

CNA's key messages on PPE

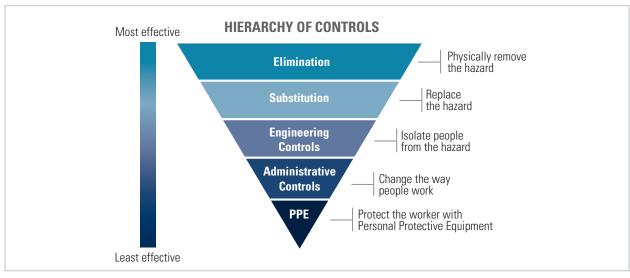
April 14, 2020

- ▶ Where clinical equipment decisions must be made in uncertain circumstances, we have urged and will continue to urge all levels of government to operate on the assumption that all parties will err on the side of over-protection (rather than under-protection) of all health-care providers in every case.
- ▶ The choice about equipment used in clinical situations in hospitals are made by health-care providers in each situation. Nurses are well prepared to make those decisions and must base them on sound guidelines and evidence.
- ► Employers have a responsibility to provide appropriate protective equipment in sufficient quantities to protect nurses.
- ► Nurses must advocate for change with employers or government when guidelines do not meet current evidence and infection control guidelines

The protection of health-care providers, including nurses, needs to be paramount, as they are the most valuable resource of all.

THE LAST LINE OF DEFENCE

Personal protective equipment (PPE) is considered the last line of defence in the hierarchy of infection prevention and control. This means that PPE supplements other measures to keep health-care providers and nurses safe. PPE should be used *in conjunction* with other types of controls, including engineering and administrative controls. Engineering controls can include strategies on the way a facility is built, private washrooms in isolation rooms, negative pressure rooms, and even something as simple as a plexiglass barrier in an emergency triage area. Administrative controls are strategies like screening procedures, visitor restrictions, symptom monitoring checklists, etc.



U.S. Centers for Disease Control (CDC) https://www.cdc.gov/niosh/topics/hierarchy/default.html

ETHICAL DILEMMAS

An ethical dilemma is defined as an issue where "equally compelling reasons for and against two or more possible courses of action, and where choosing one course of action means that something else is relinquished or let go." Ethics involves judgments about "the way we ought to live our lives, including our actions, intentions, and our habitual behaviour" (p. 8). The process of ethical analysis involves using principles and applying them to a given situation and making decisions about how to weigh competing principles when it is not possible to satisfy them all.

The COVID-19 pandemic has generated many challenging ethical dilemmas for nurses and health-care providers, including decisions around surge capacity, triaging of care and allocation of limited resources (i.e., beds, ventilators, staff). Of particular concern is the potential and actual shortages of appropriate PPE for health-care providers, which can compromise the safety of patients and staff alike. This situation is creating significant moral distress for nurses, as they consider their own personal safety and that of their family with their professional responsibility to meet standards of care for patients. The media has reported cases of the following:

- ► Shortages or anticipated shortages of PPE
- ► Rationing of PPE by employers
- ► Inappropriate or unauthorized PPE
- ► Inconsistent guidance on appropriate PPE

Some of the questions that may be raised when faced with scarce resources:xiii

- ▶ What type of resource allocation decisions might need to be made?
- ▶ How do the principles of utility and equity apply to decisions about allocating scarce resources?
- ▶ How does the principle of reciprocity apply to decisions about allocating scarce resources?
- ▶ What procedural considerations apply to decisions about resource allocation?
- ▶ What obligations do nurses have towards persons who are not able to access life-saving resources?

DELIVERY OF SAFE CARE IS A SHARED RESPONSIBILITY

The provision of safe, ethical care is the responsibility of all stakeholders, including nurses and health-care providers, federal and provincial/territorial governments, employers/institutions and other leaders. Federal and provincial/territorial governments have a responsibility to provide resources, evidence-informed guidance and support to ensure institutions and health-care providers are equipped with the knowledge and equipment needed to meet standards of care. Employers have a duty "to protect and support them [nurses] as well as to provide necessary and sufficient protective equipment and supplies that will 'maximally minimize risk' to nurses and other health-care providers." Additionally, adequate communication of decisions and rationale with staff is needed to promote transparency and trust with health-care providers, in turn increasing acceptance and cooperation.**



Nurses have a professional duty to provide safe, competent, compassionate and ethical care. However, they also have a right to refuse to work in situations where the risks cannot be managed or reasonably mitigated, resulting in an unreasonable burden. VII Nurses will not take this decision lightly, and they should consult and collaborate with their employer to explore opportunities to improve safety. VIII Nurses can also work with employers to determine what other infection prevention and control measures in the hierarchy of controls (see figure) can be implemented to reduce risk. These decisions can create conflicting feelings for nurses and CNA encourages nurses to consider the following questions when it comes to decisions regarding duty to care:

