Infection Prevention and Control

Mitra Infection Prevention Consultants Inc. December 2019
Contents

Infection Prevention and Control 4
  Why is IPAC Important? 5

Integrating IPAC Best Practices 6
  Step 1: Understanding Pathogens 8
  Step 2: Routine Practices 10
  Step 3: Mitigating the Risk of Transmitting Infections 19

Clinical Scenarios 21

IPAC Resources 29
Infection Prevention and Control
Why is IPAC Important?

The goal of infection prevention and control (IPAC) is to prevent and/or reduce the risk of transmitting or acquiring a healthcare associated infection. IPAC protects your client, yourself and your colleagues from preventable infections and promotes wellness through implementing best practices in your daily routine.

CPTBC’s **Standard 11: Infection Control** provides physical therapists with a set of performance requirements to support a healthy and safe working environment for everyone. Your role is to understand, identify and minimize the risks of infectious transmission within your workplace. Remember, you can reach out for support to implement effective IPAC strategies in your workplace; IPAC is everyone’s responsibility.

By understanding IPAC evidence-based best practices and integrating these into your daily workflow you protect your clients, colleagues, family, and yourself from acquiring an infection at work. This not only promotes health, but also builds trust with your clients.

It’s important to protect your most vulnerable clients from acquiring an infection at your workplace as this could lead to a severe illness for them. Vulnerable clients include those who are immunocompromised, have poor nutrition, and/or are very young or elderly.

As a physical therapist, providing an environment for your clients that fosters infection prevention helps you adhere to the [Code of Ethical Conduct](#).

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**CPTBC Code of Ethical Conduct**

- Work in partnership with clients to improve, support, and/or sustain their health status and well-being
- Practise in a safe, competent, accountable, and responsible manner during the provision of services
- Take all reasonable steps to prevent harm to clients
Integrating IPAC Best Practices
There are several steps to integrating IPAC best-practices into your workflow.

| STEP 1 - Understanding Pathogens | • Understand how infections are transmitted  
|                                 | • Know where infectious agents hide |
| STEP 2 - Routine Practices       | • Point of care risk assessment  
|                                 | • Respiratory hygiene  
|                                 | • Hand hygiene  
|                                 | • PPE  
|                                 | • Environmental controls |
| STEP 3 - Mitigating Risk and Preventing Transmission | • Develop targeted solutions to stop transmission of a healthcare associated infection  
|                                 | • Cleaning/disinfection/sterilization |
Step 1: Understanding Pathogens

Transmission

The chain of infection explains where infectious agents (bacteria, viruses, and parasites) live, how they are spread, and where you can stop transmission. Knowing how an infectious agent travels (the mode of transmission) directs the preventive measures that must be taken in order to stay healthy.

Be aware that there are many ways infections can be spread, such as through food, water, medications, blood products, medical devices, and solutions. Many products provide a perfect breeding ground for infectious agents to flourish, therefore it is important to use them in a way that prevents contamination.
Modes of Transmission

- **CONTACT**: Direct contact from person to person (i.e., by hands or a draining wound) or by indirect contact through an intermediate object (i.e., a stethoscope, pulse oximeter, ultra-sound probe, or gel).
  - Examples of contact-spread disease include antibiotic-resistant organisms such as Methicillin-resistant Staphylococcus aureus (MRSA), scabies, lice, and shingles.

- **DROPLET**: Via large droplets (> 5 μm) that can travel six feet and enter another person’s respiratory tract or mucous membranes, or land in the environment and be transmitted at a later time.
  - Examples of infections spread by the droplet route include influenza and pertussis.

- **AIRBORNE**: Via small respirable particles (≤ 5 μm) that can remain suspended in the air for a period of time. Examples of airborne diseases include pulmonary tuberculosis, measles, chickenpox.

Where do Pathogens Hide?

**ON YOUR HANDS**

**IN THE ENVIRONMENT**

**ON THE EQUIPMENT**
**Step 2: Routine Practices**

**Point of Care Risk Assessment**

Assess your client’s health status at each encounter. If they have a known or suspected infectious disease, evaluate the risk of exposure to blood, body fluids, secretions and excretions. Are routine practices enough or are additional precautions required? Ask yourself the following questions:

- Does my client have an acute infectious illness or symptoms of one?
- What treatment will I be doing? Do I need to reschedule my client’s visit?
- If I see my client, do I need to protect others in the clinic or use PPE myself?

