

Fact Sheet: Infection Prevention and Control

Infection prevention and control (IPC) is a practical, evidence-based approach which prevents patients and healthcare providers from being harmed by avoidable infections. Effective IPC requires constant action at all levels of the health system, from policy-makers to facility managers, health care providers and those who access health services (WHO, 2016). It is important for health care providers to practise IPC in healthcare settings to help reduce the spread of both regular and resistant microbes (Government of Canada (GC), 2018).

Registered nurses (RN) and nurse practitioners (NP) have the responsibility to ensure they practise safely and competently at all times, including the use of safe and effective IPC measures. To do so, RNs and NPs, whether employed by an organization or self-employed, are expected to be aware of applicable legislation, NANB standards, best practices and organizational policies related to IPC and to advocate for quality practice environments (NANB, 2019).

RNs and NPs each play a vital role in IPC by:

- Applying evidence-informed measures such as routine practices to prevent and control transmission of micro-organisms;
- Exercising clinical judgement relevant to each patient situation and IPC practices;
- Using a risk assessment to determine the level of protection required to protect themselves;
- Reducing the risk of infection to self and others by handling, cleaning and disposing of materials, equipment and waste according to standards and best practices; and
- Using effective and timely communication strategies with patients and their families, the healthcare team and the community when discussing IPC issues.

NANB has compiled several resources to help RNs and NPs remain knowledgeable and apply best practices in IPC:

Resources for RNs and NPs

Hand hygiene:

- Framework for developing programs, policies and procedures for hand hygiene in healthcare settings: [Hand Hygiene Practices in Healthcare Settings](#) (GC)
- Canada's Hand Hygiene Challenge: [Hand Hygiene for Patient and Provider Safety in Canada](#) (CPSI)

Healthcare-associated infections (HAI) affect hundreds of millions of people every year. In fact, one in every 10 patients is affected by HAI worldwide. Equally concerning is that statistics show that on average, 61% of healthcare providers do not adhere to recommended hand hygiene practices (WHO, 2016).

Antibiotic resistance:

- Infographic that highlights the key elements of routine IPC practices: [Help Reduce Antibiotic Resistance](#) (GC)
- Other helpful resources from the GC: [Infection Prevention and Control](#)
- Latest recommendations for antibiotic prescribing: [Bugs & Drugs](#) (GC)
- Key clinical points for treating older adults: [Prescribe Antibiotics Wisely](#) (GC)

Routine practices and additional precautions:

- Framework for developing policies and procedures for routine IPC practices and additional precautions in healthcare settings: [Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings](#) (PHAC)
- Educational Resources: [Infection Prevention and Control](#) (CNA)
- IPC guidelines, policies and standards to support documentation and best practices: [Guidelines & Standards](#) (IPAC)
- IPC key strategies, guidelines, tools and other resources: [Infection Prevention and Control](#) (WHO)
- Activities focus on preventing disease and injuries, promoting good physical and mental health, and providing information to support informed decision making: [Public Health Agency of Canada](#) (GC):

NANB has developed case studies to provide RNs and NPs guidance regarding IPC measures (See pages 3-6).

If you have additional questions about this document, please contact NANB at practiceconsultation@nanb.nb.ca.

References

- Government of Canada. (2018). *Infection Prevention and Control*. Retrieved from <https://www.canada.ca/en/public-health/services/antibiotic-antimicrobial-resistance/infection-prevention-control.html>
- Nurses Association of New Brunswick. (2019). *Standards of Practice for Registered Nurses*. Fredericton, NB: Author.
- World Health Organization. (2016). *Health Care Without Avoidable Infections. The Critical Role of Infection Prevention and Control*. Retrieved from <https://apps.who.int/iris/bitstream/handle/10665/246235/WHO-HIS-SDS-2016.10-eng.pdf;jsessionid=8B7F86769932EDB5E7340A03A069DC46?sequence=1>

Case Study 1: Wounds

Julie, a home-visiting RN, is taking care of a patient with an open drain wound on her abdomen. A recent wound culture found the antibiotic resistant organism. How should Julie demonstrate appropriate IPC?

Response:

According to NANB's standard 4 of the *Standards of Practice for Registered Nurses*, indicator 4.5 states that the RN contributes to and supports initiatives that improve the health system and population health. This also applies to protecting patients from infection risks. All RNs, regardless of their position, need to advocate for quality practices which may include professional development systems, organizational supports, equipment and care delivery processes. They demonstrate maintaining commitment to quality practice environments by:

- Continually evaluating the healthcare setting to identify opportunities for improving the quality of care;
- Conducting a risk assessment to determine level of protection required to protect the health care providers and other clients;
- Respecting employer policies;
- Sharing concerns about the setting or processes that alter or don't allow IPC as per best practices;
- Exploring solutions within the setting to meet the patient's and the setting's needs; and by
- Advocating for nursing input on patient care policies.

