

HEALTH CARE WORKER VACCINE PRIORITY SETTING GUIDANCE

Where demand among health care workers for COVID-19 vaccines exceeds available supply, health care workers should be prioritized for voluntary vaccination based on (1) risk of exposure to SARS-CoV-2 within a health care setting based on health care worker role or responsibility; (2) risk of severe disease or outcomes from COVID-19 among patient population served; and (3) criticality to health system capacity. Use the following matrices with best available data to identify priority groups.

Patient population/exposure risk		Risk of exposure to SARS-CoV-2 within a health care setting based on health care worker role/responsibility		
		Low Risk	Moderate Risk	High Risk
Risk of severe disease or outcomes from COVID-19 among patient population served ¹	Low Risk	1	2	3
	Moderate Risk	2	3	4
	High Risk	3	4	5

*Consider those who provide direct and more frequent or sustained care, or whose presence in such environments is more direct, frequent, or sustained, in addition to those with more limited access to PPE.

Criticality		Existing health system capacity and redundancy		
		High	Moderate	Low
Essentiality to critical health system capacity	Low	0	.25	.50
	Moderate	.25	.50	1
	High	.50	1	2

*Consider those who cannot work remotely or virtually and who work in areas with limited or reduced capacity as well as little or no redundancy.

Priority Score

Key Prioritization Consideration	Score
Patient population/exposure risk	/5
Criticality	/2
Total	/7

- Those with a higher score should receive greater priority for a COVID-19 vaccine.
- Among equally prioritized health care workers, those who are themselves at greater risk for severe disease or outcomes should be prioritized.²
- Where all else is equal within equally prioritized groups, random allocation (via lottery) should be employed to ensure fair allocation.
- Where vaccine doses are leftover with no health care workers in the current priority group available to receive them, such residual doses should be allocated to health care workers in the next highest priority group, with priority to those who are able to be physically proximal to the vaccination site. Where demand for residual doses within this group exceeds supply, random allocation among eligible health care workers should be employed.

¹ See Government of Canada's [People who are at risk of more severe disease or outcomes from COVID-19](#). Also consider available data regarding risk for severe disease/outcomes due to biological, social, geographical, and occupational factors.

² See explanation under the section below on 'Allocation within equally prioritized groups'.

Guidance for Prioritizing Health Care Workers for COVID-19 Vaccination

December 18, 2020

Preamble

Health care workers have been identified as a priority group for COVID-19 vaccination in Ontario.³ Because demand for COVID-19 vaccines among Ontario's health care workers will initially exceed available supply, priorities for voluntary vaccination must be set *among* health care workers. The aim of this document is to provide guidance regarding the allocation of vaccine doses among health care workers for doses expected to be delivered on December 21, 2020.

Setting priorities among health care workers should aim to be consistent but also remain sensitive and responsive to local/regional/institutional contexts and data. Consequently, in lieu of identifying categories of health care workers to be prioritized irrespective of local conditions and data, this guidance identifies key parameters that can aid in the identification of priority groups based on relevant data and local settings.

For the purposes of prioritization of vaccine doses set to be delivered on December 21, 2020, 'health care worker' is defined as regulated health professionals⁴ and any staff member, contract worker, student/trainee, registered volunteer, or other essential caregiver currently working in a hospital or congregate living setting that provides care for seniors (only limited to these settings for December 21, 2020 vaccine doses). It is important to note that this definition should be interpreted in a broad and inclusive manner to include those working in non-direct patient care roles, which among others includes cleaning staff, food services staff, information technology staff, security, research staff, and other administrative staff working in these settings. Discussions are ongoing to expand this definition to include health care workers in other settings for future vaccine allotments.

General priority setting guidance

- Use the province's *Ethical Framework for COVID-19 Vaccine Distribution* to guide all priority setting decisions and decision-making processes. Consider applying a Health Equity Impact Assessment⁵ in all decision-making processes regarding prioritization.
- Use the best available local, regional, and provincial data to assist in the identification of priority groups using the key considerations identified below. In particular, use available data regarding populations, occupational roles, and settings most affected by COVID-19 to assist in prioritization.
- COVID-19 vaccination is strongly recommended for all health care workers but remains voluntary.
- Do not prioritize based on seniority or rank.
- Prospective vaccine recipients should be able to return within the vaccine interval to receive their second dose.
- Please see the first page of this document for a priority setting guidance work sheet, as well as the appendix for illustrations of how the priority setting scoring system should be applied with case examples.

³ Government of Ontario. [COVID-19 vaccines for Ontario](#); National Advisory Committee on Immunization. [Guidance on the prioritization of initial doses of COVID-19 vaccine\(s\)](#). 12/04/2020.

⁴ Ontario Ministry of Health. [Regulated health professionals](#). 11/16/2018.

⁵ Ontario Ministry of Health. [Health equity impact assessment](#). 09/06/2019.

