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**INTERORGANIZATIONAL GROUP  
FOR SPEECH-LANGUAGE  
PATHOLOGY AND AUDIOLOGY**

**INFECTION PREVENTION AND  
CONTROL GUIDELINES FOR  
SPEECH-LANGUAGE PATHOLOGY**

**August 2009**

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24

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28 Audiologists (CAR), the Canadian Association of Speech-Language Pathologists and Audiologists  
29 (CASLPA) and the Canadian Academy of Audiologists (CAA) representing the professional  
30 associations, and the Canadian Council of University Programs (CCUP) in Communication Sciences  
31 and Disorders. The Interorganizational Group's mandate is to coordinate the work of regulatory  
32 bodies, professional associations and universities on projects/activities of mutual benefit and interest  
33 for the betterment of the professions of speech-language pathology and audiology and to collaborate  
34 on the development of practice standards and guidelines.

35

36 **Update and Review**

37 It is recommended that the contents of this document be reviewed and updated every three years, or  
38 as required based on substantial changes in accepted infection prevention and control practice.

39

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56 creating these speech-language pathology guidelines.

57

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96 **INTRODUCTION**

97  
98 **Infection prevention and control (IPC)** in speech-language pathology practice refers  
99 to *“the conscious management of clinical environments for purposes of minimizing or*  
100 *eliminating the potential spread of disease.”*<sup>13</sup>

101  
102 The emergence of life threatening infections such as Severe Acute Respiratory  
103 Syndrome (SARS) and H1N1 Flu has highlighted the importance of IPC measures at a  
104 global level.

105  
106 All **health care workers**, including speech-language pathologists (S-LPs), are  
107 accountable for providing safe and ethical care to the public. S-LPs play a critical role in  
108 the development and maintenance of IPC programs, whether they work on their own or  
109 on interprofessional teams.<sup>15</sup>

110  
111  
112 **PURPOSE AND SCOPE**

113  
114 The purpose of these guidelines is to provide S-LPs with succinct and practical IPC  
115 information that is applicable across practice settings. These may include but are not  
116 limited to ambulatory and community clinics (including private practice settings);  
117 childcare and school settings; long term care facilities (i.e., nursing homes, homes for  
118 the aged, retirement homes, group homes); private homes; and hospital settings (i.e.,  
119 patient care units or services).

120  
121 This document reviews **standard** or **routine precautions** and **additional precautions**  
122 of relevance to the profession. Health Canada uses the term **routine practices** to  
123 describe the system of IPC practices recommended in Canada to prevent and control  
124 transmission of **microorganisms**.<sup>8</sup> According to the World Health Organization  
125 (WHO),<sup>15</sup> standard or routine precautions are to be applied to all clients at all times,  
126 regardless of diagnosis or infectious status. Additional precautions, including **airborne**,  
127 **droplet**, and **contact precautions**, are taken while ensuring that standard precautions  
128 are also maintained.

129  
130 This document is intended to guide clinical practice and decision-making on IPC issues.  
131 S-LPs are encouraged to reflect on their individual practice, and their typical  
132 assessment and intervention procedures as they review the contents of these  
133 guidelines. In some instances the documented recommendations will already be an  
134 integral component of an S-LP’s IPC practice, where in other instances, a change or  
135 shift in clinical practice may be required in order to integrate use of the IPC guidelines.  
136 S-LPs should also be aware of and comply with employer and/or agency policies,  
137 occupational health and safety legislation, and any additional provincial standards  
138 related to IPC, where they exist.

## GUIDING PRINCIPLES

- IPC strategies are designed to protect clients, S-LPs, other service providers, and the community.
- **Health care associated infections** can be prevented and/or minimized by following IPC strategies.
- A systematic approach to IPC requires each S-LP to play a vital role in protecting each client regardless of practice setting. S-LPs follow IPC practices at all times and use critical thinking and problem solving in managing clinical situations.
- S-LPs have an understanding of CHICA (2006) *Core Competencies for Infection Prevention and Control for Health Care Providers*<sup>5</sup> (Appendix A) and apply them according to the needs of individual practice settings. These competencies focus in the following areas: critical assessment skills, understanding the basic rationale for routine practices, personal safety, use of routine practices, cleaning, disinfection, sterilization, waste management, and additional precautions.

Adapted from: [Ontario Ministry of Health and Long Term Care IPC Core Competencies Program](#)<sup>11</sup>

## RATIONALE FOR STANDARD/ROUTINE PRACTICES

Adapted from [Public Health Agency of Canada \(1999\)](#)<sup>13</sup> and from [Infection Control Guidelines for Early Learning and Child Care](#).<sup>9</sup>

While typically healthy individuals will face infection from time-to-time, a proportion of speech-language pathology clients may be immunocompromised in some way. Harmless microbes existing throughout the environment and under the right conditions can cause serious, life-threatening illnesses in individuals with some level of immunocompromise.<sup>1</sup> Infections that take advantage of weakness in the immune defenses are called “opportunistic infections”. It is important that S-LPs consider these opportunistic infections and the impact they may have on select clients.

### **The Chain of Transmission**

Transmission of infection requires three elements: a **source** of infecting microorganisms, a susceptible host, and a means of transmission for the microorganism.

Sources of the infecting microorganisms may be human (e.g., clients, S-LPs, other employees, family members, etc.), they may include food and water, inanimate environmental objects that have become contaminated (e.g., toys, other equipment, etc.), and vectors such as insects and vermin. Microorganisms include **bacteria**, **viruses**, **fungi** and **parasites**, and can be transmitted through any of the above means.

Microorganisms may be transmitted via four main routes. These include: contact, airborne, common vehicle, and vectorborne.

187  
188 *Contact transmission* may occur via *direct* or *indirect* means:  
189

190 *Direct* contact transmission involves direct body-to-body surface contact and physical  
191 transfer of microorganisms between an infected or **colonized** person and another  
192 individual (e.g., when an S-LP assists with transfer of a client or touches a preschool-  
193 aged client during a circle time activity; when two clients have direct body-to-body  
194 surface contact while sitting next to one another, etc.). The S-LP must wash his/her  
195 hands at the beginning and end of each session to prevent the transfer of organisms  
196 from one person to another.  
197

198 *Indirect* contact transmission involves contact between an individual (susceptible host)  
199 and, for example, a contaminated inanimate object such as motivational therapy toys,  
200 assessment tools, or environmental surfaces (frequent touch surfaces may include door  
201 knobs and handles, handrails, tables, chairs, washroom surfaces, cutlery and dishes,  
202 computer keyboards, mice, electronic devices with buttons, office supplies, medical  
203 instruments, and toys). The contamination of inanimate objects is often the result of  
204 unwashed hands. Oral-fecal transmission essentially occurs through indirect contact  
205 when fecal organisms from an infected individual come in contact with an inanimate  
206 object or a common vehicle such as food or medication. Inadequate hand and/or  
207 environmental cleaning or practices where intermediary contaminated objects are used  
208 are generally the culprit of such transmission