Julie can reduce her patient's and her risk of infection by:

- Reviewing relevant employer policies on IPC;
- Identifying patient and RN risks by:
 - identifying hazards and injury potential;
 - intervening and providing appropriate care to patient(s), self or another healthcare provider after exposure;
- Reporting an infection control technique breach and taking action to limit further harm and to prevent risks;
- Applying and advocating for evidence-based practice such as:
 - applying hand hygiene principles;
 - choosing appropriate measures to prevent and control infection transmission such as using appropriate protection equipment;
 - applying principles for safely handling, cleaning and disposing of materials and equipment;
- Communicating and educating the patient (for instance, expectations, rationale);
- Collaborating with the patient and healthcare team on a plan of care that meets the patient's needs, respects IPC measures and promotes safety.

**This scenario is an adaptation of the “Infection Prevention and Control” education tools from the College of Nurses of Ontario.*

Case Study 2: Hand-Washing

A patient enters a hospital emergency department (ED) complaining of nausea, vomiting, diarrhea and a low-grade fever. As Lisa, an RN, begins to assess the patient he has an episode of diarrhea. In keeping with the employer’s policies on infection control, Lisa puts on a pair of gloves and a gown before providing personal care and changing the bed linen. The ED is busy, and when she finishes patient care she quickly disposes the soiled laundry and removes her gloves and gown. She then begins assessing her next patient’s vital signs. Lisa does not wash her hands before performing her assessment. How does Lisa’s practice impact IPC?

Response:

By not washing her hands, Lisa potentially transmits micro-organisms from one patient to another, and breaches employer policies on infection control. Her actions also place the public at harm. As highlighted by [Infection Prevention and Control Canada](#), proper hand hygiene is the single most-important IPC practice.

It is stated in the [Standards of Practice for Registered Nurses](#) that RNs use credible research findings and apply evidence-informed practices and take actions in situations where patient safety is potentially or actually at risk (see Standard 1, indicators 1.6 and Standard 2, indicator 2.6). This accountability includes identifying situations that place a patient at risk of harm and taking evidence-informed measures to minimize and prevent such risks.

The following principles guide nursing practice when implementing IPC measures:

- Placing patient safety and well-being at the centre of the care plan;
- Reflecting on nursing practice, including factors impacting clinical decision-making and professional judgment;
- Incorporating best available evidence to inform practice;
- Maintaining quality professional practice environments;
- Advocating and collaborating to create policies based on the best available evidence;
- Documenting situations where care is compromised.

**This scenario is an adaptation of the “Infection Prevention and Control” education tools from the College of Nurses of Ontario.*

Case Study 3: Syringe Use

Richard is an RN providing cosmetic filler injections in a medical spa. Richard injects approximately six patients per day using pre-loaded syringes that come packaged with two sterile needles from the manufacturer. The manufacturer label states that the product is for single use. At times, there may be leftover filler in the syringe, so he removes the used needle, caps the syringe with the plastic cap, and stores the used syringe for later use. Richard reuses the leftover filler syringe, with a new sterile needle, on other patients. How does Richard's practice impact IPC?

Response:

By reusing a syringe on another patient, even with a new, sterile needle attached, Richard potentially transmits micro-organisms from one patient to another. His actions place other patients at risk because he failed to assess the risk of potential infectious disease transmission related to syringe reuse.

Richard did not read the product monograph that indicates the product is single-use only and that any remaining unused product needs to be discarded. The [Practice Standard: Medication Management](#) states that RNs prepare, administer and document the provision of medications to patients in a safe, competent and ethical manner. This includes taking appropriate action to resolve or minimize the risk of patient harm with any medication practice.

It is stated in the [Standards of Practice for Registered Nurses](#) that RNs use credible research findings and apply evidence-informed practices and take actions in situations where patient safety is potentially or actually at risk (see Standard 1, indicators 1.6 and Standard 2, indicator 2.6). This accountability includes identifying situations that place a patient at risk of harm and taking evidence-informed measures to minimize and prevent such risks.

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Case Study 4: IPC-Community Setting

Stephanie, an NP, works at a community health center. Currently, there is a rising number of influenza cases and numerous patients are calling to consult with her. Stephanie suggested having a meeting with the healthcare team to discuss measures to prevent the transmission of this virus. What should be suggested as best practices for IPC in this situation?

Response:

It is stated in the [*Standards for the Practice of Primary Health Care Nurse Practitioners*](#) that NPs perform procedures (non-invasive and invasive) for the clinical management/prevention of disease, injuries, disorders or conditions (see Standard 3, indicator 3.11). This also applies to protecting patients from infection risks.

During their meeting, the team consulted the document [*Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings*](#). After discussion, this is what was decided:

- When scheduling appointments for routine clinic visits, patients with symptoms of an acute infection should be identified and asked that, if possible, they defer routine clinic visits until symptoms of the acute infection have subsided.
- Patients who cannot defer their routine clinic visit (i.e., those who need assessment of symptoms/condition) should be informed to follow hand hygiene and/or respiratory hygiene recommendations as indicated by their symptoms. These patients should perform hand hygiene, put on a surgical mask and be directed into an examining room as soon as they arrive and/or schedule their appointment for a time when other patients are not present.
- Signs at the entrance to the clinic reminding symptomatic patients to perform hand hygiene and/or respiratory hygiene as indicated by their symptoms should be posted.