

Performance of Infection Control in Hong Kong

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Background

- » -Residential Care Services for Elderly in Hong Kong

Residential Care Services for Elderly in Hong Kong

- ▶ Types of residential care homes for elderly (RCHEs)
 - Non-private homes
 - (i) nursing homes
 - (ii) care and attention homes for the elderly
 - (iii) homes for the aged,
 - (iv) hostels for the elderly
 - (v) contract RCHEs
 - (vi) private care and attention homes for the elderly participating in the Enhanced Bought Place Scheme
 - Private homes
 - (vii) nursing homes under the Nursing Home Place Purchase Scheme and
 - (viii) private RCHEs

- ▶ Licensing authority
 - ▶ Social Welfare Department

- ▶ Related legal provision
 - ▶ Law of Hong Kong Chapter 459 Residential Care Homes (Elderly Persons) Ordinance (Cap 459)

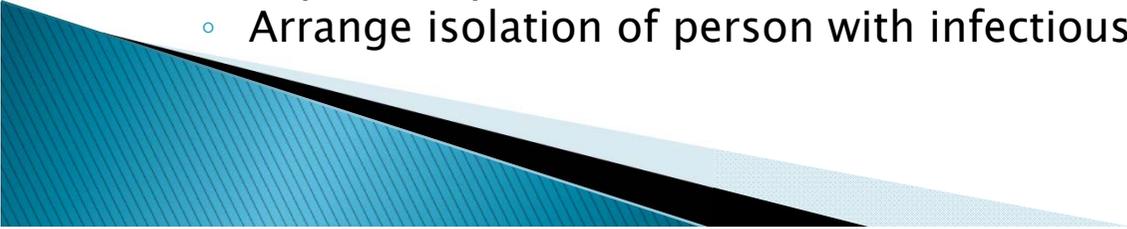


Infection Control related Regulatory Requirements

- ▶ Section 8 (3) (c), Cap 459
 - The Director may refuse to issue a license if it appears to him that such premises do not comply with any requirements relating to, health, sanitation etc. set out in any Code of Practice issued by the Director

 - ▶ Section 17 Cap 459
 - Appointment of Inspectors (compliance check)

 - ▶ Section 18, CAP 459A Residential Care Homes (Elderly Persons)
 - Regulation Report suspected infectious disease case

 - ▶ Code of Practice (COP), Chapter on Infection Control
 - Implement control of infectious diseases in accordance with the Guidelines on Prevention of Communicable Diseases in Residential Care Homes for the Elderly
 - Designate an Infection control officer (ICO)
 - Report suspected outbreak
 - Arrange isolation of person with infectious disease
- 

The Survey

- » Integrated Assessment for Residential Care Homes for Elderly (RCHEs)

Background

2003	March–June	72 RCHE Residents infected by SARS, 52 died
	August	Infection control checklist began
	October	Infection control checklist completed
		Issued infection control guidelines – Input from Hospital Authority, Department of Health and Social Welfare Department
	November	Introduction of Infection Control Officer in RCHEs
2003–2004		Training for Infection Control Officers – Briefing forum – Training workshop – On-site training – Sharing Forums



Background

2005

Evaluation of infection control survey

Free vaccination programme for RCHE staff

Annual Infection Control Officers Training by CHP

2007 September

2nd edition of infection control guidelines

2009 July

Incorporated with health education needs assessment

- drug management
- fall prevention
- other health needs

2015 January

3rd edition of infection control guidelines

Objectives

- ▶ To collect data for assessment of RCHEs' staff training need
- ▶ Rectify irregularities during the course with health advice and skill training
- ▶ Information sharing with stakeholder to facilitate planning
 - Infection Control Branch of Centre for Health Protection
 - Hospital Authority
 - Social Welfare Department (the regulatory authority)



Methods

- ▶ A cross-sectional survey
- ▶ Self-administered questionnaire
 - Residents' profile
 - Manpower
 - Infrastructure
- ▶ Inspection and interview
 - Environmental hygiene
 - Hardware and software for infection control, among other areas



Sampling (2015)

