



## Infection Control Standards and Guidelines

### DEFINITIONS

**“Routine Practices”** – The basic infection prevention and control practices that apply to all patient care, regardless of the patient’s suspected or confirmed infectious state, and to all settings where healthcare is delivered. These are also known as “Standard/Routine Precautions”.

**“Additional/Transmission-Based Precautions”** – Infection prevention practices used when Routine Practices are not sufficient to interrupt the transmission of certain organisms. They are based on the actual mode of transmission of the organism (i.e., contact, droplet, and/or airborne). Additional Precautions are implemented when a diagnosis is known or suspected.

**“Hand Hygiene”** – Relates to the removal of visible soil and removal or killing of transient microorganisms from the hands. Hand hygiene may be accomplished using an alcohol-based hand rub or soap and running water.

### GLOSSARY OF ACRONYMS

ISMP – Institute for Safe Medication Practices

MSSA – Medication Safety Self-Assessment

ABHR – Alcohol-Based Hand Rub

CDC – Centers for Disease Control and Prevention

PHAC – Public Health Agency of Canada

PPE – Personal Protective Equipment

### 1. PURPOSE

Medication and Safety Self-Assessments are required every two years as outlined in the SCPP Regulatory Bylaws (Part I – Proprietary Pharmacies). According to ISMP, compliance with infection control guidelines is a core characteristic of a safe medication use system. Pharmacy staff must be informed of routine practices and additional precautions to reduce the risk of transmitting infections to and from patients, clients, residents, and staff in all health care settings.

**Disclaimer:**

This document is not intended to be a comprehensive review of routine and additional infection control practices. Instead, it is meant to outline the key components of infection control policies and procedures that must be in place at community pharmacies.

**For more comprehensive information on each section see the Related Resources section for respected resources that speak to each area of infection control.**

## 2. ROUTINE PRACTICES

- 2.1. All pharmacies must have policies and written procedures in place and train staff on each of the following at orientation and ongoing thereafter:
  - 2.1.1. Hand hygiene (See SCPP's [Hand Hygiene Standards and Guidelines](#));
  - 2.1.2. Respiratory hygiene and cough etiquette (See SCPP's [Respiratory Hygiene and Cough Etiquette Standards and Guidelines](#));
  - 2.1.3. Cleaning and disinfecting of environmental surfaces, which includes, but is not limited to:
    - 2.1.3.1. Routine and targeted cleaning of environmental surfaces specific to needs of the location (i.e., level of patient/staff contact and degree of soiling);

**Best Practices: Cleaning of Environmental Surfaces**

- Surfaces in the patient care environment (e.g. patient care room, drop off/pick up counters and waiting area) and high-touch surfaces (e.g doorknobs, telephones, computer keyboards, cash registers, pens) must be cleaned and disinfected **at least daily**;
- Low touch surfaces (e.g. floors, walls and windowsills) can be cleaned and disinfected on a less frequent schedule compared to other surfaces;
- Spills of blood or other body fluids should be promptly cleaned and disinfected

2.1.3.2. Products available and necessary for appropriate cleaning and disinfection procedures;

**Appropriate Cleaning and Disinfection Products**

- Detergent and water are adequate for cleaning surfaces in nonpatient-care areas;
- Low and Intermediate level disinfectants are suitable for most pharmacy equipment and surfaces. Examples include:
  - Ethyl or Isopropyl alcohol (70-90%);
  - Sodium Hypochlorite (5.25-6.15% household bleach diluted 1:50 provides > 1000ppm available chlorine);
  - Phenolic, Iodophor or Quaternary Ammonium germicidal detergent solutions (follow product labels for use-dilution);
  - 3% Hydrogen Peroxide or 0.5% Improved Hydrogen Peroxide;

**Note:** It is most important that an item or surface be free from visible soil and other items that might interfere with the action of the disinfectant (e.g. adhesive products), before a disinfectant is applied, or the disinfectant may not work. **Most disinfectants lose their effectiveness rapidly in the presence of organic matter.**

See: Public Health Ontario – [Best Practices for Cleaning, Disinfection and Sterilization in All Health Care Settings \(Page 108\)](#) for a concise chart outlining the use, advantages and disadvantages of various low-level disinfectants.

