

FUNDAMENTALS

Summary of Infection Prevention and Control Key Principles for Clinical Office Practice

2nd Edition: October 2022

Introduction

This document is an update to *At A Glance: Summary of Infection Prevention and Control Key Principles for Clinical Office Practice*, September 2021. This revision provides additional evidence, current to August, 2022, concerning risks associated with serious infectious disease outbreaks and the implementation of IPAC practices to minimize the risk of infection transmission.

Background

Preventing the spread of acute respiratory illnesses (ARI) (e.g., influenza, COVID-19, respiratory syncytial virus [RSV]) and other communicable diseases (e.g., varicella, norovirus) during the provision of care in the clinical office setting is critical for the health of patients/clients, health care workers (HCWs) and office staff. This document has been developed to provide a compilation of Infection Prevention and Control (IPAC) best practices and resources for clinical office practice with additional information on ARI assessments, vaccination and testing for ARI (e.g., influenza and COVID-19).

Providers of care in clinical office settings have a responsibility to have systems in place with established policies and procedures that protect the health and safety of workers in their workplace. Preventing transmission of microorganisms to patients is a patient safety issue, and preventing transmission to staff is an occupational health and safety issue. The consistent and appropriate use of Routine Practices and Additional Precautions (RPAP) by all HCWs will lessen microbial transmission in the clinical office setting.¹

The information in this document is complementary to and is supported by the following resources:

- Provincial Infectious Diseases Advisory Committee-Infection Prevention and Control's (PIDAC-IPC) [IPAC for Clinical Office Practice](#)¹
- [IPAC Checklist for Clinical Office Practice Core Elements](#)²
- [CHECKLIST Infection Prevention and Control Key Principles for Clinical Office Practice During the COVID-19 Pandemic](#)³
- [Interim Infection Prevention and Control Measures based on COVID-19 Transmission Risks in Health Care Settings](#)⁴
- [Interim IPAC Recommendations for Use of Personal Protective Equipment for Care of Individuals with Suspect or Confirmed COVID-19](#)⁵

These resources can assist with ensuring implementation of IPAC best practices.

This document was developed to support primary care offices, specialist clinics, community health centres, urgent care and walk-in clinics, dental offices and other community clinics. In this document, the term clinical office setting represents the care settings listed above.

Relevant guidance from the government of Ontario for long-term care and retirement homes are to be followed related to many sections in this document. As these are revised often, always ensure that the most recent version is viewed. These can be found on the Ministry website: [COVID-19 Guidance for the Health Sector](#)⁶

Planning and Preparedness

An IPAC Organizational Risk Assessment (ORA) can help provide a framework for the components of an IPAC plan and is an evaluation, done by the organization or facility, to identify potential internal and external infection risks and the level of risk for exposure of staff or patients in order to implement controls to mitigate identified hazards.⁷

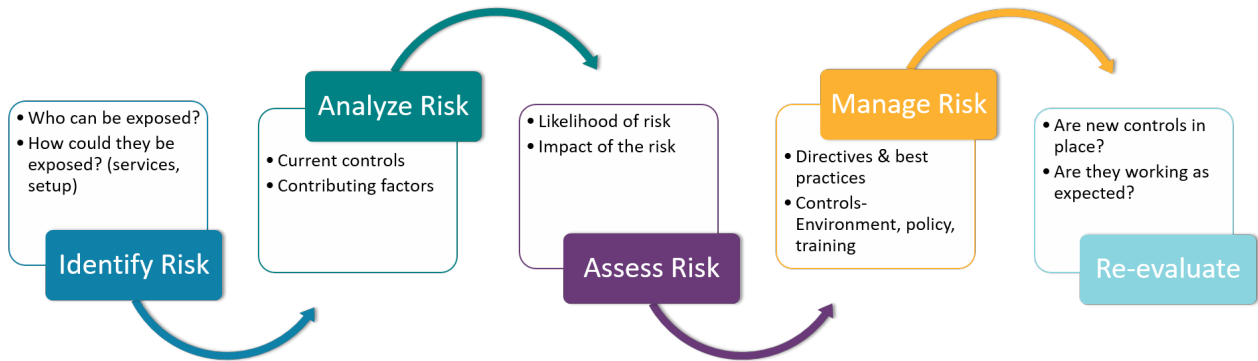
Larger group practices may consider forming a multi-disciplinary working group and appointing a lead. The composition of the working group should be representative of the various regulated health professionals providing care. Consider engagement with external partners such as local PHU'S.

Consider the following when performing an ORA:^{8,9}

- Identify potential communicable diseases that could impact your office, staff and patients (e.g., influenza, norovirus, SARS-CoV-2 (virus name for COVID-19), viral hepatitis).
 - The specific communicable diseases will depend on many factors (e.g., patient demographic, the incidence or the epidemiology of the organism in the geographic location, types of procedures performed).
- Who could potentially be exposed? How could they be exposed?
 - Staff coming to work when ill, patients coming for an appointment while sick and patient's companions coming to the office while sick have the potential to cause an exposure.
- The likelihood of harm and its severity to staff and patients.
- Current IPAC measures already in place? Would these measures be effective in mitigating the potential transmission and what changes would have to be made to improve the ability to mitigate transmission (e.g., healthy workplace policy including paid sick days, a vaccination policy strongly encouraging staff to receive pertinent vaccinations, access to alcohol based hand rub [ABHR], screening processes, access to personal protective equipment [PPE] and staff have been educated and trained on how to perform a personal risk assessment, how to don and doff PPE)?¹⁰⁻¹²
- As COVID-19 community incidence and epidemiology changes, the additional IPAC measures used within healthcare settings can be safely adjusted during periods of increasing or decreasing transmission risk with the goal of reducing transmission within the health care facility, preventing harm to vulnerable patients/clients and preserving operational capacity of the individual facility and the health care system.⁴

An ORA should be performed on an annual basis, a threats evolve or as needed. This allows you to re-evaluate your IPAC action plan and assess the effectiveness of control strategies. Having a current IPAC plan and a pandemic plan is important for quickly and effectively responding to changing control measures. The principles of an ORA are as much applicable for smaller independent practices as they are for larger group practices.

Figure 1: Sample of a Risk Assessment tool



Source: Public Services Health & Safety Association. Infectious disease threats risk assessment tool for acute care [Internet]. Toronto, ON: Public Services Health & Safety Association; 2020 [cited 2022 Aug 17]. Available from: <https://www.pshsa.ca/resources/infectious-disease-threats-risk-assessment-tool-for-acute-care#home-pshsa-logo>

Resources

- Public Services Health and Safety Association: [Infectious Disease Threats Risk Assessment Tool for Acute Care](#)¹³
- Ontario COVID-19 Science Advisory Table: [Ontario Dashboard: Tracking Omicron](#)¹⁴
- Public Health Ontario:
 - [IPAC for Clinical Office Practice](#)¹
 - [Interim Infection Prevention and Control Measures based on COVID-19 Transmission Risks in Health Care Settings](#)⁴
 - [Interim IPAC Recommendations for Use of Personal Protective Equipment for Care of Individuals with Suspect or Confirmed COVID-19](#)⁵
 - [Routine Practices and Additional Precautions in All Health Care Settings](#)⁷
 - [Ontario COVID-19 Data Tool](#)¹⁵
 - [Ontario Respiratory Pathogen Bulletin](#)¹⁶

Hierarchy of Controls

According to the United States Centers for Disease Control and Prevention’s [National Institute for Occupational Safety and Health](#) (NIOSH), a fundamental framework in the protection of workers is the application of the hierarchy of hazard controls.¹⁷ These control measures need to be considered and applied as part of the ORA and IPAC program with the higher tiers being the preferred and most effective measures and PPE being the least effective control measure.