Remember, when your client calls to book an appointment let them know they can reschedule if they are sick at the time of their appointment.

**Routine practices** are the best way to prevent infections because there are unknown infectious agents everywhere. Routine practices should be carried out ALL the time with every client. They include:

- **Respiratory Hygiene**
- **Hand Hygiene**
- **Personal Protective Equipment (PPE)**

**Respiratory Hygiene**

Anyone (clients or staff) who has a new or worsening cough should cover their mouth and nose with a tissue when they sneeze or cough or use their upper sleeve to contain the spread of droplets. Alternatively, a fluid-resistant mask can be offered to clients and used by staff also. **Respiratory hygiene posters** are available from many sources such as the Center of Disease Control (CDC), and can be placed in the reception area as a reminder and an education tool for clients.
Hand Hygiene

As hands spread many infections, cleaning your hands is the single most important action you can take to stop the spread of infections to yourself and others. Your hands should be cleaned:

- when entering the clinic
- before taking a mask or gloves out the box (to avoid hands contaminating the entire box)
- if they become contaminated after a sneeze or cough
- before removing a mask

Do you feel awkward asking your client to clean their hands? You could say “I’m going to clean my hands before we start and ask you to do the same. If we both have clean hands it really helps reduce the spread of infection in the clinic/hospital.”

Clients should also be asked to clean their hands when they arrive at your clinic, and before/after using any equipment required for treatment. When both you and your client clean their hands before an interaction, the bioburden, or the number of infectious agents that are present in your environment, significantly decreases, making this an easy and practical step in reducing the spread of infections.

Preparing to clean your hands

To clean your hands effectively and ensure they are free of infectious agents you should remove any items that may harbour germs. These include rings (especially those with stones or that are etched), nail polish, artificial nails, nail enhancements, and long nails. Wrists should also be free of items that can become contaminated and spread germs, such as watches and long or floppy sleeves.
Dedicated hand hygiene sinks

A dedicated hand hygiene sink should be used for cleaning hands. Sinks that are used for multiple purposes such as pouring liquids or other products down them may begin to harbour germs that are fed by the nutrients being discarded. In turn, these germs can aerosolize and contaminate your hands during cleaning. So, when you think you have clean hands, they could actually be dirty.

Hand hygiene sinks should not be close to a dirty area or anything that could contaminate them.

<table>
<thead>
<tr>
<th>SOAP AND WATER COMPARED WITH ALCOHOL-BASED HAND RUB (ABHR)</th>
<th>ADVANTAGES OVER SOAP AND WATER</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ABHR with 70-90% alcohol is required to effectively kill germs</td>
<td>• Saves time</td>
</tr>
<tr>
<td>• Apply enough ABHR to cover all areas/surfaces of your hands and wrists</td>
<td>• Extremely effective at killing germs if used correctly</td>
</tr>
<tr>
<td>• ABHR is effective (i.e., germs are killed) once your hands are dry</td>
<td>• Less skin damage</td>
</tr>
<tr>
<td>• If, after many uses of ABHR, you notice a sticky buildup on your hands, clean them using soap and water</td>
<td>• Less drying on your hands as it contains emollients</td>
</tr>
<tr>
<td></td>
<td>• Doesn’t wash away natural skin oils</td>
</tr>
</tbody>
</table>

BUT... Use plain soap and water when hands are visibly soiled as organic compounds will inactivate ABHR, and/or you have been in contact with Clostridium-Difficile as the spores have a protective coating and cannot be penetrated by ABHR, and/or you have been in contact with Norovirus as ABHR does not effectively kill all of the particles on your hands; they have to be physically removed using friction.

When using soap and water to clean hands rub all the areas/surfaces of your hands and wrists – friction is needed to remove infectious agents.
Protecting your hands when cleaning them frequently

✓ When you use soap and water you can protect your hands by using plain soap, warm water, rinsing well, and patting your hands dry (not rubbing) with a paper towel. If your hands are feeling dry, use a lotion immediately after cleaning your hands. Lotions with ceramides help hydrate, restore, and strengthen skin. Remember, lotions can become contaminated. You can prevent contamination by using a no-touch technique or a pump-dispenser, and ensuring you discard any lotions before their expiry date.

