

# Nursing: Infection Prevention and Control

## Seven Things Nurses and Patients Should Question

by  
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### 1 **Don't do a urine dip or send urine specimens for culture unless urinary tract symptoms are present.**

Don't do a urine dip or send urine specimens for culture when patients/clients/residents (including the elderly or persons with diabetes) do not have urinary tract symptoms or when following up to confirm effective treatment. Testing should only be done when there are urinary tract infection (UTI) symptoms such as urinary discomfort, frequency, urgency, supra-pubic pain, flank pain or fever. Dark, cloudy and/or foul-smelling urine may not be suggestive of UTI but rather of inadequate fluid intake. Delirium by itself is not considered a symptom of cystitis in non-catheterized patients. Testing often shows bacteria in the urine, with as many as 50% of those tested showing bacteria without localizing symptoms to the genitourinary tract. Over-testing and treating asymptomatic bacteriuria with antibiotics lead to an increased risk of diarrhea and infection with *Clostridium difficile*. Overuse of antibiotics contributes to increasing antimicrobial resistance. The only exceptions to such overuse are screening in early pregnancy, for which there are clear guidelines, and screening for asymptomatic bacteriuria before urologic procedures in which mucosal bleeding is anticipated.

### 2 **Don't recommend antibiotics for infections that are likely viral in origin, such as an influenza-like illness.**

Since the vast majority of upper respiratory infections are viral, antibiotics are rarely indicated and may lead to adverse effects. Overuse or misuse of antibiotics can lead to increased antibiotic resistance in the individual and the larger society. Antiviral drugs are authorized for influenza treatment and prophylaxis in Canada. Their use will depend on a number of factors such as patient risk, relevant history and the duration and severity of symptoms. If a nurse caring for a patient feels that medication is not the appropriate intervention, the nurse has a responsibility to discuss these concerns with the prescribers.

### 3 **Don't overuse gloves.**

Gloves should only be worn: (1) when a point-of-care risk assessment indicates a risk of contact with broken skin, blood or body fluids, mucous membranes or contaminated surfaces (as per routine practices); (2) for situations where additional (contact) precautions are indicated; or (3) for contact with chemicals (e.g., during environmental cleaning, preparing chemotherapy, etc.). When a task requires gloves, they should be put on immediately beforehand and removed immediately after, at which point hands should be cleaned. Gloves are not necessary for social touch (e.g., shaking hands) or when contact is limited to intact skin (e.g., taking blood pressure, dressing a client) or clean surfaces. Don't wear multiple layers of gloves and don't substitute gloves for hand hygiene. Hand hygiene is the single most important way to prevent transmission of infection, and alcohol-based hand rub (ABHR) is the preferred method. If gloves must be worn, after cleaning hands, allow them to dry before putting on gloves to reduce the risk of chronic irritant contact dermatitis (ICD) and colonization of hands. If hands are not visibly soiled, this risk could be reduced by avoiding handwashing and using ABHR instead.\*

### 4 **Don't send unnecessary or improperly collected specimens for testing.**

Don't routinely send specimens for testing or screening (e.g., for methicillin-resistant *Staphylococcus aureus* [MRSA]) unless clinical evidence of infection is present (e.g., for incisions or eyes). If the highest quality specimen that can be obtained is through a swab of infected skin, tissue or wound, cleanse the area with sterile saline beforehand to reduce surface contaminants. Do not take a specimen of the discharge unless it is specifically ordered. Improperly collected or poor-quality specimens (including swabs) can reduce patient safety by prompting antimicrobial therapy (in cases of colonization) and increase laboratory and pharmacy expenses. To promote sensible antimicrobial use and optimize the treatment of infected patients, while reducing unnecessary microbiology lab workup, attention should be paid to appropriate specimen collection.