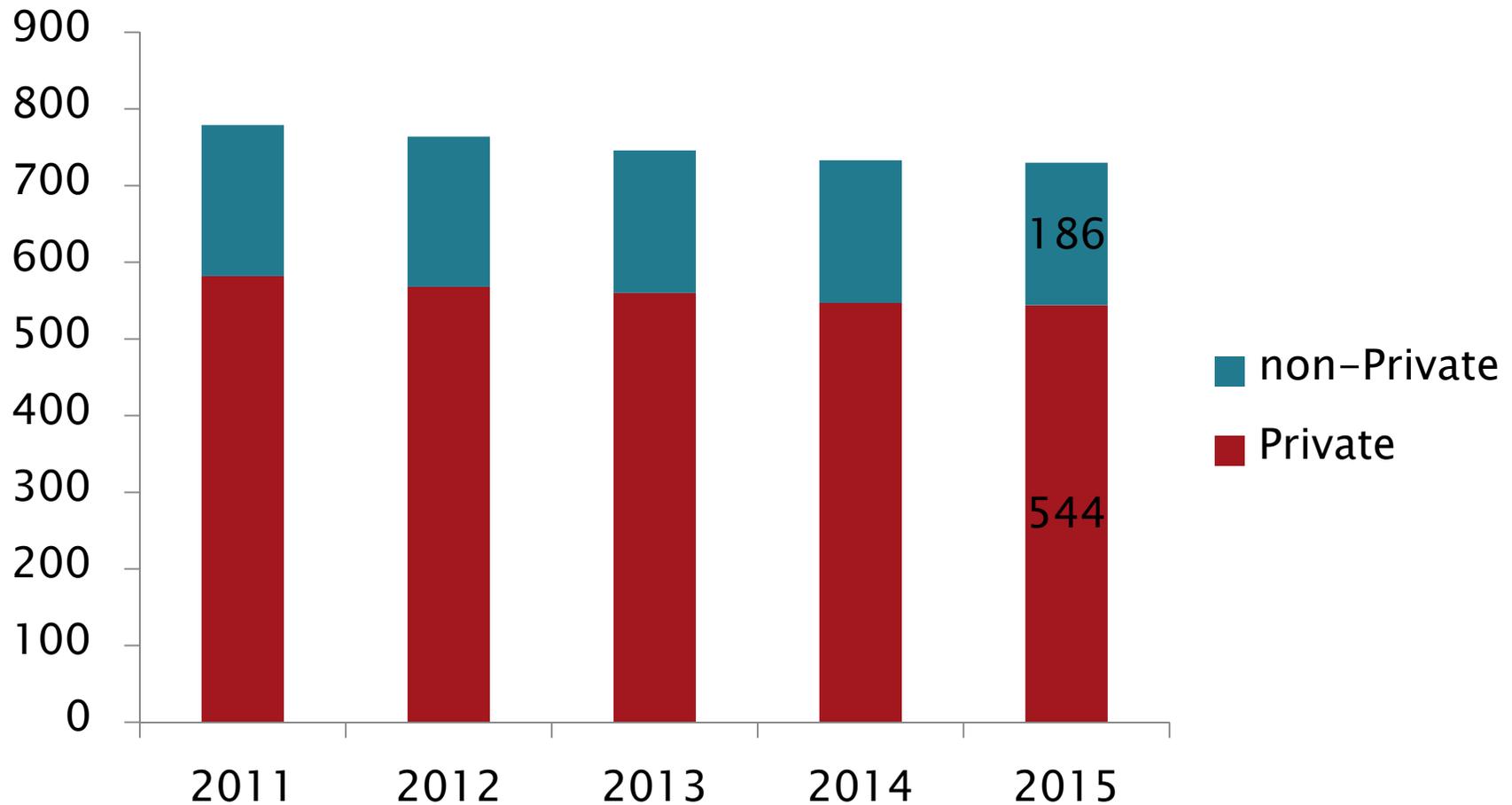
- ▶ Target population
 - All RCHEs in Hong Kong according to the updated list kept by Social Welfare Department – 740 (as at June 2015)
- ▶ A total of 730 RCHEs were recruited (response rate 98.6%)
 - 3 refused
 - 6 ceased operation before survey
 - 1 closed for renovation
- ▶ Completion rate
 - 100%