✓ If the integrity of the skin on your hands is compromised, see your physician early for recommendations. Remember that non-intact skin increases your risk of acquiring or transmitting an infection.

✓ If you need to use gloves, remember to put them on clean dry hands and remove them using a technique that does not tear your skin.

Personal Protective Equipment

Personal Protective Equipment (PPE) includes gloves, masks, gowns, and face/eye protection. PPE protects you, your clients, and others in your workplace from acquiring/transmitting an infection. It not only acts as a barrier against infection but also keeps your clothing clean and keeps infectious agents contained in a smaller area. This in turn reduces the bioburden of infectious agents in your workplace and makes cleaning easier.

<table>
<thead>
<tr>
<th>IF YOU ANTICIPATE CONTACT WITH BLOOD, BODY FLUIDS, SECRETIONS OR EXCRETIONS WITH YOUR...</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hands</td>
<td>Wear gloves</td>
</tr>
<tr>
<td>Clothing/body</td>
<td>Put on a gown</td>
</tr>
<tr>
<td>Face</td>
<td>Wear a mask/eye protection</td>
</tr>
</tbody>
</table>

The type of PPE you wear is based on your risk assessment of the client you are treating (See Step 3 below about conducting a risk assessment). This should take place at the beginning of every interaction with the client.
### Table 1: Link between risk assessment and protective measures

<table>
<thead>
<tr>
<th>MODES OF TRANSMISSION</th>
<th>CONTACT</th>
<th>DROPLET</th>
<th>AIRBORNE</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Direct Contact = person to person (hands, wet wound)</td>
<td>✓ Large droplets (&gt; 5 μm)</td>
<td>✓ Small particles (≤ 5 μm)</td>
<td></td>
</tr>
<tr>
<td>✓ Indirect Contact = intermediate object (ultrasound probe, stethoscope, gels)</td>
<td>• Carry pathogens</td>
<td>• Carry pathogens</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Travel 6-10 feet</td>
<td>• Remain suspended in the air for a period of time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Enter a person’s respiratory tract/mucous membranes</td>
<td>• Infective over time and distance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Can live in the environment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SYMPTOMS</th>
<th>CONTACT</th>
<th>DROPLET</th>
<th>AIRBORNE</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Wet Wound</td>
<td>✓ New/worsening cough</td>
<td>✓ Rash and Fever</td>
<td></td>
</tr>
<tr>
<td>✓ Diarrhea not yet diagnosed (NYD)</td>
<td>✓ Vomiting NYD</td>
<td>✓ High Pulmonary TB Risk</td>
<td></td>
</tr>
<tr>
<td>✓ Influenza-like illness</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ORGANISM</th>
<th>CONTACT</th>
<th>DROPLET</th>
<th>AIRBORNE</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ MRSA</td>
<td>✓ Norovirus</td>
<td>✓ Pulmonary TB</td>
<td></td>
</tr>
<tr>
<td>✓ <em>Clostridium difficile</em></td>
<td>✓ Influenza</td>
<td>✓ Measles</td>
<td></td>
</tr>
<tr>
<td>✓ Lice/Scabies</td>
<td>✓ Mumps</td>
<td>✓ Chickenpox</td>
<td></td>
</tr>
<tr>
<td>✓ Shingles</td>
<td>✓ Pertussis</td>
<td>✓ Disseminated shingles</td>
<td></td>
</tr>
<tr>
<td>✓ Coronavirus (COVID-19)</td>
<td>✓ Respiratory illnesses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓ Coronavirus (COVID-19)</td>
<td>✓ Coronavirus (COVID-19)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IPAC MEASURES: PHYSICAL THERAPIST</th>
<th>CONTACT</th>
<th>DROPLET</th>
<th>AIRBORNE</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Hand hygiene</td>
<td>✓ Hand hygiene</td>
<td>✓ Hand hygiene</td>
<td></td>
</tr>
<tr>
<td>✓ Gown</td>
<td>✓ Gown</td>
<td>✓ N95 mask</td>
<td></td>
</tr>
<tr>
<td>✓ Gloves (for direct care)</td>
<td>✓ Gown &amp; gloves (for direct care)</td>
<td>✓ Gown &amp; gloves (for direct care)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ Surgical Grade Mask</td>
<td>✓ Surgical Grade Mask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ Eye Protection (spray)</td>
<td>✓ Eye protection (spray)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IPAC MEASURES: PATIENT/CLIENT</th>
<th>CONTACT</th>
<th>DROPLET</th>
<th>AIRBORNE</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Hand hygiene</td>
<td>✓ Hand hygiene</td>
<td>✓ Hand hygiene</td>
<td></td>
</tr>
<tr>
<td>✓ Clean clothing/robe</td>
<td>✓ Clean clothing/robe</td>
<td>✓ Clean clothing/robe</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ Surgical Grade Mask</td>
<td>✓ Surgical grade mask</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Environmental Controls