**5 Don't collect stool that is not diarrhea for *Clostridioides difficile* infection testing or test of cure.**

Don't routinely collect or process specimens for *Clostridioides* (formerly *Clostridium*) *difficile* testing when stool is not diarrhea (i.e., does not take the shape of the specimen container), the patient has had a prior nucleic acid amplification test result within the past seven days (e.g., polymerase chain reaction) or as a test of cure. A positive test in the absence of diarrhea likely represents *C. difficile* colonization. Repeated *C. difficile* testing within seven days of a negative test generally adds little diagnostic value. A test of cure in patients with recent *C. difficile* infection is also not recommended, as colonization may continue indefinitely. Contact precautions are required until symptoms (i.e., diarrhea) resolve.

**6 Don't prolong the use of invasive devices.**

Invasive devices (such as central venous catheters and endotracheal tubes) should not be used without specific indication (determined by appropriate clinical assessment) and should not be left in place without daily re-assessment. If required, invasive devices should not be used longer than necessary, as they breach skin and body integrity and are portals of entry for infection.

**7 Don't shave hair for medical procedures. Use clippers if hair removal is required.**

Shaving hair (e.g., preoperatively, for vascular access device insertion or electrode application) can result in microscopic cuts and abrasions to the underlying skin surface. According to World Health Organization guidelines, hair should not be removed unless it interferes with a surgical procedure. The use of razors (shaving) prior to surgery increases incidents of wound infection when compared to clipping, depilatory use or the non-removal of hair. If hair must be removed, clipper use is sufficient for any body part (razor use is not appropriate for any operative site). Clippers should be used as close to the time of surgery as possible. To facilitate better contact for electrodes or vascular access device dressings, disposable (or cleaned and disinfected reusable-head) surgical clippers should be used.

## How the list was created

The Canadian Nurses Association (CNA) and Infection Prevention and Control (IPAC) Canada established its Choosing Wisely Canada nursing list by convening an eight-member nursing working group (NWG). The group consisted of infection prevention and control nursing experts from across Canada, representing a broad range of geographical regions and practice settings. The NWG began considering its list by reviewing existing recommendations, including items from Choosing Wisely Canada's specialty societies and the American Academy of Nursing (AAN) Choosing Wisely list, both of which had already undergone rigorous evidence reviews. In addition, members brought forward recommendations on new evidence-based items. The NWG appraised 298 items for their relevance to nursing using a structured process developed for this work. Each of these items (217 from Choosing Wisely Canada, 15 from AAN Choosing Wisely and 66 that were independently submitted) was appraised by two independent reviewers then validated by the group. Using a modified Delphi process for the next two rounds of revision, the group refined and adapted 30 items until it reached consensus on a final seven-item list. A literature review was conducted to confirm the evidence for these items, and supporting nursing research was added where appropriate. The list subsequently underwent extensive consultation, with input from nursing experts in patient safety, members of the Canadian Network of Nursing Specialties, patient advocates, CNA jurisdictional members, CNA nurses, the Canadian Association for Drugs and Technologies in Health (CADTH) and Choosing Wisely Canada's internal clinician reviewers. In September 2017, the Choosing Wisely Canada nursing list was presented to the IPAC Canada and CNA boards, who gave it their full endorsement and support.

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### About the Canadian Nurses Association

CNA represents registered nurses from ten provincial and territorial nursing associations and colleges, independent registered nurse members from Ontario and Quebec and retired registered nurses from across the country. CNA advances the practice and profession of nursing to improve health outcomes and strengthen Canada's publicly funded, not-for-profit health system.



### About Infection Prevention and Control Canada

IPAC Canada is a multidisciplinary, professional organization for those engaged in the prevention and control of infections. IPAC Canada was incorporated under the Canadian Corporation Act in 1976 and is a registered non-profit organization. IPAC Canada has over 1600 members.




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### About Choosing Wisely Canada

Choosing Wisely Canada is the national voice for reducing unnecessary tests and treatments in health care. One of its important functions is to help clinicians and patients engage in conversations that lead to smart and effective care choices.

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