



# Infection Control Guide

For Registered Dietitians  
in Community Settings



College of Dietitians of Ontario

Published by the *College of Dietitians of Ontario*  
5775 Yonge Street  
Suite 1810, Box 30  
Toronto ON M2M 4J1  
[www.cdo.on.ca](http://www.cdo.on.ca)

October 2006

## ACKNOWLEDGEMENTS

The *Infection Control Guide for Registered Dietitians in Community Settings* was adapted by the *College of Dietitians of Ontario* from *Infection Control for Regulated Professionals*, a guide developed by an interdisciplinary, ad-hoc Infection Control Committee as a resource and educational tool by regulated practitioners for practitioners.

Special thanks to the following participants and health regulatory colleges involved in this project.

Valerie Browne, CAE  
Director, Office and Membership Services  
College of Optometrists of Ontario  
6 Crescent Road, 2nd Floor  
Toronto, ON M4W 1T1  
director@collegeoptom.on.ca  
www.collegeoptom.on.ca

Shona Hunter  
Quality Assurance Manager  
College of Massage Therapists of Ontario  
810-1867 Yonge Street  
Toronto, ON M4S 1Y5  
416-489-2626 or 1-800-465-1933 ext 115  
shona.hunter@cmtom.com

Mary Lou Gignac, Registrar & ED  
College of Dietitians of Ontario  
5775 Yonge Street  
Suite 1810 (Box 30)  
Toronto ON M2M 4J1  
Phone: 416-598-1725 or 1-800-668-4990  
Fax: 416-598-0274  
gignacm@cdo.on.ca

Susan James, B.Sc. (OT), OT Reg.(Ont.)  
Project Director, Registered Pharmacy  
Technicians, Ontario College of Pharmacists  
483 Huron Street  
Toronto, ON M5R 2R4  
Tel (416) 962-4861

Rod Hamilton  
Senior Advisor, Integrated Policy  
College of Physiotherapists of Ontario  
230 Richmond Street West, 10th Floor  
Toronto, Ontario M5V 1V6  
416-591-3828 ext. 232  
rhamilton@collept.org

Barbara Meissner Fishbein  
Director of Professional Practice  
College of Audiologists and Speech-Language  
Pathologists of Ontario  
3080 Yonge St. Suite 5060  
Toronto, Ontario M4N 3N1  
416-975-5347 ext. 27; 1-800-993-9459  
Fax: 416-975-8394  
bfishbein@caslpo.com

Jennifer Harrison, B.Sc.Hon., RRCPP/RRT  
Policy Analyst  
The Ontario College of Pharmacists  
483 Huron Street  
Toronto, ON M5R 2R4  
Tel 416-962-4861  
jharrison@ocpinfoc.com

Rick Morris, Ph.D., C.Psych.  
Deputy Registrar/Director, Professional Affairs  
The College of Psychologists of Ontario  
110 Eglinton Avenue West, Suite 500  
Toronto, Ontario M4R 1A3  
416-961-8817, ext. 223  
www.cpo.on.ca

*A special acknowledgement to Jennifer Harrison RRT/RRCP, Policy analyst at the Ontario College of Pharmacists for researching and preparing this document and the Ontario College of Pharmacists for supporting this project on behalf of this working group.*

Cover image from <http://www.sbcphd.org/ehs/opening.htm#handwashing...>

Printed October 2006



# Contents

|   |    |
|---|----|
| ACKNOWLEDGEMENTS .....  | 2  |
| Introduction .....  | 6  |
| 1 Your Professional Responsibility .....  | 6  |
| 2. How Infection Spreads .....  | 7  |
| 3. Assessing the Risk.....  | 9  |
| A. YOUR PERSONAL SAFETY AND RISK OF INFECTING OTHERS.....                               | 8  |
| B. PREVENTING SPREAD OF INFECTION BETWEEN PEOPLE.....                                   | 9  |
| C. PREVENTING SPREAD OF INFECTION THROUGH YOUR ENVIRONMENT, TOOLS AND<br>EQUIPMENT..... | 9  |
| • ENVIRONMENTAL SURFACES .....  | 11 |
| • HOW TO CLEAN .....  | 11 |
| • CLEANING WITH DISINFECTANTS.....  | 13 |
| • SPILLS.....   | 14 |
| • WASTE MANAGEMENT .....  | 14 |
| 4. Two Tiered Approach to Infection Control in the Community.....                       | 15 |
| Tier 1: Routine Practices or Routine Precautions.....                                   | 16 |
| I. HAND HYGIENE .....   | 16 |
| II. PERSONAL PROTECTIVE EQUIPMENT (PPE) .....   | 18 |
| III. SAFE HANDLING AND DISPOSAL OF SHARPS .....   | 19 |
| Tier 2: Transmission-based Precautions .....  | 22 |
| I. ASSESSING THE NEED FOR TRANSMISSION-BASED PRECAUTIONS .....                          | 22 |
| II. CONTACT PRECAUTIONS – GLOVES .....  | 24 |
| III. DROPLET PRECAUTIONS – SURGICAL MASKS & EYE PROTECTORS.....                         | 25 |
| IV. AIRBORNE PRECAUTIONS.....   | 26 |
| V. REMOVING DIRTY MASKS & EYE PROTECTORS PROPERLY .....                                 | 26 |
| INFECTION CONTROL GLOSSARY.....   | 28 |
| REFERENCES.....   | 31 |

## Figures

|  |    |
|--|----|
| 1. How micro-organisms are acquired.....                           | 7  |
| 2. Spalding Classification on Cleaning and Disinfecting .....      | 10 |
| 3. Cleaning and Disinfecting Check List.....                       | 12 |
| 4. Selecting Disinfectants .....                                   | 13 |
| 5. Two-Tiered Approach to Infection Control in the Community ..... | 15 |
| 6. How to wash your hands.....                                     | 17 |
| 7. RD Check List for Cleaning, Disinfecting & Use of PPE .....     | 20 |
| 8. Assessing Risk for Infection Control Strategies .....           | 27 |

# Introduction

Infection control is an integral part of good health practices and critical to the health and safety of both healthcare workers and their clients. It refers to measures practised by healthcare personnel to prevent the spread of infectious agents or pathogens between clients, from healthcare workers to clients, and from clients to healthcare workers in healthcare settings. Depending on how infectious agents are transmitted, infection control measures include standard, contact, droplet, and airborne precautions.

This *Infection Control Guide for Registered Dietitians in Community Settings* is evidence-based and is intended to assist you in achieving best practices in applying appropriate infection control measures in your practice settings. It describes *Routine* and *Additional Infection Control Practices* applicable to community clinics, family practices, private consulting practices, home care and other community settings where Registered Dietitians (RDs) are providing direct patient care. It is based on *Health Canada* recommendations as recognized by the Ontario Ministry of Health and Long Term Care. Where conflicting information exists, *Health Canada* recommendations prevail.

The two-tiered approach to infection control used in this guide is adapted from the College of Physicians and Surgeons of Ontario, *Infection Control in the Physician's Office* (2004). **Tier 1, Routine Practices** uses the Health Canada terms **Routine Precautions or Routine Practices** which describe the system of infection prevention recommended in Canada that must be used **at all times, with all clients**, to prevent transmission of infections in health care settings. Routine precautions or practice include both:

- **Hand hygiene** or cleansing before and after any direct contact with a client using plain or antimicrobial soaps with running water or alcohol-based hand sanitizers. Hand hygiene replaces the term “hand washing”; and
- **Additional barrier precautions** – *Personal Protective Equipment (PPE)* – to prevent health care worker contact with a client's blood and body fluids, non intact skin or mucous membranes.

**Tier 2, Transmission-based Precautions**, explains practices used in addition to **Tier 1** for clients suspected of having transmissible diseases. The World Health Organization (WHO) uses the terms **Standard Precautions** and **Additional (transmission-based) Precautions** to describe infection control practices. They replace the terms *Universal Precautions* or *Body Substance Precautions*.

