

Infectious Questions EP 24: Infection Prevention and Control for COVID-19: Spotlight on IPAC Canada Resources

Shivoan: Welcome to Infectious Questions; a public health podcast produced by the National Collaborating Centre for Infectious Diseases. I'm Shivoan Balakumar. We move on with our series on COVID-19 covering topics and questions of interest among public health practitioners in Canada. If you have any questions to submit, please send them to nccid@umanitoba.ca or find us on our website at nccid.ca. On this 10th episode, we'll be shining a spotlight on infection prevention and control resources for COVID-19 developed by the non-profit professional organization Infection Prevention and Control Canada, otherwise known as IPAC Canada. It's an organization that works to provide expert information on infection prevention and control to its diverse members and stakeholders.

We spoke with Jennifer Happe, an infection prevention and control professional with Alberta Health Services and a director on the IPAC Canada board. Here's NCCID's Harpa Isfeld-Kiely with Jennifer Happe.

Harpa: Thanks for joining us on the podcast today, Jennifer. We are now four weeks into the pandemic here in Canada and as we see more healthcare workers contracting COVID-19, questions are coming back to our infection prevention and control practices. Could you tell us about IPAC Canada's role in supporting evidence based infection prevention and control practices for COVID-19?

Jennifer: Infection Prevention and Control Canada or IPAC Canada, supports evidence-based practices in a number of ways. IPAC Canada actively participates in shaping federal and provincial guidance by advising on best practices to prevent and control the virus that causes COVID-19. For example, the Public Health Agency of Canada is an important partner of ours and IPAC Canada consulted on preparation of their interim guidance for COVID-19. We support the office of the Chief Public Health Officer of Canada in building and disseminating surveys to those working on the frontline of infection prevention and control.

The purpose has been to gather information about COVID-19 readiness and resources in jurisdictions across Canada and to determine what new resources would be most helpful to the frontline, including evidence based guidelines and webinar sessions to convey current best practices. IPAC Canada also plays a role in disseminating best practice resources. We have a dedicated COVID-19 webpage that we updated daily with new guidance and information that can be accessed by both members and non-members. We also host educational webinars; for example, some of the most recent sessions included a general session on COVID-19 and a session on respiratory personal protective equipment.

Harpa: Thanks Jennifer, those will be helpful for our listeners. What basic IPC practices are in place and have they changed as more information has become available?

Jennifer: Well, basic practices like hand hygiene and conducting a point of care risk assessment never change. These are part of routine practices that form the foundation of infection prevention and control. They are in place to keep healthcare professionals safe during every single interaction they have with the patient in the healthcare environment. It's important not to lose sight of these basic actions staff can take to protect themselves even during the COVID-19 pandemic. Having said that, it's just not business as usual; our knowledge of this virus and how it spreads continues to grow. Emerging evidence on COVID-19 has to be continuously reviewed to inform decision making. For example, recent data shows that asymptomatic spread appears to be happening more often than what was first thought.

In light of this, Canada's Chief Public Health Officer, Dr Theresa Tam, expanded the containment approach in Canada just earlier this week to include using non-medical masks in tandem with social distancing measures to limit the transmission of the virus from asymptomatic carriers. It's important that healthcare staff stay informed about new and changing best practices and that they obtain this information from trusted sources.

Harpa: What challenges have you seen in the ability to apply IPC practices to protect those at the frontlines?

Interviewer: Personal protective equipment availability is a real concern specifically with procedure masks N-95 respirators given that COVID-19 is a respiratory infection. Masks and respirators are intended to be used once and discarded. However, in times of crisis, special measures may be required to conserve this personal protective equipment. Strategies to preserve facial protection supplies can include continuous use of masks between patient interactions and decontaminating respirators with hydrogen peroxide vapour or ultraviolet irradiation or moist heat. It's important to recognize the risks of these strategies; for example, continuous use of masks can lead to inadvertent transmission of microbes from patient to patient, facial dermatitis in the users, fatigue, potential increased frequency of touching and adjusting the mask over time which increases the risk of self-contamination.

