

Is long term care prepared for the next pandemic?

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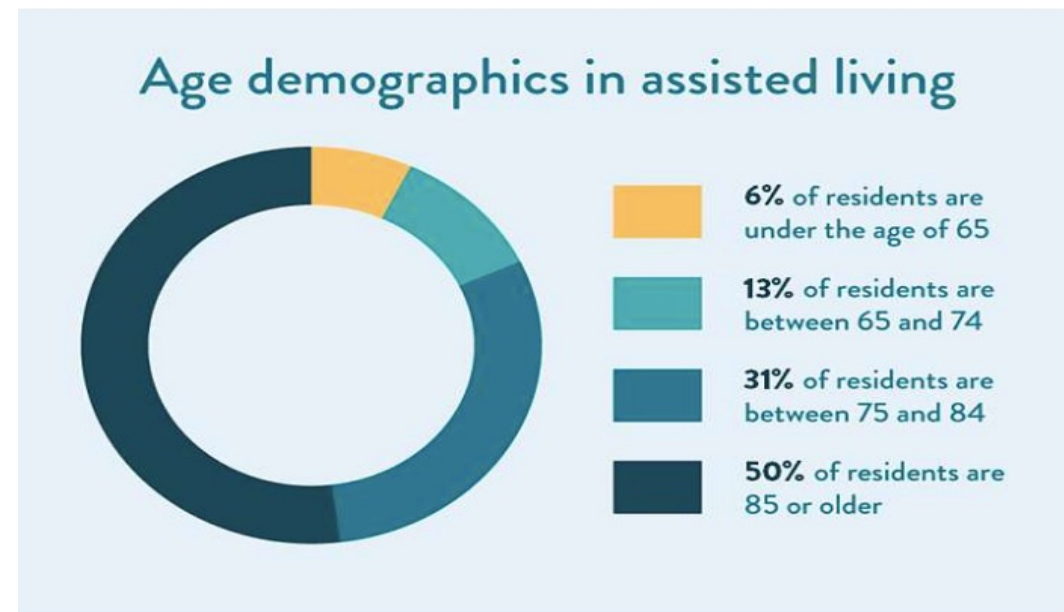
- VP, Infection Control for Southbridge Care Homes
- Editor-in-Chief, IPAC Canada



What is a long-term care home?

- Long-term care homes are residential homes that provide ongoing care to patients whose care needs cannot be met in the community.
- People may require this level of support due to:

- ❖ advancing age
- ❖ disability
- ❖ declining health



<https://www.aplaceformom.com/senior-living-data/articles/assisted-living-statistics>

What services are provided in long-term care homes?

- ❖ Nursing and personal care
- ❖ Specialized services such as physiotherapy & occupational therapy
- ❖ Assistance with activities of daily living
- ❖ Treatment and medication administration
- ❖ Meals
- ❖ Laundry services
- ❖ Social/recreational programs