Source: National Institute for Occupational Safety and Health (NIOSH). Hierarchy of controls [Internet]. Atlanta, GA: Centers for Disease Control and Prevention; 2022 [cited 2022 Aug 11]. Available from: <https://www.cdc.gov/niosh/topics/hierarchy/default.html>

Elimination and Substitution: Postpone non-urgent appointments of patients with infectious signs and symptoms; staff with infectious signs or symptoms do not come into work; accommodate virtual appointments/staff to work remotely.

Engineering controls: Physical barriers and re-designed work areas to facilitate physical distancing, controlled entry/exit; handwash stations/ABHR dispensers; improved ventilation (e.g., increased fresh air circulation, portable high-efficiency particulate air (HEPA) fan/filtration systems).^{18,19}

Administrative Controls: IPAC policies and procedures; healthy work place policy; education and training; signage.

PPE – masks, eye protection, gloves and gowns: PPE is the last line of defense and to be only used in concert with the above controls.

Resources

- Public Services Health and Safety Association: [Infectious Disease Threats Risk Assessment Tool for Acute Care](#)¹³
- Public Health Ontario:
 - [Interim IPAC Recommendations for Use of Personal Protective Equipment for Care of Individuals with Suspect or Confirmed COVID-19](#)⁵
 - [Heating, ventilation and air conditioning \(HVAC\) systems in buildings and COVID-19](#)¹⁸
- Centers for Disease Control and Prevention (CDC): [Ventilation in Buildings](#)¹⁹
- Canadian Centre for Occupational Health and Safety: [Controlling COVID-19 in the Workplace Infographic](#)²⁰

Communication

Timely, efficient communication with HCWs, staff and the local Public Health Unit (PHU) will be critical should there be an exposure to a communicable disease (e.g., varicella, measles, COVID-19). Develop and maintain a list of staff names, their emergency contacts, and contact information. Know the name(s) and contact information for your contacts at the local PHU. Have a process in place to update this information as new staff are hired, as changes occur and yearly to ensure the information is accurate.

Education and Training

Education and training, both at orientation and on a continuing basis, supports HCWs and staff to consistently implement IPAC practices. Effective education programs emphasize:

- The risks associated with infectious diseases, including acute respiratory infection and gastroenteritis.
- The importance of appropriate immunization.
- Hand hygiene, both the use of ABHR and hand washing.
- Principles and components of Routine Practices as well as transmission-based precautions (Additional Precautions).
- Assessment of the risk of infection transmission and the appropriate use of PPE, including safe application, removal and disposal.
- Reprocessing of reusable medical equipment.
- Appropriate cleaning and/or disinfection of surfaces or items in the health care environment.

Regular audits of IPAC practices, such as staff compliance with hand hygiene, donning and doffing of PPE and equipment/environmental cleaning practices, help to identify areas of focus when preparing for staff training and education.²¹ Ensure all staff have been trained in these areas. The short PPE videos in the Resources section are quick refreshers that can be used.

Resources

General: [IPAC Fundamentals](#)²²

Hand Hygiene: Perform according to 4 moments and as part of PPE donning and removal.

- Videos available on PHO website:
 - [How to Hand Rub](#)²³
 - [How to Hand Wash](#)²⁴
- [How to Hand Rub Sign](#)²⁵
- [How to Hand Wash Sign](#)²⁶

Personal Risk Assessment: Perform prior to each resident interaction to determine what PPE is needed.

- [Performing a Risk Assessment Related to Routine Practices and Additional Precautions](#)¹⁰

PPE: Use PPE as determined by a personal risk assessment or clinical syndrome/condition (e.g., Droplet/Contact Precautions)

- [Recommended Steps for Putting On and Taking off PPE](#)²⁷
- [Personal Protective Equipment \(PPE\) Auditing](#)²⁸

Videos available on PHO website:

- [Putting on Mask and Eye Protection](#)²⁹
- [Taking off Mask and Eye Protection](#)³⁰
- [Putting on Full PPE \(facial protection, gowns and gloves\)](#)³¹
- [Taking off Full Personal PPE \(facial protection, gowns and gloves\)](#)³²
- [Putting on Flatfold N95 Respirator](#)³³
- [Taking off Flatfold N95 Respirator](#)³⁴
- [Putting on Cone N95 Respirator](#)³⁵
- [Taking off Cone N95 Respirator](#)³⁶

Environmental Cleaning:

- [Environmental Cleaning Toolkit](#)³⁷
- [Health Care Huddles: IPAC Checkpoints](#)³⁸
- [Cleaning and Disinfection of Reusable Eye Protection](#)³⁹

Patient Education

Patients and their accompanying support person (if required) should receive instruction regarding specific clinic control measures before their clinic visit to help ensure compliance with established practices:

- Instruction on the correct donning, doffing and disposal of masks
- Hand hygiene is to be performed upon entry to and exit from the clinic.
- Respiratory etiquette (personal practices that help prevent the spread of bacteria and viruses that cause acute respiratory infections [e.g., covering the mouth when coughing, hand hygiene after disposing of tissues]) is to be followed while in the clinic. Instructional materials may be provided to visitors on recommended hand hygiene and respiratory etiquette practices.

Resources:

- [How to Protect Yourself from COVID-19](#)⁴⁰
- [Multilingual COVID-19 Resources](#)⁴¹
- [Coronavirus Disease 2019 \(COVID-19\)](#)⁴²

Universal Masking (Masking for Source Control) and Physical Distancing

Follow current jurisdictional guidance regarding universal masking (wearing a mask at all times for source control) and physical distancing within a clinical practice setting. Jurisdictional guidance may be directed provincially or regionally by the local PHU and may also be based on the specific setting (e.g., healthcare). Masks should be well-fitted snugly covering the nose, mouth and under the chin with no large gaps. Access to a variety of mask sizes will facilitate good fit for staff and patients. While wearing masks, physical distancing should be maintained.

Resources:

- [Interim Infection Prevention and Control Measures based on COVID-19 Transmission Risks in Health Care Settings](#)⁴
- [Universal Mask Use in Health Care](#)⁴³
- [Frequently Asked Questions for Interim IPAC Measures based on COVID-19 Transmission Risks in Health Care Settings](#)⁴⁴

Hand Hygiene

Hand hygiene is considered the most important and effective IPAC measure to prevent the spread of health care-associated infections. Hand hygiene is the process of cleaning one's hands with either soap and water or use of alcohol-based hand rub (ABHR). ABHR is more effective in lowering colony counts on the skin surface than the use of soap and water, however, soap and water is required when hands are visibly soiled. Only liquid soap should be used, not bar soap, due to risk of contamination. When hands are being cleaned with soap and water this should occur in a sink dedicated to hand hygiene.

HCWs are to receive education and training on how and when to perform hand hygiene. ABHR products, in a concentration of 70-90% alcohol, are to be located in multiple areas, such as the entrance and exit to examination rooms, point-of-care and public areas (e.g., waiting rooms, reception). Regular observation of hand hygiene of HCWs, staff and patients (hand hygiene audits) will help identify training gaps and improve practice.²⁸ Hand care including easy access to emollient hand lotion (moisturizer) is also important to prevent damage to hands that can occur with frequent hand hygiene. ABHR, soap and lotion containers should never be topped up, should be either disposable or cleaned and disinfected when emptied. There should also be a process to regularly check expiry dates of all products.