When considering a decontamination strategy, it's important to consult the manufacturer about the impact of a decontamination method on their respirator and to gather information from the manufacturer or a third party showing that the respirators can be successfully decontaminated without impacting respirator performance. IPAC Canada has a public page

dedicated to research and recommendations around conservation and decontamination of PPE during the COVID pandemic. Another concern that we found is frequently voiced by frontline healthcare workers is conflicting messages about how the virus spreads and whether a mask or a respirator is the most appropriate personal protective equipment to use for the routine interactions that they have with patients who are suspected or known to have COVID-19 virus. Provincial and federal guidelines in Canada recommend the use of procedure masks after the World Health Organization for all routine care – while N-95 respirators are recommended only when aerosol generating medical procedures are performed.

On the other hand, Professional Staff Unions in Canada and the Centre for Communicable Diseases in the United States recommend respirators when providing any type of care. This has been a great cause for anxiety amongst staff.

Harpa: Thanks Jennifer. What inequities affect how well frontline personnel can implement IPC recommendation? For example, inequities shaped by the healthcare setting in which they work, their region, professional group or the patient populations they work with?

Jennifer: Supporting staff to implement infection control best practices is often focused on frontline care providers like nurses and physicians. But, we can't forget about allied health professionals, our environmental services staff and our facility maintenance staff, as well as any contractors and vendors that might be in the facility. These personnel also require support in understanding and applying safety measures like when and how to perform hand hygiene and how to put on and take off personal protective equipment properly in case they have to enter rooms with patients who are on additional precaution.

IPAC Canada members can use resources and tools available to them through our organization to provide training and education in their local healthcare setting through these often de-prioritised staff groups. Other tools are also available to measure compliance and identify gaps where work still needs to be done. When thinking about regions and populations where inequities exist; First Nations, Inuit and Métis are among the most vulnerable during this crisis, in particular those in remote and fly-in only parts of the country are uniquely vulnerable to inequities and service and supplies. While provinces and territories are generally responsible for the provision of direct healthcare services, in this case the government of Canada has taken action to implement a co-ordinated effort to ensure measures are in place to mitigate the impacts of COVID-19 in indigenous communities.

Specifically, they want an indigenous communities support fund to address education, supplies and mental health needs in these populations during the pandemic.

Harpa: Thank you, Jennifer. Those settings certainly are a concern for Public Health. What more can be done to protect frontline healthcare providers? Who can help?

Jennifer: Well, industry can play a significant role in ensuring personal protective equipment is available to staff by speeding up the manufacturing of this vital equipment. Manufacturers can also validate appropriate methods of decontaminating single-use masks to be used temporarily during the COVID-19 pandemic to further ensure that there is sufficient supplies manufactured. The supplies have to be made available for use. IPAC Canada is actively working with our partners to prevent disruption in the supply chain of PPE from the United States into Canada. To support supply availability, we've also encouraged other professional organizations whose members may have closed or reduced clinic hours to advocate for the donation of new and unused PPE to hospitals and long-term care centres.

This effort is ongoing but, to date, there have been 1000 masks and 200 gloves donated. Staffing levels is another important piece to increase capacity to respond to surges in COVID cases. When it comes to staffing, health professional associations have a key role to play in helping Canada to respond. The office of the Chief Public Health Officer of Canada enlisted the support of IPAC Canada and other partners in identifying experts across the country that can support surveillance and monitoring of COVID cases at the provincial and territorial levels and augment healthcare human resource capacity across all disciplines to prepare the healthcare system for an anticipated surge in cases.

Harpa: Thank you, Jennifer. I really appreciate all that information. Do you have any final advice for frontline worker about infection prevention practices for COVID-19?

Jennifer: I guess if there are healthcare professionals listening, I would just remind them that they have the skills to safely interact with people that are suspected or known to have COVID. Apply contact droplet precautions, which is what they utilize every year during influenza season especially. And, I just urge them to have confidence and conviction in what they're doing to make sure that they obtain information from trusted and reputable sources rather than from social media and word of mouth and to have faith in their skills as healthcare providers because we know how and can safely manage this within our healthcare system.

Shivoan: That was Harpa Isfeld-Kiely's phone interview with Jennifer Happe of IPAC Canada. If you have other public health questions on COVID-19, please

submit them to nccid@umanitoba.ca. Production of this podcast has been made possible through a financial contribution from the Public Health Agency of Canada, but the views expressed here do not necessarily represent those of the agency. The host organization of the NCCID is the University of Manitoba. Learn more at nccid.ca.