KEY DIMENSIONS FOR PRIORITIZING HEALTH CARE WORKERS

Health care workers are being prioritized for COVID-19 vaccination because they provide critical services during the pandemic, because they are at greater risk of transmission of, and exposure to, SARS-CoV-2, and because doing so will help ensure that the health system stays optimally capable of treating the population.⁶ Consequently, where demand among Ontario's health care workers for COVID-19 vaccines exceeds available supply, health care workers should be prioritized for voluntary vaccination based on (1) risk of exposure to SARS-CoV-2 within a health care setting based on health care worker role or responsibility; (2) risk of severe disease or outcomes from COVID-19 among patient population served; and (3) criticality to health system capacity. These considerations can aid prioritization both across and within health institutions, workforces, and settings.

Key considerations (1) and (2) are given greater weight in identifying priority health care workers because vaccinating health care workers meeting these criteria may help to protect the most vulnerable patients as well as help to protect health system capacity by reducing health care needs amongst the most vulnerable patient populations. Key considerations (1) and (2) are weighted equally.

1. Risk of exposure to SARS-CoV-2 within a health care setting based on health care worker role or responsibility

In order to protect patients and protect health system capacity, health care workers who are at greater risk of exposure to SARS-CoV-2 within a health care setting based on their role or responsibilities should be prioritized. This includes those working with patient populations who are more likely to be currently infected with SARS-CoV-2 and whose patient interactions carry a greater risk of transmission of SARS-CoV-2 (e.g., physical contact with patients, sustained time in patients' rooms, aerosol-generating procedures).

Health care workers who may be at greater risk of exposure to SARS-CoV-2 within a health care setting due to their role or responsibilities are institution- and setting-specific, but among others *may* include those working in the following example areas:

- COVID-19 units
- Critical care units/critical care response teams
- Emergency departments
- General internal medicine units
- COVID-19 assessment centres
- Emergency first response
- Outreach to high risk COVID-19 satellite clinics, such as COVID-19 recovered hostels, hotels

2. Risk of severe disease or outcomes from COVID-19 among patient population served

In order to protect the most vulnerable patient populations, health care workers who serve patient populations who are at greater risk of more severe disease or outcomes⁷ should be prioritized. This includes health care workers who may not provide direct care to such populations but who work in their patient care environments. Those who provide more frequent or sustained care or whose presence in such environments is more frequent or sustained should be prioritized, as should those with more limited access to personal protective equipment.

⁶ Government of Ontario. [COVID-19 vaccines for Ontario](#); National Advisory Committee on Immunization. [Guidance on the prioritization of initial doses of COVID-19 vaccine\(s\)](#). 12/04/2020.

⁷ See Government of Canada's [People who are at risk of more severe disease or outcomes from COVID-19](#). 12/8/2020. Also consider available data with respect to risk for severe disease or outcomes due to biological, social, geographical, and occupational factors.

Health care workers who serve patient populations who are at greater risk of severe disease or outcomes from COVID-19 are institution- and setting-specific, but among others *may* include those working in the following example areas:

- Congregate living settings that provide care for seniors (e.g., long-term care homes)
- Complex continuing care
- ALC settings where patients are awaiting transfer to congregate living settings that provide care for seniors
- Critical care units
- Settings with immunocompromised patients (e.g., cancer care, transplant)
- In-centre dialysis
- Services for those who are at greater socioeconomic disadvantage

Patient population/exposure risk		Risk of exposure to SARS-CoV-2 within a health care setting based on health care worker role/responsibility		
		Low Risk	Moderate Risk	High Risk
Risk of severe disease or outcomes from COVID-19 among patient population served ¹	Low Risk	1	2	3
	Moderate Risk	2	3	4
	High Risk	3	4	5

3. Criticality to health system capacity

Health care workers provide critical services during the pandemic by caring for patients with and without COVID-19 infection. This key consideration aims to protect health care human resources by prioritizing health care workers who cannot work remotely or virtually and who work in areas with limited or reduced capacity, little or no redundancy, and are essential to critical health system capacity.

Health care workers who may be essential to critical health system capacity or who work in roles that cannot be conducted virtually or have limited existing capacity or redundancy are institution- and setting-specific. For example, in hospitals with multiple units caring for COVID-19 patients, limited capacity among respiratory therapists may exist, which may favour greater prioritization for this group. As another example, health human resources/provincial centres providing unique, highly specialized services (e.g., ECMO, organ procurement) may be considered essential to these critical health system functions and therefore ought to be prioritized accordingly.

Criticality		Existing health system capacity and redundancy		
		High	Moderate	Low
Essentiality to critical health system capacity	Low	0	.25	.50
	Moderate	.25	.50	1
	High	.50	1	2

Priority scoring

To arrive at a priority score for the purposes of prioritization, add the figures from each of the tables above. Those scoring higher should receive higher priority.