Canada

Total number of long-term care homes

2,076

Publicly owned



Privately owned



Private for-profit



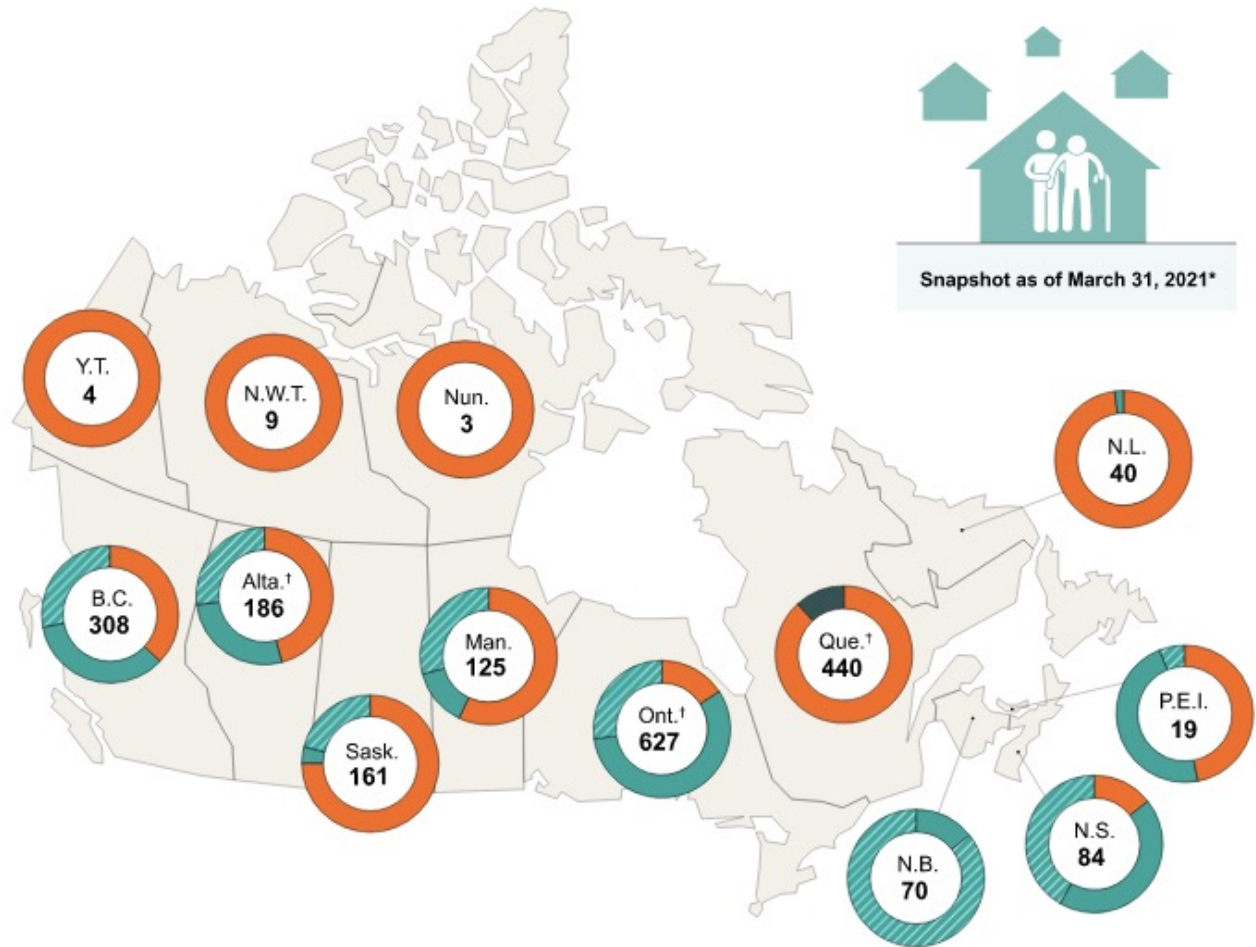
Private not-for-profit



Private (no breakdown)[†]



Snapshot as of March 31, 2021*



Notes

* Data for all jurisdictions is as of March 31, 2021, except Quebec (as of April 1, 2021) and Alberta (as of February 28, 2021).

[†] Private for-profit and not-for-profit ownership breakdown information for some long-term care homes in Quebec, Ontario and Alberta was not available at the time of publication.