209 *Droplet transmission* is technically another form of contact transmission although  
210 distinct from the other forms. Droplet secretions are produced after coughing, sneezing,  
211 or talking, and also during procedures such as suctioning and the administration of  
212 inhalants. Droplets containing infection travel through the air, and can be breathed in, or  
213 land in a person's nose, mouth or eyes, which can also cause an infection. Droplets do  
214 not remain suspended in the air, and hence do not require special air handling and  
215 ventilation. They can however, contaminate the surrounding environment resulting in  
216 indirect contact transmission. Respiratory etiquette is an important consideration to  
217 prevent the spread of droplet secretions.  
218

219 *Airborne transmission* occurs when particular types of microorganisms remain  
220 suspended in the air for long periods of time and are dispersed by air currents. Airborne  
221 evaporated droplets containing microorganisms, or dust particles containing an  
222 infectious agent can be inhaled by a person in the same room or over a longer distance  
223 from the source. For example, tuberculosis, measles, chickenpox, and shingles are all  
224 spread by airborne transmission. While environmental controls (e.g., appropriate  
225 ventilation systems and air handling) are especially important with regard to airborne  
226 transmission, a **hierarchy of control measures** is recommended. This **hierarchy of**  
227 **controls** includes the use of personal protective equipment.  
228

229 *Common vehicle transmission* applies to microorganisms transmitted by contaminated  
230 items such as food, water and medications to multiple hosts, resulting in explosive  
231 outbreaks.  
232

233 *Vectorborne transmission* occurs when vectors such as mosquitoes, flies, rats, and  
234 other vermin transmit microorganisms.

235  
236 Resistance to pathogenic microorganisms can vary greatly from one individual to  
237 another. Some individuals may be immune to infection or may be able to resist  
238 **colonization** by an infectious agent. Other individuals exposed to the same  
239 microorganism may become asymptomatic carriers. Still others will develop disease.  
240 Host factors including age, underlying diseases, and breaks in the “first line of defense”  
241 (e.g., factors such as surgical operations, anesthesia, or invasive procedures) may  
242 make individuals more susceptible to infection. Self care practices such as good oral  
243 hygiene, hand hygiene, and respiratory etiquette can all reduce the risk of infection.

244  
245

## 246 **STANDARD OR ROUTINE PRECAUTIONS**

247

248 Standard or routine precautions are to be applied to all clients at all times, regardless of  
249 diagnosis or infectious status.<sup>15</sup> They are the minimum practice standard or activity that  
250 is expected.<sup>5</sup>

251

252 The elements classified as standard precautions include:

- 253 • Hand hygiene
- 254 • Risk assessment related to client symptoms, care and service delivery, including  
255 screening for infectious diseases, fever, respiratory symptoms, rash, diarrhea,  
256 excretions and secretions
- 257 • Risk reduction strategies such as promoting use of respiratory etiquette, client  
258 placement, and use of personal protective equipment
- 259 • Environmental cleaning, disinfection, and sterilization of multiple and single use  
260 equipment
- 261 • Waste and laundry management
- 262 • Sharps injury prevention
- 263 • Healthy workplace practices including the education of S-LPs, clients, their  
264 families, and other staff regarding recommended immunizations and when to  
265 stay home from work

266

267 [The Canadian Committee on Antibiotic Resistance \(CCAR\) \(2007\)](#)<sup>4</sup> offers fact sheets  
268 outlining many of the standard or routine precautions listed above. These are available  
269 for public use and may be reprinted without special permission (unless otherwise  
270 noted).

271

272 (Standard or routine precautions are asterisked (\*) to indicate the availability of a fact  
273 sheet at the attached hyperlink.) Appendix B of this document, *Checklist or Audit Tool*  
274 *for Treatment Office and Checklist or Audit Tool for Services Provided in Client’s Homes*  
275 (adapted from CCAR document) also provides a checklist of routine practices to be  
276 implemented by S-LPs in these environments.

277

278 **Hand Hygiene**

279 Hand hygiene\* is the single most important way to prevent infection. Refer to the World  
280 Health Organization (2009) document entitled [WHO Guidelines on Hand Hygiene in](#)  
281 [Health Care](#)<sup>16</sup> for a comprehensive review of this area.

282

283 S-LPs should perform hand hygiene:

- 284 • Before assessing or treating a client
- 285 • Between consecutive clients
- 286 • Between “dirty” and “clean” activities with the same client (e.g., sand play  
287 followed by one-on-one articulation work at a table; helping a client blow his/her  
288 nose followed by table top therapy activities)
- 289 • Immediately after touching body fluids or any contaminated items in the  
290 immediate environment
- 291 • Immediately after removing personal protective equipment such as gloves (e.g.,  
292 after performing an oral peripheral examination)
- 293 • Before preparing or handling food, or before feeding a client
- 294 • After handling money or other items that may be contaminated
- 295 • After personal body functions, such as using the toilet or blowing one’s nose
- 296 • Immediately if skin is contaminated and/or injury occurs
- 297 • When leaving a client

298

299 S-LPs can also encourage clients to perform hand hygiene at the beginning of the  
300 therapy session, prior to handling assessment and therapy materials, or when  
301 transitioning between “dirty” and “clean” activities.

302

303 Alcohol-based hand rubs are recommended to decontaminate hands in clinical  
304 situations when hands are not visibly soiled. It is recommended that they contain a  
305 minimum of 60 percent ethanol (ethyl alcohol).

306

307 Hand Rub Technique:

- 308 • Remove hand and arm jewelry
- 309 • Apply between 1 to 2 full pumps of product, or a loonie-sized amount onto one  
310 palm.
- 311 • Spread product over all surfaces of hands, concentrating on finger tips, between  
312 fingers, back of hands, and base of thumbs
- 313 • Rub hands until product is dry. This will take 15-20 seconds if an adequate  
314 amount of product has been used. The entire hand rub technique process should  
315 take approximately 20-30 seconds in total.

316

317 Hand washing must be performed when hands are visibly soiled. A disposable pump  
318 dispenser is recommended in all settings except for individual client/resident personal  
319 use, where bar soap is also considered acceptable. Antibacterial soaps may be used in  
320 critical care areas such as Intensive Care Units (ICU) or in areas where invasive  
321 procedures are performed (e.g., nasendoscopy, etc.).

322

323 Hand Washing Technique:

- 324 • Remove hand and arm jewelry
- 325 • Wet hands with warm water (hot water will lead to dryness)
- 326 • Apply soap
- 327 • Vigorously rub all aspects of your hands for a minimum of 15 seconds, paying
- 328 particular attention to finger tips, between fingers, backs of hands and base of
- 329 thumbs
- 330 • Rinse and dry hands thoroughly with an air dryer or by blotting gently with a
- 331 paper towel, if available, so as not to damage the skin
- 332 • Turn off taps with paper towel, if available

333  
334 Soaps, antimicrobial agents, and extra hand washing can be hard on the hands. To  
335 maintain skin integrity it is important to use hand lotion.

