

Guideline Approach in Canada and European Countries

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Canadian Health Care

Federal (PHAC)

- Standards (Guidelines)
- Provincial/Territorial
- Health Care Provision (Funding)
 Regional/Facility
- Delivery



Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings

Public Health Agency of Canada (2013) publications.gc.ca/collections/collection_2013/aspcphac/HP40-83-2013-eng.pdf

- Routine practices in all healthcare settings
- Additional precautions in all healthcare settings and modifications for precautions in specific healthcare settings
 - Contact precautions
 - Droplet precautions
 - Airborne precautions

Overview

"For the purposes of this document health care settings are any location where health care is provided including emergency care, pre-hospital care, hospital, <u>long term</u> <u>care</u>, home care, ambulatory care and facilities and locations in the community where care is provided (e.g. infirmaries in schools, residential facilities or correctional facilities).

Overview (cont'd)

Included in this document are the principles necessary to prevent transmission of microorganisms from patient to patient, patient to health care workers and health care worker to patients across the continuum of care. Principles of transmission, as well as routine practices and additional precautions are outlined for acute care, <u>long term care</u>, ambulatory care, pre-hospital care and home care settings.

H (page 11) <u>Balancing risk and benefit in preventing</u> <u>transmission</u>.

"Precautions that may be justified in terms of risk benefit in an intensive care unit (ICU) or acute care ward may not be of equal benefit or indicated for patient in LTC".

1. Routine practices and contact precautions should be followed for all health care settings and modified as noted below:

- a) Patient placement, accommodation and activities (CII)
 - A point of care risk assessment to determine patient placement, removal from a shared room or participants in group activities should be performed on a case by case basis, balancing infection risks to other patients in the room, the presence of risk factors that increase the likelihood of transmission and the potential adverse psychological impact and the symptomatic patient.
 - Participation in group activities should not be restricted if wound drainage or diarrhea is contained.
 - Patients should perform hand hygiene and be assisted as necessary before participation with group activities.

b) Use of personal protective equipment:

 Gloves should be worn if direct personal care contact with the patient is necessary or if direct contact with frequently touched environmental surfaces as anticipated (BII)

(vs on entering room)

- c) Cleaning of patient environment (BII)
 - In outbreaks, consideration should be given to more frequently cleaning and/or cleaning with disinfectants. This includes bathing and toileting facilities, recreational equipment and horizontal surfaces in the patient room and in particular areas/items that are frequently touched (e.g. hand and bed rails, light cords).

Special Consideration for the Care of Patients with Antibiotic Resistant Organisms in Long Term Care Settings (page 72)

 Policies for managing antimicrobial resistant organisms including initiation and discontinuation of precautions, should be in place, reflect local experience with particular antibiotic resistant microorganisms and should be flexible enough to accommodate the various characteristics of different antimicrobial resistant organisms. It is important to collaborate with other local health care organizations to design a comprehensive control program. Special Consideration for the Care of Patients with Antibiotic Resistant Organisms in Long Term Care Settings (page 72) (cont'd)

- Management strategies should take into consideration the risk and benefits of both the patient and the facility, based on the point of care risk assessment. (CII)
- Control and transmission is primarily the responsibility of direct care giver through hand hygiene and appropriate use of gloves. Ability to maintain hygiene by the patient and caregivers, individualized activity restrictions, selection of low risk roommate, and environmental cleanliness are also factors that need consideration.

Modifications of droplet precautions in Long Term Care (Page 79)

1. Routine practices and droplet precautions should be followed for all health care settings and modified as below:

a. In long term care and other residential settings a point of care risk assessment should be performed to determine patient placement. Infection risk to other patients in the room and all available alternatives should be considered. Modifications of droplet precautions in Long Term Care (Page 79) (cont'd)

- b. Participation in group activities may need to be restricted while the patient is symptomatic.
- c. During an outbreak in a facility restriction of social activities in wards/units/areas should be considered.
- d. Restriction of visitors should be considered during community or facility outbreaks of respiratory infections (CII).

Modifications of Airborne Precautions for Long Term Care (Page 87)

a.Tuberculosis (infectious)

- i. The tuberculosis infectious status of patients in residential facilities should be determined at the time of admission (CII).
- If an airborne infection isolation room is not available in the long term care setting transfer to a facility with airborne infection isolation rooms should be arranged (CII). If transfer is delayed.
 - Place the patient in a single room with the door closed, preferably without recirculation of air from the room and as far away from the rooms of other patients as possible.
 - Limit the number of people entering the room (e.g. no nonessential visitors)

Modifications of Airborne Precautions for Long Term Care (Page 87)

- **b**. Varicella or disseminated herpes zoster or localized herpes zoster that cannot be covered, or measles:
 - i. The immune status (measles/varicella) of patients in residential facilities should be determined at the time of admission and immunization offered, if appropriate (CII).
 - ii. If an airborne infection isolation room is not available in the long term setting transfer to a facility with airborne infection isolation rooms should be arranged. If transfer is delayed see sub-bullets as above. If all personnel and other residents in the facility are immune and if non-immune visitors can be excluded transfer to a facility with an airborne infection isolation room may not be essential (CII).
 - iii. Infected patients should not be placed on units where there are susceptible immunocompromised patients.