Resources

- [Best Practices for Hand Hygiene in All Health Care Settings](#)⁴⁵
- Videos available on PHO website:
 - [How to Hand Rub](#)²³
 - [How to Hand Wash](#)²⁴
- [How to Hand Rub Sign](#)²⁵
- [How to Hand Wash Sign](#)²⁶
- [Placement Tool for Hand Hygiene Products](#)⁴⁶
- [IPAC Practices for Occupational Contact Dermatitis](#)⁴⁷
- [Hand Hygiene for Health Care Settings Fact Sheet](#)⁴⁸

Environmental Cleaning

Maintaining a clean and safe health care environment is an essential component of IPAC and is integral to the safety of patients and staff. Clinical office settings are to have written procedures for cleaning the office setting. If cleaning is contracted out, the cleaning contractor is to have procedures for cleaning the office setting.¹

Environmental cleaning and disinfection should be performed on a routine and consistent basis to provide for a safe and sanitary environment. Responsibility for cleaning needs to be clearly defined and understood.

The ease of cleaning is an important consideration for care settings. Surfaces, furnishings, equipment, and finishes are smooth, non-porous, seamless (where possible), and cleanable (e.g., no unfinished wood or cloth upholstered furnishings). Upholstered furniture that is used in care areas shall be covered with fabrics that are fluid-resistant, nonporous.⁴⁹ Ensure compatibility of cleaning and disinfecting agents with the items and surfaces to be cleaned.

Environmental Cleaning Requirements

- As part of routine cleaning and best practice, clean and disinfect all medical equipment and surfaces that come in contact with the patient with a low-level disinfectant after each use/patient leaves the examination room (e.g., arm rests, examination table surface, stethoscope, blood pressure cuff).

- Single use items must be discarded after use (e.g., examination table paper coverings, stirrup covers).
- High touch surfaces and items (e.g., doorknobs, telephones, keyboards) are at a higher risk of transmitting microorganisms and should be cleaned and disinfected at least once daily and more frequently as needed.¹
- Items that are not high touch need only be cleaned not disinfected. Items that are not touched frequently and are not likely to become contaminated with blood or body fluids (e.g., cabinets, bookcases, privacy curtains) do not require daily cleaning, but should receive periodic, scheduled cleaning and disinfection.¹
- Surfaces in clinical and communal areas need to be cleaned and disinfected immediately when they are visibly soiled with blood or other body fluids, excretions or secretions.¹
- Clinical offices, including communal areas, should be fully cleaned at the end of every day. Garbage should be collected, floors cleaned and carpets vacuumed. Supplies should be replaced as required (e.g., soap, ABHR, paper towel, PPE) and sharps containers should be sealed, removed and replaced if full.¹
- Use health care disinfectants (i.e.), have a Drug Information Number [DIN]) and follow the manufacturer's instructions for use (e.g., dilution, contact time, and recommended use of PPE). Cleaning and disinfecting agents combined into a single product are available and can save a step in the process.¹

Resources

- [IPAC for Clinical Office Practice](#)¹
- [Environmental Cleaning Toolkit](#)³⁷
- [Best Practices for Environmental Cleaning for Prevention and Control of Infections in All Health Care Settings, 3rd Edition](#)⁴⁹
- [PHO Environmental Cleaning](#)⁵⁰
- [Key Elements of Environmental Cleaning in Health Care Settings](#)⁵¹

Office Space

Office space, including public areas (e.g., waiting, reception, and patient washrooms), clinical areas (e.g., examination rooms) and staff areas (e.g., break and meeting rooms) are to be conducive to the provision of care (e.g., patient flow) and the mitigation of transmission of infection.¹

Clinical Office Workflow

Limiting the number of patients and their accompanying support persons in the clinic/office at any given time is one key strategy in managing the workflow. Consider staggering appointments (e.g., in-person appointments with virtual appointments), asking accompanying persons to wait outside the office and scheduling those with potentially communicable infections at the end of the day if possible.

Entrance

When a patient and accompanying support person first enters the office, there is to be self-screening (passive screening) signage asking them to report to reception should they have any of the listed signs, symptoms or exposures. Signage also directs all patients and support persons to don a mask (as per jurisdictional requirements) and perform hand hygiene. A well-fitted non-medical mask can be worn, however if the patient or support person screen positive, they should wear a medical mask. The clinical office setting is to have a process for managing patients with infectious symptoms (e.g., acute respiratory illness, vomiting, diarrhea, and rash) to prevent transmission to others. These processes include:

- Access to masks and ABHR for patients and their accompanying support person.
- Consistent application of point-of-care risk assessment, Routine Practices by HCWs and staff, and implementation of Additional Precautions (e.g., Droplet and Contact Precautions) as required based on presenting signs and symptoms or diagnosis.

Other signage for waiting spaces and exam rooms include:

- Respiratory etiquette
- Hand hygiene
- Physical distancing (see resources listed below).

Patients and their accompanying support person are to be actively screened for infectious signs and symptoms. Staff conducting the screening are ideally behind a barrier (e.g., Plexiglas). If a barrier is not available, staff are to maintain a 2-metre distance from the patient. Screeners who do not have a barrier and cannot maintain a 2-metre distance are to wear a well-fitted medical mask, and eye protection (goggles or face shield). For details on the screening process see section on [Screening](#).

Seating/Communal Areas

Seating in the patient waiting area is set up to facilitate physical distancing of two metres between households as much as possible. Patients who screen positive should be directed to a separate room/area if possible. Patient flow practices that minimize the amount of time patients are required to spend in the waiting room should be encouraged (e.g., advise patients not to show up too early for

appointments, place patients into empty exam rooms as soon as possible, wait outside/in vehicle until ready to be seen, intersperse virtual appointments throughout the day).

The following items are to be easily accessible in the waiting area:

- ABHR at 70-90% concentration
- Tissues boxes
- Hands free waste receptacles
- Medical masks available at reception

Communal items (e.g., toys, magazines) are discouraged in the waiting or patient care areas.

In staff areas (e.g., break and meeting spaces) furniture is arranged to ensure physical distancing of two metres.

Examination Room

Set up examination rooms to support Routine Practices and Additional Precautions (e.g., Droplet and Contact Precautions) as required:

- PPE, such as gown, gloves, well-fitted medical mask or fit-tested, seal-checked N95 respirator, and eye protection is to be available at point of care (immediately outside of the exam room).
- PPE is to be stored in a manner that will keep it clean and dry (e.g., closed container).
- Work flow is conducive to having clean PPE donned immediately outside the examination room prior to entering and used PPE doffed and disposed into a waste receptacle within the examination room by the door upon exiting. If reusable PPE is used (e.g., cloth gowns, goggles), processes need to be in place for safe storage of used laundry and the cleaning, disinfection and storage of eye protection.
- ABHR is to be available both outside and inside the examination rooms and throughout the facility to support hand hygiene.
- Tissue boxes and hands-free waste receptacles are to be provided in the examination room to support respiratory etiquette.
- Decrease clutter and minimize number of surfaces that may come in contact with the patient.

Resources:

- Ministry of Health: [COVID-19 Patient Screening Guidance](#)⁵²
- Public Health Ontario:
 - [IPAC for Clinical Office Practice](#)¹
 - [Routine Practices and Additional Precautions in All Health Care Settings](#)⁷
 - [How to Hand Rub Sign](#)²⁵
 - [How to Hand Wash Sign](#)²⁶

- [Cough and Sneeze Etiquette](#)⁵³
- [Physical Distancing](#)⁵⁴

Heating, Ventilation and Air Conditioning (HVAC)

The risk of transmission of ARIs is increased through close contact, crowded, inadequately ventilated settings, and with increasing time spent under these circumstances.¹⁸

HVAC systems supply, distribute and remove air from space, helping to decrease viral particle concentration in the air. Clinical office settings should review their HVAC systems with the assistance of HVAC professionals for system function and to evaluate compliance with CSA Z317.2:19 (Special Requirements for Heating, Ventilation, and Air-Conditioning (HVAC) Systems in Health Care Facilities) or other standards related to their facility type.⁵⁵

Where clinical office settings may not be able to meet applicable standards for HVAC systems, consider other strategies to increase ventilation (e.g., fan to exhaust air out an open window, enable cross-ventilation through a space) or air filtration using the resources below.