- ▶ What is the risk to the person in care if the nurse does not assist?
- ► Is the nurse's intervention directly relevant to preventing harm?
- ► Will the nurse's care probably prevent harm?
- ▶ Does the intervention outweigh the harms the nurse might incur and is that an acceptable risk?xvi

RISK MITIGATION

"An individual's duty to care is not absolute."x

Strategies and considerations for nurses and employers to manage or mitigate risk during a PPE shortage:

- ► Work with your employer to identify sources of appropriate PPE
- ► Identify personal risk factors (i.e., individual or family) that may put you at risk and communicate this to your supervisor/employer to develop alternative strategies
- ► Work with the employer to develop guidance/policies on risk mitigation strategies when supplies of PPE are limited
- ▶ Review potential engineering or administrative controls that can be used to mitigate risk
- ► Communicate with nursing staff in a timely and transparent manner regarding decision-making



TABLE: COMPARISON OF GUIDANCE FOR OPTIMIZING USE OF MASKS BY HEALTH-CARE PROVIDERS IN HEALTH-CARE SETTINGS

The table below is for general information purposes only. Always follow the guidelines as established by your provincial/territorial health authority. Date: PHAC, CDC, and WHO guidance as of April 14, 2020.

STRATEGIES TO OPTIMIZE USE OF MASKS		PUBLIC HEALTH AGENCY OF CANADA	CENTERS FOR DISEASE CONTROL AND PREVENTION	WORLD HEALTH ORGANIZATION*
Using masks past their shelf life or expiration date	N95	In times of decreased supply and increased demand, N95 masks can be used past their shelf life. Considerations: ► The straps are intact ► There are no visible signs of damage ► They can be fit-tested ► Conduct a seal test ^{xi}	In crisis capacity, N95 respirators can be used past their shelf life. Considerations: ▶ The quality of the fit and seal may be affected.xii	Considerations include: ► Inspect before use ► Can be fit- tested ► Straps intact ► Seal-check completed xiii
	Surgical or procedural mask	In times of decreased supply and increased demand, surgical masks can still be used beyond their shelf life to protect health-care providers. Considerations: ► Check that straps are intact. ► Inspect for visible signs of damage.	In crisis capacity, facemasks can be used beyond their shelf life to protect health-care providers. Considerations: Inspect for damage prior to use.**	No guidance at this time.

STRATEGIES TO OPTIMIZE USE OF MASKS		PUBLIC HEALTH AGENCY OF CANADA	CENTERS FOR DISEASE CONTROL AND PREVENTION	WORLD HEALTH ORGANIZATION
Using alternative masks	N95	If alternatives aren't available, health-care providers may use a commercial-grade N95 respirator in a health-care setting during the COVID-19 outbreak. Considerations: ► Commercial N95 respirators aren't tested for fluid resistance of any type. **vi*	In conventional capacity, can use equivalent and approved alternatives to N95 respirators where feasible. When supplies are low, can use respirators approved in other countries with similar standards.xvii	No available guidance at this time.
	Surgical or procedural mask	No recommendation; use with caution.xviii	In situations when no PPE is available, alternatives to facemasks can be considered (e.g., face shield, homemade mask). xix	Currently cloth masks are discouraged and not proven effective.xx
Extending use of masks Using the same mask for multiple encounters with patients of the same diagnosis. Note that the health-care provider would not remove the mask at any point between patients.	N95	No available guidance at this time.	In contingency capacity, extended use of N95 respirators can be considered, with limitations.**xi	Use of N95 can be extended for multiple patients with same diagnosis for up to 6 hours. Health- care providers should be aware of criteria, risks and precautions.
	Surgical or procedural mask	No available guidance at this time.	In contingency capacity, can consider limited extended use of face masks with specific considerations. xxii	Use of medical masks can be extended for multiple patients with same diagnosis for up to 6 hours. Health-care providers should be aware of criteria, risks and precautions.



STRATEGIES TO OPTIMIZE USE OF MASKS		PUBLIC HEALTH AGENCY OF CANADA	CENTERS FOR DISEASE CONTROL AND PREVENTION	WORLD HEALTH ORGANIZATION
Reprocessing and/or decontamination of masks The practice of using the same facemask by one health-care provider for multiple encounters with different patients, but removing it after each encounter.	N95	Health Canada has developed regulatory considerations.**	In crisis capacity, this may be considered. Guidance on reprocessing available here.	Methods exist for reprocessing; however, limitations and risks make this a last resort. Considerations include: ► Efficacy of sterilization ► Residual toxicity from reprocessing ► Integrity of product after reprocessing xxvii
	Surgical or procedural mask	No available guidance at this time.	No available guidance at this time.	No evidence currently available.
Re-using masks The practice of using the same facemask by one health-care provider for multiple encounters with different patients, but removing it after each encounter.	N95	No available guidance at this time.	In crisis capacity, can consider limited re-use of N95 respirators with specific considerations.xxiii	Reuse of any item without decontamination is inadequate or unsafe.
	Surgical or procedural mask	No available guidance at this time.	In crisis capacity, can consider Ilimited re-use of facemasks with specific considerations.xvv	WHO advises against re-use of single-use face mask. They should be disposed of after single use and should not be re-worn.