### 336 **Risk Assessment**

337 Risk assessment\* is the process of systematically evaluating risks to safety and  
338 health.<sup>14</sup> A risk assessment procedure includes the following:

- 339
- 340 *Step one:* Identifying hazards and those at risk:
    - 341 • From a specific interaction (e.g., face-to-face interaction with a client,
    - 342 transport of a client, etc.)
    - 343 • With a specific client (e.g., infants, clients with respiratory illness, etc.)
    - 344 • In a specific environment (e.g., classroom, private home, therapy
    - 345 room, etc.)
    - 346
  - 347
  - 348 *Step two:* Evaluating and prioritizing risks:
    - 349 • Estimate the risks regarding severity and probability of causing harm
    - 350
  - 351 *Step three:* Deciding on preventive action to eliminate or control the risks
  - 352
  - 353 *Step four:* Taking action to put preventive and protective measures in place
  - 354
  - 355 *Step five:* Monitoring and reviewing

356  
357 An excellent example of risk assessment in practice can be found in the [Public Health](#)  
358 [Agency of Canada IPC Measures for H1N1 Flu Virus \(2009\)](#).<sup>14</sup>

359  
360 S-LPs should be prepared to ask a few simple questions in the clinic setting to  
361 determine the level of risk, how to proceed, and whether standard or additional  
362 precautions are required. Questions regarding communicable diseases (such as  
363 coughs, fevers, rashes, diarrhea, and eye infections) should be included as part of the  
364 screening. Questions regarding recent exposures to infectious disease such as  
365 chickenpox or tuberculosis and recent travel, depending on what is prevalent in the  
366 community, should also be asked.

367

368 Information regarding when to stay at home or cancel an appointment should be  
369 provided to prospective clients at the time of initial booking. A script could include the  
370 following:

371 *If you/your child have symptoms of fever and cough, diarrhea, rash, or*  
372 *untreated eye infections within 24 hours of your appointment, please let*  
373 *this office know before the scheduled appointment. Visits can be re-*  
374 *scheduled due to illness.*

375  
376 A sample screening poster and screening questionnaire for febrile respiratory illness are  
377 available on pages 29-30 of [The Canadian Committee on Antibiotic Resistance \(CCAR\)](#)  
378 [\(2007\)](#) document.<sup>4</sup>

379  
380 S-LPs should also be aware of health and travel alerts regarding exposure to infectious  
381 diseases, including pandemics. They would be advised to follow the guidelines put forth  
382 by the Ministry(ies) of Health related to specific situations.

### 383 **Risk Reduction Strategies**

#### 384 *Respiratory Etiquette*

385  
386 **Respiratory etiquette\*** involves measures to contain respiratory secretions for all  
387 individuals with signs and symptoms of a respiratory infection. They include the  
388 following:

- 389 • Cover nose/mouth when coughing or sneezing – cough into elbow or sleeve
- 390 • Use tissues to contain respiratory secretions and dispose of them in the nearest  
391 waste receptacle after use
- 392 • Perform hand hygiene (e.g., hand washing or use alcohol-based hand rub) after  
393 having contact with respiratory secretions and contaminated objects

394  
395  
396 A sample respiratory etiquette poster is available on page 31 of the [The Canadian](#)  
397 [Committee on Antibiotic Resistance \(CCAR\) \(2007\)](#) document.<sup>4</sup>

#### 398 *Client Placement*

399  
400 Maintaining a 1-2 meter distance from a client is recommended until initial screening or  
401 triage can be completed. Sitting beside the client (vs. across from them) is preferred. If  
402 possible, clients should be seated in a waiting room while they await their appointment.

#### 403 *Personal Protective Equipment*

404  
405 Barriers or **personal protective equipment (PPE)\*** are required whenever there is a  
406 risk of coming in contact with non-intact skin, mucous membranes or body fluids. PPE  
407 may serve to protect the S-LP and/or may serve to protect the client.

408  
409 For S-LPs, common situations that may require the use of PPE would include:

- 410 • oral peripheral examination
- 411 • feeding and swallowing assessment and intervention
- 412 • oral hygiene

- 413
- 414
- 415
- 416
- 417
- any speech-language interventions provided in environments where additional precautions have been identified (i.e., a client with C-difficile in a hospital setting, additional airborne or droplet precautions in a long term care facility, etc.)
  - handling dirty laundry or waste materials
  - when dealing with immunocompromised clients

418

419 *Gloves* are the most commonly worn PPE. They do not replace good hand hygiene; however, they should be worn when there is a risk of coming in contact with non-intact skin, mucous membranes, or body fluids. Glove material should be chosen based on the risks for which they are being worn (e.g., vinyl for personal care, latex for sterile invasive procedures, nitrile for exposure to chemicals). Single use disposable gloves must not be reused or washed.

424

425

426 Remove or change gloves and perform hand hygiene when:

- 427
- 428
- 429
- moving between dirty and clean procedures, even on the same client (e.g., following an oral exam and before starting table top activities)
  - after contact with contaminated items

430

431 Proper procedure for removal of gloves is as follows:

- 432
- 433
- 434
- 435
- 436
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- 441
- 442
- 443
- 444
- With both hands gloved, grasp the outside of one glove at the top of your wrist.
  - Peel off this first glove, peeling away from your body and from wrist to fingertips, turning the glove inside out.
  - Hold the glove you just removed in your gloved hand.
  - With your ungloved hand, peel off the second glove by inserting your fingers inside the glove at the top of your wrist.
  - Turn the second glove inside out while tilting it away from your body, leaving the first glove inside the second.
  - Dispose of the entire bundle promptly in a waterproof garbage bag. **Do not reuse!**
  - Wash your hands thoroughly with soap and water as soon as possible after removing gloves and before touching any objects and surfaces.

445 Adapted from: Occupational Health & Safety Agency for Healthcare in BC (OHSAH)  
446 (2008) [Home and Community Care Risk Assessment Tool: Resource Guide](#)<sup>10</sup>

447

448 *Masks, eye protectors, and face shields* are used to protect the S-LP's nose, mouth, and eyes from splashes and/or sprays of body fluids. Likewise, they can be used to protect a client. These would be considered droplet precautions, as the microbe carrying droplets can land on mucous membranes of the mouth and nose or contaminate the conjunctiva of the eyes, all of which are portals for infection. Splashes and sprays can occur when a client is coughing or sneezing or during procedures such as suctioning or cleaning soiled equipment.

454

455

456 The proper sequence for donning PPE is as follows:

- 457
- 458
1. gown
  2. mask

- 459 3. eye protection  
 460 4. gloves

461  
 462 Masks and eye protection should be worn within 1-2 meters of the coughing or sneezing  
 463 client in order to prevent the transmission of microorganisms. Eyes should be covered  
 464 from all directions.

465  
 466 The proper sequence for removal of PPE is as follows:

- 467 1. gloves  
 468 2. gown  
 469 3. wash hands prior to removing eye protection or a mask.