Profile of residents in long-term care

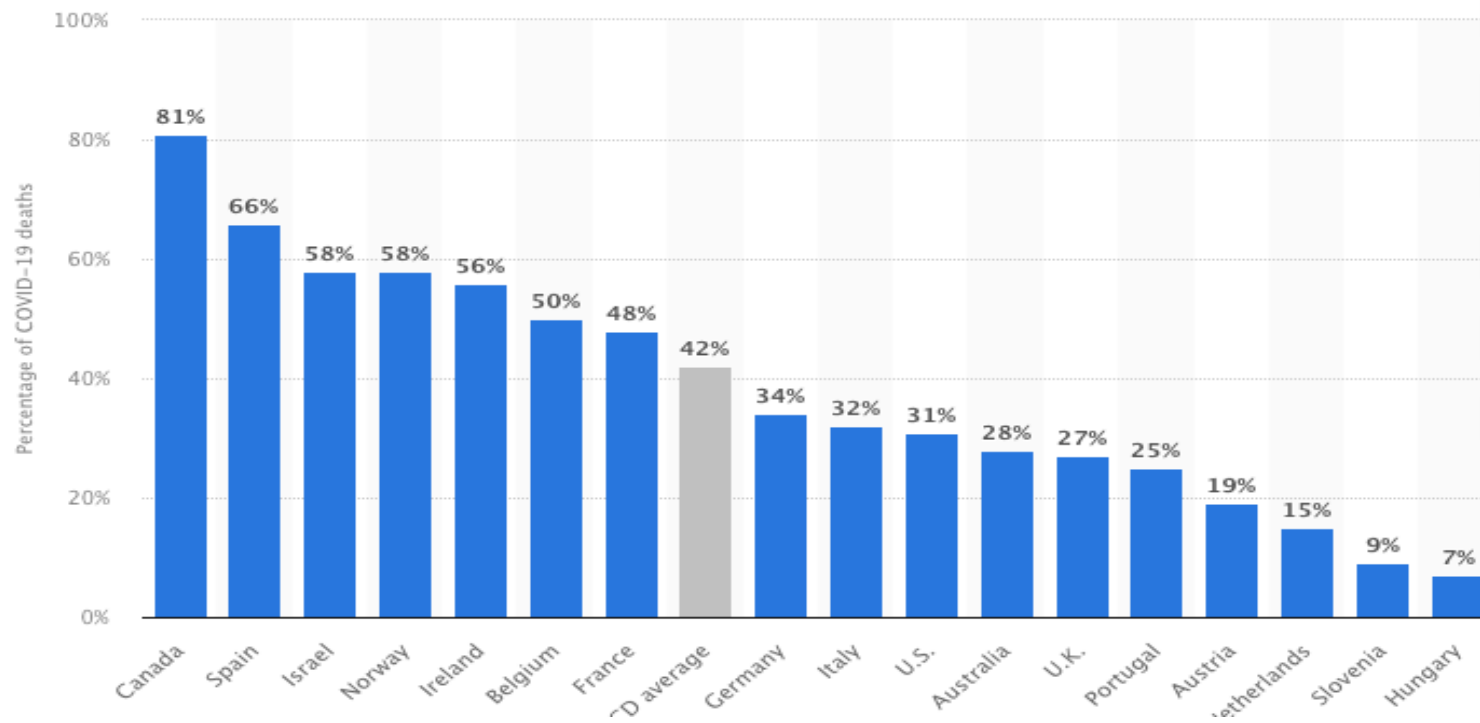
Selected Characteristics	%
Physical health	
Occasional bladder incontinence	83.8
Occasional bowel incontinence	69.0
Diagnosis of hypertension	64.5
Some indication of health instability ¹	62.0
Diagnosis of diabetes	28.4
Total dependence in activities of daily living	13.4
Diagnosis of cancer	10.6
Daily pain ²	5.2
Mental and cognitive health	
Moderate to very severe cognitive impairment ³	72.1
Diagnosis of dementia	63.4
Limited or no social engagement ⁴	41.7
Some aggressive behaviour ⁵	40.7
Signs of possible depression ⁶	24.3

Susceptibility of seniors to infection

The following risk factors put seniors at increased risk of infections in LTC settings:

- **Increase use of invasive devices** (like catheters, ventilators, or feeding tubes)
- **Malnutrition**, which is common in older adults, is associated with impaired immune function manifested by a decrease in cell-mediated immunity.
- **Immunosenescence**, the age-related changes that occur in the immune system may lead to decrease in the effectiveness of the immune system in older adults. Due to immunosenescence, the immune response from vaccinations for older adults has been shown to be weaker than the response in younger adults
- **A diminished ability to complain** of or self-identify symptoms, or increased likelihood of presenting with atypical symptoms or signs of infection.
- **Cognitive deficits**, which may complicate compliance with basic sanitary practices, such as hand washing and functional impairments associated with incontinence or immobility.
- **Comorbid conditions**, such as diabetes, neurological disease, cerebrovascular disease, and cardiorespiratory disease, are associated with physiological and functional impairment, which contribute to the risk of infection.