*This document is available at [www.cdo.on.ca](http://www.cdo.on.ca). You will find documents and references linked to the internet. Just click on underlined words and phrases to get to the document you would like to research in more detail.*

---

# 1. Your Professional Responsibility

As a Registered Dietitian, whether you work independently, in partnership, or as an employee, you are accountable for providing safe and ethical care to the public in accordance with the standards of your profession. As an employee, your place of employment may already have specific infection control programs that you are responsible to follow. You may be an employer and have to consider infection control programs for yourself or your employees. It is your responsibility to ensure that your infection control practices are current and meet your professional requirements that include the application of evidence-based measures and the use of professional judgement

## **REGISTERED DIETITIANS ARE RESPONSIBLE FOR:**

- Knowing the current infection control guidelines for your practice setting.
- Assessing risks and knowing how to use/apply the infection control guidelines in your practice.
- Adhering to the “current” infection control programs.
- Educating and modelling infection control practices for others, such as teaching hand washing techniques to clients.
- Being aware of what your infection control resources are and where to find out more.
- Advocating for best practices in infection control.
- Ensuring ongoing quality of infection control practices.
- Monitoring changes to infection control practices (health alerts) and updating your practice accordingly.

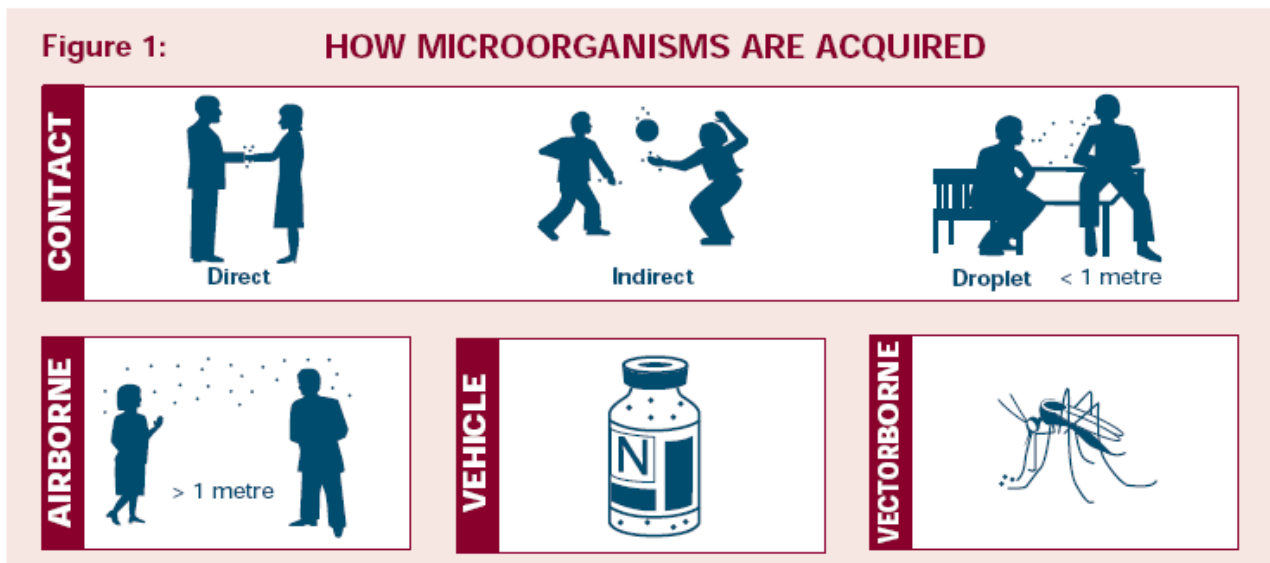
## 2. How Infection Spreads\*

Understanding how infection is spread is necessary for developing and using good infection control strategies.

There are four main routes of transmission for organisms:

- I. contact (either direct or indirect, or droplet);
- II. airborne transmission;
- III. vehicle (e.g. contaminated foodstuffs including enteral and parenteral solutions); and
- IV. vectorborne transmission ( e.g. insects, ticks).

Vectorborne transmission is likely not relevant in an office setting, but the others are all important modes of transmission in community settings.



\* From CPSO, *Infection control in the physician's office*, p 9.

---

## 3. Assessing the Risk

There are three components to assessing risks for infection control:

- I. Your personal safety and risk of infecting others;
- II. Preventing spread of infection between people; and
- III. Preventing spread of infection through your environment, your tools or equipment.

### A. YOUR PERSONAL SAFETY AND RISK OF INFECTING OTHERS

As co-workers, parents, and care providers, RDs are at risk of infection which they can spread to others at work. It is beyond the scope of this guideline to review all infectious diseases but, as an RD, you must be aware of situations when you should not go to work or where you should restrict your usual practices.

You need to follow *additional precautions* if you or your client is immunocompromised or has:

- dermatitis
- a common cold
- influenza or flu like symptoms
- a GI illness with vomiting or diarrhoea
- cold sores
- shingles or
- TB

#### Key

#### Taking care of yourself

Protect yourself against infection, including immunization.

Prevent yourself from spreading disease to others.

### Recommended Reading

RDs are encouraged to review the more detailed recommendations in the documents below and to update work restriction policies and recommended immunizations for health care workers accordingly:

- **College of Physicians and Surgeons of Ontario.** *Infection Control in the Physician's Office* (2004).
- **BC Centre of Disease Control.** Guidelines for infection prevention and control in the physician's office (2004).

## B. PREVENTING SPREAD OF INFECTION BETWEEN PEOPLE

Each client encounter is an opportunity for the transmission or prevention of infection. Controlling the spread of infection in your practice can protect your clients, your colleagues and you from illnesses such as measles or influenza.

### Booking Client Appointments, Reception and Triage \*

Assessing every client for the possibility of infection is desirable, but not practical. Share the responsibility of infection control with your clients and consider these practices:

1. If you do reminder phone calls to clients just prior to their appointments, ask about coughing, diarrhoea or new rashes and fever.
2. Post signage at the entrance requesting that clients with symptoms identify themselves on arrival.
3. Where possible, rather than letting clients with symptoms wait in busy areas, direct them immediately into counselling rooms to minimize the risk of spreading infection.
4. Where possible, try to arrange waiting rooms with enough space to allow at least one metre between clients for symptomatic clients.
5. Implement a respiratory etiquette:



- It might include signage, providing masks, tissues, waste containers and hand sanitizers.
- Post instructions to cover the nose and mouth when coughing or sneezing. Sample visual aids are available at:  
<http://www.cdc.gov/flu/professionals/infectioncontrol/resphygiene.htm>

\* College of Physicians and Surgeons of Ontario. *Infection Control in the Physician's Office* (2004), p. 17.

### Key

#### Client Care Management

#### Ask yourself:

Are there particular clients for whom you may need to take special precautions?

What kind of contact do you have with your clients?


What tasks do you do that involve increased risk of infection, e.g., handling money, preparing food or direct client contact?

## C. PREVENTING SPREAD OF INFECTION THROUGH YOUR ENVIRONMENT, TOOLS AND EQUIPMENT

It is up to you to classify the tools and equipment used in your practice and to determine what level of disinfection is necessary. Deciding how to decontaminate inanimate objects depends on the type of item involved and how it relates to the procedures performed. Under normal circumstances, routine procedures performed by RDs are clean procedures, as opposed to sterile procedures. As such, most of infection control processes you would use involve cleaning, sanitization and low level disinfection.

The *Spaulding Classification Scheme* (Figure 2 below), developed by Dr. Earle H. Spaulding in 1968, assigns objects used in a healthcare setting to one of three categories – critical, semi-critical and non-critical – and defines the levels of decontamination required for them.

### Key

 **Keep your environment, tools & equipment clean.**

Most of the infection control processes used by RDs involve cleaning, sanitization and low level disinfection.

Review the objects in your practice environment and classify your tools and equipment to determine the level of disinfection necessary for infection control.