470  
 471 Refer to page 37 of [The Canadian Committee on Antibiotic Resistance \(CCAR\) \(2007\)](#)  
 472 document<sup>4</sup> fact sheet entitled *The use of gowns, aprons, and lab coats* for further  
 473 information.

474  
 475 *Fit-tested masks* (e.g., N95 masks) are used when airborne precautions are indicated.  
 476 The S-LP must be “fit tested” in order to ensure that the mask fits tightly to the face and  
 477 filters airborne organisms. A fit-tested mask is worn when:

- 478 • the client has a known or suspected airborne infection (e.g., tuberculosis,  
 479 chickenpox, measles, hantavirus)
- 480 • performing aerosolizing procedures with a client with droplet infection (e.g., open  
 481 suctioning)
- 482 • there is a health alert that requires use of a fit-tested mask

483  
 484 Table 1 from the [CASLPO \(2006\) Infection Control for Regulated Professionals](#)  
 485 document<sup>6</sup> is reproduced, with adaptations, below. It provides a comprehensive  
 486 summary of risk assessment and risk reduction strategies for different situations.  
 487

488 **Table 1: Strategies to Reduce the Transmission of Infection\*\***

Situation	Infection Control Strategy (escalating from least to most invasive)
Routine Client Care No physical contact Communication with client >1 meter away	<i>Routine Precautions</i> ➤ Hand washing ➤ Respiratory etiquette (cover mouth and nose when coughing or sneezing, followed by proper hand washing)
Physical Contact with client with intact skin	<i>Contact Precautions</i> ➤ Hand washing
Physical contact with client, <u>you or client</u> has infected or open wound, non-intact skin, no respiratory concerns	<i>Contact Precautions</i> ➤ Hand washing ➤ Gloves ➤ Proper removal and disposal of gloves followed by hand washing
Contact with client, procedure may involve body fluids, splashing (droplets)	<i>Droplet Precautions</i> ➤ Hand washing ➤ Use professional judgment: Gloves Surgical Mask Eye protectors, Face shields

Situation	Infection Control Strategy (escalating from least to most invasive)
	Gowns > Proper removal and disposal of PPE followed by hand washing
Close contact with client, respiratory symptoms	<i>Droplet Precautions</i> > Hand washing > Respiratory etiquette > Use professional judgment: Gloves Surgical mask for you and/or your client Eye protectors Gowns
Close contact with client, fever and respiratory symptoms	<i>Droplet Precautions</i> > Hand washing > Respiratory etiquette > Use professional judgment: Gloves Surgical mask for you and/ or your client Eye protectors Gowns > Follow federal, provincial, territorial or agency health alerts if applicable
Contact with client with known airborne infection (e.g. active tuberculosis)	<i>Airborne Precautions</i> > Droplet precautions with fit tested mask > Proper ventilation
Health Alert in effect	<i>Follow Ministry of Health guidelines</i>

489  
 490 \*\*In speech-language pathology, practice settings may dictate the infection control  
 491 strategy used in a given situation. For example, close contact with a client who has a  
 492 fever and/or respiratory symptoms in an acute care setting may necessitate the use of  
 493 PPE. In a school or community clinic environment, PPE may be less accessible.  
 494 Standard practice in these types of environments would involve re-scheduling of a client  
 495 appointment until such time as symptoms have resolved.

496  
 497 **Environmental Cleaning, Disinfection, and Sterilization**

498 [PIDAC \(2006\) Best Practices for Cleaning, Disinfection and Sterilization in All health](#)  
 499 [Care Settings](#)<sup>12</sup> is a comprehensive and current guide related to the area of cleaning,  
 500 disinfection, and sterilization.

501  
 502 **Cleaning** is the physical removal of foreign material (e.g., dust, soil, organic material  
 503 such as blood, secretions, excretions and microorganisms). Cleaning physically  
 504 removes rather than kills microorganisms. It is accomplished with water, detergents and  
 505 mechanical action. Cleaning is required before any equipment/device can be disinfected  
 506 and/or sterilized.

507  
 508 **Disinfection** refers to the inactivation of disease-producing microorganisms.  
 509 Disinfection does not destroy bacterial spores. **Sterilization**, by contrast, is the level of  
 510 reprocessing required when processing critical medical equipment/devices. Sterilization  
 511 results in the destruction of all forms of microbial life including bacteria, viruses, spores

512 and fungi. Equipment/devices must be cleaned thoroughly before effective sterilization  
 513 can take place.

514  
 515 There are three categories of client equipment. Each category defines how it must be  
 516 cleaned in order to prevent infection transmission. This is known as the **Spaulding**  
 517 **classification**. The three categories are:

- 518 • **Critical** – these items come in contact with the blood stream or sterile body  
 519 tissues (e.g., internal scopes such as nasendoscopes)
- 520 • **Semi-critical** – these items come in contact with mucous membranes or non-  
 521 intact skin (e.g., mouthpieces, laryngeal mirrors, ear nozzles/pieces)
- 522 • **Non-critical** – these items come in contact with intact skin or do not come in  
 523 contact with skin (e.g., stethoscopes, furnishings, assessment and therapy  
 524 materials such as testing booklets, therapy toys, etc.)

525  
 526 In speech-language pathology, most of the routine practices performed are clean  
 527 procedures that do not require **high level disinfection** or sterilization. The majority of  
 528 infection control processes involve cleaning, **low level disinfection**, and some  
 529 **intermediate level disinfection**. The exception would be items such as internal scopes  
 530 (nasendoscopes) and suction tubes requiring high level disinfection and/or sterilization.

531  
 532 Table 2, below, outlines the Spaulding classification, indicating the level of disinfection  
 533 required for common use speech-language pathology items in each category (adapted  
 534 from CASLPO, 2006).<sup>6</sup>

535  
 536 **Table 2: The Spaulding Classification**

Category	Level of Disinfection	Examples
<b>Critical</b> ➤ Items that come in contact with the blood stream or sterile body tissues.	Sterilization	➤ Surgical instruments
	High Level Disinfection (HLD) when sterilization is not possible	➤ Flexible and rigid scopes used for stroboscopy or endoscopy
<b>Semi-Critical</b> ➤ Items that come in contact with mucous membranes or non-intact skin.	High Level Disinfection (HLD)	➤ Laryngeal mirrors used during swallowing therapy ➤ Mouthpieces
	Intermediate Level Disinfection (ILD)	➤ Thermometers ➤ Ear syringe nozzles
<b>Non-critical</b> ➤ Items that come in contact with intact skin.	Intermediate Level Disinfection (ILD)	➤ Examination tables ➤ Therapy tables ➤ Toys ➤ Books ➤ Computer assisted treatment materials (e.g., headsets, masks)
<b>Non-critical</b> ➤ Items that do not come in contact with the patient's	Low Level Disinfection (LLD)	➤ Furnishings, dishes ➤ Desks ➤ Tables and chairs