Percentage of all COVID-19 deaths in select countries worldwide that were among long-term care residents as of May 2020

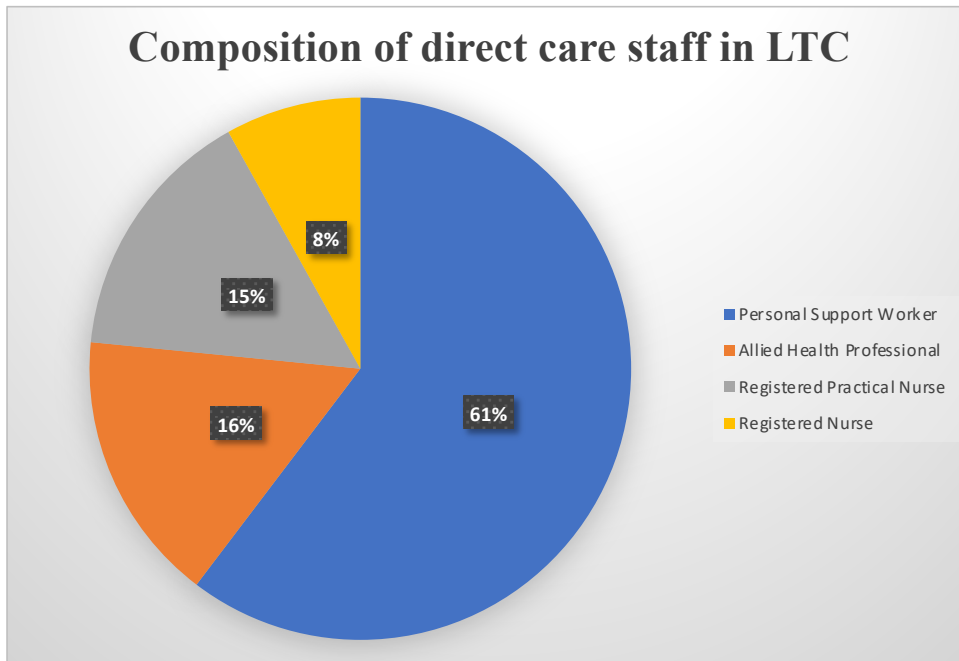


Source: Organization for Economic Co-operation and Development. LTC: Long-term care. June 2020.

Operational & Logistic Challenges of Infection Prevention and Control in Long-Term Care



Knowledge base of direct care staff in long-term care



- ✓ The overall knowledge score of LTC PSW on IPAC measures was **77.3%** CI (76.5% – 77.9%).
- ✓ Gaps in Visitors and family compliance to IPAC measures

Statement	Correct Response	Percent
Hand hygiene must be performed before and after contact with a resident.	589	99.7%
When handling soiled laundry, gloves should be worn.	570	99.1%
Bedpans should be covered while being transported to a disposal area.	567	98.6%
Before collecting a urine sample from a resident, wash your hands and put gloves on before cleaning the genitals.	564	98.1%
A clean sheet that falls on the floor should be considered soiled even if the floor has recently been cleaned.	570	96.4%
Only gloves that are visibly soiled can spread germs.	552	96.0%
Gloves can be used instead of practicing hand hygiene.	562	95.1%
Hand hygiene should be performed before moving to a clean-body site from a soiled site during care of the same resident.	540	93.9%
Gloves are not to be used for the care of more than one resident.	545	92.2%
A urine sample should be collected from either “first-catch” or “mid-stream”.	499	84.4%
A urine sample can be stored for as long as needed if it is in the dedicated fridge for lab samples.	492	83.2%
Bedpans and urinals must be cleaned in a soiled utility room.	474	80.2%
Alcohol-based hand rub should be used while wearing gloves.	466	78.8%
When handling soiled laundry, shake out any foreign objects.	449	78.1%
Bedpans and urinals can be cleaned in the resident washroom.	442	76.9%
A urine sample can be collected from a bedpan or urinal.	407	70.8%
Bedpans and urinals can be cleaned manually.	317	53.3%
Gloves are not required for direct care when contact is limited to the resident’s intact skin (such as dressing the resident).	197	34.3%
Hand washing with soap and water is the preferred method of hand hygiene when there is no obvious dirt.	181	31.5%
Special laundry bags should be used for residents with infections.	27	4.6%

Qu K et al. Voices of care: A mixed-methods study of key factors enhancing support workers’ engagement in IPAC practices in Canadian LTC homes. *Canadian Journal of Infection Control* 2026. In Press.