Resources

- [Heating, Ventilation and Air Conditioning \(HVAC\) Systems in Buildings and COVID-19](#)¹⁸
- [Interim Guidance for IPAC of SARS-CoV-2 Variants of Concern for Health Care Settings](#)⁵⁵
- [COVID-19 and HVAC: A Practical Perspective](#)⁵⁶
- [The Use of Portable Air Cleaners and Transmission of COVID-19](#)⁵⁷
- [Indoor Air Quality and COVID-19](#)⁵⁸

Patient Care Management

Screening

Screening of staff, patients and accompanying persons is an essential step to prevent transmission of infectious agents to others. Screening of patients and any accompanying persons is to be done at the time of booking an appointment by phone or electronically for symptoms of communicable disease(s) (e.g., acute respiratory infection,) to prevent transmission to others. Additional screening, in keeping with the patient population, (e.g., RSV in pediatric populations, conjunctivitis in ophthalmology populations) may be added. Screening may also be augmented by specific condition(s) that may be prevalent in the community or patient population. If feasible, patients who screen positive over the phone may be scheduled at end of day to optimize workflow and mitigate exposure risks.

Passive Screening

There is signage at the entrance prompting HCWs, other staff, patients and accompanying persons to self-assess and self-identify to the reception if they have signs and symptoms of COVID-19 or another infectious disease.

Active Screening

Active screening is conducted by asking screening questions at the entrance and have a process to ensure that all persons entering the clinic are screened and visits are logged.

Patients and support persons who screen positive should be provided with a medical mask (if they do not have their own medical mask), should be immediately placed in a room with the door closed, where possible, to avoid contact with other patients in common areas of the clinical office setting (e.g., waiting rooms). If a room is not immediately available, if feasible, the patient may be asked wait outside/in vehicle until a room becomes available.

Resources

- [Interim Infection Prevention and Control Measures based on COVID-19 Transmission Risks in Health Care Settings](#)⁴
- [COVID-19 Patient Screening Guidance](#)⁵²
- [COVID-19 Management of Cases and Contacts of COVID-19 in Ontario](#)⁵⁹

Clinical Assessment and Examination

Clinical assessment and examination of patients who screen negative may proceed with Routine Practices.

Clinical assessment and examination of patients who screen positive may be provided if:

- Additional Precautions are initiated and maintained.
- HCWs have access to and are knowledgeable on how to properly don and doff PPE (i.e., gloves, isolation gown, a well-fitted medical mask, fit-tested, seal-checked N95 respirator, and eye protection [goggles or face shield]).

- The patient can be isolated in a single room/area away from others.
- Cleaning and disinfection best practices are followed (see Section on [Environmental Cleaning](#)).

Considerations for clinical assessments and examination within a patient’s own home:

- Screen patient and inquire about their household members when booking appointment.
- Actively screen patient and inquire about their household members upon arrival to the home.
- Bring your own ABHR and PPE (i.e., gloves, isolation gown, well-fitting medical mask, fit-tested, seal checked N95 respirator, eye protection).
- Select PPE based on personal risk assessment.
- If a patient or household member screens positive over the phone or upon your arrival at their home, provide care using Additional Precautions and instruct other members of the household to remain in a separate area of the home for the entirety of the visit.
- Discard used PPE on exit from the home.

Personal Risk Assessment

An individual assessment of each patient’s potential risk of transmission of microorganisms (based on signs [e.g., rash, fever], symptoms [e.g., cough, diarrhea], exposures [e.g., household contact with COVID-19 case] and diagnosis [e.g., varicella, conjunctivitis]) must be made by all HCWs who come into contact with them. Based on that risk assessment and a risk assessment of the task at hand, one may determine appropriate intervention and interaction strategies, such as hand hygiene, waste management, selection of PPE and patient placement, that will reduce the risk of transmission of microorganisms to and from the individual. Perform a personal risk assessment prior to each patient interaction.

For detailed recommendations for added precautions need for various infectious diseases see [Appendix N: Clinical Syndromes/Conditions with Required Level of Precautions](#) (pg. 91).⁷

Resources:

- [Performing a Risk Assessment Related to Routine Practices and Additional Precautions](#)¹⁰
- [IPAC Core Competencies Personal Risk Assessment in Community Care Clinics](#)⁶⁰

PPE Selection

Use PPE as determined by a personal risk assessment and/or clinical syndrome/condition that requires Additional Precautions (e.g., Droplet and Contact Precautions, Contact Precautions).

For patients who screen negative for COVID-19, eye protection may be considered when providing direct care within 2m based on a personal risk assessment (that includes the task at hand and local incidence of COVID-19) particularly if patient is unmasked.

Resources:

- [IPAC Recommendations for Use of PPE for Care of Individuals with Suspect or Confirmed COVID-19](#)⁵
- [Clinical Syndromes/Conditions with Required Level or Precautions](#)⁶¹

Aerosol-Generating Medical Procedures

Medical procedures that are considered AGMPs are supported by data that indicate these procedures may significantly increase the risk of infection to HCWs within close range of the procedure.

For patients with an ARI, AGMPs should be performed using processes and practices designed to avoid generating aerosols and to prevent transmission, including:

- Perform the procedure with the door closed.
- Keep the number of people in the room during the procedure to a minimum. Have only experienced staff perform the procedure.
- Ensure everyone wears PPE and is instructed in its use. PPE includes a fit-tested, seal-checked N95 respirator, eye protection, gloves and gown.
- Use equipment and techniques that minimize exposure to respiratory pathogens. Refer to PIDAC's [Annex B: Best Practices for Prevention of Transmission of Acute Respiratory Infection in All Health Care Settings](#).⁶²
- For a list of AGMPs, see [PIDAC'S Routine Practices and Additional Precautions in All Health Care Settings](#),⁷ and [IPAC Recommendations for Use of PPE for Care of Individuals with Suspect or Confirmed COVID-19](#)⁵

Testing

Testing for suspected acute respiratory infection is a valuable tool to help confirm the clinical diagnosis. Examples include testing for influenza and SARS-CoV-2 (COVID-19). Patient testing for COVID-19 is performed in accordance with the Ministry of Health guidance for testing.⁵⁹ COVID-19 is a designated disease of public health significance (O. Reg. 135/18) and thus reportable under the Health Protection and Promotion Act.⁵⁹

Droplet and Contact Precautions should be followed for collecting specimens from patients with any suspect acute respiratory illness (e.g. COVID-19, influenza, RSV). These precautions include placing the patient in a private room with a closed door, and wearing gloves, a gown, eye protection and a well-fitting medical mask or fit-tested, seal-checked N95 respirator. Nasopharyngeal (NP) swab collection is not considered an AGMP.

Review the resources below and/or consult the local laboratory for further information on specimen collection, storage and transport.^{63,64}

Resources:

- Ministry of Health: [COVID-19 Management of Cases and Contacts of COVID-19 in Ontario](#)⁵⁹
- Public Health Ontario:

- [Laboratory Services](#)⁶³
- [COVID-19 Laboratory Testing Resources](#)⁶⁴
- [Virus Respiratory Kit \(Nasopharyngeal\) Specimen Collection Instructions](#)⁶⁵
- [Respiratory Viruses \(Including Influenza\)](#)⁶⁶
- [List of Reportable Diseases and Unit Contact Information](#)⁶⁷

Vaccination

“Disruption of immunization services, even for short periods, will result in an accumulation of susceptible individuals, and a higher likelihood of vaccine-preventable disease (VPD) outbreaks.”⁶⁸

Immunization is widely recognized as one of the most effective interventions for reducing the impact of many infectious diseases.