**Figure 2: Spaulding Classification on Cleaning and Disinfecting**

| Category  | Level of Disinfection  | Examples   |
|---|--|--|
| <b>Critical</b><br>➤ Items that come in contact with the blood stream or sterile body tissues | ➤ Sterilization  | Surgical instruments<br>Acupuncture needles<br>Foot care instruments— <i>not filaments for diabetic foot care</i>            |
|   | ➤ High Level Disinfection when sterilization is not possible | Internal scopes  |
| <b>Semi-critical</b><br>➤ Items that come in contact with mucous membranes or non-intact skin | ➤ High Level Disinfection (HLD)                              | Contact lenses<br>Reusable Peek Flow meters<br>Mouthpieces   |
|   | ➤ Intermediate Level Disinfection (ILD)                      | Thermometers   |
| <b>Non-critical</b><br>➤ Items that come in contact with intact skin                          | ➤ Intermediate Level Disinfection (ILD)                      | Examination tables<br>Stethoscope<br>Blood pressure cuff<br>Skin probes e.g.<br>Filament used for routine diabetic foot exam |
| ➤ Items that do not come in contact with the client's skin                                    | ➤ Low Level Disinfection (LLD)                               | Furnishings, dishes, food models, scales   |

## Environmental Surfaces

It is likely that your practice setting will require some type of general housekeeping. Some of the surfaces in your environment may include examination tables, counter tops, sinks, bathrooms, scales, floors, table tops, door knobs, desk tops, waiting room chairs, toys, etc. Generally, these environmental surfaces require cleaning and a **low level** of disinfection. A rule of thumb is, the more an object is touched (used), the more it needs to be cleaned (See *Figure 3, Cleaning and Disinfecting Check List*).

### When to Clean

- In health care settings most environmental surfaces and items should be cleaned daily and when visibly soiled.
- Items that come in contact with clients, such as scales, food models, skin callipers, household measures and demonstration tools should be cleaned routinely between clients.
- Paper products should also be disposed of between clients.
- Children's toys and books in all waiting areas need to be cleaned and disinfected.
- If possible, avoid using carpets, draperies and stuffed toys in offices and clinics. These are hard to clean and disinfect.
- Body fluid spills or other hazardous materials require immediate attention and special considerations. Clean-up immediately (See *Spills*, p. 14).

### How to Clean

For general housekeeping cleaning, use low level detergent disinfectants. These agents typically clean and disinfect at the same time and can be used on most objects and surfaces. Some examples are:

- quaternary ammonium compounds;
- 3% hydrogen peroxide-based products;
- phenolic products. Be careful, these leave a film and may be toxic to children;
- household bleach (1:1000 diluted and prepared weekly). Bleach does not really "clean" like a detergent but is a low level disinfectant. A bleach solution can be used to wipe down toys, for example. Let the toys air dry afterwards. Disinfect infant and toddler toys more often as they tend to put the toys in their mouths.

In Ontario, chemical disinfectants used in health care settings are regulated by the [Health Canada-Public Health Agency](#). Be sure to follow manufacturer's instructions in order to ensure safe and efficient disinfecting procedures.

Some disinfectant may be hazardous. WHMIS (Workplace Hazardous Materials Information System) is a Canada-wide system designed to give employers and workers

information about hazardous materials used in the workplace. Under WHMIS, there are three ways in which information on hazardous materials is to be provided:

- I. labels on the containers of hazardous materials;
- II. material safety data sheets to supplement the label with detailed hazard and precautionary information; and
- III. Worker education programs.

**Figure 3: Cleaning and Disinfecting Check List**

| Considerations  | What to use.  | Recommendations  |
|---|---|--|
| <p><b>Environmental Surfaces / General Housekeeping</b></p> <ul style="list-style-type: none"> <li>➤ Floors</li> <li>➤ Sinks</li> <li>➤ Counter Tops</li> <li>➤ Storage Shelves and Bins</li> <li>➤ Cash Registers, telephones, computers</li> <li>➤ Washrooms (public and staff)</li> <li>➤ Private Counselling Rooms</li> <li>➤ Blood Pressure monitoring machines</li> <li>➤ Water filtration systems (for distilled water)</li> <li>➤ Refrigerator</li> </ul> | <p><b>Cleaning</b><br/>usually involves soap and water, detergents or enzymatic agents to physically remove soil, dust or foreign material.</p> <p><b>Low level Disinfection</b></p> <ul style="list-style-type: none"> <li>- quarternary ammonium compounds</li> <li>- iodophores</li> <li>- 3% hydrogen peroxide</li> <li>- diluted bleach</li> </ul> | <ul style="list-style-type: none"> <li>➤ Daily and when visibly soiled.</li> <li>➤ Clean high traffic areas more frequently.</li> <li>➤ Keep shelves and bins tidy, clean and dust free.</li> </ul>  |
| <p><b>Equipment / Tools</b></p> <ul style="list-style-type: none"> <li>➤ Weight scales</li> <li>➤ Skin fold callipers</li> <li>➤ Food models</li> <li>➤ Household measures</li> <li>➤ Demonstration product containers</li> </ul>   | <p><b>Sanitation</b><br/>a process that reduces micro-organisms on an inanimate object to a safe level (e.g., dishes and eating utensils are sanitized)</p> <p><b>Cleaning</b><br/>usually involves soap and water, detergents or enzymatic agents to physically remove soil, dust or foreign material.</p>   | <ul style="list-style-type: none"> <li>➤ Following use</li> <li>➤ Prior to use if suspected contamination</li> <li>➤ Care must be taken to ensure residues from the cleaning process itself (e.g., detergents, solvents, etc.) are also removed from equipment.</li> </ul> |

## Cleaning with Disinfectants

The basic principles about cleaning, disinfecting and sterilizing are:

- Protect yourself when processing equipment; use routine precautions.
- Some products work better on certain items; choose the disinfectant accordingly.
- Disinfectants and sterilization do not necessarily remove debris. Surface cleaning may be required before sterilization; use a detergent or an enzymatic cleaner.
- Be safe; know your products and refer to manufacturer's instructions, labels and WHMIS material safety data sheets.

The *BC Centre for Disease Control* also has a very practical summary entitled *Selection and Use of Disinfectants* which may help you choose the best disinfectant for your practice. This guide is available at:

[http://www.bccdc.org/downloads/pdf/epid/reports/CDManual\\_DisinfectntSelectnGuidelines\\_sep2003\\_nov05-03.pdf](http://www.bccdc.org/downloads/pdf/epid/reports/CDManual_DisinfectntSelectnGuidelines_sep2003_nov05-03.pdf)

**Figure 4: Selecting Disinfectants**

| Low level Disinfectants                        | Intermediate Level Disinfectants                         | High Level Disinfectants                     | Sterilization   |
|--|--|--|---|
| Phenolics<br>*careful, can be toxic to infants | Alcohols 60-90%  | Boiling for more than 20 minutes             | Exposure to steam at high temperature (autoclave)   |
| Quaternary Ammonium Compounds                  | Hypochlorites household bleach 1:100 dilution            | Ortho-phthaldehyde                           |   |
|  | Iodines and Iodophors                                    |  | Glutaraldehyde 10 hours   |
| 3% Hydrogen peroxide                           | Hypochlorites household bleach (1:1000 diluted solution) | Glutaraldehyde for 20 minutes                | Gas sterilization (ethylene oxide)  |
|  |  | Hypochlorites household bleach 1:50 dilution | Hydrogen peroxide, high concentration for 30 minutes  |
|  |  |  | Dry Heat sterilization the lower the temperature the longer the time, high temperatures for shorter times |

## Spills

Spills of blood and body substances require special consideration. RDs working in institutional settings have resources and staff available to help clean spills. RDs working outside institutions must take precautions to safely clean these spills:

- Protect yourself by using routine precautions - gloves, masks and eye protectors may be necessary.
- Clean the area of obvious organic material using disposable towels and dispose of them in a plastic lined container.
- Apply a low level detergent/disinfectant.
- Rinse and dry the area using disposable towels.
- Dispose of waste in a plastic lined container.
- Dispose of your personal protective equipment and wash your hands immediately (see p. 18).

## Waste Management

### 1. Bio-Hazardous Waste

There are two bio-hazardous waste classifications:

- I. Anatomical waste includes human tissues, **blood, body fluids** but **exclude teeth, hair, nails, urine and feces**. You may throw out a diaper for example.
- II. Hazardous non-anatomical waste such as **needles, blades and sharps** that have come into contact with blood or body fluids.

The disposal of bio-hazardous waste is regulated by the Ministry of the Environment. This means that bio-hazardous waste must be transported and disposed of properly.