Staffing issue

- ❖ Recruiting, retaining direct care staff remains a challenge
- ❖ This may be worsen during an epidemic or pandemic

During the COVID-19 pandemic, some staff left LTC because of:

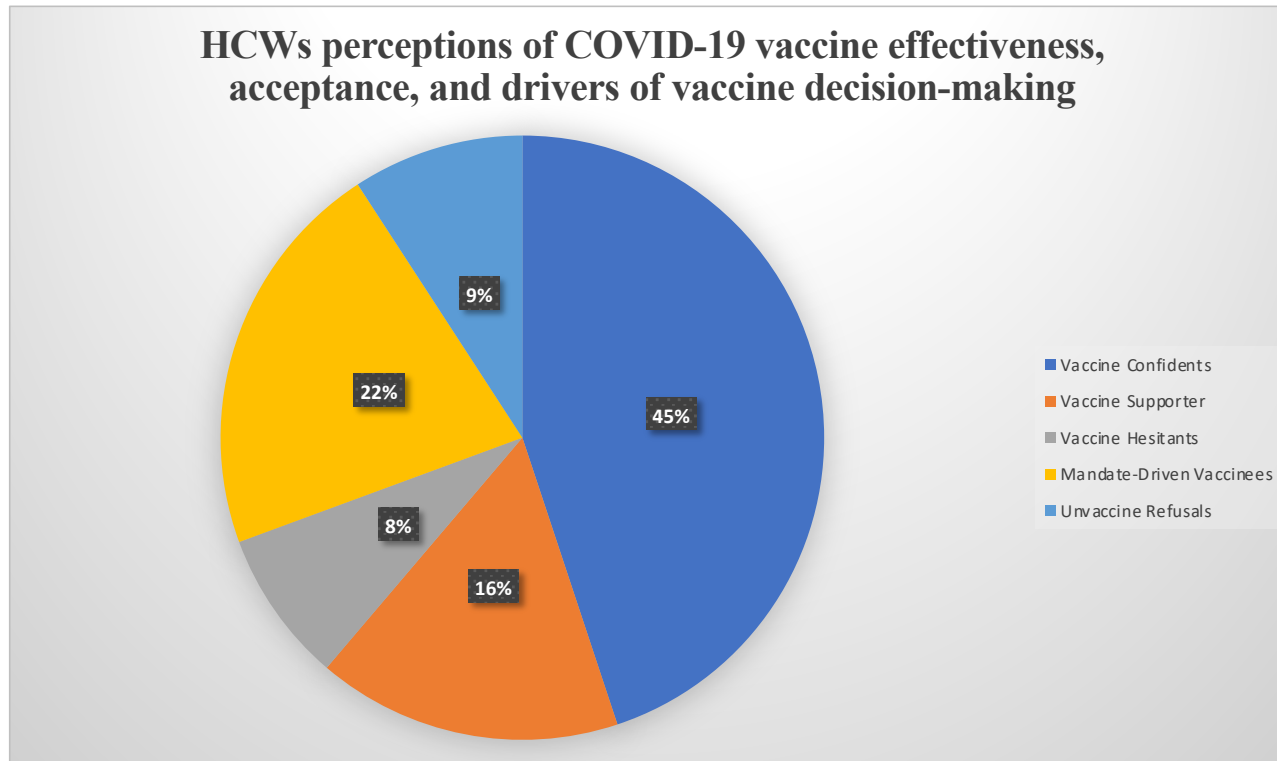
- Fear of becoming infected
- Some moved to more paying jobs with less infection risk



Meeting Optimum Direct Care Hours is a Challenge

- ❖ Ontario gov't increased from 2 hours 45 mins of direct care 3 hours
- ❖ Working towards a target of 4 hours