Care providers may refer to the Ministry of Health’s [Publicly Funded Immunization Schedules for Ontario](#),⁶⁹ IPAC considerations when administering vaccinations:

- Sharps safety (e.g., education, training, needle safety devices).

To accommodate physical distancing and patient flow when there may be higher volumes due to vaccine considerations (e.g., new vaccine formulation or schedule [pediatric availability]) could include:

- Booking household members together for vaccinations to optimize use of space.
- Having patients wait outside/in their vehicles and bypass the waiting room.
- Post-vaccine monitoring outside of the clinic space if feasible.
- Pre-vaccine counselling and screening questions administered virtually or pre-filled by patient.

The Ministry of Health and Public Health Ontario have resources that support COVID-19 and other immunization activities, as well as interim IPAC guidance on managing COVID-19 vaccinated patients in healthcare settings.^{71,72,73}

Resources:

- Ministry of Health:
 - [Publicly Funded Immunization Schedules for Ontario](#)⁶⁹
 - [COVID-19 Vaccine Administration](#)⁷⁰
 - [COVID-19 Vaccine-Relevant Information and Planning Resources](#)⁷¹
 - [Staying Up to Date with COVID-19 Vaccines: Recommended Doses](#)⁷⁴
 - [Health Care Providers: Influenza](#)⁷⁵
 - [Vaccine Storage and Handling Guidelines](#)⁷⁶
- Public Health Ontario:

- [Public Health Ontario: IPAC for Clinical Office Practice](#)¹
- [Building Confidence in Vaccines](#)⁷²
- [Interim Guidance on IPAC for Health Care Providers and Patients Vaccinated Against COVID-19 in Hospital and Long-Term Care Settings](#)⁷³
- [Management of Anaphylaxis Following Immunization in the Community](#)⁷⁷
- [Vaccine Safety](#)⁷⁸
- [COVID-19 Vaccines](#)⁷⁹
- [Report of Adverse Event Following Immunization \(AEFI\) Form](#)⁸⁰
- [Adverse Event Following Immunization Reporting For Health Care Providers in Ontario](#)⁸¹
- Public Health Agency of Canada: [Anaphylaxis and other Acute Reactions following Vaccination: Canadian Immunization Guide](#)⁸²

Occupational Health and Safety

Occupational Health and Safety (e.g. personal risk assessment, PPE use, universal masking, physical distancing and hand hygiene) is performed in accordance with the [Occupational Health and Safety Act \(OHSA\)](#).⁸³

Organizations are strongly encouraged to develop and implement policies that support the highest possible vaccination rates for HCWs and other staff.¹

Providers of clinical office care have a responsibility to have systems in place with established policies and procedures that protect the health and safety of workers in their workplace. Preventing transmission of microorganisms to other patients is a patient safety issue, and preventing transmission to staff is an occupational health and safety issue. Employers and supervisors make sure workers know about hazards and dangers by providing information, instruction and supervision on how to work safely, for example, make sure workers wear and use the right PPE. Similarly, workers have a duty to comply with the OHSA and its regulations and the workplace's health and safety policies and procedures, for e.g., wear and use the PPE required by the employer.¹

All staff are to self-monitor for infectious symptoms (e.g. acute respiratory illness symptoms, gastrointestinal symptoms) while at work or at home. HCWs and other staff who become ill should not come to work, should inform their supervisor, and if at work, return home.

Resources:

- [IPAC for Clinical Office Practice](#)¹
- [Best Practices for Hand Hygiene in All Health Care Settings](#)⁴⁵
- [Interim Guidance on IPAC for Health Care Providers and Patients Vaccinated Against COVID-19 in Hospital and Long-Term Care Settings](#)⁷³
- [How to Self-Monitor](#)⁸⁴
- [How to Self-Isolate While Working](#)⁸⁵

Glossary

Additional Precautions: Precautions (i.e., Contact Precautions, Droplet Precautions, Airborne Precautions) that are necessary in addition to Routine Practices for certain pathogens or clinical presentations. These precautions are based on the method of transmission (e.g., contact, droplet, airborne).^{1,7}

Clinical office practice/setting: Any community location where health care is provided, including settings where emergency care is provided, outpatient clinics, community health centres and clinics, physician offices, independent health facilities, and out-of-hospital premises.¹

Health Care Worker: Any person delivering care to a patient. This includes, but is not limited to, the following: physicians, dentists, nurses, respiratory therapists and other health professionals, clinical instructors and students.¹ See also, Staff.

Personal Risk Assessment: An evaluation of the interaction of the health care provider, the patient and the patient environment to assess and analyze the potential for exposure to infectious disease.^{1,7}

Routine Practices: The system of IPAC practices recommended by the Public Health Agency of Canada to be used with all patients during all care to prevent and control transmission of microorganisms in all health care settings.^{1,7}

Staff: Anyone conducting activities in settings where health care is provided, including but not limited to, health care workers. See also, Health Care Workers.¹

References

1. Ontario Agency for Health Protection and Promotion (Public Health Ontario), Provincial Infectious Diseases Advisory Committee. Infection prevention and control for clinical office practice [Internet]. 1st revision. Toronto, ON: Queen's Printer for Ontario; 2015 [cited 2022 Aug 12]. Available from: https://www.publichealthontario.ca/-/media/documents/b/2013/bp-clinical-office-practice.pdf?sc_lang=en
2. Ontario Agency for Health Protection and Promotion (Public Health Ontario). IPAC checklist for clinical office practice: core elements [Internet]. 2nd revision. Toronto, ON: Queen's Printer for Ontario; 2019 [cited 2022 Aug 11]. Available from: https://www.publichealthontario.ca/-/media/documents/c/2018/checklist-clinical-office-core.pdf?sc_lang=en
3. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Infection prevention and control key principles for clinical office practice during the COVID-19 pandemic [Internet]. 2nd ed. Toronto, ON: Queen's Printer for Ontario; 2022 [cited 2022 Aug 11]. Available from: https://www.publichealthontario.ca/-/media/documents/ncov/ipac/2020/09/checklist-assessment-primary-care-spec-walk-in-clinics.pdf?sc_lang=en
4. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Interim infection prevention and control measures based on COVID-19 transmission risks in health care settings [Internet]. Toronto, ON: Queen's Printer for Ontario; 2022 [cited 2022 Aug 11]. Available from: https://www.publichealthontario.ca/-/media/Documents/nCoV/ipac/technical-brief-ipac-measures-transmission-risks.pdf?sc_lang=en
5. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Interim IPAC recommendations for use of personal protective equipment for care of individuals with suspect or confirmed COVID-19 [Internet]. 9th revision. Toronto, ON: Queen's Printer for Ontario; 2022 [cited 2022 Aug 11]. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/updated-ipac-measures-covid-19.pdf?la=en#:~:text=The%20interim%20recommended%20PPE%20when,protection%2C%20gown%2C%20and%20gloves>
6. Ontario. Ministry of Health; Ontario. Ministry of Long-Term Care. COVID-19: guidance for the health sector [Internet]. Toronto, ON: Queen's Printer for Ontario; c2022 [modified 2022 Sep 9; cited 2022 Sep 8]. Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/2019_guidance.aspx
7. Ontario Agency for Health Protection and Promotion (Public Health Ontario), Provincial Infectious Diseases Advisory Committee. Routine practices and additional precautions in all health care settings. 3rd ed. Toronto, ON: Queen's Printer for Ontario; 2012. Available from: https://www.publichealthontario.ca/-/media/documents/b/2012/bp-rpap-healthcare-settings.pdf?sc_lang=en
8. Lucid Content team. A complete guide to the risk assessment process. 2022 [cited 2022 Aug 11]. In: Lucidchart blog [Internet]. South Jordan, UT: Lucid Software Inc.; 2008. Available from: <https://www.lucidchart.com/blog/risk-assessment-process>
9. Canadian Centre for Occupational Health and Safety. OSH answers fact sheets: risk assessment [Internet]. Ottawa, ON: Canadian Centre for Occupational Health & Safety; 2017 [modified 2017 Feb