Manitoba Guidelines for the Prevention and Control of Antimicrobial Resistant Organisms (2016)

- MRSA
- CPE
- (MDR GNB)
- <u>not VRE</u>
- <u>not ESBL-E</u>

5.0 ARO Management in LTC

"There are important differences between acute care and LTCF with respect to IPC recommendations. A LTCF is a patient's home and IPC precautions must be balanced with promoting an optimal, healthy lifestyle for the patient. Imposing precautions such as in acute care would interfere with social interaction and rehabilitative care and may result in isolation, depression, and anger and even death".

5.0 ARO Management in LTC (cont'd)

Experience to date and results of epidemiologic studies indicate that LTCF patients who are colonized or infected with AROs do not endanger the health of LTCF workers or other patients **when routine practices especially hand hygiene are consistently and properly applied**. However, infected or colonized patients are a potential reservoir for introduction of these micro-organisms into acute care hospitals should they require acute care admission.

MRSA (only specific LTC ARO in document)

- 1.2 Admission screening:
 - Recommendations for acute care
 - Screen patients who were admitted or directly transferred from <u>a health care facility</u>, which includes personal care home...
 - Recommendations for LTC
 - <u>No admission screening</u> recommended. Do not screen LTC patients upon admission/transfer or return to their personal care home.

Accreditation Canada

	Client organizations with on-site survey, 2012								
	Section	Number organizations							
	Acute care	50							
*	Health systems	36							
	Home care	17							
	Long-term care	86							
	Other	88							

WRHA: 2 TCH, 4 AC, 19 personal care, 6 health centres, etc.

Accreditation Canada

Required Operational Practices

"ROPs are evidence-based practices that mitigate risk and contribute to improving the quality and safety of health services"

Accreditation Canada ROPs

5/6 Infection Control

Reduce the risk of healthcareassociated infections across the continuum of care/service

- Hand-hygiene audit (2016)
- Hand-hygiene education and training (2016)
- Infection rates (tracks and shares) (2016)
- Pneumococcal vaccine (2016)
- Reprocessing (2016)
- Policies/procedures meet infection control guidelines
- Influenza vaccine

Accreditation Canada ROPs

Antimicrobial stewardship

- •for organizations providing inpatient acute care services (2013)
- •for inpatient acute care, inpatient cancer, inpatient rehabilitation, and complex continuing care (2016)

Development and assessment of national performance indicators for infection prevention and control and antimicrobial stewardship in European long-term care facilities

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JHI 2013; 85:45-53



NPI	Inclu	ded in:	Component indicator			
	ICPI	ASPI				
National programme	Х		A national committee has agreed, and reviews, an HAI programme annually (ideally online) specific for, or including, LTCFs			
	Х		Evidence that HAI programme is reviewed annually			
		Х	A national committee has agreed, and reviews, an AS programme annually (ideally online) specific for, or including, LTCFs			
		Х	Evidence that AS programme is reviewed annually			
	Х		National HAI committee(s) meet(s) at least twice a year with minutes available (e.g online)			
		Х	National AS committee(s) meet(s) at least twice a year with minutes available (e.g. online)			

Table 1 cont'd

NPI	Inclu	ıded in:	Component indicator			
	ICPI	ASPI				
Guidelines	Х		LTCF IC guidelines exist			
	Х		LTCF IC guidelines are reviewed regularly (e.g. 3-5 yearly)			
	Х		Urinary tract infection guidelines included			
	Х		Lower respiratory tract infection guidelines included			
	Х		Pressure sores guidelines included			
	Х		Enteral feeding guidelines included			
	Х		Transferring patients guidelines included			

Table 1 cont'd

NPI	Inclu	ıded in:	Component indicator		
	ICPI	ASPI			
Guidelines	Х		Staff immunization guidelines included		
	Х		Flu immunization offered to residents guidelines included		
	Х		MRSA guidelines included		
	Х		Transmission-based precautions guidelines included		
	Х		Diarrhoea guidelines included		
		Х	AS guidelines exist		
		Х	AS guidelines reviewed regularly (e.g. 3-5 times every year)		