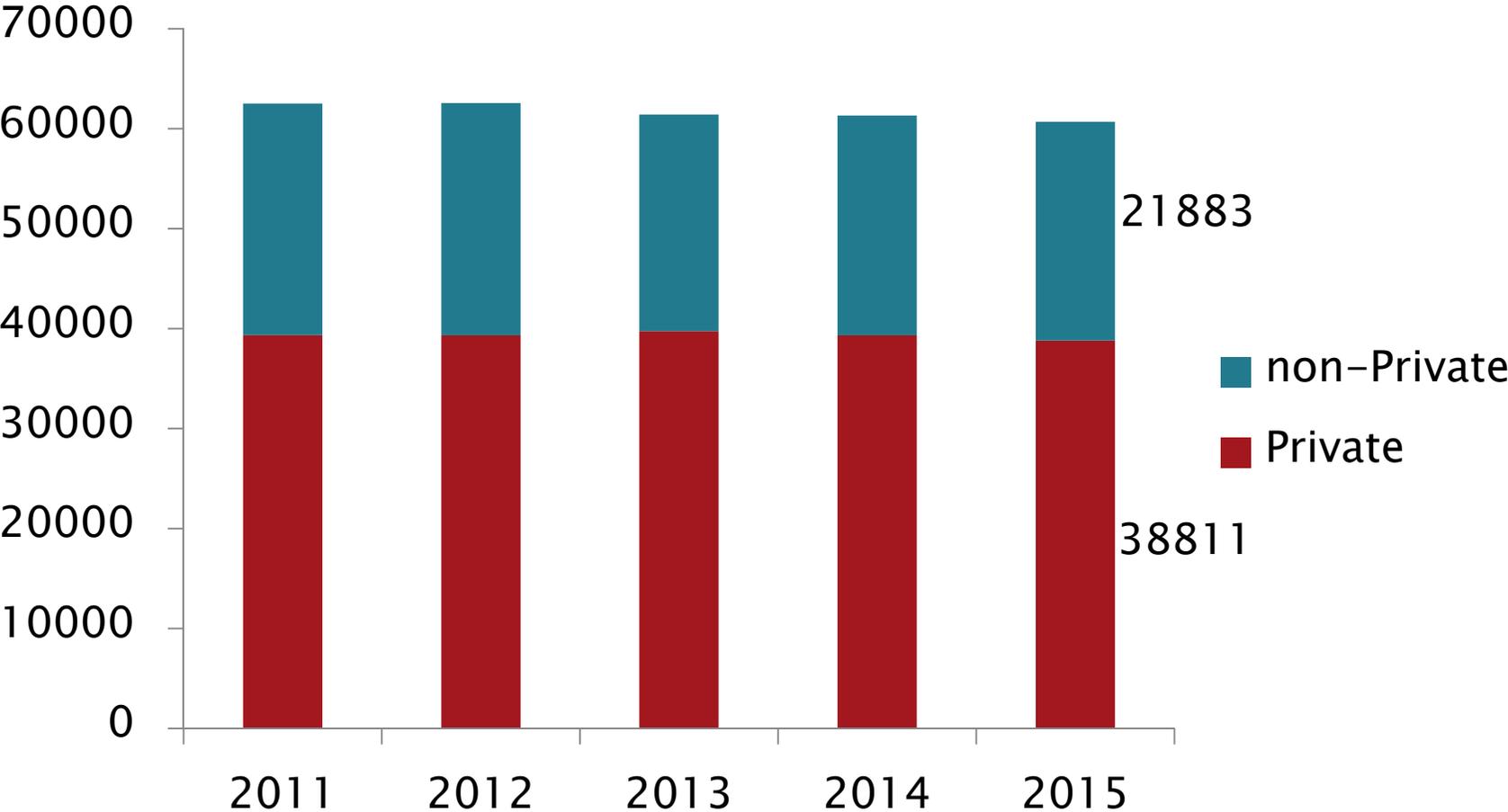
Findings



Types of RCHEs under Survey

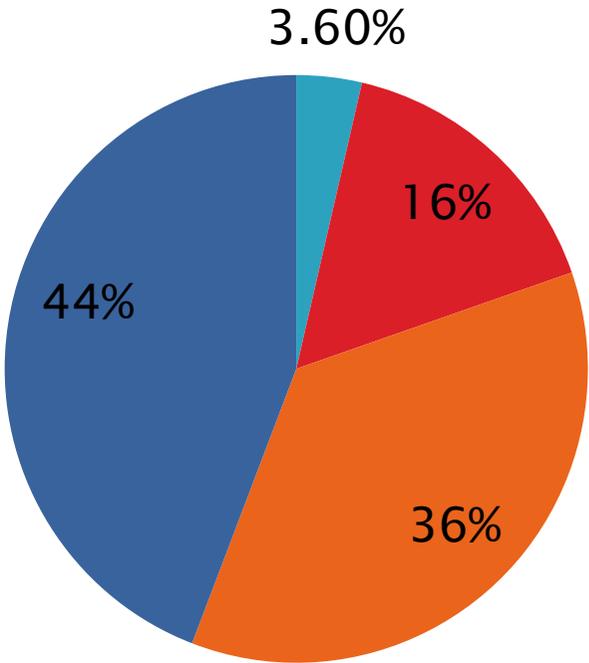


Distribution of Residents in RCHEs

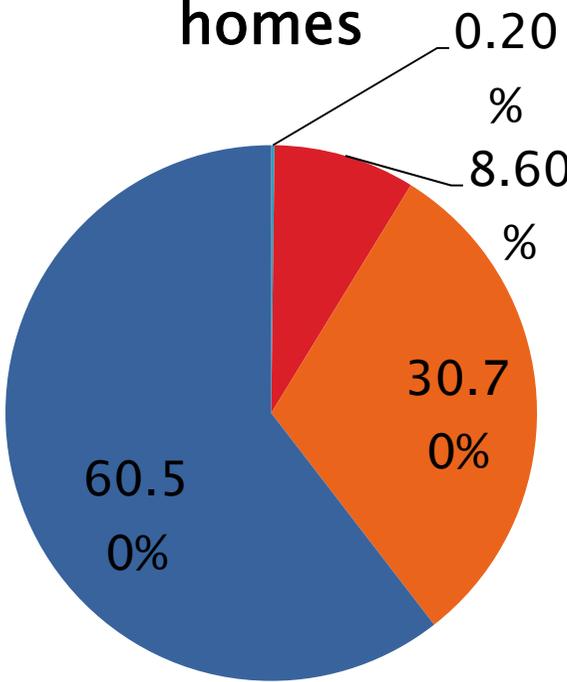


Residents' profile – Age

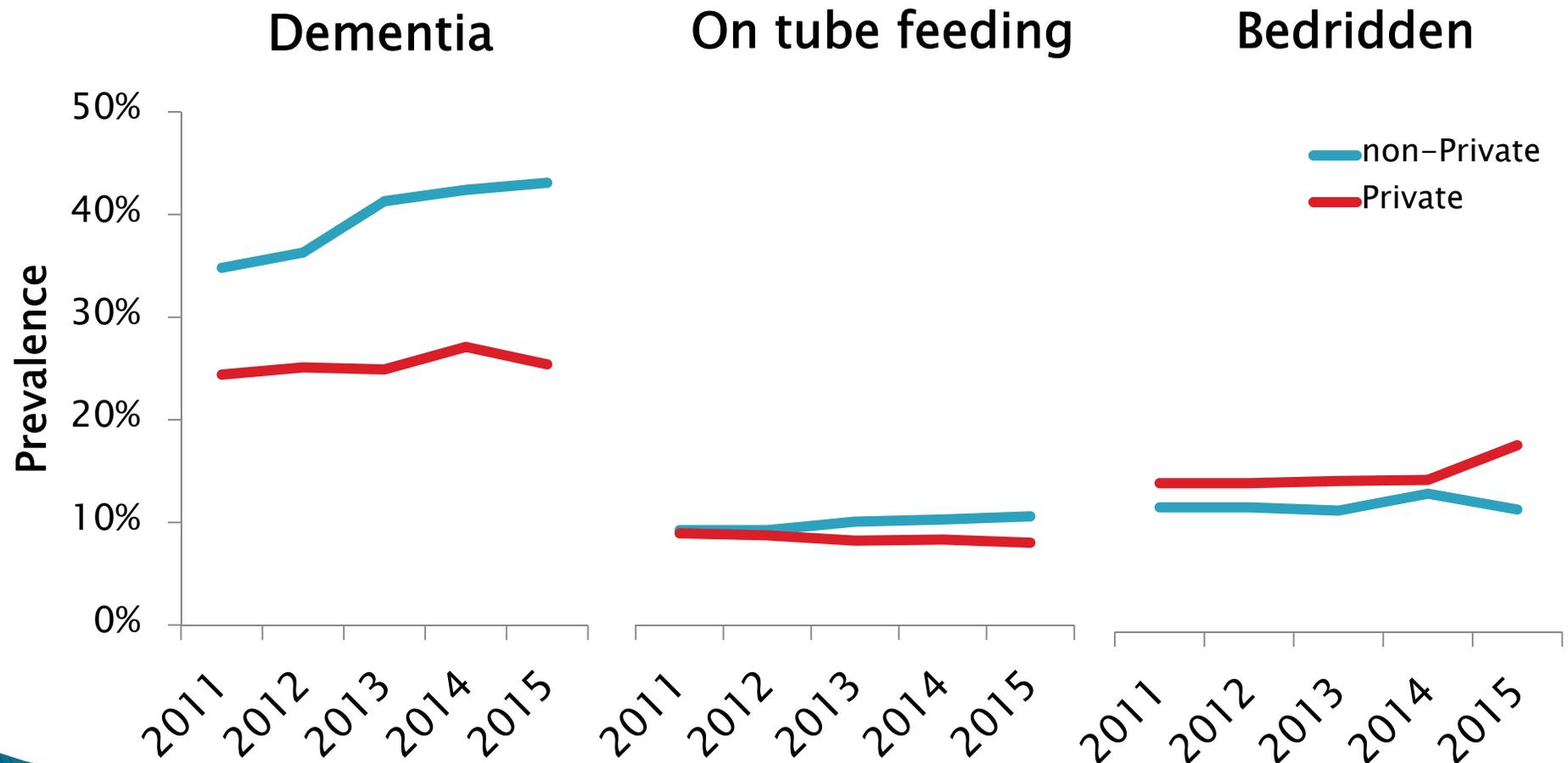
Private homes



Non-private homes



Proportion of Residents Required Special Care



