

Expert Panel on Infection Control | Guidelines

Management of At-Risk Trainees during the COVID-19 Pandemic

Background

The current pandemic of COVID-19 is likely to continue and evolve over several years. The lack of population immunity to COVID-19 and the lack of a vaccine place healthcare workers, including trainees, at risk. COVID-19 severity ranges from asymptomatic or mild to severe and fatal and this is only partially predictable based on known risk factors including advanced age and specific comorbidities. For this reason, **every effort must be made to minimize the risk of COVID-19 for all trainees.**

It is also essential that we continue to train medical professionals to meet the challenges of healthcare in the COVID-19 era. These trainees represent the future of Canadian healthcare and their training, in most cases, should go forward despite the pandemic. Caring for patients with communicable diseases is part of healthcare, and should be part of healthcare training – with appropriate safety measures in place, including education, training, supervision, and graduated responsibility for trainees based on experience and competence.

These guidelines provide a foundation for the Faculty of Medicine, University of Toronto to assess and mitigate the risk of COVID-19 for pregnant trainees and trainees with comorbid conditions that increase the risk of severe COVID-19 outcomes. These guidelines may need to be adapted based on the occupational health policies of the healthcare facilities where clinical placements occur. Guidelines will be updated as new information emerges regarding transmission and risk associated with COVID-19 infection.

How do healthcare workers, including trainees, acquire COVID-19

COVID-19 is spread by droplet and contact transmission. In most cases, prolonged close contact within 2 meters is required for transmission to occur. Attack rates in households are approximately 10% to 20%, and are much lower in other settings, including healthcare settings.

Healthcare workers are at increased risk of COVID-19 compared to the general population because of their need to attend work in person, and the need for close contact with patients. However, data suggest that many or most healthcare workers that develop COVID-19 acquire it in the community. When healthcare workers acquire COVID-19 within a healthcare setting it can occur via several mechanisms*:

- Exposure to another infected healthcare worker, including pre-symptomatic or mildly ill healthcare workers that have continued to work despite illness;
- Exposure to a COVID-19 patient where that patient was not suspected of having COVID-19 as they were pre-symptomatic or their symptoms were atypical or ascribed to an alternative diagnosis;
- Exposure to a confirmed COVID-19 patient without the use of hand hygiene or without the use of appropriate personal protective equipment (including correct donning and doffing of this equipment).

* Note: While transmission of COVID-19 transmission related to handling specimens in a laboratory setting is a theoretical risk, transmission to laboratory staff has not been reported.

An important point is that restricting contact with confirmed COVID-19 cases will only minimally reduce a healthcare worker's risk of acquiring COVID-19 as they will remain at risk from community transmission, healthcare worker to healthcare worker transmission, and transmission from unrecognized cases. Only strict adherence to both public health and infection control routine practices (including physical distancing between healthcare workers and universal masking at work) can reduce these risks.

Strategies to Protect all Trainees

All healthcare trainees are at risk of COVID-19. To minimize their risk the following measures should be in place:

- Training programs should ensure that trainees are informed about public health guidance on reducing the spread of COVID-19 in our communities – trainees have a responsibility as healthcare professions to role model recommended public health behaviours;
- Training programs must ensure trainees receive infection prevention and control training on hand hygiene, routine practices, and the correct use of personal protective equipment;
- Training programs and healthcare settings where trainees are located must ensure that trainees are aware of the policies and procedures related to COVID-19 in each setting, including the required use of masks at all times within the healthcare setting, the use of additional personal protective equipment (e.g. faceshields, gowns, gloves) when indicated, and recommendations on social and physical distancing within the clinical and non-clinical learning environment;
- Training programs must ensure that trainees are aware that they must not attend a clinical placement if ill; the training program must ensure that trainees are not penalized for lack of attendance due to illness;
- Trainees should only be sent to clinical placements that provide a safe environment that includes infection prevention and control policies and procedures to reduce COVID-19 transmission risk, provision of required personal protective equipment to trainees, and appropriate supervision;
- Trainees should never be required to care for potentially infectious patients to reduce the risk to other healthcare workers (e.g. senior clinicians should not have trainees provide care to COVID-19 patients as a strategy to avoid providing that care themselves);
- Trainees must have access to personal protective equipment, occupational health assessment, and COVID-19 testing in the same manner as other healthcare workers;
- Trainees should be assigned graduated responsibility and should only provide clinical care at a level that their program and clinical supervisor feel is within their current competency.

Considerations and recommendations for pregnant trainees and trainees with existing health conditions that may increase COVID-19 risk

Pregnancy has been associated with worse outcomes from other respiratory viruses, including influenza. Early data for COVID-19 suggest that pregnant women are not at increased risk of severe outcomes compared to non-pregnant women. The quality of these data remain limited, however. An increased risk of preterm delivery has been reported, and other, as yet unknown risks to the fetus related to maternal infection remain possible.

A number of comorbid conditions have been associated with increased risk of severe COVID-19 outcomes (e.g. hypertension, asthma, COPD, coronary artery disease, diabetes, obesity), as has age and male gender. Other less common conditions, particularly immunocompromising conditions (e.g. bone marrow transplants) and conditions affecting the lungs (e.g. cystic fibrosis), are also likely to increase risk, but data remain limited. In some cases the degree of risk increase is relatively small; furthermore there is significant morbidity (and potential mortality) associated with COVID-19 in the absence of any identified risk conditions.

Considering that: 1) all trainees are at some risk of COVID-19, 2) most of this risk is not related to the direct provision of care to a COVID-19 patient by a trained individual using appropriate PPE, 3) healthcare training can be significantly impacted when clinical rotations are canceled, rescheduled, or delayed, 4) COVID-19 symptoms are so broad that a large proportion of patients are currently considered to have suspected COVID-19, 5) the pandemic risk will not resolve in the near future, and 6) many trainees will become credentialed healthcare professionals during the pandemic, it does not make sense to completely restrict trainees from providing care to patients with suspected or confirmed COVID-19.

Recommendations

- **Trainees at all levels** are not obligated to report their medical condition or pregnancy status, as it relates to COVID-19 risk, to their program or clinical placement.
- **Post-licensure trainees** (e.g. residents, fellows) that are pregnant or have a medical condition that may increase their risk of COVID-19 are **expected to provide care** to patients with **suspected or confirmed** COVID-19 (including working in an area or placement dedicated to COVID-19 care) if they have received appropriate training, have access to appropriate PPE, and are under appropriate supervision.
- **Pre-licensure trainees** (e.g. medical students) that are pregnant or have a medical condition that may increase their risk of COVID-19 **should not provide care** to **confirmed** COVID-19 patients or work in an area or placement dedicated to COVID-19 care.
- **Pre-licensure trainees** (e.g. medical students) that are pregnant or have a medical condition that may increase their risk of COVID-19 **can provide care** to patients with **suspected** COVID-19 if they have received appropriate training, have access to appropriate PPE, and are under appropriate supervision.
- **Trainees at all levels** can participate in laboratory medicine rotations, including handling specimens that may be contaminated with SARS-CoV2, if they have received appropriate training, have access to appropriate PPE, and are under appropriate supervision.
- **Trainees at all levels** that are severely immunocompromised or have a condition that may substantially increase their risk of severe COVID-19 outcomes should be evaluated by their program. On a case by case basis, if warranted and in order to reduce risk, it may be necessary for the trainee to take a medical leave of absence in order to avoid both community and occupational exposure to COVID-19 following the medical leave policy for their program.