**This is the symbol for bio-hazardous waste.**

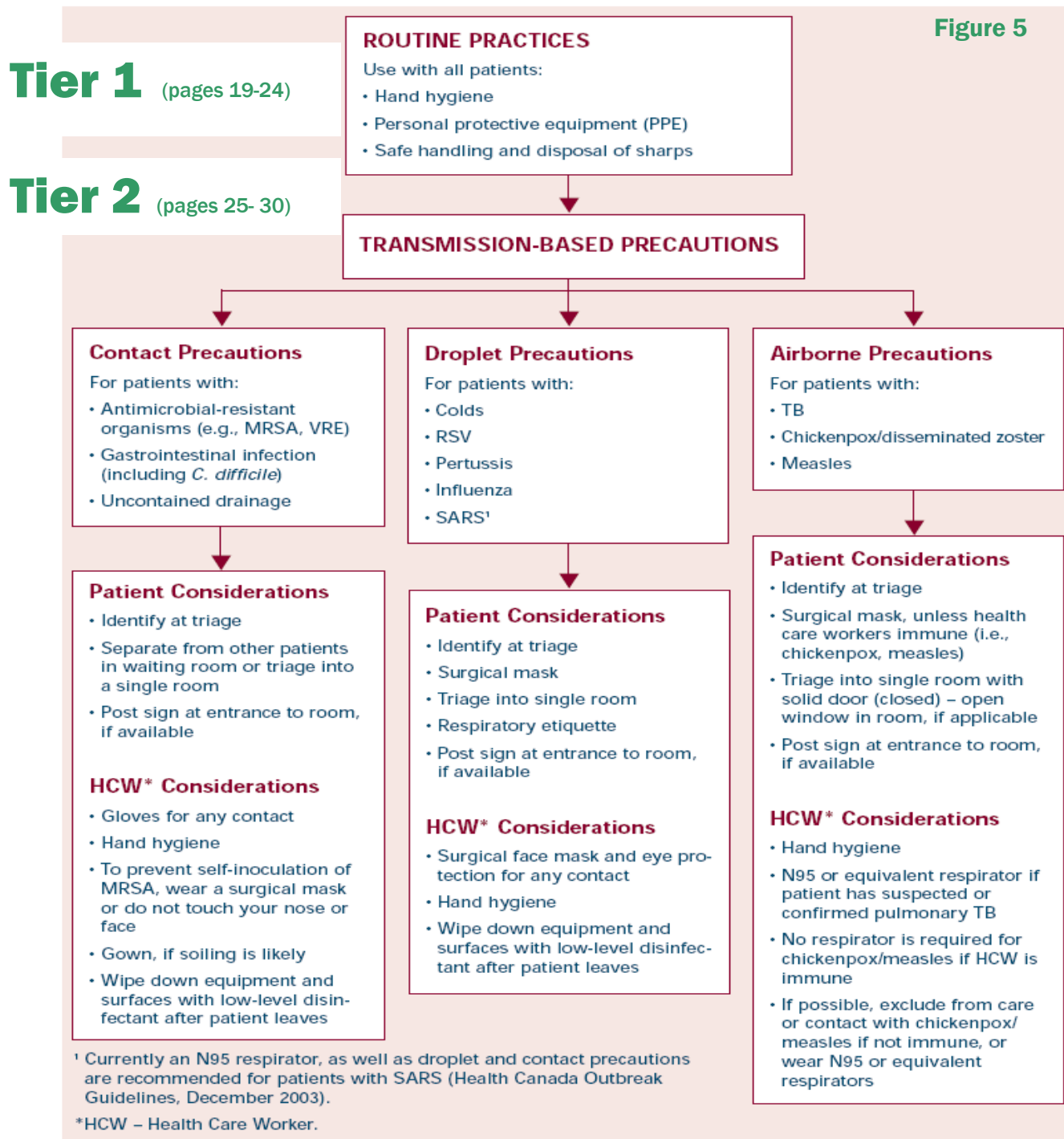


**Refer to:** GUIDELINE C-4. The Management of Biomedical Waste in Ontario  
<http://www.ene.gov.on.ca/envision/gp/425e.htm> For more information contact the Ministry of the Environment at: <http://www.ene.gov.on.ca/feedback/#general>

### 2. Domestic Wastes

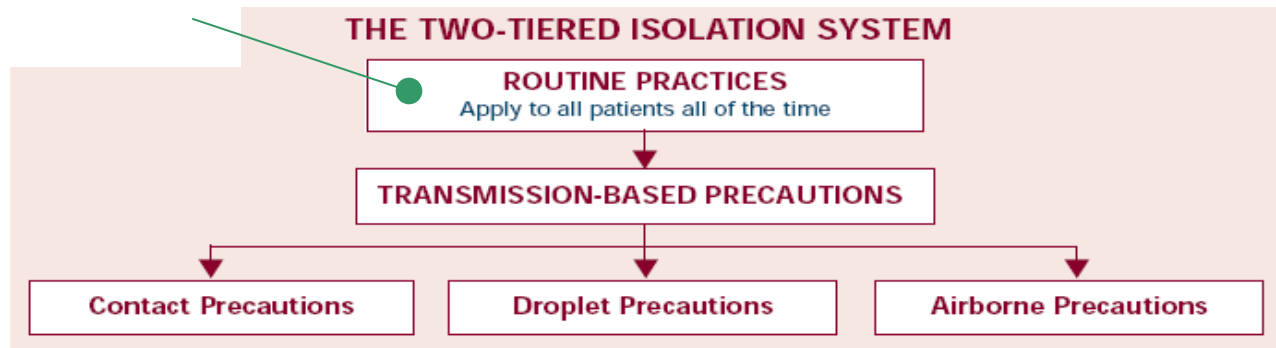
Medical wastes that are generated by individuals at home are not considered to be pathological/biomedical wastes. They are classified as domestic wastes and are not regulated by the Ministry of the Environment, “Domestic waste is exempt from the definition of hazardous waste. Domestic waste may include waste that is human body waste, toilet or other bathroom waste, waste from other showers or tubs, liquid or water borne culinary or sink waste or laundry waste” (Environmental Protection Act R.R.O. 1990, REGULATION 347 Amended to O. Reg. 326/03 GENERAL - WASTE MANAGEMENT)

## 4. Two Tiered Approach to Infection Control in the Community \*



\* Source: From CPSO, *Infection control in the physician's office*, (2005) p 21.  
<http://www.cpso.on.ca/Publications/infectioncontrolv2.pdf>

# Tier 1 Routine Practices or Routine Precautions



**Routine Practices** refer to the standard of practice that should be followed for the care of all clients at all times regardless of diagnosis or infectious status.

Routine Practices prevent the transmission of micro-organisms from direct contact with blood, body fluid or secretions and moist body substances with non-intact skin or mucous membranes, e.g. open wounds, enterostomy sites.

## THREE BASIC ROUTINE PRACTICES

### I. Hand Hygiene

Hand hygiene is the single most important means of preventing the transmission of micro-organisms.

#### When should you wash?

- When performing routine and non-invasive procedures.
- After personal hygiene (e.g., using the toilet or blowing one's nose).
- When hands are visibly soiled.
- Before and after you have contact with a client.
- After contact with any blood, body fluids, secretions, or excretions.
- After contact with laboratory specimens.
- After contact with enteral and parenteral feeding equipment, glucometers, etc.
- Between contact with different clients.
- Immediately after removing gloves.
- Before preparing, handling, eating, or serving food and medications.
- Before feeding a client.
- After handling money or other items that may be contaminated.
- Immediately, if your skin is contaminated or any injury occurs.

## KEYS

- 1. Hand Hygiene
- 2. Personal Protective Equipment (PPE)
- 3. Appropriate handling of waste and disposal of sharps.

### What should you use to wash?

**Plain soap** products (bar or liquid) are recommended for routine hand hygiene especially when your hands are visibly soiled, e.g., after contact with enteral feeds.

**Antimicrobial agents** (alcohol gels, rinses, rubs) containing at least **60%** alcohol may be used as an alternate to soap and water. Most healthcare professionals use antibacterial soaps specially made for health care providers due to the nature of their close contact with clients. Antimicrobial soaps may not always be available for your use, for example, if you are caring for a client in their home.

**Antiseptic agents** are used when:

- You will be performing sterile or invasive procedures.
- You have had contact with blood, body fluids, secretions, or excretions.
- You have had contact with contaminated items.
- You will have contact with an immunocompromized client.

Examples of antiseptic hand hygiene agents are:

- Alcohol 70-90%;
- Chlorhexidine 2% or 4% aqueous solutions; and
- Iodine Compounds.