Staff profile: staff to residents ratio

	<u>To resident ratio</u>	
	Private homes	Non-Private homes
Nurse	1:71	1:10
Health care worker	1:16	1:17
Personal care worker	1:7	1:4

Nurse: Professionally trained

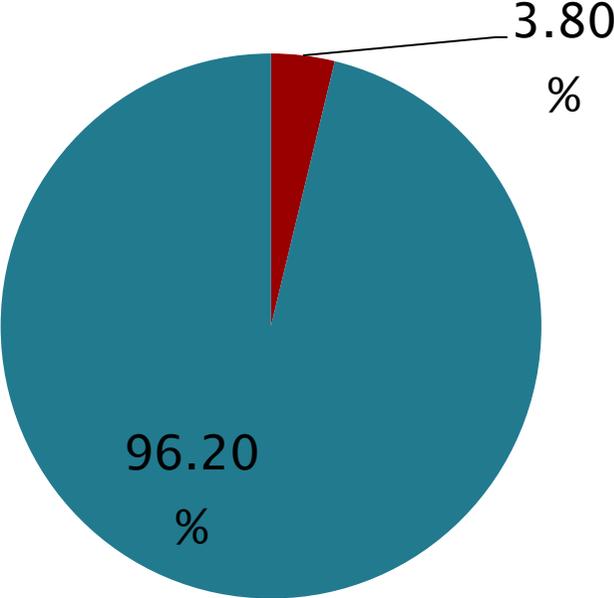
Health worker: completed training authorized by Director of Social Welfare, Secondary 5 or equivalent