15; cited 2022 Aug 11]. Available from:

https://www.ccohs.ca/oshanswers/hsprograms/risk_assessment.html

10. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Performing a risk assessment related to routine practices and additional precautions [Internet]. Toronto, ON: Queen's Printer for Ontario; 2012 [cited 2022 Aug 11]. Available from: <https://www.publichealthontario.ca/-/media/documents/r/2012/rpap-risk-assessment.pdf?la=en>
11. Ontario Agency for Health Protection and Promotion (Public Health Ontario). How to put on personal protective equipment [Internet]. Toronto, ON: Queen's Printer for Ontario; 2018 [cited 2022 Aug 11]. Available from: <https://www.publichealthontario.ca/-/media/documents/p/2018/poster-ipac-pss-putting-on-ppe.pdf?la=en>
12. Ontario Agency for Health Protection and Promotion (Public Health Ontario). How to remove personal protective equipment [Internet]. Toronto, ON: Queen's Printer for Ontario; 2018 [cited 2022 Aug 11]. Available from: <https://www.publichealthontario.ca/-/media/documents/p/2018/poster-ipac-pss-removing-ppe.pdf?la=en>
13. Public Services Health & Safety Association. Infectious disease threats risk assessment tool for acute care [Internet]. Toronto, ON: Public Services Health & Safety Association; 2020 [cited 2022 Aug 11]. Available from: <https://www.pshsa.ca/resources/infectious-disease-threats-risk-assessment-tool-for-acute-care>
14. Jüni P, da Costa BR, Maltsev A, Katz GM, Perkhun A, Yan S, et al. Ontario dashboard: tracking Omicron [Internet]. Toronto, ON: Ontario COVID-19 Science Advisory Table; 2021 [cited 2022 Aug 12]. Available from: <https://doi.org/10.47326/ocsat.dashboard.2021.1.0>
15. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Ontario COVID-19 data tool [Internet]. Toronto, ON: Queen's Printer for Ontario; c2022 [cited 2022 Aug 17]. Available from: <https://www.publichealthontario.ca/en/data-and-analysis/infectious-disease/covid-19-data-surveillance/covid-19-data-tool?tab=summary>
16. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Ontario respiratory pathogen bulletin [Internet]. Toronto, ON: Queen's Printer for Ontario; c2022 [cited 2022 Aug 17]. Available from: <https://www.publichealthontario.ca/en/Data-and-Analysis/Infectious-Disease/Respiratory-Pathogens-Weekly>
17. National Institute for Occupational Safety and Health (NIOSH). Hierarchy of controls [Internet]. Atlanta, GA: Centers for Disease Control and Prevention; 2022 [cited 2022 Aug 11]. Available from: <https://www.cdc.gov/niosh/topics/hierarchy/default.html>
18. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Heating, ventilation and air conditioning (HVAC) systems in buildings and COVID-19 [Internet]. 2nd revision. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2022 Aug 11]. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/ipac/2020/09/covid-19-hvac-systems-in-buildings.pdf?la=en>

19. Centers for Disease Control and Prevention. Ventilation in buildings [Internet]. Atlanta, GA: Centers for Disease Control and Prevention; 2021 [modified 2021 Jun 2; cited 2022 Aug 11]. Available from: <https://www.cdc.gov/coronavirus/2019-ncov/community/ventilation.html>
20. Canadian Centre for Occupational Health and Safety. Controlling COVID-19 in the workplace infographic [Internet]. Ottawa, ON: Canadian Centre for Occupational Health and Safety; 2021 [cited 2022 Aug 11]. Available from: <https://www.ccohs.ca/products/posters/covid-hierarchy/>
21. Desai C, Rezmovitz J, Manson J, Callery S, Vearncombe M. Engaging patients as observers in monitoring hand hygiene compliance in ambulatory care. *Can J Infect Control*. 2017;32(3):150-3. Available from: http://www.ipac-canada.com/photos/custom/CJIC/IPAC_Fall2017_Chaitali_Desai.pdf
22. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Infection prevention and control fundamentals [Internet]. Toronto, ON: Queen's Printer for Ontario; 2020 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/ipac/ipac-fundamentals.pdf?la=en>
23. Ontario Agency for Health Protection and Promotion (Public Health Ontario). How to hand rub [video recording on the Internet]. Toronto, ON: Queen's Printer for Ontario; 2016 [cited 2022 Aug 12]. 1 min. Available from: <https://www.publichealthontario.ca/en/videos/ipac-handrub>
24. Ontario Agency for Health Protection and Promotion (Public Health Ontario). How to hand wash [video recording on the Internet]. Toronto, ON: Queen's Printer for Ontario; 2016 [cited 2022 Aug 12]. 2 min. Available from: <https://www.publichealthontario.ca/en/videos/ipac-handwash>
25. Ontario Agency for Health Protection and Promotion (Public Health Ontario). How to handrub [Internet]. Toronto, ON: Queen's Printer for Ontario; 2009 [cited 2022 Aug 12]. Available from: https://www.publichealthontario.ca/-/media/documents/j/2009/jcyh-handrub.pdf?sc_lang=en
26. Ontario Agency for Health Protection and Promotion (Public Health Ontario). How to handwash [Internet]. Toronto, ON: Queen's Printer for Ontario; 2009 [cited 2021 Aug 12]. Available from: https://www.publichealthontario.ca/-/media/documents/j/2009/jcyh-handwash.pdf?sc_lang=en
27. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Recommended steps: putting on personal protective equipment (PPE) / taking off personal protective equipment (PPE) [Internet]. Toronto, ON: Queen's Printer for Ontario; 2020 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/ipac/ppe-recommended-steps.pdf?la=en>
28. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Personal protective equipment (PPE) auditing [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/en/health-topics/infection-prevention-control/ppe-auditing>
29. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Putting on mask and eye protection [video recording on the Internet]. Toronto, ON: Queen's Printer for Ontario; 2016 [cited 2022 Aug 12]. 1 min. Available from: <https://www.publichealthontario.ca/en/Videos/I/2021/IPAC-MaskEyes-On>
30. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Taking off mask and eye protection [video recording on the Internet]. Toronto, ON: Queen's Printer for Ontario; 2016 [cited