Vaccine Acceptance by Healthcare Workers



Sample size 5,372

IPOS: National cross-sectional survey of health workers perceptions of COVID-19 vaccine effectiveness, acceptance, and drivers of vaccine decision-making. NOV 2023.

https://publications.gc.ca/collections/collection_2024/aspc-phac/H14-478-2024-1-eng.pdf

Prepared for the PHAC

Communal nature of long-term care



Dinning



Programs



Resident Bill of Rights and IPAC Measures

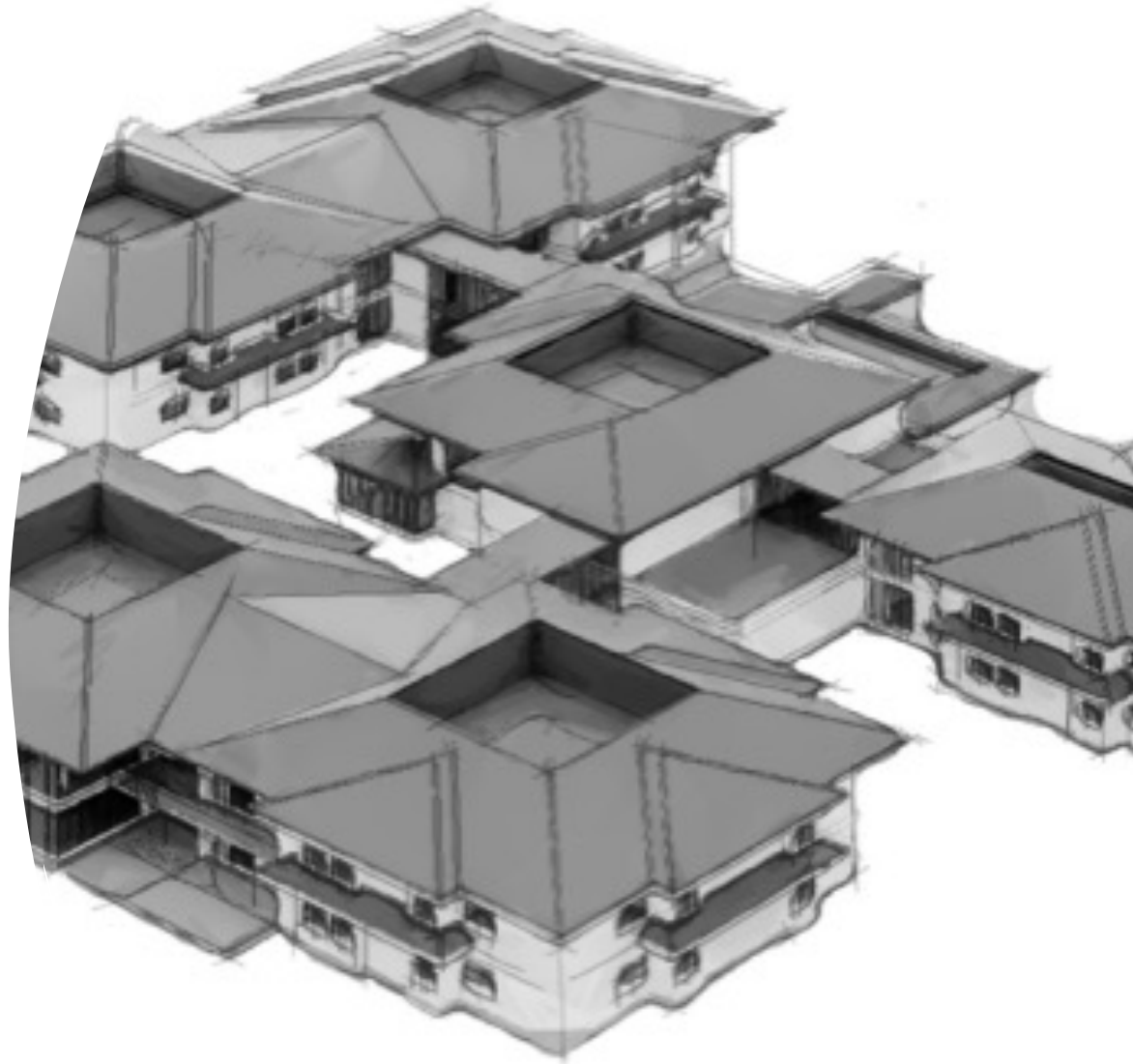
Long-term care operators struggle to balance Resident Bill of Rights and the implementation of appropriate IPAC measures, e.g.,