Personal care worker: Anyone employed for personal care

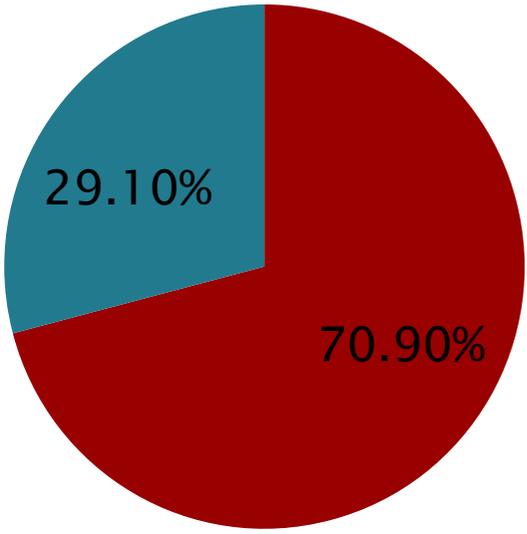


Percentage of RCHEs without professional nursing support

Non-Private



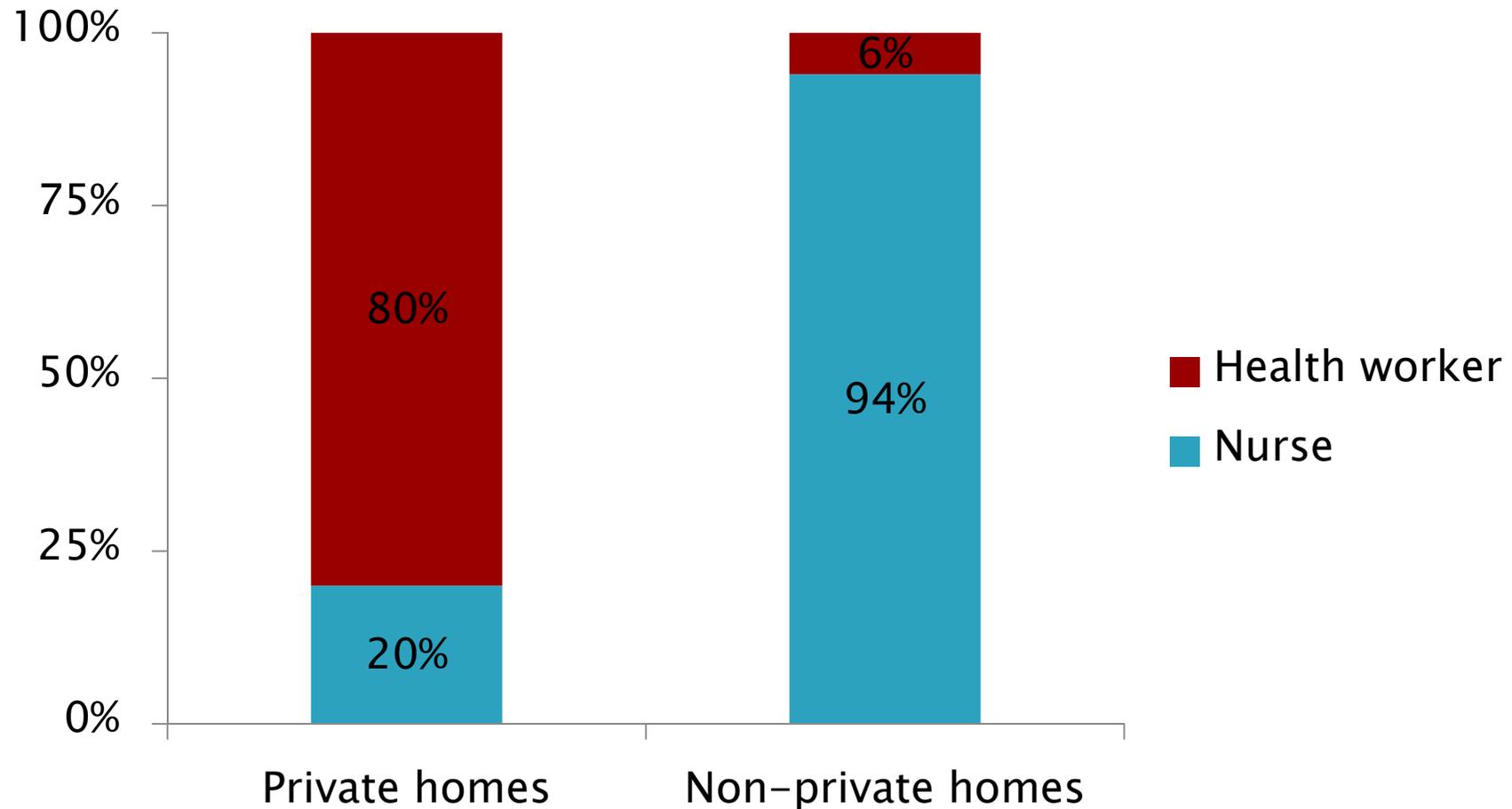
Private



■ No nurse



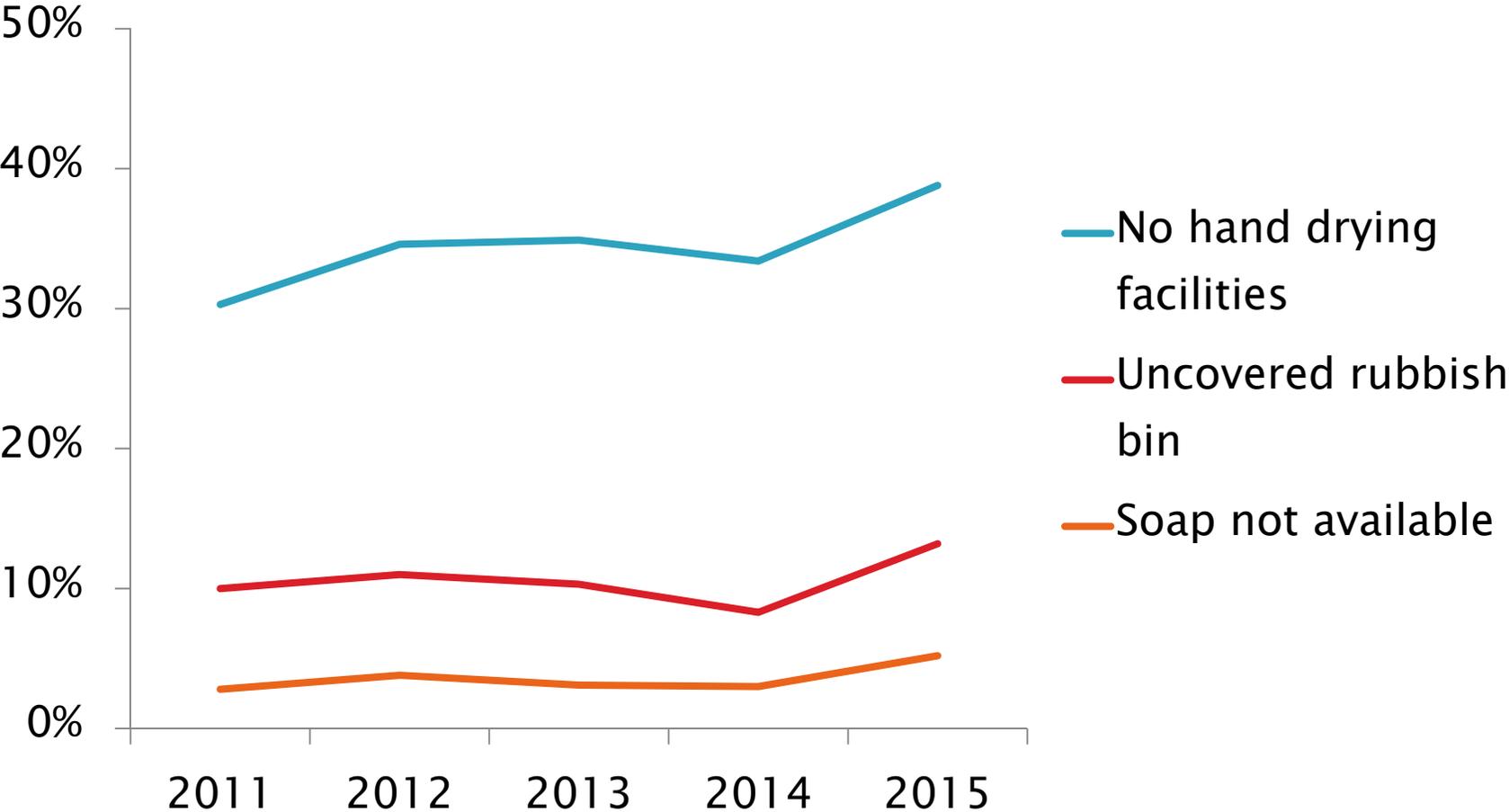
Who has taken up the role of Infection Control Officers?