Refer to BC Best Practices for Environmental Cleaning for direction on cleaning items/equipment.

**Why is cleaning important?**

Infectious agents can survive in the environment for varying lengths of time depending on the type of surface (non-porous/porous) they land on and the environmental conditions (temperature/humidity).

<table>
<thead>
<tr>
<th>ENVIRONMENTAL SURVIVAL OF PATHOGENS</th>
<th>DID YOU KNOW...</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Norovirus can live in the environment for 40-56 days and just 10 viral particles can make you sick</td>
<td></td>
</tr>
<tr>
<td>✓ Influenza A can survive on surfaces from 12-48 hours and it takes between 100-1000 viral particles to make you sick</td>
<td></td>
</tr>
</tbody>
</table>

As most of these germs are found on high-touch areas such as doorknobs, phones, keyboards, treatment tables, devices, and equipment (stethoscopes, electrophysical agents (EPAs), gym equipment), effective cleaning is essential to reduce the *bioburden* (the number of infectious agents that are present in your environment) and mitigate the risk of transmission.

<table>
<thead>
<tr>
<th>INFECTIONS CAN BE SPREAD THROUGH:</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Hands</td>
</tr>
<tr>
<td>✓ Cell phones</td>
</tr>
<tr>
<td>✓ Food</td>
</tr>
<tr>
<td>✓ Water</td>
</tr>
<tr>
<td>✓ Medications</td>
</tr>
<tr>
<td>✓ Blood products</td>
</tr>
<tr>
<td>✓ Medical devices</td>
</tr>
<tr>
<td>✓ EPAs</td>
</tr>
<tr>
<td>✓ Solutions</td>
</tr>
</tbody>
</table>

These products provide a perfect breeding ground for infectious agents to flourish, therefore it is important to use them in a way that prevents contamination.
Cleaning tips

- Declutter your environment for easier cleaning
- Know the manufacturer’s instructions for cleaning of all items used in practice (walking aids, exercise equipment, TENS units, fabric straps, plinths, hot pack covers)
- Only purchase items/devices/equipment that can be cleaned with a healthcare grade disinfectant
- Only use healthcare grade disinfectants that are identified by a Drug Identification Number (DIN) or a seal of approval from Health Canada. Essential oils are not effective for disinfection.
- Ensure all cleaning products have accessible “material safety data sheets” (MSDS) describing safe use and dilution proportions
- Know the manufacturer’s guidelines for all cleaning products and follow these to ensure effective cleaning (i.e., if the required contact time for a cleaning product is not followed, infectious agents may not be killed)
- Use microfiber cloths for effective removal of germs. Microfibre is more effective than cotton cloths at capturing (rather than dispersing) infectious agents.
- Develop a formal cleaning process so nothing is missed (checklists/times/sign-off/clean tags)
- Hire a healthcare-trained cleaner and always have a trained back-up cleaner
- Ensure all PTs and staff are knowledgeable about the cleaning basics
- Ensure clean and dirty items are separated (to avoid contaminating clean items)
- Store clean items/supplies in a dedicated space away from dirty items or high traffic areas to keep them from becoming contaminated.
- Periodically evaluate the effectiveness of cleaning for quality assurance
Know what to clean and how