Key Prioritization Consideration	Score
Transmission/infection risk	/5
Criticality	/2
Total	/7

Allocation within equally prioritized groups

It is likely that many health care workers will receive a similar priority score and that demand within equally prioritized groups may still exceed vaccine supply. Within equally prioritized health care workers, those who are themselves at greater risk for severe disease or outcomes should be prioritized. Because prioritization on this basis would otherwise require personal health information, institutions should implement this consideration using voluntary self-reports from health care workers regarding their own assessment of personal risk for severe disease and outcomes. Where all else is equal within equally prioritized groups, random allocation (e.g., via a random number generator) should be employed to ensure fair allocation.

When individuals are randomized for vaccination, safeguards should be in place to ensure the integrity and fairness of the randomization process. Randomization should be done through a valid tool to ensure that the results cannot be predicted or influenced, and it should occur independently of those who are eligible to receive the vaccine in the random allocation. The process and outcomes of randomization should be clearly documented and made transparent to all those affected.

Allocation of leftover vaccine

In order to avoid wastage of thawed vaccine and due to time sensitivities, vaccine doses leftover with no health care workers in the current priority group available to receive them should be allocated to those in the next highest health care worker priority group, with priority to those who are able to be physically proximal to the vaccination site and able to receive the vaccine before it spoils. If eligible recipients exceed supply, random allocation (via lottery) should be employed to ensure fair allocation.

Local decision-making

Priority setting decisions should be informed by consultation with a diverse range of health care workers (including point of care, unit managers, etc.) and should be made by a committee of no less than five individuals that itself includes perspectives from stakeholders from across the health work force who understand roles, functions, and patient populations. Additional key stakeholder perspectives include infection prevention and control specialists, operations, human resources, bioethics, and communications. The committee should review the criteria/risk matrices and assign priority scores based on the best available scientific evidence, shared values, and input from affected parties, including those historically under-represented. The committee should make their decisions and decision-making processes transparent and communicate them publicly. Consult the province's *Ethical Framework for COVID-19 Vaccine Distribution* to better ensure fair decision-making processes.

Staffing consideration

Consider staggering vaccination within a unit or program's complement of staff to maintain critical functions given the possibility of reactogenicity, e.g., vaccinating no more than 15% from any given unit/discipline every 3 days.

Appendix: Case examples

The following case examples are provided to illustrate how the health care worker prioritization guidance could be applied. They are provided for illustrative purposes only and do not necessarily reflect the assessment of all health care workers in the roles and settings described.

Case Example #1: Respiratory therapist working in ICU

This example is provided for illustrative purposes only. It does not necessarily reflect the assessment of all health care workers in this role in this setting.

Patient population/exposure risk		Risk of exposure to SARS-CoV-2 within a health care setting based on health care worker role/responsibility		
		Low Risk	Moderate Risk	High Risk
Risk of severe disease or outcomes from COVID-19 among patient population served ¹	Low Risk	1	2	3
	Moderate Risk	2	3	4
	High Risk	3	4	5

Rationale:

- Patient population (High risk): Critically ill patients with complex and multiple conditions, including respiratory distress
- Exposure risk (High): High rate of COVID-19 patients in ICU; high transmission risk associated with aerosol-generating medical procedures

Criticality		Existing health system capacity and redundancy		
		High	Moderate	Low
Essentiality to critical health system capacity	Low	0	.25	.50
	Moderate	.25	.50	1
	High	.50	1	2

Rationale:

- Essentiality (Moderate): Some physicians and nurses may be able to perform functions if required
- Redundancy (Low): Highly specialized role with lean workforce

Priority Score

Key Prioritization Consideration	Score
Patient population/exposure risk	5/5
Criticality	1/2
Total	6/7

Case Example #2: Nurse working in COVID-19 unit

This example is provided for illustrative purposes only. It does not necessarily reflect the assessment of all health care workers in this role in this setting.

Patient population/exposure risk		Risk of exposure to SARS-CoV-2 within a health care setting based on health care worker role/responsibility		
		Low Risk	Moderate Risk	High Risk
Risk of severe disease or outcomes from COVID-19 among patient population served ¹	Low Risk	1	2	3
	Moderate Risk	2	3	4
	High Risk	3	4	5

Rationale:

- Patient population (Low risk): Patient population not at risk of transmission/infection since already COVID-19 positive
- Exposure risk (High): Cumulative exposure to patients with COVID-19

Criticality		Existing health system capacity and redundancy		
		High	Moderate	Low
Essentiality to critical health system capacity	Low	0	.25	.50
	Moderate	.25	.50	1
	High	.50	1	2

Rationale:

- Essentiality (High): Essential to the critical health system function of treating COVID-19 patients
- Redundancy (Moderate): Staffing is lean, though some redundancy exists

Priority Score

Key Prioritization Consideration	Score
Patient population/exposure risk	3/5
Criticality	1/2
Total	4/7