masks.
	Environmental Services employee	Entering room of suspect or presumptive case of COVID-19 on droplet/contact precautions: Clean room 1x per day and frequently touched surfaces 2x per day.	Droplet/contact precautions, which include: <ul style="list-style-type: none"> • Isolation gown (disposable) • Surgical/procedure mask • Gloves • Eye protection (goggles) 	<ul style="list-style-type: none"> • Use disposable gown if available. • See strategies for eye protection and masks. 	<ul style="list-style-type: none"> • Use isolation gowns (level 1) from the provincial supply and wear two at once. • Add a disposable apron. • See strategies for eye protection and masks.
	Visitor (including auxiliary staff and external agencies, e.g. extra mural program, foot care, Social Development staff, etc.)	Entering room of suspect or presumptive case of COVID-19: In situations where visits are permitted according to the criteria set by OCMOH: <ul style="list-style-type: none"> ○ Limit visits to one 	Droplet/contact precautions, which include: <ul style="list-style-type: none"> • Isolation gown (disposable) • Surgical or procedure mask • Gloves • Eye protection (goggles) 	<ul style="list-style-type: none"> • Cancel all visits except for compassionate reasons for palliative care, and essential services (i.e. Extra Mural, 	<ul style="list-style-type: none"> • Cancel all visits except for compassionate reasons for palliative care, and essential services (i.e. Extra Mural, Physicians).

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Adult Residential Facilities, Shelters, Group Homes				< 60 days of inventory	< 14 days of inventory
		<p>designated person per patient.</p> <ul style="list-style-type: none"> ○ Screen visitor for COVID-19 symptoms before visitor enters healthcare facility. ○ Provide visitor, before visitor enters patient's room, with instructions for hand hygiene, limiting surfaces touched, and use of PPE in accordance with Public Health guidelines while visitor is in room. ○ Keep a record (e.g., logbook) of all visitors entering patient rooms. ○ Restrict visitor access during AGMPs. ○ Prevent visitor from visiting other patients or going into other sectors of the facility. 		<p>Physicians).</p> <ul style="list-style-type: none"> • Use isolation gowns (level 1) from the provincial supply and wear two of them. • Add a disposable apron. • See strategies for eye protection and masks. 	<ul style="list-style-type: none"> • Use isolation gowns (level 1) from the provincial supply and wear two of them. • Add a disposable apron. • See strategies for eye protection and masks.

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Adult Residential Facilities, Shelters, Group Homes				< 60 days of inventory	< 14 days of inventory
Food service/ Dining Areas	Cooks, servers	Preparing and serving meals, delivering meal trays.	<ul style="list-style-type: none"> • Mask only if physical distancing of six feet/two metres is not possible. • Hair cover / Beard cover 	<ul style="list-style-type: none"> • Face covering 	<ul style="list-style-type: none"> • Face covering
Resident Room (COVID wing)	HCWs (including resident attendant)	Providing direct care for suspect case of COVID-19 who may not require AGMP.	Droplet/contact precautions, which include: <ul style="list-style-type: none"> • Isolation gown (disposable) • Surgical/procedure mask • Gloves • Eye protection (goggles) 	<ul style="list-style-type: none"> • Use disposable gown if available. • See strategies for eye protection and masks. 	<ul style="list-style-type: none"> • Use isolation gowns (level 1) from the provincial supply and wear two at once. • Add a disposable apron. • See strategies for eye protection and masks.
	Environmental Services employee	Entering room of suspect or presumptive case of COVID-19 on droplet/contact precautions: Clean room 1x per day and frequently touched surfaces 2x per day Or Do terminal cleaning	Droplet/contact precautions, which include: <ul style="list-style-type: none"> • Isolation gown (disposable) • Surgical/procedure mask • Gloves • Eye protection (goggles) 	<ul style="list-style-type: none"> • Use disposable gown if available. • See strategies for eye protection and masks. 	<ul style="list-style-type: none"> • Use isolation gowns (level 1) from the provincial supply and wear two at once. • Add a disposable apron. • See strategies for eye protection and masks.