## Figure 6 – How to wash your hands

Adhering to proper hand hygiene techniques is most important.



Visit ***Clean Hands, Good Health*** for a video tutorial on hand hygiene at:  
<http://www.ahsc.health.nb.ca/cleanhandsahsc/cleanhandsworkingahsc.html> (2)

*CPSO recommended technique*  
<http://www.cpso.on.ca/Publications/infectioncontrolv2.pdf>, p. 12.


## II. Personal Protective Equipment (PPE)

Personal Protective Equipment (PPE) is used at all times where contact with blood and body fluids may occur. The use of PPE is intended to reduce the transmission of micro-organisms to and from health care professionals. PPE reduces but does not completely eliminate the risk of acquiring an infection.

When performing procedures related to client care or for clean-up procedures, RDs should assess whether they are at risk of exposure to non-intact skin, blood, body fluids, excretions or secretions. Occasionally, they may be required to participate in procedures that expose them to a client's body fluids, such as:

- working with feeding tubes;
- assisting clients with ostomies; and
- assisting clients with blood glucose testing.

### KEY

 The use of PPE does not replace proper hand hygiene.

## Protect Yourself and Others

### Learn how to use your PPE correctly.

PPE is only effective in infection control and prevention when applied, used, removed and disposed of properly. Follow the manufacturer's directions.

- **Avoid cross contamination from soiled PPE to other surfaces or individuals.**
- **Follow appropriate directions for proper disposal of soiled PPE.**
- **Do not share PPE.**
- **After each client, change your PPE completely and thoroughly wash your hands before you attend to another client or perform another duty.**

### III. Safe Handling and Disposal of Sharps

Used needles and sharps are classified as non-anatomical bio-hazardous waste. The management of these is regulated in Ontario by the Ministry of the Environment and GUIDELINE C-4 The Ministry endorses the proper disposal of sharps and supports initiatives aimed towards diverting these wastes from disposal into landfill. The Ministry encourages householders to make use of the “Public Waste” Depot Programs that have been established in various retail pharmacies across Ontario for the disposal of sharps and pharmaceutical waste.

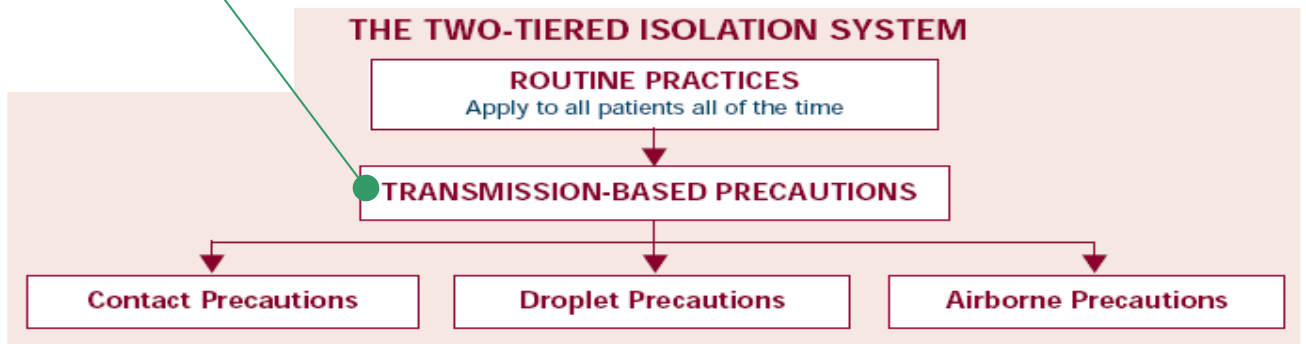
- Collect and store used needles and sharps in sharps containers. Sharps containers should be made of plastic or metal and have a lid that can be closed. It must be marked with the universal biohazard symbol and labelled "Biomedical Waste/Déchets Biomédicaux".
- If clients are returning sharps to you for disposal – some clients return sharps to the pharmacy – do not handle them. Have the client put the sharps into the container themselves.
- If you have a bio-hazardous waste management system in place in your practice, a good idea may be to encourage a container exchange program where the client can return a full sharps container for an empty one.
- If you do not have a bio-hazardous waste management system in place, you may encourage clients to start their own "individual collection system" which means:
  - clients collect their own household bio-hazardous wastes;
  - approved containers are used; and
  - wastes are taken to a waste disposal site by the householder.

**Figure 7 – RD Check List for Cleaning, Disinfecting & Use of PPE**

| Considerations  | What to use.  | Recommendations   |
|---|---|---|
| <p><b>Environmental Surfaces / General Housekeeping</b></p> <ul style="list-style-type: none"> <li>➤ Floors</li> <li>➤ Sinks</li> <li>➤ Counter Tops</li> <li>➤ Storage Shelves and Bins</li> <li>➤ Cash Registers, telephones, computers</li> <li>➤ Washrooms (public and staff)</li> <li>➤ Private Counselling Rooms</li> <li>➤ Blood Pressure monitoring machines</li> <li>➤ Water filtration systems (for distilled water)</li> <li>➤ Refrigerator</li> </ul> | <ul style="list-style-type: none"> <li>➤ <b>Cleaning</b><br/>usually involves soap and water, detergents or enzymatic agents to physically remove soil, dust or foreign material.</li> <li>➤ <b>Low level Disinfection</b> <ul style="list-style-type: none"> <li>- quarternary ammonium compounds</li> <li>- iodophores</li> <li>- 3% hydrogen peroxide</li> <li>- diluted bleach</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>➤ Daily and when visibly soiled.</li> <li>➤ Clean high traffic areas more frequently i.e. where clients drop off and pick up prescriptions and near the cash register.</li> <li>➤ Keep shelves and bins tidy and clean, dust free.</li> </ul>  |
| <p><b>Equipment / Tools</b></p> <ul style="list-style-type: none"> <li>➤ Weight scales</li> <li>➤ Skin fold callipers</li> <li>➤ Food models</li> <li>➤ Household measures</li> <li>➤ Demonstration product containers</li> </ul>   | <ul style="list-style-type: none"> <li>➤ <b>Sanitation</b><br/>a process that reduces micro-organisms on an inanimate object to a safe level (e.g., dishes and eating utensils are sanitized)</li> <li>➤ <b>Cleaning</b><br/>usually involves soap and water, detergents or enzymatic agents to physically remove soil, dust or foreign material.</li> </ul>  | <ul style="list-style-type: none"> <li>➤ Following use.</li> <li>➤ Prior to use if suspected contamination.</li> <li>➤ Care must be taken to ensure residues from the cleaning process itself (e.g., detergents, solvents, etc.) are also removed from equipment.</li> </ul>  |
| <p><b>Hand Hygiene</b></p> <ul style="list-style-type: none"> <li>➤ For proper hand washing technique, see p. 17.</li> </ul>  | <ul style="list-style-type: none"> <li>➤ Plain Soap</li> <li>➤ Antibacterial Soap</li> <li>➤ Hand Sanitizers</li> </ul>   | <ul style="list-style-type: none"> <li>➤ <b>After</b> handling money.</li> <li>➤ <b>After</b> handling waste or sharps containers.</li> <li>➤ <b>After</b> handling equipment or items returned to you by clients, e.g. returned glucometers.</li> <li>➤ <b>After</b> removing PPE (gloves).</li> <li>➤ <b>Before and after</b> blood glucose monitoring or diabetic foot assessment, wound or ostomy care, feeding tube evaluation.</li> </ul> |

|   |  |  |
|---|--|--|
|   |  | <ul style="list-style-type: none"> <li>➤ <b>After</b> use of bathroom or blowing your nose.</li> </ul>   |
| <p><b>Use of Personal Protective Equipment</b></p> <ul style="list-style-type: none"> <li>➤ Risk Assessment (see Figure 8, p. 27.)</li> </ul> | <ul style="list-style-type: none"> <li>➤ Gloves</li> <li>➤ Surgical Masks</li> </ul> | <ul style="list-style-type: none"> <li>➤ If you have a respiratory infection (cold) and must report to work, wear a surgical mask when in close contact with clients.</li> <li>➤ Have available enough <i>Personal Protective Equipment</i> to use if there is a Health Alert in effect for example: <ul style="list-style-type: none"> <li>○ A respiratory illness such as SARS; or</li> <li>○ Pandemic Influenza (<i>Ontario Plan</i> recommends 4 weeks worth of supplies!).</li> </ul> </li> </ul> |

# Tier 2 Transmission-based Precautions



Transmission-based Precautions, also called *Additional Precautions*, and PPE (see Section III below) are used together with routine practices when clients are suspected or confirmed of being infected with a **transmissible disease**. Office signage and prevention measures such as immunization and restricting the work of infected employees are all components of *Transmission-based Precautions*.