Category	Level of Disinfection	Examples
skin.		➤ Penlights

537

538 A cleaning and disinfection checklist for S-LPs, also adapted from CASLPO (2006)<sup>6</sup>, is  
 539 outlined below:

540

541

542 **Table 3: Cleaning and Disinfection Checklist for S-LPs**

Practice Considerations	What to use	Recommendations for use
<b>Environmental Surfaces/ General Housekeeping</b>		
<ul style="list-style-type: none"> <li>➤ Floors</li> <li>➤ Sinks (used in clinic for hand washing)</li> <li>➤ Desk or counter tops</li> <li>➤ Storage shelves and bins</li> <li>➤ Telephones, computers, credit card reader</li> <li>➤ Washrooms (public and staff)</li> <li>➤ Therapy rooms</li> <li>➤ Audiometric testing booths</li> <li>➤ Toys used for assessment such as play audiometry or test batteries</li> <li>➤ Toys used in therapy</li> </ul>	<p>Cleaning 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>➤ <i>Low level Disinfection (LLD)</i></li> <li>- Quarternary Ammonium Compounds</li> <li>- Iodophores</li> <li>- 3% Hydrogen Peroxide</li> <li>- Diluted Bleach (5 ml of bleach to 500 ml of water)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Daily and when visibly soiled.</li> <li>➤ Clean high traffic areas more frequently i.e., table used for therapy, chair in testing booth.</li> <li>➤ Keep shelves and bins tidy and clean, dust free.</li> <li>➤ Plush toys, which are handled and cannot be laundered, should be discarded.</li> <li>➤ Bleach solutions must be mixed daily to be effective.</li> <li>➤ Store away from heat and light.</li> <li>➤ Spray on surface and let solution sit for at least 30 seconds before wiping. Use a paper towel (not a cloth towel).</li> <li>➤ Wear rubber gloves to protect hands from irritation and wash hands immediately after glove removal.</li> </ul>
<b>Common Equipment/Tools</b>		
<p><i>Hearing Screening</i></p> <ul style="list-style-type: none"> <li>➤ Ear light</li> <li>➤ Supra-aural headphones and covers, including band and cord</li> <li>➤ Patient response button</li> <li>➤ Test toys</li> </ul> <p><i>Speech-Language Pathology</i></p> <ul style="list-style-type: none"> <li>➤ Microphone</li> <li>➤ Mirrors</li> <li>➤ Test batteries</li> <li>➤ Therapy materials</li> </ul>	<p>Cleaning 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 or 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> <li>➤ Consider laminating paper material used by patient/clients repeatedly during intervention so that it can be wiped with disinfectant.</li> <li>➤ Discard all single use items immediately after use.</li> <li>➤ In cases where equipment or instruments come into contact with cerumen or other body fluids a higher level of disinfection may be warranted.</li> </ul>
<b>Specialized Procedures or Patient/Client Populations</b>		
<ul style="list-style-type: none"> <li>➤ Cases where equipment or tools may come into contact with non-intact skin or mucous membranes.</li> <li>➤ Cases where patient/clients may be extremely ill or immunocompromised</li> </ul>	<ul style="list-style-type: none"> <li>➤ Moderate to high level disinfection or sterilization may be required.</li> <li>➤ Use disposables wherever possible</li> </ul>	<ul style="list-style-type: none"> <li>➤ Evaluate whether Infection Control is semi-critical or critical and use disinfection and sterilization procedures required.</li> </ul>
<b>Use of Personal Protective Equipment (PPE)</b>		
<ul style="list-style-type: none"> <li>➤ Risk Assessment</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 patients.</li> <li>➤ Determine if you have access to personal protective equipment to use if there is a Health Alert in effect. For example: A respiratory illness such as SARS or Pandemic Influenza</li> </ul>

543  
 544 **Single use devices (SUDs)** are for use by a single client only and may only be reused  
 545 on that same client within a short duration of time (e.g., within the same session). SUDs

546 must be disposed of in a safe manner. Examples of items in this category that are  
547 relevant to S-LPs include, but are not limited to tongue depressors, swabs, gloves, ear  
548 phone covers, etc. Items such as Nuk brushes may be used in a treatment session and  
549 given to the client to take home with appropriate cleaning and disposal instructions.

550  
551 Critical equipment, such as internal scopes require high level disinfection and/or  
552 sterilization. Refer to employer policies and procedures where available, and to specific  
553 provincial or territorial documents as appropriate. [Alberta Health and Wellness \(2008\)](#)  
554 [Standards for Cleaning, Disinfection and Sterilization of Reusable Medical Devices for](#)  
555 [All Health Care Facilities and Settings](#)<sup>2</sup> is an example of one such document, which  
556 provides comprehensive requirements related to cleaning, disinfection, and sterilization  
557 of reusable medical equipment.

## 558 559 **Laundry**

560 The risk of actual disease transmission from soiled linen is negligible provided that  
561 hygienic handling, storage and processing of clean and soiled linen occurs.<sup>4</sup>

562  
563 Collection and handling of linen should be completed with a minimum of agitation and  
564 shaking. Soiled linen should be placed in a laundry basket or waterproof bag (not on the  
565 floor). In home and office settings, any laundry\* soiled with blood or body fluids should  
566 be handled while wearing gloves. Touching soiled linen to one's clothes or skin should  
567 be avoided. Heavily soiled linen should be rolled or folded to contain the heaviest soil in  
568 the centre of the bundle.

569  
570 Laundry carts or hampers do not need to be covered from an infection prevention  
571 perspective; however, they should be cleaned after each use. If a cloth laundry bag is  
572 used to store or transport soiled linen, it can be washed in the same cycle as the linen  
573 contained within it.

574  
575 It is impossible to clean laundry when organic material is present. Solid soil, feces or  
576 blood clots should be removed from linen with a gloved hand. Linens may then be  
577 laundered together using detergent and dried in a hot air dryer to ensure killing of  
578 microorganisms. Cold water wash may be used if cold water detergent is available.  
579 Complete wash and rinse cycles should be used. In a home setting, machine drying or  
580 hanging clothing and linens on a clothes line are both suitable methods for drying.

581  
582 Clean laundry must be stored separately from soiled linens.

583  
584 If clothing containing blood or body fluids is sent to a community dry cleaner, it should  
585 be appropriately labeled.

## 586 587 **Waste Handling**

588 Waste is divided into three categories: general, biomedical, and pathological. Provincial  
589 legislation requires that biomedical waste, including **sharps** such as needles and  
590 blades, be handled and disposed of in a manner that prevents transmission of potential  
591 infections.

592  
593 Any sharps in the practice setting should be disposed of immediately in a clearly  
594 labeled, puncture resistant container. The container should have a tightly fitting lid that  
595 seals and prevents leakage.