2.1.3.3. Information regarding the manufacturer's instructions on the use of chosen cleaners and disinfectants (e.g., dilution, storage, shelf-life, contact time, compatibility and safe use and disposal);

**Practice Tip – Limited Information from Manufacturer**

When information from the manufacturer is limited, the selection/use of cleaning agents, for specific microorganisms, environmental surfaces or equipment, should be guided by best available evidence and careful consideration of the risks and benefits of the available options.

- 2.1.3.4. Education of staff in the selection and proper use of PPE such as gloves, gowns, masks and eye protection as necessary, to prevent exposure to chemicals when cleaning.
- 2.1.4. Injection safety, needlestick injury and sharps disposal (See SCPPs policy on the [Administration of Drugs by Injection and Other Routes](#) and [Needlestick Injury Guidelines](#)).
- 2.1.5. Selection of Personal Protective Equipment for infection control that includes, but is not limited to:
- 2.1.5.1. Wear gloves when it can be reasonably anticipated that contact with blood or other potentially infectious materials, non-intact skin or contaminated equipment could occur;

#### **Glove Use**

- Do not use the same pair of gloves for care of more than one patient;
- Remove and discard disposable gloves upon completion of a task or when soiled during the process of providing care;
- Do not wash gloves for the purpose of reuse.

- 2.1.5.2. Use protective eyewear and a mask, or just a face shield, to protect the mucous membranes of the eyes, nose and mouth during activities that could result in sprays of bodily fluids (e.g. teaching proper inhaler technique);
- 2.1.5.3. Ensure that all staff have immediate access to PPE and are trained on:
- When to use PPE;
  - What PPE is necessary;
  - How to properly don, use and doff PPE in a manner that prevents self-contamination;
  - How to properly dispose of or disinfect and maintain PPE;
  - The limitations of PPE;
- 2.1.6. Cleaning and disinfecting of reusable medical equipment that is specific to equipment carried by the pharmacy.
- 2.1.6.1. All reusable medical equipment and devices (e.g. multi-use breast pumps, nebulizers, blood pressure cuffs and blood glucose monitors) should be cleaned and disinfected prior to use for another patient and when soiled with food, dirt, blood or other bodily fluids, according to manufacturer recommendations;

### **Cleaning/Disinfecting Reusable Medical Devices that Touch Bodily Fluids or Broken Skin (Class III Medical Devices)**

For medical devices that come into contact with blood or other body fluids (e.g. blood glucose monitors) if the manufacturer does not specify how the device should be cleaned and disinfected then it should not be used for more than one person.

**Note:** In the community pharmacy setting, blood glucose monitors are only considered suitable for multi-person use if a medical laboratory license has been acquired by the pharmacy. See SSCP's policy [Sale and Distribution of Medical Testing Devices](#) for more information.

2.1.6.2. Separation between clean and soiled equipment should be maintained at all times to prevent cross contamination;

2.1.7. Ensuring that the air quality is clean, safe and appropriate for employees and patients based on provincial occupational health and safety standards and the activities being performed (e.g. managing exposure to airborne diseases). See [CDC's Cleaning, Disinfecting, and Ventilation](#).

### **Extreme Circumstances (e.g. pandemic, supply-chain shortages, directives from public health officials):**

In extreme situations the routine and additional infection control measures may not be sufficient, or the pharmacy may be expected to implement other measures to ensure the health and safety of the public and staff.

These measures should occur before the patient arrives, upon arrival, during the visit and by planning ahead. For example, using electronic means of communication with patients, installing physical barriers (glass or plastic window), or limiting points of entry into the pharmacy.

For more information see the [PHAC's Guidance on Indoor Ventilation During the Pandemic](#), and CDC guidelines on [interim infection control measures](#) and a [poster](#) summarizing the above information for COVID-19.

## **3. ADDITIONAL PRECAUTIONS**

3.1. All pharmacies must have policies and procedures for transmission-based precautions in place that reflect [PHAC's Recommendations for Routine and Additional Precautions](#). Pharmacies must provide training and education to staff at orientation and ongoing thereafter that includes, but is not limited to:

3.1.1. Indications for contact, droplet and/or airborne precautions.

**Indications for Contact, Droplet and/or Airborne Precautions**

Transmission-based precautions should be implemented according to the patient's clinical presentation and suspected infection diagnoses as soon as signs and symptoms are identified.

See [Table 4 \(Transmission precautions by condition/clinical syndrome\)](#) and [Table 5 \(Transmission precautions by specific etiology\)](#) for more information.