- **CLEANING**: physical removal of foreign material (for example, dust or soil) and organic material (for example, blood/secretions) with water, detergents and mechanical action.
- **DISINFECTION**: inactivation of all disease producing micro-organisms except bacterial spores.
  - Low Level (LLD) = kills most vegetative bacteria and some viruses/fungi
  - Intermediate Level = kills vegetative bacteria, viruses, fungi and mycobacterium
  - High Level (HLD) = kills all microbial organisms but not spores
- **STERILIZATION**: removal of all micro-organisms and pathogens

If appropriate, clients may also bring their own equipment (which must not be shared) and be taught how to clean it themselves. It’s important to know if an item is reusable or not, otherwise you may be unknowingly spreading infections. For example, some electrodes are single use only while others can be cleaned, disinfected and used again. Never clean a single-use item (these should be discarded), and always follow manufacturers’ guidelines for cleaning a reusable one.

**Spaulding’s criteria for cleaning medical devices**

Spaulding’s criteria\(^1\) divides medical devices into three categories based on the client’s risk of infection from contact with the device. The three device categories are:

- **NON-CRITICAL DEVICE**: touches only intact skin and not mucous membranes, or does not directly touch the client
- **SEMI-CRITICAL DEVICE**: comes in contact with non-intact skin or mucous membranes but does not penetrate them
- **CRITICAL DEVICE**: enters sterile tissues, including the vascular system

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The level of cleaning required is based on the type of device, as shown below:

<table>
<thead>
<tr>
<th>CLASSIFICATION</th>
<th>ITEM USE</th>
<th>EXAMPLES</th>
<th>CLEANING</th>
<th>REMINDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>NON-CRITICAL</td>
<td>intact skin</td>
<td>✓ stethoscope ✓ beds/plinths ✓ exercise equipment ✓ walkers/canes ✓ oximeters ✓ blood pressure cuffs</td>
<td>clean (to remove organic matter) + low level disinfectant (to inactivate disease-producing microbes)</td>
<td>✓ only buy equipment/ items that can be cleaned with healthcare grade products ✓ contact time is important ✓ follow manufacturers’ instructions ✓ clean between clients</td>
</tr>
<tr>
<td></td>
<td>non-intact skin mucous membranes</td>
<td>✓ vaginal specula ✓ reusable peak flow meters</td>
<td>cleaning + high level disinfection (minimum) or sterilization</td>
<td>✓ sterilization is preferred and required for heat tolerant items</td>
</tr>
<tr>
<td>SEMI-CRITICAL</td>
<td>enters (or houses instrument that enters) a sterile body area including blood</td>
<td>✓ IMS plungers ✓ needles ✓ wound care instruments</td>
<td>cleaning + sterilization</td>
<td>✓ never re-use needles or syringes ✓ discard single-use items</td>
</tr>
<tr>
<td>CRITICAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Once you understand how pathogens are transmitted, how and when and what to clean, and how to implement routine practices, it’s important to put it all together into a sensible workflow. Ensuring some activities are integrated into the workplace is the best way to mitigate the risk of transmitting infections.
**Step 3: Mitigating Risk and Preventing Transmission**

**Environmental Cleaning**

- Develop a cleaning process/routine
  - Identify frequency of cleaning for all items (between clients, end of day, monthly, when soiled)
  - Determine what needs to be cleaned (equipment, shared spaces/items etc.) and what has been cleaned (keep a logbook or use labels)
  - Know how to clean each item (follow manufacturers’ guidelines and contact times provided on cleaning products) and what products to use (healthcare grade detergents, disinfectants, microfiber cloths)
  - Have a cleaning system – move from cleaner areas to dirty areas
- Once clean, keep it clean
  - Store clean items/supplies in a dedicated clean space
  - Identify clean equipment/devices with a label
  - Separate clean from dirty items by at least three feet (to stop cross-contamination)

**Safe Sharps**

- Use dedicated sharps containers
- Make sure sharps containers are easily accessible in all required areas
- Fill each container to 3/4 full only
- Close the full container and store in a dedicated closed area for pick-up/disposal

**Safe Waste Management**

- Use appropriate biohazard and garbage bags
- Make sure garbage bins always have closed lids
- Never fill garbage bins all the way (3/4 only)
- Create a separate storage area for regular pick-up by the medical waste company