2022 Aug 12]. 1 min. Available from: <https://www.publichealthontario.ca/en/Videos/I/2021/IPAC-MaskEyes-Off>

31. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Putting on full personal protective equipment [video recording on the Internet]. Toronto, ON: Queen's Printer for Ontario; 2016 [cited 2022 Aug 12]. 2 min. Available from: <https://www.publichealthontario.ca/en/videos/ipac-fullppe-on>
32. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Taking off full personal protective equipment [video recording on the Internet]. Toronto, ON: Queen's Printer for Ontario; 2016 [cited 2022 Aug 12]. 1 min. Available from: <https://www.publichealthontario.ca/en/videos/ipac-fullppe-off>
33. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Putting on flatfold N95 respirator [video recording on the Internet]. Toronto, ON: Queen's Printer for Ontario; 2016 [cited 2022 Aug 12]. 1 min. Available from: <https://www.publichealthontario.ca/en/Videos/I/2021/IPAC-N95Respirator-Flat-On>
34. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Taking off flatfold N95 respirator [video recording on the Internet]. Toronto, ON: Queen's Printer for Ontario; 2016 [cited 2022 Aug 12]. 1 min. Available from: <https://www.publichealthontario.ca/en/Videos/I/2021/IPAC-N95Respirator-Flat-Off>
35. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Putting on cone N95 respirator [video recording on the Internet]. Toronto, ON: Queen's Printer for Ontario; 2016 [cited 2022 Aug 12]. 1 min. Available from: <https://www.publichealthontario.ca/en/Videos/I/2021/IPAC-N95Respirator-Cone-On>
36. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Taking off cone N95 respirator [video recording on the Internet]. Toronto, ON: Queen's Printer for Ontario; 2016 [cited 2022 Aug 12]. 1 min. Available from: <https://www.publichealthontario.ca/en/Videos/I/2021/IPAC-N95Respirator-Cone-Off>
37. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Environmental cleaning toolkit [Internet]. Toronto, ON: Queen's Printer for Ontario; 2019 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/en/health-topics/infection-prevention-control/environmental-cleaning/environmental-cleaning-toolkit>
38. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Health care huddles: IPAC checkpoints [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/ltcrh/2021/03/ipac-huddles-checkpoints.pdf?la=en>
39. Ontario Agency for Health Protection and Promotion (Public Health Ontario). A resource for health care workers: cleaning and disinfection of reusable eye protection [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/ipac/2021/03/covid-19-infographic-cleaning-eye-protection.pdf?la=en>
40. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Coronavirus disease 2019 (COVID-19): how to protect yourself from COVID-19 [Internet]. Toronto, ON: Queen's Printer for Ontario; 2022 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/>

[/media/documents/ncov/factsheet/2021/06/lp/fact-sheet-covid-19-preventive-layers.pdf?la=en&sc_lang=en&hash=35EAD841BDE13ACF4EC3EB1B9155542B](https://www.publichealthontario.ca/-/media/documents/ncov/factsheet/2021/06/lp/fact-sheet-covid-19-preventive-layers.pdf?la=en&sc_lang=en&hash=35EAD841BDE13ACF4EC3EB1B9155542B)

41. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Multilingual COVID-19 resources [Internet]. Toronto, ON: Queen's Printer for Ontario; c2022 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/en/diseases-and-conditions/infectious-diseases/respiratory-diseases/novel-coronavirus/public-resources>
42. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Coronavirus disease 2019 (COVID-19) [Internet]. Toronto, ON: Queen's Printer for Ontario; c2022 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/en/Diseases-and-Conditions/Infectious-Diseases/Respiratory-Diseases/Novel-Coronavirus>
43. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Coronavirus disease 2019 (COVID-19): universal mask use in health care [Internet]. Toronto, ON: Queen's Printer for Ontario; 2022 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/ipac/faq-covid-19-universal-mask-use-health-care.pdf?la=en>
44. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Frequently asked questions: technical brief interim infection prevention and control measures based on COVID-19 transmission risks in health care settings [Internet]. Toronto, ON: Queen's Printer for Ontario; 2022 [cited 2022 Aug 12]. Available from: https://www.publichealthontario.ca/-/media/Documents/nCoV/faq-ipac-measures-transmission-risks.pdf?sc_lang=enhtmlfile\Shell\Open\Command
45. Ontario Agency for Health Protection and Promotion (Public Health Ontario), Provincial Infectious Diseases Advisory Committee. Best practices for hand hygiene in all health care settings. 4th ed. Toronto, ON: Queen's Printer for Ontario; 2014. Available from: <https://www.publichealthontario.ca/-/media/documents/b/2014/bp-hand-hygiene.pdf?la=en>
46. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Placement tool for hand hygiene products [Internet]. Toronto, ON: Queen's Printer for Ontario; 2009 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/-/media/documents/h/2009/hand-hygiene-poc.pdf?la=en>
47. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Infection prevention and control practices for occupational contact dermatitis [Internet]. Toronto, ON: Queen's Printer for Ontario; 2020 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/-/media/documents/s/2020/summary-ipac-occupational-dermatitis.pdf?la=en>
48. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Hand hygiene for health care settings [Internet]. Toronto, ON: Queen's Printer for Ontario; 2019 [cited 2022 Aug 12]. Available from: https://www.publichealthontario.ca/-/media/documents/f/2019/fact-sheet-pidac-ipc-hand-hygiene.pdf?sc_lang=en
49. Ontario Agency for Health Protection and Promotion (Public Health Ontario), Provincial Infectious Diseases Advisory Committee. Best practices for environmental cleaning for prevention and control of infections in all health care settings [Internet]. 3rd ed. Toronto, ON: Queen's Printer for Ontario;

2018 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/-/media/documents/b/2018/bp-environmental-cleaning.pdf?la=en>

50. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Environmental cleaning [Internet]. Toronto, ON: Queen's Printer for Ontario; 2019 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/en/health-topics/infection-prevention-control/environmental-cleaning>
51. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Coronavirus disease 2019 (COVID-19): key elements of environmental cleaning in healthcare settings [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2022 Aug 12]. Available from: https://www.publichealthontario.ca/-/media/documents/ncov/ipac/2020/10/factsheet-covid-19-environmental-cleaning-hcs.pdf?sc_lang=en
52. Ontario. Ministry of Health. COVID-19 patient screening guidance document [Internet]. Version 5.0. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2022 Aug 12]. Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/2019_patient_screening_guidance.pdf
53. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Cover your cough [Internet]. Toronto, ON: Queen's Printer for Ontario; 2013 [cited 2022 Aug 12]. Available from: https://www.publichealthontario.ca/-/media/documents/c/2013/clincial-office-cough-signage.pdf?la=en&sc_lang=en
54. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Coronavirus disease 2019 (COVID-19): [archived] physical distancing [Internet]. Toronto, ON: Queen's Printer for Ontario; 2020 [archived; cited 2022 Aug 12]. Available from: https://www.publichealthontario.ca/-/media/documents/ncov/factsheet/factsheet-covid-19-guide-physical-distancing.pdf?la=en&sc_lang=en&hash=389A654E4F26BEC0529F79755046B232
55. Ontario Agency for Health Protection and Promotion (Public Health Ontario), Provincial Infectious Diseases Advisory Committee. Interim guidance for infection prevention and control of SARS-CoV-2 variants of concern for health care settings [Internet]. 2nd revision. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/voc/2021/02/pidac-interim-guidance-sars-cov-2-variants.pdf?la=en>
56. University of Toronto, Civil & Mineral Engineering, Siegel J. COVID-19 and HVAC: a practical perspective [Internet]. Presented at: PHO Rounds. 2021 Mar 9 [cited 2022 Aug 12]; Toronto, ON. Available from: https://www.publichealthontario.ca/-/media/event-presentations/2021/covid-19-hvac.pdf?sc_lang=en
57. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Use of portable air cleaners and transmission of COVID-19 [Internet]. 1st revision. Toronto, ON: Queen's Printer for Ontario; 2022 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/ipac/2021/01/faq-covid-19-portable-air-cleaners.pdf?la=en>
58. University of Toronto, Civil & Mineral Engineering, Siegel J. Indoor air quality and COVID-19 [Internet]. Presented at: PHO Rounds. 2021 Mar 9 [cited 2022 Aug 12]; Toronto, ON. Available from: https://www.publichealthontario.ca/-/media/event-presentations/2021/covid-19-rounds-indoor-air-quality.pdf?sc_lang=en