596  
597 General office waste (e.g., tissues, tongue depressors, swabs, etc.), used gloves or  
598 non-sharp medical equipment may be disposed of in regular waste receptacles. It is  
599 recommended that waste be packaged in a leak-proof container that can be disposed of  
600 (e.g., plastic bag) or cleaned after emptying (e.g., plastic waste bin or trash can). Waste  
601 should be emptied frequently and stored in a manner that isolates it prior to pick  
602 up/disposal.

### 603 604 **Healthy Workplace Practices**

605 Adapted from [The Canadian Committee on Antibiotic Resistance \(CCAR\) \(2007\)](#)<sup>4</sup>

606  
607 Healthy workplace practices involve several factors:

608  
609 **Immunizations:** Considerations related to immunization for S-LPs should include an  
610 awareness of one's own history of childhood communicable diseases. Another  
611 consideration, as per employer policies, is that any new staff should have a tuberculin  
612 skin test at the beginning of their employment, unless they have documentation of a  
613 negative skin test in the past 12 months.

614  
615 Recommended immunizations for all healthcare workers, including S-LPs, are:

- 616 • Annual influenza immunization
- 617 • Measles, mumps and rubella (MMR), two doses
- 618 • Diphtheria, polio and tetanus (DPT)
- 619 • Hepatitis B
- 620 • Varicella vaccine (chickenpox) – recommended for anyone who may be  
621 susceptible (history for disease is negative, IgG negative)

622  
623 **Staying home from work:** Knowing when to stay home from work is another important  
624 consideration in infection prevention and control (IPC).

625  
626 S-LPs are encouraged to stay home from work when experiencing the following  
627 conditions:

- 628 • Febrile respiratory illness
- 629 • Dermatitis on their hands (consult your physician about your risk)
- 630 • Cold sores or shingles that cannot be covered
- 631 • During the initial days of a respiratory illness
- 632 • Diarrhea
- 633 • Eye infections until treated

634  
635 Most employers will have policies that should be adhered to in this regard. The same  
636 recommendations would also apply to clients, who should be encouraged to re-

637 schedule an assessment or treatment visit under any of the above conditions (refer to  
638 Risk Assessment section of document).

639  
640 **Follow-up regarding exposures:** S-LPs should ensure they are familiar with employer  
641 procedures related to punctures or mucous membrane exposures to blood borne  
642 pathogens (e.g., Hepatitis B, Hepatitis C, and HIV).

- 643 • First aid should include rinsing, washing and cleaning involved areas after  
644 exposure.
- 645 • Obtain medical follow up (e.g., post-exposure prophylaxis to reduce HIV  
646 transmission, assessment/testing for blood borne pathogens, etc.).
- 647 • Obtain education and counseling related to informed consent and testing (if  
648 required) and any necessary precautions.

649  
650 **Education:** S-LPs should demonstrate work practices that reduce the risk of infection.  
651 Healthy workplace practices involve providing leadership and acting as a role model to  
652 other service providers, clients, and families related to IPC. Appendix A provides an  
653 outline of the *Core Competencies in Infection Prevention and Control for All Health Care*  
654 *Providers*.<sup>5</sup> These competencies cluster around the following areas: critical assessment  
655 skills, understanding the basic rationale for routine practices, personal safety, use of  
656 routine practices, cleaning, disinfection, sterilization, waste management, and additional  
657 precautions.

## 658 659 **CONCLUSION**

660  
661  
662 The purpose and scope of these guidelines is to provide S-LPs with succinct, practical  
663 IPC information that is applicable across a variety of practice settings. S-LPs are  
664 encouraged to familiarize themselves with *Core Competencies for Infection Prevention*  
665 *and Control for Health Care Providers* (Appendix A), to reflect on their own IPC  
666 knowledge in relation to these competencies, and to consider their own practice within  
667 the expectations and requirements of their respective work settings. Audit tools for  
668 treatment office and home environments (Appendix B) are available to assist with the  
669 practical implementation of these recommendations. Our intent is that these steps will  
670 optimize safe practice settings related to IPC for both S-LPs and the clients whom we  
671 serve.

672  
673

674 **APPENDIX A**

675

676 **Core Competencies for Infection Prevention and Control for Health Care**  
 677 **Providers**

678 **Source: Community and Hospital Infection Control Association (2006)**

679

680 **Target Audience:** Individuals who are accountable for the quality of health care  
 681 delivered in Canada.

682

AREA OF COMPETENCY	DETAILED CORE COMPETENCY
<b>Critical Assessment Skills</b> These skills are the under-pinning for the other five core competencies	<ul style="list-style-type: none"> <li>• Critical assessment skills related to exposure to infectious agents, awareness to local outbreaks and use of infectious disease specific protocols</li> </ul>
<b>Basic Rationale for Routine Practices</b>	<ul style="list-style-type: none"> <li>• Understands basic microbiology and how infections can be transmitted in health care settings</li> </ul>
<b>Personal Safety</b>	<ul style="list-style-type: none"> <li>• Knows how to appropriately manage sharps, blood and body fluids and recognizes the appropriate first aid activities for exposures to blood and body fluids</li> <li>• Understands the role of vaccines in preventing certain infections, including annual influenza immunizations for health care workers</li> </ul>
<b>Routine Practices</b>	<ul style="list-style-type: none"> <li>• Understands the importance of hand hygiene/hand washing</li> <li>• Understands the activities of Routine Practices/Standard Precautions</li> <li>• Respiratory Etiquette</li> <li>• Knows and selects appropriate Personal Protective Equipment (PPE) for their job(s)</li> <li>• Demonstrates appropriate use of PPE</li> </ul>
<b>Cleaning, Disinfection, Sterilization, Waste Management</b>	<ul style="list-style-type: none"> <li>• Maintains safe clean environment</li> <li>• Understands importance of using PPE when sorting laundry</li> <li>• Recognizes that re-usable equipment that has been in direct contact with a client should be cleaned and reprocessed before use in the care of another client</li> <li>• Appreciates the differences between clean, disinfected (low, medium, and high-level) and sterile items</li> <li>• Knows the difference between regular and biohazard wastes</li> </ul>
<b>Additional Precautions</b>	<ul style="list-style-type: none"> <li>• Understands Transmission Based Precautions (Additional Precautions): Why and when they are used</li> </ul>

683

684 **APPENDIX B**

685 (Adapted from Appendix III – Audit Tool, Canadian Committee on Antibiotic Resistance (CCAR) Infection Prevention and Control Best Practices  
686 for Long Term Care and Community Care Including Health Care Offices and Ambulatory Clinics)

687  
688 **Checklist or Audit Tool for Treatment Office** (i.e., applicable to private and public practice settings)

689  
690 Date Checklist / Audit completed:

691 By:

692

Items	Fully Implemented	Partially Implemented	Not Implemented	N/A	Comments
<b>WAITING AREA</b>					
Infection control signs at entry					
Infection control signs at reception desk					
Alcohol-based hand cleaner and signage					
Tissue boxes available					
Garbage cans available					
Clean toy and soiled toy bins available (or if no toys or magazines available, a sign indicating rationale)					
<b>RECEPTION</b>					
Personal Protective Equipment (PPE) available (masks, gloves)					
Reception staff can maintain 1 metre distance from patients					
Telephone screening protocol has been developed and implemented					
<b>TREATMENT ROOMS</b>					
Alcohol-based hand cleaner available in all rooms OR Hand washing sinks with soap available in all rooms					
Rooms only have essential supplies					
Written policies exist for decontaminating treatment					