**Laundry**

- Process in place for safe handling and effective cleaning and storage of linens. See section 4.1.1 of [BC Best Practices for Environmental Cleaning](#) for more details.
PT/Staff Health

Here are some ways to optimize your own health:

Know your own vaccine and immune status. For example:
- When was your last tetanus vaccine?
- Are you up-to date with your measles and mumps vaccines now that there is a chance of catching these diseases again?
- Have you had chickenpox and are therefore immune to a client who has chickenpox or shingles?
- Given the clients your serve, what vaccines might be important for you to have up to date (i.e., influenza, hepatitis B)?
- Have you recently had an illness that may have weakened your immune system and left you vulnerable to catching something?

Be aware of:
- The process you should follow after a blood and body fluid exposure
- The steps you should take if you have been exposed to an infectious illness, such as measles
- The infection prevention practices you must carry out to decrease the spread of infection
- What hand hygiene best practices are and how to clean your own hands effectively, with the least damage to your skin
Clinical Scenarios
1. **Does the type of cleaning cloth I use matter?**  
   **YES.** Paper and cotton (cellulose-based) cloths decrease the effectiveness of disinfectants as they absorb the active disinfecting molecules. Microfiber cloths are made of polyester and nylon, and work by static attraction; the positively charged cloth attracts the negatively charged dust/bacteria. Never dry dust; this simply disperses dust and germs to new locations.

2. **Is soap and water less drying on my hands than alcohol-based hand rub (ABHR)?**  
   **NO.** ABHR has emollients in the formula that makes it less drying/irritating to your hands than soap and water. It is also very effective at killing pathogens when used correctly (apply to all surfaces of your hands, rub well and wait until dry) and should be your preferred method of choice unless your hands are visibly soiled.

3. **What’s the best thing I can do to prevent infections at work?**  
   **Clean your hands.** This is the single most important way to prevent infections as most infections spread through our hands.  
   **TIP:** As cleaning your hands also decreases the bioburden of pathogens in your workplace environment, it is not only is it important to clean your own hands but also ask your clients to clean their hands before/after each session and before/after using any equipment.  
   Conduct a point of care risk assessment at every client encounter – to be consistent.

4. **My client arrives at their appointment with a caregiver who must accompany them but has a cough and cold. What should I do?**  
   If the caregiver has to stay with the client and the appointment cannot be rescheduled, to limit the spread of infection, encourage the caregiver to clean their hands when they arrive. Next, ask them to cover their cough, sneeze or runny nose with a tissue, discard this into a covered garbage can and clean their hands again. If possible, the caregiver should wear a mask during the visit and their time in shared spaces should be limited. Refer to BC Ministry of Health [Respiratory Etiquette Poster](#).
1. **I have a patient on contact precautions who needs to climb two flights of stairs before they can be discharged. Can I take my patient out of their room?**

**YES** but before you take your patient out the room you should carry out a risk assessment. For example, if the patient is on contact precautions for:
- a draining wound, ensure that the drainage is contained
- shingles, make sure the area is covered

Check with the team if you are unsure if the patient can leave the room.

✓ **Before leaving the room:**
- Ask your patient to clean their hands (as most pathogens are spread via hands)
- Give them a clean gown to wear over their clothing
✓ **When you return to the room**
- Ask your patient to clean their hands again to prevent them from getting a new infection that may have picked up from the environment outside their room.

2. **During an inpatient group exercise class my patient’s post-op wound drained onto the chair and the floor. What should I do?**

- Clean your hands and put gloves on
- Try to stop any further drainage until the wound can be dressed by the nurse
- Ask for help to return the patient to their room and alert the nurse to re-dress the wound
- Remove the chair from the area so no-one else can use it and label it as ‘dirty’
- Wipe up the floor as per hospital blood-and-body-spill protocol and direct patients away from the area
- Call environmental services to clean the floor and the chair as soon as possible

3. **What should I do if I need a walker and I’m not sure if the one I found is clean or dirty?**

**Equipment should be marked as clean and dated.** If there is no process in place to identify clean equipment, one needs to be developed with the staff in the area you are working in—discuss this with them.