- resident cohorting
- restriction of outdoor activities
- restriction of visitation
- cancellation of group activities and communal dining

These, and other imposed isolation measures on one hand have been salient in mitigating the risk of infection transmission within the home, but on the other hand, have had significant implications in residents' rights and freedom as well as their mental wellbeing

Challenges due to Long- Term Care Facility Design

LTC homes are not designed to deal with outbreaks of pandemic potential



Rooms types

Pre-COVID-19 pandemic



The shared accommodation settings in many LTCHs facilitate the transmission of infections among residents



Challenges with isolation or cohorting of residents who are infected



Crowding

Outbreak area

Non-outbreak area

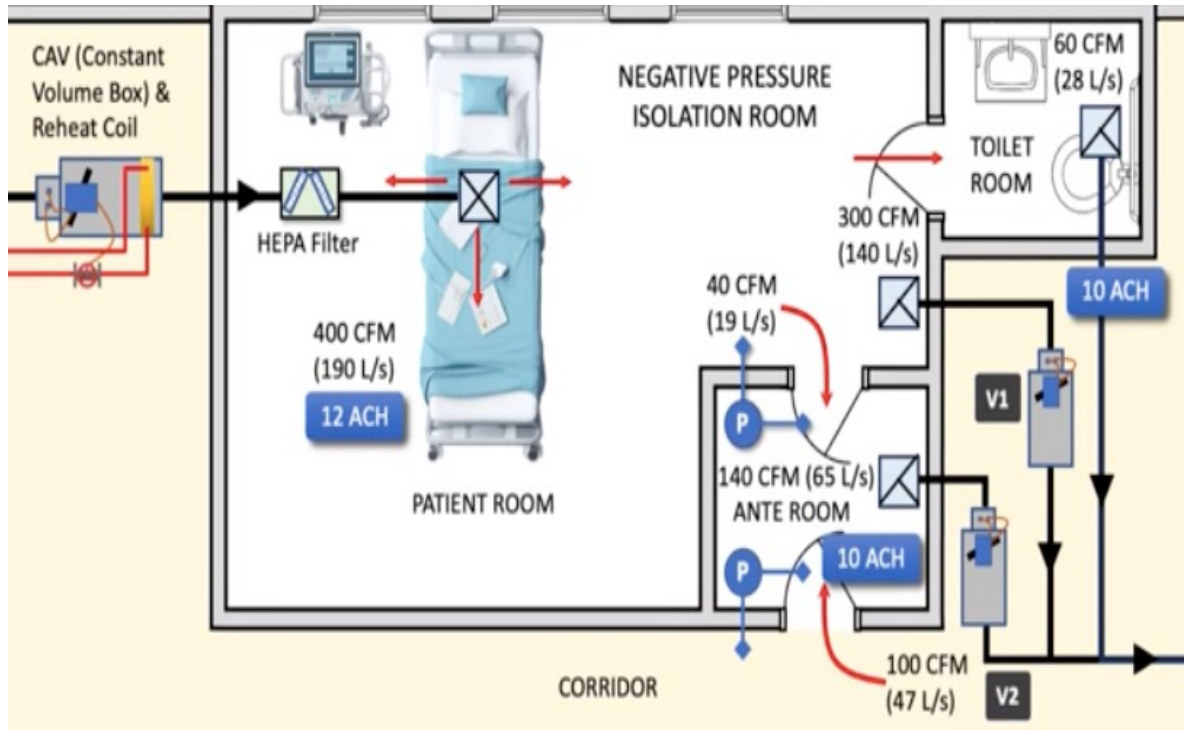
Exposed and well

Exposed and ill

Confirmed positive cases

No isolation rooms

Lack of Healthcare Grade Ventilation System



Portable HEPA filter device

e.g., negative pressure or Airborne Infection Isolation Room

The control of infections spread by airborne means will be impossible, e.g., TB, Measles, Varicella, etc.