Items	Fully Implemented	Partially Implemented	Not Implemented	N/A	Comments
rooms between patients and at the end of the day					
<b>CLEANING PROCEDURES</b>					
Written procedures for cleaning the office setting have been provided by (or to) the cleaning staff					
Approved and appropriate disinfectant products are available for patient surfaces					
Approved and appropriate disinfectant procedures are available for equipment and instruments					
<b>PROTOCOL DEVELOPMENT AND STAFF TRAINING</b>					
Annual staff training or updating completed on infection prevention					
Annual staff training on proper PPE use					
<b>DISINFECTION / STERILIZATION OF MEDICAL DEVICES</b>					
Manufacturer's instructions are followed					
Process for cleaning semi-critical and critical devices including written protocols for: <ul style="list-style-type: none"> <li><input type="checkbox"/> disassembly</li> <li><input type="checkbox"/> sorting and soaking</li> <li><input type="checkbox"/> physical removal of organic material</li> <li><input type="checkbox"/> rinsing</li> <li><input type="checkbox"/> drying</li> <li><input type="checkbox"/> physical inspection</li> <li><input type="checkbox"/> wrapping</li> </ul>					

693  
694  
695

696 **Checklist or Audit Tool for Services Provided in Client's Homes**

697

698 Date Checklist / Audit completed:

699 By:

700

Items	Fully Implemented	Partially Implemented	Not Implemented	N/A	Comments
<b>RISK ASSESSEMENT</b>					
Screening done before visits					
Phone script available for use					
Standardized client assessment used					
<b>RISK REDUCTION</b>					
Hand hygiene products available and used					
Supplies that may be required for risk reduction:					
<input type="checkbox"/> alcohol-based hand rub					
<input type="checkbox"/> hand lotion or cream					
<input type="checkbox"/> sterile gloves, as required					
<input type="checkbox"/> alcohol wipes or other disinfectant					
<input type="checkbox"/> antimicrobial soap, if required					
Written guidelines available on:					
<input type="checkbox"/> when to wear protective equipment					
<input type="checkbox"/> cleaning and disinfecting of equipment if moving from client to client					
<input type="checkbox"/> waste disposal					
Written guidelines on work exclusions					
<input type="checkbox"/> dermatitis on hands					
<input type="checkbox"/> disseminated shingles					
<input type="checkbox"/> initial days of respiratory infection					
<input type="checkbox"/> fever					
<input type="checkbox"/> diarrhea					
<input type="checkbox"/> eye infection until treated					

Items	Fully Implemented	Partially Implemented	Not Implemented	N/A	Comments
Verify employee immunity before assigning to client with communicable disease.					
Documentation of annual education programs on:					
<input type="checkbox"/> hand hygiene					
<input type="checkbox"/> risk assessment and risk reduction					
Standardized client education information available on:					
<input type="checkbox"/> hand hygiene					
<input type="checkbox"/> hygiene in the home					
<input type="checkbox"/> self screening					
<input type="checkbox"/> other					
Identify resources available to manage infectious diseases and staff safety					

701

702 **GLOSSARY**

703

704 **Additional precautions:** Interventions implemented for certain pathogens or clinical  
705 presentations in addition to routine infection control practices, to reduce the risk of  
706 transmission of microorganisms from patient to patient, patient to health care worker,  
707 and health care worker to patient.<sup>7, 12</sup>

708 • **Airborne precautions:** These are additional to standard precautions and are  
709 designed to reduce the transmission of diseases spread by the airborne  
710 route.<sup>6, 13</sup>

711 • **Contact precautions:** These are additional to standard precautions and are  
712 designed to reduce the risk of transmission of microorganisms by direct or  
713 indirect contact.<sup>6, 14</sup>

714 • **Droplet precautions:** These are additional to standard precautions and are  
715 designed to reduce the transmission of infectious spread by the droplet route.  
716 The precautions consist of a water resistant surgical or procedure mask and eye  
717 protection or face shield for the health care worker. Droplet precautions are also  
718 used to protect the mucous membranes of the eyes, nose and mouth of the  
719 health care worker during procedures and patient care activities likely to generate  
720 splashes or sprays of blood, body fluids, secretions or excretions (e.g., airway  
721 suctioning).<sup>6, 8, 14</sup>

722

723 **Bacteria:** Very small living organisms made of only one cell. They are present almost  
724 everywhere. While some can cause diseases, others are very helpful to humans, like  
725 the bacteria in the intestine that help digestion and bacteria that make yoghurt.<sup>9</sup>

726

727 **Cleaning:** The physical removal of foreign material (e.g., dust, soil, organic material  
728 such as blood, secretions, excretions and microorganisms). Cleaning physically  
729 removes rather than kills microorganisms. It is accomplished with water, detergents and  
730 mechanical action. Thorough and meticulous cleaning is required before any  
731 equipment/device may be decontaminated, disinfected and/or sterilized.<sup>12</sup>

732

733 **Colonization:** The presence of microorganisms in or on a host with growth and  
734 multiplication but without tissue invasion or cellular injury.<sup>7, 16</sup>

735

736 **Critical medical device:** A medical device that enters sterile tissues, including the  
737 vascular system. Critical medical devices present a high risk of infection if the device is  
738 contaminated with any microorganisms, including bacterial spores. Examples of critical  
739 medical devices include but are not limited to needles, syringes, scalpels and  
740 invasive/surgical instruments, all implantable devices, biopsy forceps and all  
741 instruments used for foot care.<sup>1, 6, 12</sup>

742

743 **Disinfection:** A process that destroys some forms of microorganisms excluding  
744 bacterial spores; a process that kills most forms of microorganisms on inanimate  
745 surfaces.<sup>1, 6, 12, 14</sup>

746

747 **Fungi:** Any of numerous eukaryotic organisms that reproduce by spores. The spores of  
748 most fungi grow a network of slender tubes called hyphae that spread into and feed off  
749 of dead organic matter or living organisms. The hyphae often produce specialized  
750 reproductive bodies, such as mushrooms.<sup>4</sup>

751  
752 **Health care associated infection:** Also known as nosocomial infection and hospital-  
753 associated infection. An infection acquired in hospital by a patient who was admitted for  
754 a reason other than that infection. An infection occurring in a patient in a health care  
755 facility in whom the infection was not present or incubating at the time of admission.  
756 This includes infections acquired in the hospital but appearing after discharge, and also  
757 occupational infection among staff of the facility.<sup>14</sup>

758  
759 **Health care worker:** Any person working in a health care facility, for example, medical  
760 officer, nurse, speech-language pathologist, physiotherapist, cleaner, psychologist.<sup>6, 8, 14</sup>

761  
762 **Hierarchy of control measures:** A framework that includes three levels of control:  
763 engineering controls, administrative controls and personal protective measures.