**Equipment should always be cleaned and disinfected between patients** to prevent hospital associated infections. If you are unsure if an item is clean you should clean the item yourself, or ask the appropriate staff member to do this, using the wipes provided by the hospital for this purpose.

Manufacturers’ guidelines must be followed when cleaning equipment (contact time is important).

If your patient has used an item that has not been cleaned, ask them to clean their hands after use.

4. **Can I use a portable lift, transfer belt or fabric sling on more than one patient if I can’t find another one?**

**NO,** these items must be cleaned/laundered between patients to mitigate the risk of transmitting a healthcare associated infection. If you are using one of these items regularly on one patient, you should dedicate it for that one patient’s use.
5. **How often should I clean my stethoscope?**

Stethoscopes should be cleaned and disinfected between patients and when visible soiled. Anything that touches a patient needs to be disinfected. Refer to Appendix E in *BC Best Practices for Environmental Cleaning* for direction on cleaning items/equipment. *Be mindful of where you put your stethoscope – when you wear it around your neck and near your face you increase the risk of transmitting/acquiring a healthcare associated infection.* Refer to Appendix E (P.92) in BC Best Practices.
1. **How often should I clean my plinth and the face opening?**
   Plinths should be cleaned and disinfected between clients, when soiled and at the end of the day. Pay special attention to the area a client places their face. Plinths should be regularly inspected for wear and tear as damage or rips can result in contamination; if this occurs replacement is recommended. *Paper coverings do not replace the need to clean.*

2. **I use a variety of equipment in my practice such as foam rollers, TheraBand and trigger point balls. If my client seems healthy do I need to clean these items before the next client use?**
   It is important to conduct a risk assessment as you don’t always know if a person has a transmittable illness or has been in contact with one. As pathogens can survive in the environment for extended periods of time, the gold standard is that all equipment should be cleaned and disinfected between clients.
   Some equipment/materials may be difficult to clean adequately, such a porous foam. Purchase equipment that can be cleaned and disinfected with a healthcare grade product and follow the manufacturers’ guideline for cleaning.
   Remember to inspect your equipment regularly; if there is evidence of damage or tears that cannot be repaired to a level that can withstand healthcare cleaning, it is recommended you replace these items.

3. **My client tells me they are MRSA positive, is this a problem?**
   **If your client is colonized with MRSA** you don’t need to change your practice if you are cleaning and disinfecting shared equipment/items in between each client.
   **If your client has an MRSA infection in the area you are working on**, treat this as you would any client with an open wound—carry out hand hygiene, wear gloves, cover the wound to contain the drainage and clean/disinfect all areas of the room the client came in contact with between clients. *Tip: If you don’t want to delay your schedule, see clients with a communicable illness at the end of your day or reschedule their appointment for a later time when they are infection-free.*

4. **Can I use tea-tree oil or other natural products to clean with?**
   **NO.** Only healthcare grade products can be used to clean the environment and equipment in a physical therapy setting as these are known to kill pathogens effectively. Disinfectants are regulated under the Food and Drugs Act in Canada and require a Drug Identification Number (DIN) from Health Canada. Check the product you are using has a DIN on the label. All equipment comes with manufacturers’ instructions which must be followed for effective cleaning.

5. **Do interferential devices have any IPAC risks?**
   **YES.** To decrease the risk of healthcare associated infections never buy a device or item that cannot be cleaned and disinfected with a healthcare grade product. In addition, keep in mind that some materials (i.e., porous, absorbent, and those with rough surfaces) cannot be cleaned effectively. Because of this, interferential devices that use sponge covers may be a reservoir for pathogens and a risk for the transmission of healthcare associated infections.
If the manufacturer does not provide instructions for effectively cleaning and disinfecting sponges, they should be designated as single-use or replaced by an alternative item such as electroconductive gel or a machine that employs single-use self-adhesive pad electrodes. Remember, all parts of the device that come in contact with the client must be cleaned and disinfected before use by another client; this includes the wires.