Hand Hygiene Facility

Acute Care Settings – Hand wash facilities readily available in patient care areas



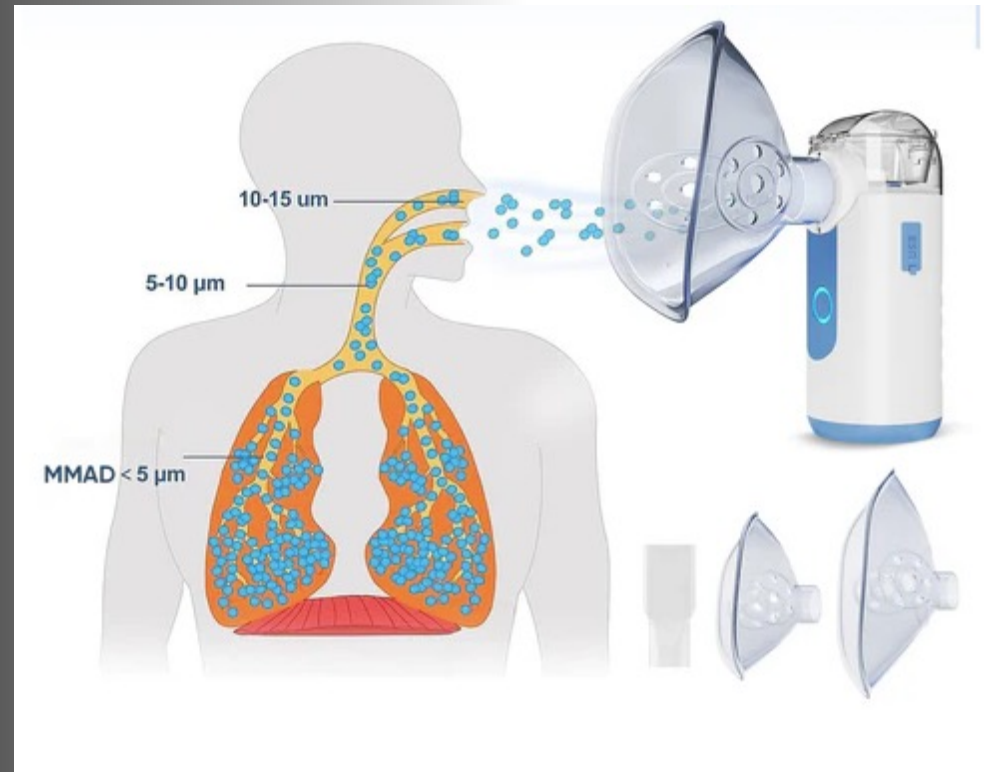
Long-Term Care Settings – Hand wash facilities **not** readily available in resident care areas



Aerosol Generating Medical Devices (AGMDs)

Most residents in LTC homes use AGMDs

These devices increases aerolization of microorganisms increasing spread.



Is long term care prepared for the next pandemic?



WED
18

February 18 @ 1:30 pm AEDT

Gloves Off – A Quality Improvement Project

Australasian Teleclass

Patricia Knight and Dr. Sarah Browning, John Hunter Hospital Campus, Australia

\$40.00



THU
19

February 19 @ 1:30 pm AEDT

An Overview of the Leapfrog Group's Hand Hygiene Standard

Prof. Matt Austin and Preeti Joshi, Johns Hopkins School of Medicine

Free



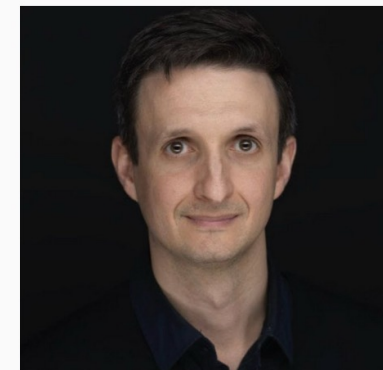
THU
26

February 26 @ 1:30 pm EST

Code Red: Measles On the Ward

Prof. Yves Longtin, McGill University

\$40.00



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