## KEY

Transmission-based precautions are added to Routine Precautions to provide protection against infections not covered by routine practices.

## I. ASSESSING THE NEED FOR TRANSMISSION-BASED PRECAUTIONS — 3 STEPS

### Step 1 — Assess

- Use your professional knowledge, skill and judgement to assess the potential routes of transmission in your practice (contact, droplet and airborne).
- Assess the risks involved in what you are doing. Consider the procedures you perform, the tools you use and your environment.
- Assess clients and people around you for potential transmission of disease, e.g., RDs in home care call ahead of time to do a screen for febrile respiratory illnesses.
- Remember to consider your own health. Are you at risk of spreading infection to others?

### Step 2 — Control

- Based on your surveillance and assessment, determine your need for additional infection control precautions.
- Establish what type of personal protective equipment or precautions you will need to achieve adequate infection control.

### Step 3 — Prevent

- **#1** Wash your hands frequently.
- Be prepared; have updated infection control programs in place that suit your needs and your clients.

- Have a plan; be aware of how to manage special situations (see below).
- Have the appropriate PPE available.
- Know when and how to use PPE correctly.
- Educate others about good infection control practices.
- Have an annual influenza immunization.
- Keep up-to-date with your other immunizations.
- Stay home when you are sick.
- If you must work when you are ill, cover your mouth when coughing or sneezing, consider wearing a surgical mask, and wash your hands frequently.

### **Special Situations: Febrile and Influenza Like Illnesses**

Follow government recommendations on health alerts, surveillance, screening and reporting of suspected *Febrile Respiratory Illness (FRI)* and *Influenza-Like Illness (ILI)*,

#### ▶ **Health Alerts**

The Ministry of Health and Long Term Care (MOHLTC) has a Website tailored specifically for health care professionals. Here you can access provincial infection control guidelines and check out current health alerts.

[http://www.health.gov.on.ca/english/providers/program/emu/emu\\_mn.html](http://www.health.gov.on.ca/english/providers/program/emu/emu_mn.html)

#### ▶ **Non-Outbreak Conditions**

MOHLTC has published Guidelines for Infection Control and Surveillance for Febrile Respiratory Illness (FRI) in Community Settings in Non-Outbreak Conditions". These guidelines can be found at:

[http://www.health.gov.on.ca/english/providers/program/infectious/syndromes/standards/guide\\_fri\\_comm\\_031104.pdf](http://www.health.gov.on.ca/english/providers/program/infectious/syndromes/standards/guide_fri_comm_031104.pdf)

#### ▶ **Pandemic**

MOHLTC has also developed *Ontario Health Pandemic Influenza Plan* which can be found at:

[http://www.health.gov.on.ca/english/providers/program/emu/pan\\_flu/pan\\_flu\\_mn.html](http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_mn.html)


There may be other situations when your employer requires you to exercise *Transmission-based Precautions*, such as an outbreak of SARS. For more information visit [www.health.gov.on.ca/pandemic](http://www.health.gov.on.ca/pandemic) or Call INFOline 1-866-801-7274, Health Care Provider's Hotline 1 866 212-2272 .

**Government alerts are posted on the website of the  
College of Dietitians of Ontario  
[www.cdo.on.ca](http://www.cdo.on.ca) > Home Page**

## II. Contact Precautions - Gloves

Gloves are part of routine precautions and should be worn by health care professionals for protection against exposure to blood, body fluids, secretions, excretions and mucous membranes. When used properly, gloves can reduce the spread of infection by health care providers.

### KEY

 The use of gloves does not replace proper hand washing.

### When to Wear Gloves

Gloves are not required for routine care activities in which contact is limited to intact skin. Wear gloves:

- During any procedure and client-care activities that are likely to generate splashes or sprays of blood, body fluids, secretions, and excretions.
- When you are cleaning contaminated items, linen or handling waste that may generate splashes or sprays of blood body fluids, secretions and excretions.
- When you are performing invasive procedures, to protect yourself and the client.
- To protect immunocompromized clients.
- If there is a health alert in effect that requires you to wear gloves, e.g., when dealing with a client who is infected with MRSA or Clostridium difficile.

### Using Gloves Effectively

- Remove your gloves carefully to prevent contaminating yourself as you are doing so.
- Always wash your hands after removing your gloves.
- Change your gloves between clean and dirty procedures - even on the same client.
- Change gloves after contact with contaminated items, waste, linens, etc.
- Single-use disposable gloves should not be reused or washed.

### About Gloves

- Purchase gloves that have the *Canadian General Standards Board* certification mark which ensures that national standards are met during manufacturing.
- There are many types of gloves available, for example, latex-free products. For more information on medical devices check out Health Canada *Medical Devices Bureau* at: <http://www.hc-sc.gc.ca/english/protection/devices.htm>

### III. Droplet Precautions – surgical masks & eye protectors

Droplets or aerosols can carry microbes. Droplets are classified as particles larger than 5µm in size. They do not stay suspended in the air for long periods of time but fall to the surfaces of the environment.

#### **Surgical masks**

- help protect you from inhaling respiratory pathogens transmitted by the droplet route.
- provide a barrier that protects the mucous membranes of the mouth and nose, which are portals for infection.

#### **Eye protectors**

- prevent droplets from contacting the conjunctiva of the eyes, which are a portal for infection.

#### **When should you wear them?**

Wear a surgical mask and eye protection or face shield:

- During routine procedures and client-care activities that are likely to generate splashes or sprays of blood, body fluids, secretions and excretions.
- When you are cleaning contaminated items, linen or handling waste that may generate splashes or sprays of blood body fluids, secretions and excretions.
- When you are in close contact (<1 meter) with a person who is suspected of having a communicable disease that is droplet spread for example, a client who is febrile (temperature >38C) and who is coughing or sneezing or if you suspect you may be ill as such.
- When you are performing invasive procedures, to protect yourself and the client.
- To protect immunocompromized clients.
- When there is a health alert in effect that requires you to wear a surgical mask, for example, during an alert for chicken-pox or meningococcal meningitis.

## IV. Airborne Precautions and N95 Masks

Airborne particles (pathogens) such as the agent that causes tuberculosis are smaller than 5µm in size. An N95 mask helps protect you from inhaling respiratory pathogens that are transmitted via the airborne route.

You may be required to use an N95 mask when you are working with a client with a known airborne disease or when there is a health alert or screening process in effect.

### Fitting your N95 Masks

Health Care professional who may need to use N95 masks in their practice must be "fit tested" in order to ensure adequate protection from transmission of airborne pathogens.

For more information on N95 masks and fit testing visit Health Canada, *Infection Control Guidance for Respirators (Masks) worn by Health Care Workers - Frequently Asked Questions* at:  
[http://www.phac-aspc.gc.ca/sars-sras/ic-ci/sars-respmasks\\_e.html](http://www.phac-aspc.gc.ca/sars-sras/ic-ci/sars-respmasks_e.html)

## V. Removing dirty masks & eye protectors properly

Always remove your mask and eye protectors carefully to avoid contaminating yourself.

### Masks

- Remove soiled gloves and wash your hands prior to removing the mask.
- Hold your mask with your hand. Remember, your hand and the outside of the mask are now dirty.
- Undo the ties and then pull the mask directly away from your face.
- Do not drag the mask up or down over your face.
- Discard your mask and gloves.
- Always wash your hands after you have removed your PPE.

### Eye Protectors

- Similarly, remove eye protectors by pulling them away from your face and discard or clean.
- Wash your hands after removing the eye protectors.