NPI	Inclue	ded in:	Component indicator			
	ICPI	ASPI				
Expert advice	Х		An MoH-endorsed statement exists that there should be at least one person in charge of, and responsible for, LTCF IC, with documented arrangements for access to professional IC advice in working hours, and arrangements for cover outside these hours			
	Х		IC survey/audit performed regularly (e.g. every 3-5 years) to ensure the above is in place			
		Х	An MoH-endorsed statement exists that there should be access to antibiotic treatment advice during working hours, and a system in place to ensure that the advice given complies with medical standards, and there are arrangements described for cover outside these hours			
		Х	AS survey/audit performed regularly (e.g. every 3-5 years) to ensure the above is in place			

Table II cont'd

NPI	Includ	ded in:	Component indicator		
	ICPI	ASPI			
IC structure	Х	MoH (or equivalent)-endorsed national standards are described for structural resources for IC specific for, or including, LTCFs			
	Х		These are audited/surveyed regularly (e.g. every 3-5 years)		
	Х		The standards should describe ratios of single rooms/total no. of rooms		
	Х		The standards should provide a specification for no. of sinks/no. of residents		

Table II cont'd

NPI	Includ	led in:	Component indicator			
	ICPI	ASPI				
Surveillance	Х		An MoH-endorsed statement exists that there should be national/regional programmes in place for surveillance of LTCF HAIs and alert organisms/conditions			
	Х		There is evidence of feedback of LTCF surveillance data to all who need to know			
	Х		Analyses include risk stratification			
		Х	Includes antimicrobial resistance surveillance			
		Х	Includes antibiotic usage surveillance			
	Х		Includes hand hygiene consumable monitoring			
	Х		Includes hand hygiene audit			
	Х		There should be no routine environmental microbiological screening			

Table II cont'd

NPI	PI Included in:		Component indicator				
	ICPI	ASPI					
Composite	Х		An educational body statement exists that training in IC is embedded into undergraduate and postgraduate clinical training programmes				
		Х	An educational body statement for AS				
	Х		Annual reports exist for MoH (or equivalent)-endorsed reference laboratories providing IC/AS reference services				
	Х		A national research and development IC/AS programme is described				
	X		Evidence of regular research and development funding calls				
		Х	Annual reports exist of national campaigns for hand hygiene or AS				

Development and assessment of national performance indicators for infection prevention and control and antimicrobial stewardship in European long-term care facilities

Cookson et al JHI 2013; 85:45-53

European Region mean (min-max)

				Eastern	Baltic	Northern	Souther n	Wester n
Guidelines	Х		Guidelines available	2 (1-3)	1 (1-1)	4 (3-5)	2 (1-5)	5 (4-5)
	Х		Guidelines reviewed	2(1-3)	1(1-1)	1(1-2)	1(1-4)	2 (1-3)
	Х		Urinary tract infections	1(1-5)	1 (1-2)	4 (3-5)	5 (1-5)	5 (5-5)
	Х		Lower respiratory tract infections	2 (1-5)	1 (1-2)	3 (1-5)	3 (1-5)	5 (2-5)
	Х		Pressure sores	2 (1-4)	1 (1-2)	5 (5-5)	1 (1-2)	4 (2-5)
	Х		Enteral feeding	2 (1-4)	1 (1-2)	3 (1-5)	1 (1-2)	5 (1-5)
	Х		Transferring patients	5 (2-5)	2 (1-2)	4 (3-5)	1(1-2)	5 (5-5)
	Х		Staff immunization	4 (2-4)	4 (1-4)	5 (3-5)	1(1-3)	5 (5-5)
	Х		Flu immunization offered	3 (2-5)	4 (1-4)	5 (5-5)	2 (1-5)	5 (5-5)
			to residents					2010 - 10 - 2010 - 517 D# 51
	Х		MRSA	2 (2-2)	1 (1-2)	5 (5-5)	3 (1-5)	5 (3-5)
	Х		Transmission-based precautions	2 (2-3)	3 (2-3)	4 (3-5)	4 (2-5)	5 (4-5)
	Х		Diarrhoea	1 (1-2)	2 (1-3)	5 (5-5)	2 (1-5)	5 (5-5)
		Х	AS guidelines	2 (1-2)	1 (1-2)	2 (1-4)	1 (1-4)	4 (3-5)
		Х	AS guidelines reviewed	1 (1-2)	1 (1-2)	1 (1-5)	1 (1-2)	4 (3-5)

HALT NPIs Conclusions

Cookson JHI 2013; 85:45

- there is room for improvement in many HALT countries (N=32) in terms of increasing performance against these NPIs.
- prospective monitoring should enable countries to monitor their own progress and benchmark themselves against others
- future work: refining NPIs