**Note:** Some diseases/conditions need two categories of additional precautions (e.g. contact and droplet).

3.1.2. PPE, **beyond that which is used for routine precautions**, required when implementing contact, droplet and/or airborne precautions:

3.1.2.1. For **contact precautions**, gloves and long-sleeved gowns are required for all direct contact with the patient.

3.1.2.2. For **droplet precautions**, surgical/procedural masks in combination with eye protection, or face shields, are required when within two meters of the patient. Prescription eyeglasses are not considered sufficient eye protection.

**Use of N95 Respirators:**

N95 respirators protect against diseases transmitted by the airborne route and are **NOT** to be used in place of surgical or procedural masks as a part of droplet precautions.

Apart from tuberculosis, measles and chickenpox, few diseases are known to be transmitted person-to-person by the airborne route. The CDC has a [list of additional precautions required for various diseases](#).

3.1.2.3. For **airborne precautions**, high filtration respirators (i.e. N95 particulate respirators) and eye protection are required when within two meters of the patient.

3.1.3. How to properly put on and remove PPE ([See Appendix X: Technique for putting on and taking off personal protective equipment](#) for more information).

### **Reuse and Extended Use of Personal Protective Equipment:**

#### **IN NORMAL SITUATIONS:**

- **Disposable gloves, gowns and surgical/procedural masks must not be subject to reuse or extended use**, even for repeated contacts with the same patient at different times in the same day.
- **Under extenuating circumstances**, such as during supply shortages and during outbreaks of infectious diseases, **N95 respirators may be subject to extended use or reuse** provided the respirator is not damaged or soiled, the fit is not compromised by change in shape and the respirator has not been contaminated with blood or bodily fluids.

See CDC's [Implementing Filtering Facepiece Respirator \(FFR\) Reuse, Including Reuse after Decontamination, When There Are Known Shortages of N95 Respirators](#).

#### **DURING SUPPLY-CHAIN SHORTAGES:**

- Disposable gloves should never be subject to reuse or extended use
- Disposable eye-protection, gowns, and surgical/procedural masks may be subject to extended use or re-use in specific circumstances as outlined by CDC.

See CDC's [Strategies to Optimize PPE Supply](#) for more information.

## **4. OCCUPATIONAL HEALTH**

- 4.1. Pharmacies should ensure that healthcare personnel either receive immunizations or have documented evidence of immunity against vaccine-preventable disease as recommended by PHAC (See [Canadian Immunization Guide - Part 3, Table 1 – Recommended immunizations for health care workers](#) for suggested immunizations.)
  - 4.1.1. Staff who choose not to receive recommended immunizations that are transmitted via respiratory secretions, such as influenza, should wear a surgical or procedural mask when caring for patients, especially those who are high risk.
- 4.2. Pharmacies should implement processes and sick leave policies to encourage healthcare personnel to stay home when they develop signs or symptoms of acute infectious illnesses (e.g., fever, cough, diarrhea, vomiting, or draining skin lesions) to prevent spreading their infections to patients and other healthcare personnel.

- 4.3. Pharmacies should implement a system for healthcare personnel to report signs, symptoms, and diagnosed illnesses, that may represent a risk to their patients and coworkers, to their supervisor.

## 5. RELATED RESOURCES

- 5.1. [CDC – Guideline for Disinfection and Sterilization in Healthcare Facilities -- Recommendations \(Sections 4 and 5 – Pages 85-87\)](#) for guidance on environmental cleaning and disinfection practices.
- 5.2. CDC's [Guideline for Isolation Precautions \(Section IV.B. - Page 80\)](#) for information on the use of PPE for infection control.
- 5.3. See Public Health Ontario – [Best Practices for Cleaning, Disinfection and Sterilization of Medical Equipment/Devices in All Health Care Settings – Appendix B \(Page 78\)](#) for information on cleaning and disinfecting of reusable medical equipment and devices.
- 5.4. CDC – [Core Infection Prevention and Control Practices for Safe Healthcare Delivery in All Settings](#)
- 5.5. CDC – [Guide to Infection Prevention for Outpatient Settings: Minimum Expectations for Safe Care](#): This document may be used to assist in the assessment of infection control programs and practices in the pharmacy
- 5.6. CDC – [Infection Prevention during Blood Glucose Monitoring & Insulin Administration](#)

## 6. AUTHORITY

[Saskatchewan College of Pharmacy Professionals Regulatory Bylaws](#)

## 7. ACKNOWLEDGEMENTS

SCPP would like to acknowledge the Centers for Disease Control and Prevention for the information used to create this document.