Environment & Facilities

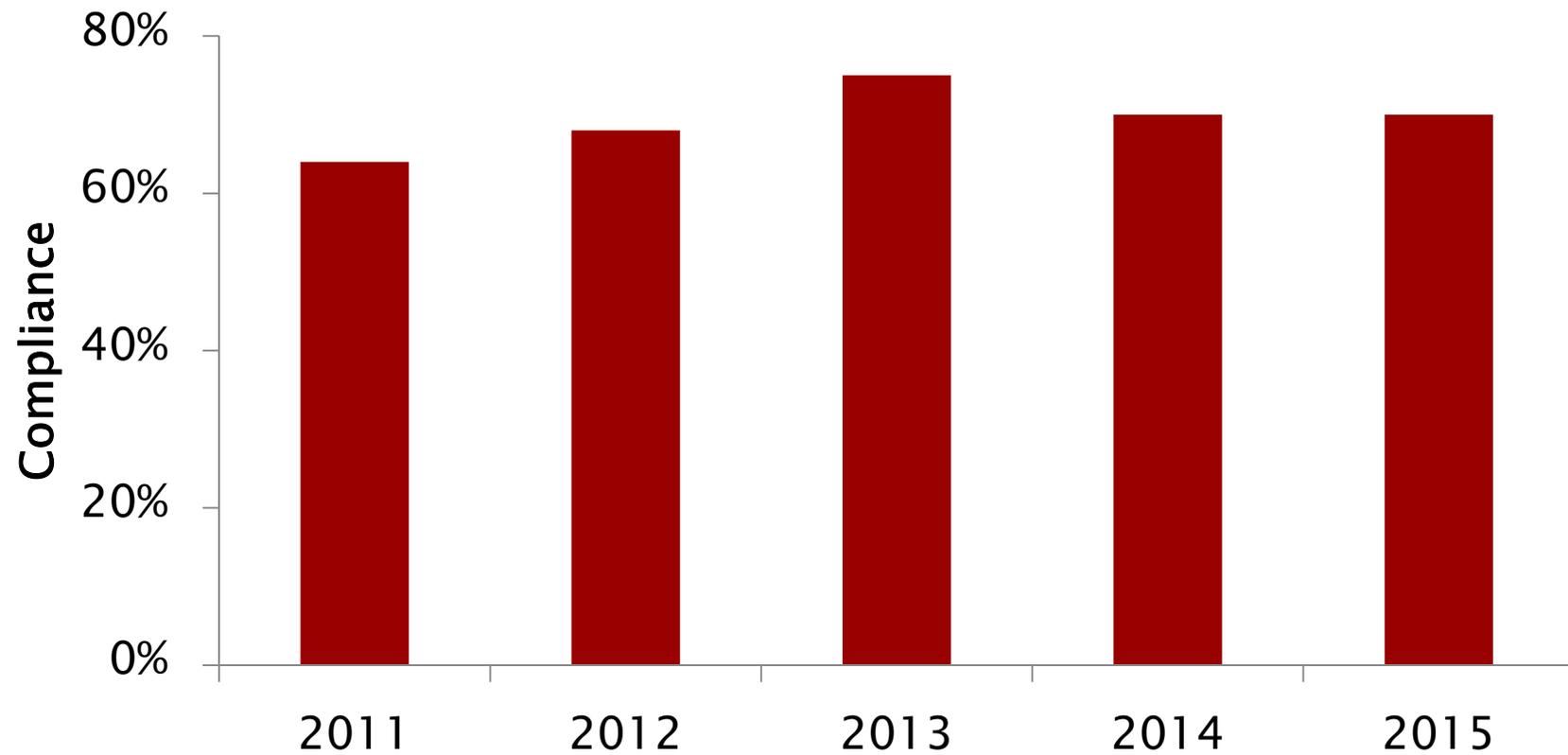


Environment: Washroom

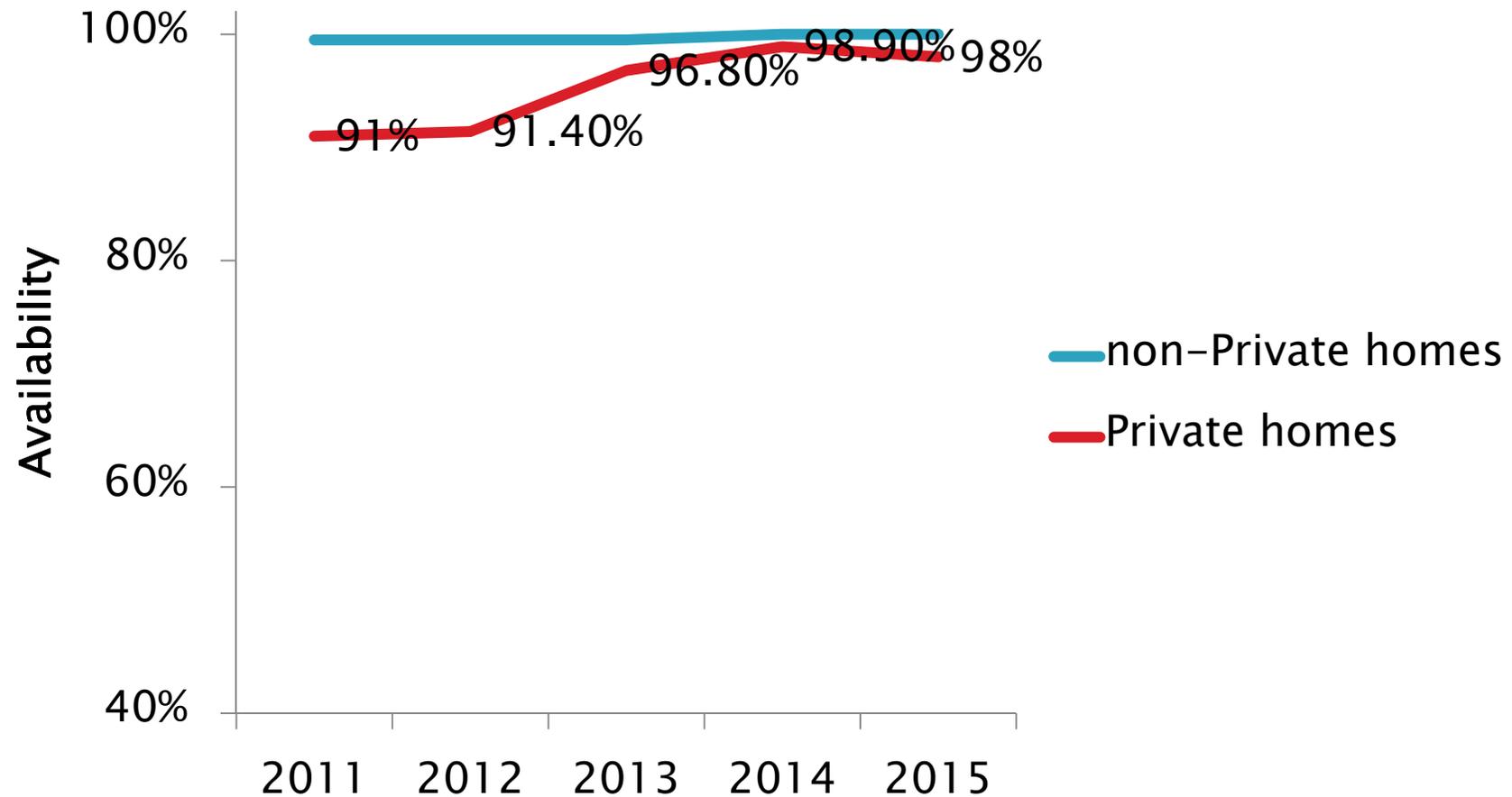


Environment: Kitchen