^{*}All WHO guidance is considered a last measure in times of potential or actual serious shortage of PPE.

World Health Organization. (2016). Retrieved from https://apps.who.int/iris/bitstream/handle/10665/250580/9789241549837-eng. pdf;jsessionid=6297B55E6B0F551CDA5879E9F2983C34?sequence=1



i Canadian Nurses Association. (2017). Code of Ethics for registered nurses. Retrieved from https://cna-aiic.ca/~/media/cna/page-content/pdf-en/code-of-ethics-2017-edition-secure-interactive.pdf?la=en

ii World Health Organization. (2016). Guidance for managing ethical issues in infectious disease outbreaks. Retrieved from https://apps.who.int/iris/bitstream/handle/10665/250580/9789241549837-eng.pdf;jsessionid=6297B55E6B0F551CDA5879E9F2983C34?sequence=1

i Ibic

- v Canadian Nurses Association. (2017). Code of Ethics for registered nurses. Retrieved from https://cna-aiic.ca/~/media/cna/page-content/pdf-en/code-of-ethics-2017-edition-secure-interactive.pdf?la=en
- vi Department of Health, Government of Ireland. (2020). Ethical framework for decision-making in a pandemic. Retrieved from https://www.gov.ie/en/publication/a02c5a-what-is-happening/#ethical-framework-for-decision-making-in-a-pandemic
- vii Ibid
- viii Nova Scotia College of Nursing. (2020). COVID-19. Retrieved from https://www.nscn.ca/professional-practice/trending-topics/covid-19
- ix Canadian Nurses Association. (2017). Code of Ethics for registered nurses. Retrieved from https://cna-aiic.ca/~/media/cna/page-content/pdf-en/code-of-ethics-2017-edition-secure-interactive.pdf?la=en
- x Department of Health, Government of Ireland. (2020). Ethical framework for decision-making in a pandemic. Retrieved from https://www.gov.ie/en/publication/a02c5a-what-is-happening/#ethical-framework-for-decision-making-in-a-pandemic
- xi Public Health Agency of Canada. (2020). Optimizing the use of masks and respirators during the COVID-19 outbreak. Retrieved from https://www.canada.ca/en/health-canada/services/drugs-health-products/medical-devices/masks-respirators-covid19.html
- xii U.S. Centers for Disease Control. (2020). Strategies for optimizing the supply of N95 respirators Retrieved from https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html
- xiii World Health Organization. (2020, April 6). Rational use of personal protective equipment for coronavirus disease (COVID-19). Retrieved from: https://www.who.int/publications-detail/rational-use-of-personal-protective-equipment-for-coronavirus-disease-(covid-19)-and-considerations-during-severe-shortages xiv Ibid
- xv U.S. Centers for Disease Control. (2020). Strategies for optimizing the supply of facemasks. Retrieved fromhttps://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/face-masks.html
- xvi Ibid
- xvii U.S. Centers for Disease Control. (2020). Strategies for optimizing the supply of N95 respirators. Retrieved from https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html
- xviii Health Canada. (2020). Considerations in the use of homemade masks to protect against COVID-19. Retrieved from https://www.canada.ca/en/health-canada/services/drugs-health-products/medical-devices/activities/announcements/covid19-notice-home-made-masks.html
- xix U.S. Centers for Disease Control. (2020). https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/face-masks.html
- xx WHO. (2020, April, 6). https://www.who.int/publications-detail/advice-on-the-use-of-masks-in-the-community-during-home-care-and-in-healthcare-settings-in-the-context-of-the-novel-coronavirus-(2019-ncov)-outbreak
- xxi U.S. Centers for Disease Control. (2020). Strategies for optimizing the supply of N95 respirators https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html
- xxii Ibio
- xxiii U.S. Centers for Disease Control. (2020). Pandemic planning Recommended Guidance for Extended Use and Limited Reuse of N95 Filtering Facepiece Respirators in Healthcare Settings. Retrieved from https://www.cdc.gov/niosh/topics/hcwcontrols/recommendedguidanceextuse.html#respreuse
- xxiv Ibid
- xxv Health Canada. (2020, April 8). Notice Important Regulatory Considerations for the Reprocessing of Single Use N95 Respirators during the COVID-19 Response. Retrieved from: https://www.canada.ca/en/health-canada/services/drugs-health-products/medical-devices/activities/announcements/covid19-notice-reprocessing-n95-respirators.html
- xxvi World Health Organization. (2020, April 6). Rational use of personal protective equipment for coronavirus disease (COVID-19). Retrieved from: https://www.who.int/publications-detail/rational-use-of-personal-protective-equipment-for-coronavirus-disease-(covid-19)-and-considerations-during-severe-shortages xxvii lbid.