59. Ontario. Ministry of Health. Management of cases and contacts of COVID-19 in Ontario [Internet]. Version 15. Toronto, ON: Queen's Printer for Ontario; 2022 [cited 2022 Sep 12]. Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/2019_reference_doc_symptoms.pdf
60. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Infection prevention and control (IPAC) – online learning [Internet]. Toronto, ON: King's Printer for Ontario; 2022 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/en/education-and-events/online-learning/ipac-courses>
61. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Clinical syndromes/conditions with required level or precautions [Internet]. Toronto, ON: Queen's Printer for Ontario; 2012 [cited 2022 Aug 12]. Available from: https://www.publichealthontario.ca/-/media/documents/r/2012/rpap-clinical-syndromes.pdf?sc_lang=en
62. Ontario Agency for Health Protection and Promotion, Provincial Infectious Diseases Advisory Committee. Annex B – best practices for prevention of transmission of acute respiratory infection. Annexed to: Routine practices and additional precautions in all health care settings. Toronto, ON: Queen's Printer for Ontario; 2013. Available from: <https://www.publichealthontario.ca/-/media/documents/B/2012/bp-prevention-transmission-ari.pdf?la=en>
63. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Laboratory services [Internet]. Toronto, ON: Queen's Printer for Ontario; c2022 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/en/laboratory-services/about-laboratory-services>
64. Ontario Agency for Health Protection and Promotion (Public Health Ontario). COVID-19 laboratory testing resources [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/en/diseases-and-conditions/infectious-diseases/respiratory-diseases/novel-coronavirus/laboratory-resources>
65. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Virus respiratory kit (nasopharyngeal) specimen collection instructions [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/en/laboratory-services/kit-test-ordering-instructions/virus-respiratory-kit>
66. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Respiratory viruses (including influenza) [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/en/laboratory-services/test-information-index/virus-respiratory>
67. Ontario Agency for Health Protection and Promotion (Public Health Ontario). List of reportable diseases and unit contact information [Internet]. Toronto, ON: Queen's Printer for Ontario; 2017 [cited 2022 Aug 12]. Available from: https://www.publichealthontario.ca/-/media/documents/r/2017/reportable-disease-contact.pdf?sc_lang=en
68. Public Health Agency of Canada; National Advisory Committee on Immunization (NACI). Interim guidance on continuity of immunization programs during the COVID-19 pandemic [Internet]. Ottawa, ON: Government of Canada; 2020 [cited 2022 Aug 12]. Available from: <https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci/interim-guidance-immunization-programs-during-covid-19-pandemic.html#a15>

69. Ontario. Ministry of Health; Ontario. Ministry of Long-Term Care. Publicly funded immunization schedules for Ontario. Toronto, ON: Queen's Printer for Ontario; 2022. Available from: https://www.health.gov.on.ca/en/pro/programs/immunization/docs/Publicly_Funded_ImmunizationSchedule.pdf
70. Ontario. Ministry of Health. COVID-19 vaccine guidance [Internet]. Version 1.0. Toronto, ON: Queen's Printer for Ontario; 2022 [cited 2022 Sep 15]. Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/vaccine/COVID-19_vaccine_administration.pdf
71. Ontario. Ministry of Health; Ontario. Ministry of Long-Term Care. COVID-19: vaccine-relevant information and planning resources [Internet]. Toronto, ON: Queen's Printer for Ontario; 2019 [modified 2022 Jul 26; cited 2022 Aug 12]. Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/covid19_vaccine.aspx
72. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Building confidence in vaccines [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/vaccines/2021/04/covid-19-building-confidence-in-vaccines.pdf?la=en>
73. Ontario Agency for Health Protection and Promotion (Public Health Ontario), Provincial Infectious Diseases Advisory Committee. Interim guidance on infection prevention and control for health care providers and patients vaccinated against COVID-19 in hospital and long-term care settings [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2022 Aug 12]. Available from: https://www.publichealthontario.ca/-/media/documents/ncov/ipac/2021/06/covid-19-vaccinated-patients-hcw-hospitals.pdf?sc_lang=en
74. Ontario. Ministry of Health. Staying up to date with COVID-19 vaccines: recommended doses [Internet]. Version 2.0. Toronto, ON: Queen's Printer for Ontario; 2022 [modified 2022 May 2; amended 2022 May 24; cited 2022 Aug 12]. Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/vaccine/COVID_19_vaccine_up_to_date.pdf
75. Ontario. Ministry of Health; Ontario. Ministry of Long-Term Care. Health care providers: influenza [Internet]. ON: Queen's Printer for Ontario; 2008 [modified 2018 Oct 23; cited 2022 Aug 12]. Available from: <https://www.health.gov.on.ca/en/pro/programs/publichealth/flu/>
76. Ontario. Ministry of Health; Ontario. Ministry of Long-Term Care. Vaccine storage and handling guidelines [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2022 Aug 12]. Available from: https://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/reference/vaccine%20storage_handling_guidelines_en.pdf
77. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Management of anaphylaxis following immunization in the community [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/>

[/media/documents/ncov/vaccines/2021/03/managing-anaphalaxis-following-immunization.pdf?la=en](#)

78. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Vaccine safety [Internet]. Toronto, ON: Queen's Printer for Ontario; c2022 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/en/health-topics/immunization/vaccine-safety>
79. Ontario Agency for Health Protection and Promotion (Public Health Ontario). COVID-19 vaccines [Internet]. Toronto, ON: Queen's Printer for Ontario; 2021 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/en/diseases-and-conditions/infectious-diseases/respiratory-diseases/novel-coronavirus/vaccines>
80. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Report of adverse event following immunization (AEFI) [Internet]. Toronto, ON: Queen's Printer for Ontario; 2020 [modified 2021 Oct; cited 2022 Aug 12]. Available from: https://www.publichealthontario.ca/-/media/documents/a/2020/aefi-reporting-form.pdf?la=en&sc_lang=en&hash=CE7D5C979139601758FD4BCA8B2C049C
81. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Adverse event following immunization reporting for health care providers in Ontario [Internet]. Toronto, ON: Queen's Printer for Ontario; 2016 [cited 2022 Aug 12]. Available from: https://www.publichealthontario.ca/-/media/documents/a/2016/aefi-reporting-overview.pdf?sc_lang=en&hash=9EAD5FB734A076C460C2A09FF1B83D43
82. Public Health Agency of Canada; National Advisory Committee on Immunization. Anaphylaxis and other acute reactions following vaccination. In: Canadian immunization guide [Internet]. Evergreen ed. Ottawa, ON: Government of Canada; 2021 [modified 2021 Dec 13; cited 2022 Aug 12]. Anaphylaxis. Available from: <https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-2-vaccine-safety/page-4-early-vaccine-reactions-including-anaphylaxis.html#a7>
83. *Occupational Health and Safety Act*, RSO 1990, c O1. Available from: <https://www.ontario.ca/laws/statute/90o01>
84. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Coronavirus disease 2019 (COVID-19): how to self-monitor [Internet]. Toronto, ON: Queen's Printer for Ontario; 2022 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/factsheet-covid-19-self-monitor.pdf?la=en>
85. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Coronavirus disease 2019 (COVID-19): how to self-isolate while working: recommendations for health care workers [Internet]. Toronto, ON: Queen's Printer for Ontario; 2022 [cited 2022 Aug 12]. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/ipac/ipac-covid-19-work-self-isolation.pdf?la=en>

Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Summary of infection prevention and control key principles and best practices for clinical office practice. 2nd ed. Toronto, ON: King's Printer for Ontario; 2022.

Disclaimer

This document was developed by Public Health Ontario (PHO). PHO provides scientific and technical advice to Ontario's government, public health organizations and health care providers. PHO's work is guided by the current best available evidence at the time of publication.

The application and use of this document is the responsibility of the user. PHO assumes no liability resulting from any such application or use.

This document may be reproduced without permission for non-commercial purposes only and provided that appropriate credit is given to PHO. No changes and/or modifications may be made to this document without express written permission from PHO.

Public Health Ontario

Public Health Ontario is an agency of the Government of Ontario dedicated to protecting and promoting the health of all Ontarians and reducing inequities in health. Public Health Ontario links public health practitioners, front-line health workers and researchers to the best scientific intelligence and knowledge from around the world.

For more information about PHO, visit publichealthontario.ca.

Publication history:

Published: 2021

2nd Edition: September 2022

© King's Printer for Ontario, 2022

Ontario 