**Figure 8 – Assessing Risk for Infection Control Strategies**

| Situation   | Infection Control Strategy (escalating)  |
|---|--|
| <p><b>Routine Client Care</b><br/>No physical contact<br/>Communication with client &gt;1 metre away.</p>   | <p><b>Routine Practices</b><br/>Hand hygiene<br/>Respiratory etiquette (cover mouth and nose when coughing or sneezing, followed by proper hand hygiene)</p>   |
| <p><b>Physical Contact with client – intact skin</b></p>  | <p><b>Contact Precautions</b><br/>Hand hygiene</p>   |
| <p><b>Physical contact with client – skin problem</b><br/>You or your client has an infected or open wound, non intact skin, no respiratory concerns.</p> | <p><b>Contact Precautions</b><br/>Hand hygiene<br/>Gloves<br/>Proper removal and disposal of gloves followed by hand hygiene</p>   |
| <p><b>Physical contact with client – droplets</b><br/>procedure may involve body fluids, splashing</p>  | <p><b>Droplet Precautions</b><br/>Hand hygiene<br/>Use professional judgement:<br/>Gloves<br/>Surgical Mask<br/>Eye protectors<br/>Gowns<br/>Proper removal and disposal of PPE followed by hand hygiene.</p>  |
| <p><b>Close contact with client –respiratory symptoms</b></p>   | <p><b>Droplet Precautions</b><br/>Hand hygiene<br/>Respiratory etiquette – cover mouth and nose when coughing or sneezing, followed by proper hand hygiene.<br/>Use professional judgement:<br/>Gloves<br/>Surgical mask for you and/or your client<br/>Eye protectors</p>   |
| <p><b>Close contact with client –fever and respiratory symptoms</b></p>   | <p><b>Droplet Precautions</b><br/>Hand hygiene<br/>Respiratory etiquette – cover mouth and nose when coughing or sneezing, follow with proper hand hygiene.<br/>Use professional judgement:<br/>Gloves<br/>Surgical mask for you and/ or your client<br/>Eye protectors<br/>Follow health alerts if applicable</p> |
| <p><b>Contact with client having known airborne infection e.g. active TB</b></p>  | <p><b>Airborne Precautions</b><br/><b>Droplet Precautions with N95 mask</b><br/>Proper Ventilation</p>   |
| <p><b>Health Alert in effect</b></p>  | <p><b>Follow MOHLTC Guidelines</b></p>   |

# Infection Control Glossary

The definitions are taken from the following sources:

**Health Canada.** *Infection Control Guidelines: Supplement: Hand Washing Hand hygiene, Cleaning, Disinfection and Sterilization in Health Care, Health Canada Communicable Disease Report, December 1998.*  
<http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/98pdf/cdr24s8e.pdf>

**World Health Organization.** *Regional Office for Western Pacific, Manila Regional Office for South-East Asia, New Delhi. Practical Guidelines for Infection Control in Health Care Facilities.*  
[http://w3.who.sea.org/LinkFiles/Update on SEA Earthquake and Tsunami infection-control.pdf](http://w3.who.sea.org/LinkFiles/Update_on_SEA_Earthquake_and_Tsunami_infection-control.pdf)

---

**Airborne infection:** usually occurs by the respiratory route, with the agent present in aerosols (infectious particles < 5µm in diameter).

**Airborne precautions:** additional to standard precautions and are designed to /reduce the transmission of diseases spread by the airborne route.

**Antimicrobial agent:** a product that kills or suppresses the growth of micro-organisms.

**Antiseptics:** chemicals that kill micro-organisms on living skin or mucous membranes. Antiseptics should not be used in housekeeping.

**Biomedical waste:** defined by the CSA (210) as waste that is generated by human or animal health care facilities, medical or veterinary settings, health care teaching establishments, laboratories, and facilities involved in the production of vaccines.

**Cleaning:** the physical removal of foreign material, e.g., dust, soil, organic material such as blood, secretions, excretions and micro-organisms. Cleaning physically removes rather than kills micro-organisms. It is accomplished with water, detergents and mechanical action. The terms “decontamination” and “sanitation” may be used for this process in certain settings, e.g., central service or dietary department. Cleaning reduces or eliminates the reservoirs of potential pathogenic organisms. Cleaning agents are the most common chemicals used in housekeeping activity.

**Contact transmission:** micro-organisms transmitted by direct contact with hands/ equipment or indirect contact between an infected or colonized client and a susceptible client.

**Contact precautions:** additional to standard precautions and designed to reduce the risk of transmission of micro-organisms by direct or indirect contact.

**Clinical Waste:** also known as “infectious waste” includes waste directly associated with blood, body fluids secretions and excretions, and sharps. Infectious waste is suspected to contain pathogens (bacteria, viruses, parasites, or fungi) in sufficient concentration or quantity to cause disease in susceptible hosts. It also includes laboratory waste that is directly associated with specimen processing, human tissues, including instruments, material or solutions containing free-flowing blood, and animal tissue or carcasses used for research. Sharps are items that could cause cuts or puncture wounds, including needles, hypodermic needles, scalpel and other blades, knives, infusion sets, saws, broken glass, and nails. Whether or not they are infected, such items are usually considered as highly hazardous health-care waste.

**Critical items:** instruments and devices that enter sterile tissues, including the vascular system. Critical items present a high risk of infection if the item is contaminated with any micro-organisms, including bacterial spores. Reprocessing critical items involves meticulous cleaning followed by sterilization.

**Decontamination:** the removal of disease-producing micro-organisms to leave an item safe for further handling.

**Disinfection:** the inactivation of disease-producing micro-organisms. Disinfection does not destroy bacterial spores. Disinfectants are used on inanimate objects; antiseptics are used on living tissue. Disinfection usually involves chemicals, heat or ultraviolet light. Levels of chemical disinfection vary with the type of product used.

**Droplet infections:** large droplets, particles larger than 5µm in size, carry the infectious agent.

**Droplet precautions:** additional to standard precautions and are designed to reduce the transmission of infectious spread by the droplet route.

**Fomites:** objects in the inanimate environment that may become contaminated with micro-organisms and serve as a vehicle of transmission.

**Germicide:** an agent that destroys micro-organisms, especially pathogenic organisms.

**Hand wash(ing):** a process for the removal of soil and transient micro-organisms from the hands.

**Hand antisepsis:** a process for the removal or destruction of resident and transient micro-organisms on hands.

**Health care worker:** any person working in a health care facility, for example, medical officer, nurse, physiotherapist, cleaner, psychologist.

**Health care facility:** organization that employs health care workers and cares for clients/clients.

**Heavy microbial soiling:** the presence of infection or high levels of contamination with organic material, e.g., infected wounds, feces.

**High level disinfection:** level of disinfection required when processing semi-critical items. High level disinfection processes destroy vegetative bacteria, mycobacteria, fungi and enveloped (lipid) and non-enveloped (non lipid) viruses, but not necessarily bacterial spores. High level disinfectant chemicals (also called chemosterilants) must be capable of sterilization when contact time is extended. Items must be thoroughly cleaned prior to high level disinfection.

**Infection control programme:** incorporates all aspects of Infection control, e.g. education, surveillance, environmental management, waste management, outbreak investigation, standard and additional precautions, cleaning, disinfection and sterilisation, employee health, quality management in Infection Control.

**Intermediate level disinfection:** level of disinfection required for some semi-critical items. Intermediate level disinfectants kill vegetative bacteria, most viruses and most fungi but not resistant bacterial spores.

**Low level disinfection:** level of disinfection required when processing non-critical items or some environmental surfaces. Low level disinfectants kill most vegetative bacteria and some fungi as well as enveloped (lipid) viruses (e.g., hepatitis B, C, Hantavirus, and HIV). Low level disinfectants do not kill mycobacteria or bacterial spores. Low level disinfectants-detergents are used to clean environmental surfaces.

**Non-critical items:** either touch only intact skin but not mucous membranes or do not directly touch the client. Reprocessing of non-critical items involves cleaning and/or low level disinfection.

**Personal protective equipment:** includes gloves, gowns, caps, masks – (surgical and N95), and overshoes. These items are used to protect the health care worker from splashes of blood, body fluids, excretions and excretions or from droplets or aerosolization of organisms from the respiratory tract. It is the responsibility of the health care worker to put on the appropriate personal protective equipment in any situation that is likely to lead to exposure of blood, body fluids, excretions and secretions.