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Adult Residential Facilities, Shelters, Group Homes				< 60 days of inventory	< 14 days of inventory
	Visitor (including auxiliary staff and external agencies, e.g. extra mural program, foot care, etc.)	<p>Entering room of suspect or presumptive case of COVID-19:</p> <p>In situations where visits are permitted according to the criteria set by OCMOH:</p> <ul style="list-style-type: none"> ○ Limit visits to one designated person per patient. ○ Screen visitor for COVID-19 symptoms before visitor enters healthcare facility. ○ Provide visitor, before visitor enters patient's room, with instructions for hand hygiene, limiting surfaces touched, and use of PPE in accordance with Public Health guidelines while visitor is in room. ○ Keep a record (e.g., logbook) of all visitors entering patient rooms. ○ Prevent visitor from visiting other patients or going into other sectors of the facility. 	<p>Droplet/contact precautions, which include:</p> <ul style="list-style-type: none"> • Isolation gown (disposable) • Surgical or procedure mask • Gloves • Eye protection (goggles) 	<ul style="list-style-type: none"> • Cancel all visits except for compassionate reasons for palliative care, and essential services (i.e. Extra Mural, Physicians). • Use disposable gowns (level 1) from the provincial supply and wear two of them. • Add a disposable apron. • See strategies for eye protection and masks. 	<ul style="list-style-type: none"> • Cancel all visits except for compassionate reasons for palliative care, and essential services (i.e. Extra Mural, Physicians). • Use disposable gowns (level 1) from the provincial supply and wear two of them. • Add a disposable apron. • See strategies for eye protection and masks.

APPENDIX D: PERSONAL PROTECTIVE EQUIPMENT REQUIRED BY CARE SETTING: HOME CARE SETTINGS (standard practice; potential actions in an anticipated shortage or actual shortage)

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Home Care Settings				< 60 days of inventory	< 14 days of inventory
Home of a COVID-19+ patient	Extra-Mural Program health-care worker	Providing direct care for suspect or confirmed case of COVID-19 who may not require AGMP.	Droplet/contact precautions, which include: <ul style="list-style-type: none"> • Isolation gown (disposable) • Surgical/procedure mask • Gloves • Eye protection (goggles) 	<ul style="list-style-type: none"> • Use disposable gown if available. • See strategies for eye protection and masks. 	<ul style="list-style-type: none"> • Use isolation gowns (level 1) from the provincial supply and wear two at once. • Add a disposable apron. • See strategies for eye protection and masks.
		Providing direct care for suspect or presumptive case of COVID-19 requiring AGMP. <u>Note: Any aerosol generating medical procedures should be avoided in the home environment whenever possible.</u> If performed, they should occur in a separate room with the door closed and away from other high-risk patients or family members.	SRI precautions, which include: <ul style="list-style-type: none"> • Isolation gown (reusable cotton or microfibre) • N95 respirator (seal-checked and fit-tested) • Gloves • Eye protection (face shield) 	<ul style="list-style-type: none"> • Use disposable gown if available. • See strategies for eye protection and N95 respirators. 	<ul style="list-style-type: none"> • Use Halyard isolation gowns from the provincial supply and wear two at once. • Add a disposable apron. • See strategies for eye protection and N95 respirator.

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Home Care Settings				< 60 days of inventory	< 14 days of inventory
	Home-care worker providing personal care	Providing essential or urgent care for confirmed or suspect COVID-19 patient. <u>Note: Home support workers should not provide direct home care to a COVID-19 positive patient if they have not been trained or have access to PPE for contact precautions.</u>	Droplet/contact precautions , which include: <ul style="list-style-type: none"> • Isolation gown (disposable) • Surgical/procedure mask • Gloves • Eye protection (goggles) 	<ul style="list-style-type: none"> • Do not provide service. 	<ul style="list-style-type: none"> • Do not provide service
	Social worker providing in-home services to a client	Providing essential services to a patient	Droplet/contact precautions , which include: <ul style="list-style-type: none"> • Isolation gown (disposable) • Surgical/procedure mask • Gloves • Eye protection (goggles) 	<ul style="list-style-type: none"> • Do not provide service. <p>Note: In an emergency, child protection workers would call police for support.</p>	<ul style="list-style-type: none"> • Do not provide service. <p>Note: In an emergency, child protection workers would call police for support.</p>
Home of a non-COVID-19 patient	Extra-Mural Program health-care worker	Providing essential services to a patient	<ul style="list-style-type: none"> • Procedure/surgical mask 	<ul style="list-style-type: none"> • Face covering 	<ul style="list-style-type: none"> • Face covering

Setting	Individual	Activity	Type of PPE or Procedure (Standard Practice)	Anticipated Shortage	Actual Shortage
Home Care Settings				< 60 days of inventory	< 14 days of inventory
	Home care working providing personal care	Providing essential services to a patient	<ul style="list-style-type: none"> • Procedure/surgical mask 	<ul style="list-style-type: none"> • Face covering 	<ul style="list-style-type: none"> • Face covering
	Social worker providing in-home services to a client	Providing essential services to a patient	<ul style="list-style-type: none"> • Procedure/surgical mask 	<ul style="list-style-type: none"> • Face covering 	<ul style="list-style-type: none"> • Face covering