- 764 1. Engineering controls are built into the design (private bathrooms, private rooms,  
765 HVAC systems) of a health care facility. Infection prevention and control  
766 professionals should be involved in the design and planning of new facilities. An  
767 infection control risk assessment should be done to evaluate and mitigate  
768 potential risks for microorganism transmission by means of air, water and  
769 environmental sources.
- 770 2. Administrative controls include protocols for hand hygiene, immunization of  
771 residents and caregivers, protocols for managing caregivers and clients during an  
772 outbreak and protocols for caring for clients with communicable diseases.
- 773 3. Personal protective equipment is the least desirable way to control hazards as it  
774 does not eliminate them, it merely contains the hazard and is dependent on its  
775 appropriate use by educated, knowledgeable staff.<sup>4</sup>

776  
777 **High level disinfection (HLD):** The level of disinfection required when processing  
778 semi-critical medical equipment/devices. High level disinfection processes destroy  
779 vegetative bacteria, mycobacteria, fungi and enveloped (lipid) and non-enveloped (non-  
780 lipid) viruses, but not necessarily bacterial spores. Medical equipment/devices must be  
781 thoroughly cleaned prior to high level disinfection.<sup>6, 12, 14</sup>

782  
783 **Infection prevention and control (IPC):** Evidence-based practices and procedures  
784 that, when applied consistently in health care facilities and settings, can prevent or  
785 reduce the risk of transmission of microorganisms to health care personnel, clients and  
786 visitors.<sup>1, 3, 12</sup>

787  
788 **Intermediate level disinfectants:** Level of disinfection required for some semi-critical  
789 items. Intermediate level disinfectants kill vegetative bacteria, most viruses and most  
790 fungi but not resistant bacterial spores.<sup>6</sup>

791

792 **Low level disinfection (LLD):** A process using low level disinfectants to kill most  
793 vegetative bacteria and some fungi as well as enveloped (lipid) viruses (e.g., Hepatitis  
794 B, C, Hantavirus, and HIV). Low level disinfectants do not kill mycobacteria, or bacterial  
795 spores. Low level disinfectants are used to clean and disinfect non-critical medical  
796 devices and environmental surfaces.<sup>1, 6, 12, 14</sup>

797

798 **Microorganisms:** Any organisms (animal or plant) of microscopic size.<sup>9</sup>

799

800 **Non-critical medical device:** Medical device that touches only intact skin (but not  
801 mucous membranes) or does not directly touch the client. Intact skin acts as an  
802 effective barrier against most microorganisms; therefore, the sterility of items coming in  
803 contact with skin is “non-critical”.<sup>1, 6, 12</sup>

804

805 **Parasites:** Organisms that grow, feed, and are sheltered on or in a different organism  
806 while contributing nothing to the survival of the host.<sup>4</sup>

807

808 **Personal protective equipment (PPE):** Specialized equipment or clothing used by  
809 health care workers to protect themselves from direct exposure to clients’ blood, tissue  
810 or body fluids. Personal protective equipment may include gloves, gowns, fluid-resistant  
811 aprons, head and foot coverings, face shields or masks, eye protection, and ventilation  
812 devices (e.g., mouthpieces, respirator bags, pocket masks).<sup>1, 6, 12, 14</sup>

813

814 **Respiratory etiquette:** Measures to contain respiratory secretions for all individuals  
815 with signs and symptoms of a respiratory infection.<sup>4</sup>

816

817 **Routine practices:** Routine practices is the term used by Health Canada/Public Health  
818 Agency of Canada to describe the system of infection prevention and control practices  
819 recommended in Canada to prevent and control transmission of microorganisms in  
820 health care settings. Consistent use of routine practices with all clients/residents/  
821 patients is critical to preventing transmission of microorganisms from client to client and  
822 client to staff.<sup>4, 8, 12</sup> The full description of routine practices to prevent and control  
823 transmission of nosocomial pathogens can be found on the Public Health Agency of  
824 Canada website: [http://www.phac-aspc.gc.ca/publicat/ccdr-](http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/99vol25/25s4/index.html)  
825 [rmtc/99vol25/25s4/index.html](http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/99vol25/25s4/index.html). PIDAC’s Routine Practices fact sheet is available at:  
826 [http://www.health.gov.on.ca/english/providers/program/infectious/pidac/fact\\_sheet/fs\\_ro](http://www.health.gov.on.ca/english/providers/program/infectious/pidac/fact_sheet/fs_routine_010107.pdf)  
827 [utine\\_010107.pdf](http://www.health.gov.on.ca/english/providers/program/infectious/pidac/fact_sheet/fs_routine_010107.pdf).

828

829 **Semi-critical medical device:** A medical device that comes in contact with mucous  
830 membranes or non-intact skin, but does not penetrate them, including but not limited to  
831 respiratory therapy equipment, trans-rectal probes, vaginal and rectal specula, gastro  
832 endoscopes.<sup>1, 6</sup>

833

834 **Sharps:** Objects capable of causing punctures or cuts (e.g., needles, syringes, blades,  
835 glass).<sup>6, 12</sup>

836

837 **Single use device (SUD):** A device that may be used and reused on a single client, but  
838 may not be reused on other clients.<sup>1</sup>

839  
840 **Spaulding classification:** A strategy for reprocessing contaminated medical devices.  
841 The system classifies medical devices as critical, semi-critical, or non-critical based  
842 upon the risk from contamination on a device to client safety. The system also  
843 establishes three levels of germicidal activity (sterilization, high-level disinfection, and  
844 low-level disinfection) for strategies with the three classes of medical devices (critical,  
845 semi-critical and non-critical).<sup>1</sup>

846  
847 **Source:** The person, animal, object, or substance from which an infectious agent  
848 passes to a host.<sup>7</sup>

849  
850 **Standard precautions (sometimes referred to as Routine precautions):** These are  
851 applied for all patients at all times regardless of their known or presumed infectious  
852 status. These include: hand hygiene; risk assessment; risk reduction strategies;  
853 environmental cleaning, disinfection, and sterilization; waste and laundry management;  
854 and healthy workplace practices.<sup>14</sup>

855  
856 **Sterilization:** The level of reprocessing required when processing critical medical  
857 equipment/devices. The sterilization process results in the destruction of all forms of  
858 microbial life including bacteria, viruses, spores and fungi.<sup>1, 6, 14</sup>

859  
860 **Viruses:** Any of a large group of submicroscopic agents that act as parasites and  
861 consist of a segment of DNA or RNA surrounded by a coat of protein. Because viruses  
862 are unable to replicate without a host cell, they are not considered living organisms in  
863 conventional taxonomic systems. Nonetheless, they are described as “live” when they  
864 are capable of replicating and causing disease.<sup>4</sup>

865

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