6. **I’ve heard that my ultrasound gel may be a medium for bacterial growth, is this true?**

   **YES.** Gels are a perfect medium for pathogens to flourish especially when they are warmed up. If possible, use single-use packages or smaller bottles of gel. Due to the high risk of contamination of multi-use gel containers, practices should be followed to mitigate this:
   - seal the container when not in use
   - store in a clean area at room temperature (unless the manufacturer recommends a different temperature)
   - never let the nozzle touch anything (i.e., client, your own hands, the environment)
   - avoid warming the gel
   - never wash and refill the bottle
   - write the date of opening on the bottle so it can be discarded after 30 days (or by the expiration date if this is first)

   If you are unsure about the integrity of the gel you are using, discard it and get a new bottle. Refer to IPAC Canada’s position statement on [Medical Gels](#).

7. **I sometimes come in contact with blood when I dry needle. Is there a risk to me?**

   **YES.** There is always a risk of infectious transmission with blood and body fluid exposure, however this risk can range from low to high depending on several factors such as the amount of blood, the area on you that was exposed (i.e., intact or non-intact skin, mucous membranes), the client’s medical history of communicable bloodborne illnesses and the treatment they are on, and your own immune status.

   Familiarize yourself with your clinic’s protocol for blood and body fluid exposure; if you are unsure of your personal risk or the measures you should take after a blood or body fluid exposure talk to a physician as soon as possible.
**Paediatrics**

1. **I have toys in my clinic that children often put in their mouth, is this a problem?**
   
   **YES:** If toys are a must, only purchase ones that are cleanable with a healthcare grade cleaning product and clean, disinfect, rinse with water and dry after each use. Store all toys in a covered container and clean them, and the container, when soiled or on a weekly basis even if not used. Refer to IPAC Canada’s Practice Recommendation for [Toys](#).

2. **When I treat a child I sometimes come in contact with urine or faeces. What are the risks?**
   
   Risk depends on many factors, such as communicable diseases (some are higher risk than others), portal of entry (did these secretions splash into a mucous membrane or go through a cut on your skin), and your own immune system. With any exposure, if you are not sure of the risk to you after you have collected a thorough medical history from the client, discuss this with your physician as soon as possible.
1. **If I am carrying out a home visit and find the house is not clean, what should I do?**
   
   If you feel the condition of the house may pose a risk to yourself and your client, you should discuss the situation with your homecare team to develop a plan.

   **If the session can be delayed,** reschedule your visit to a later time after a home cleaning service has been organized or, if possible, treat the client in your clinic.

   **If the session cannot be delayed,** carry out a risk assessment and use the necessary precautions such as a gown and gloves. Only bring the necessary supplies/equipment into the home and ensure that all equipment/items used for your treatment are single-use or cleaned and disinfected after use. If an item cannot be cleaned/disinfected adequately, it should be discarded. Be careful not to transport dirty equipment in a manner that may contaminate other items or the environment. And don’t forget to clean your hands before and after you treat your client or touch anything in the environment.

   *Containing pathogens is key to preventing infections.*
IPAC Resources
• You never know who is carrying a transmissible infection. Community-associated antibiotic resistant organisms are on the rise meaning that you never know what germs are circulating in your clinic. Making “routine practices” a regular routine is essential. Incorporate these practices into your workflow and make it easy for you, your colleagues and your clients by having hand hygiene products and sharps containers easily accessible and close to your point of care.

• Don’t underestimate the impact of hand hygiene on infection prevention and control. Hand hygiene by you and your client reduces bioburden and plays a key role in preventing the transmission of infectious agents.

Where can I find more IPAC information? Who can answer my questions?

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<thead>
<tr>
<th>AREA/NAME</th>
<th>REFERENCE</th>
<th>WEBLINK</th>
<th>DATE/COMMENTS</th>
</tr>
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<tbody>
<tr>
<td>GENERAL</td>
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<tr>
<td>Provincial Infection Control Network of British Columbia (picnet)</td>
<td>List of several IPAC guidelines</td>
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<td>BC Centre for Disease Control COVID-19</td>
<td></td>
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<td>CLEANING DISINFECTION STERILIZATION</td>
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<tr>
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<td></td>
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<tr>
<td>HAND HYGIENE</td>
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<td>BC MOH</td>
<td>Best Practices for Hand Hygiene in all Healthcare Settings and Programs</td>
<td><a href="http://www.picnet.ca/guidelines/">www.picnet.ca/guidelines/</a></td>
<td>2017 (revised from 2012 and in print)</td>
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