**Plain or non-antimicrobial soap:** detergent-based cleansers in any form (bar, liquid, leaflet, or powder) used for the primary purpose of physical removal of soil and contaminating micro-organisms. Such soaps work principally by mechanical action and have weak or no bactericidal activity. Although some soap contains low concentrations of antimicrobial ingredients, these are used as preservatives and have minimal effect on colonizing flora.

**Reprocessing:** steps that are taken to make an instrument or equipment that has been used (contaminated) ready for reuse again.

**Sanitation:** a process that reduces micro-organisms on an inanimate object to a safe level (e.g., dishes and eating utensils are sanitized).

**Semi-critical items:** devices that come in contact with non-intact skin or mucous membranes but ordinarily do not penetrate them. Reprocessing semi-critical items involves meticulous cleaning followed preferably by high-level disinfection (level of disinfection required is dependent on the item, see Table 5). Depending on the type of item and its intended use, intermediate level disinfection may be acceptable.

**Sharps:** needles, syringes, blades, laboratory glass or other objects capable of causing punctures or cuts.

**Sterilization:** the destruction of all forms of microbial life including bacteria, viruses, spores and fungi. Items must be cleaned thoroughly before effective sterilization can take place.

**Waste management system:** all the activities, administrative and operational, involved in the production, handling, treatment, conditioning, storage, transportation and disposal of waste generated by health-care establishments.

## References

Durham Region Health Department, Website  
<http://www.region.durham.on.ca/default.asp>

Community and Hospital Infection Control Association (CHICA)  
[www.chica.org](http://www.chica.org)

Health Canada. *Infection Control Guidelines: Supplement: Hand Washing Hand hygiene, Cleaning, Disinfection and Sterilization in Health Care, Health Canada Communicable Disease Report, December 1998.*  
<http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/98pdf/cdr24s8e.pdf>

Hurst, Debra. Recommendations from Ministry of the Environment.. Hazardous Waste Policy Section, Waste Management Policy Branch Ontario Ministry of the Environment. 416-314-4186; [debra.hurst@ene.gov.on.ca](mailto:debra.hurst@ene.gov.on.ca)

Ministry of the Environment. *Environmental Protection Act R.R.O. 1990, REGULATION 347 Amended to O. Reg. 326/03 GENERAL - WASTE MANAGEMENT*  
[http://www.e-laws.gov.on.ca/DBLaws/Regs/English/900347\\_e.htm](http://www.e-laws.gov.on.ca/DBLaws/Regs/English/900347_e.htm)

Ministry of the Environment. *GUIDELINE C-4 (formerly 14-05) The Management of Biomedical Waste in Ontario.*  
<http://www.ene.gov.on.ca/envision/gp/425e.htm>

Ministry of Labour. *Overview of Workplace Hazardous Materials Information System WHMIS.*  
[http://www.labour.gov.on.ca/english/hs/whmis/whmis\\_1.html](http://www.labour.gov.on.ca/english/hs/whmis/whmis_1.html)

World Health Organization. Regional Office for Western Pacific, Manila Regional Office for South-East Asia, New Delhi. *Practical Guidelines for Infection Control in Health Care Facilities*  
[http://w3.whosea.org/LinkFiles/Update\\_on\\_SEA\\_Earthquake\\_and\\_Tsunami\\_infection-control.pdf](http://w3.whosea.org/LinkFiles/Update_on_SEA_Earthquake_and_Tsunami_infection-control.pdf)

### Other Sources of Information

#### Ontario

- Ontario Ministry of Health and Long-Term Care – Health Providers.  
[http://www.health.gov.on.ca/english/providers/providers\\_mn.html#public](http://www.health.gov.on.ca/english/providers/providers_mn.html#public)
- Royal College of Dental Surgeons of Ontario (January 2002). *Infection Control in the Dental Office.*  
<http://www.cpso.on.ca/Publications/infectioncontrolv2.pdf>
- College of Physicians and Surgeons of Ontario (January 1999). *Infection Control in the Physician's Office, Updated.*

- College of Physicians and Surgeons of Ontario (2004) *Infection Control in the Physician's Office*.  
<http://www.cpso.on.ca/Publications/infectioncontrol.pdf>
- *Infection Control Guidelines for RNs and RPNs* (June 2003). College of Nurses of Ontario. Available at:  
[http://www.cno.org/docs/prac/41002\\_infection.pdf](http://www.cno.org/docs/prac/41002_infection.pdf)
- Ministry of Health and Long Term Care. (March 2004). *Preventing Respiratory Illnesses in Community Settings. Guidelines for Infection Control and Surveillance for Febrile Respiratory Illness (FRI) in Community Settings in Non-Outbreak Conditions*.
- Ontario College of Chiropodists. *Standards of Practice for Chiropodists and Podiatrists*, <http://www.cocoo.on.ca/infection-control.html>
- Toronto Public Health Department, <http://www.city.toronto.on.ca/health/>
- St. John's Ambulance Website <http://www.sja.ca/english/index.asp>

#### Canada

- Community and Hospital Infection Control Association (CHICA).  
<http://www.chica.org/>
- Public Health Agency of Canada. [http://www.phac-aspc.gc.ca/new\\_e.html](http://www.phac-aspc.gc.ca/new_e.html)
- BC Centre for Disease Control (2003). *A Guide to Selection and Use of Disinfectants*. Available at:  
[http://www.bccdc.org/downloads/pdf/epid/reports/CDManual\\_DisinfectntSelectnGuidelines\\_sep2003\\_nov05-03.pdf](http://www.bccdc.org/downloads/pdf/epid/reports/CDManual_DisinfectntSelectnGuidelines_sep2003_nov05-03.pdf)
- BC Centre for Disease Control (2004). *Guidelines for Infection Prevention and Control in the Physician's Office*. Available at:  
[http://cme.viha.ca/Hot\\_Topics/PDFs/Infection\\_Control\\_In\\_Physician\\_Office\\_Final.pdf](http://cme.viha.ca/Hot_Topics/PDFs/Infection_Control_In_Physician_Office_Final.pdf)
- Canadian Partnership for Consumer food Safety Education.  
<http://www.canfightbac.org/english/mcentre/factsheets/cleane.shtml>
- Health Canada. *Communicable Disease Report. Supplement-Infection Control Guidelines*. Vol 2554. July 1999.  
<http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/99pdf/cdr25s4e.pdf>
- Health Canada. Health Products and Food Branch Inspectorate, *ANNEX TO THE GMP GUIDELINES, Good Manufacturing Practices for Schedule D drugs*. [http://www.hc-sc.gc.ca/dhp-mps/compliance-conform/gmp-bpf/docs/gui\\_0071\\_tc-tm\\_e.html](http://www.hc-sc.gc.ca/dhp-mps/compliance-conform/gmp-bpf/docs/gui_0071_tc-tm_e.html)

## United States

- Association for Professionals in Infection Control and Epidemiology, Inc. (APIC) and the Wound Ostomy Continence Nurses Society (WOCN). *Position Statement. Clean vs. Sterile: Management of Chronic Wounds.*  
<http://www.wocn.org/publications/posstate/pdf/clvst.pdf>
- U.S. Department of Health and Human Services Centers for Disease Control and Prevention (CDC) Atlanta, GA 30333 2003
- *Guidelines for Environmental Infection Control in Health-Care Facilities Recommendations of CDC and the Healthcare Infection Control Practices Advisory Committee (HICPAC).*  
<http://www.cdc.gov/MMWR/preview/mmwrhtml/rr5210a1.htm>
- Association for Professionals in Infection Control and Epidemiology (APIC). <http://www.apic.org//AM/Template.cfm?Section=Home>
- United States Department of Health and Human Services – Centres for Disease Control and Prevention. <http://www.cdc.gov/page.do>
- Good Compounding Practices Applicable to State Licensed Pharmacies. <http://www.nabp.net/law/modelact/appendixc.asp>

## United Kingdom

- Infection Control Nurses Association, <http://www.icna.co.uk/>
- NHS Plus, <http://www.nhsplus.nhs.uk/>
- National Institute for Health and Clinical Excellence (NICE).  
<http://www.nice.org.uk/page.aspx?o=home>

## Other

- United Nations World Health Organization (WHO).  
<http://www.who.int/en/>



**The *College of Dietitians of Ontario* exists to regulate and support the profession of dietetics within Ontario in order to provide high quality dietetic/nutrition services to the public.**