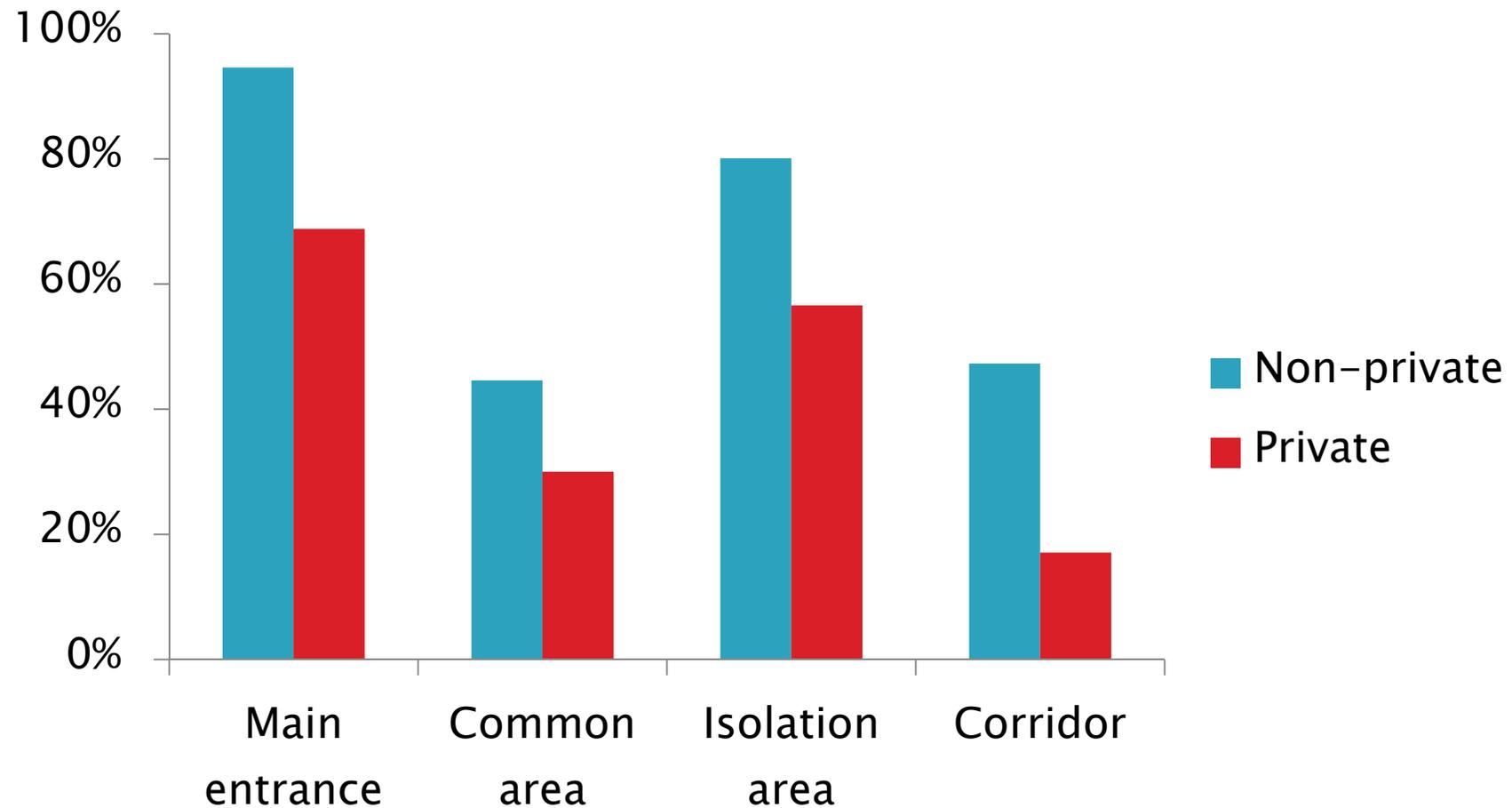
Refrigerator temperature



Availability of Alcohol hand rub

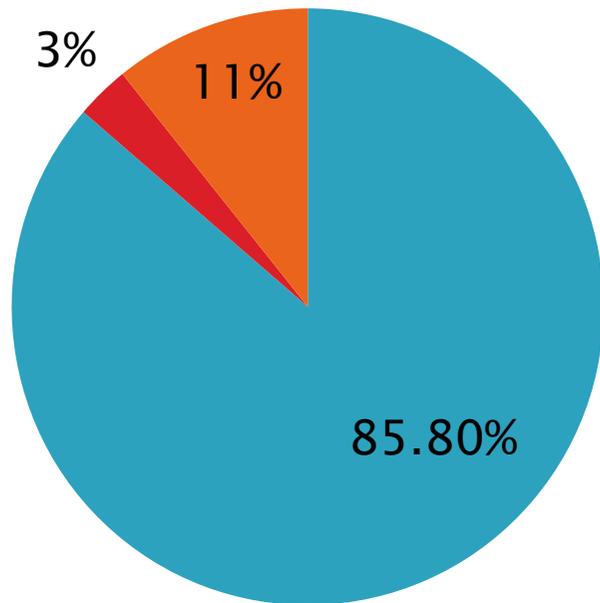


Availability of Alcohol hand rub – by Location



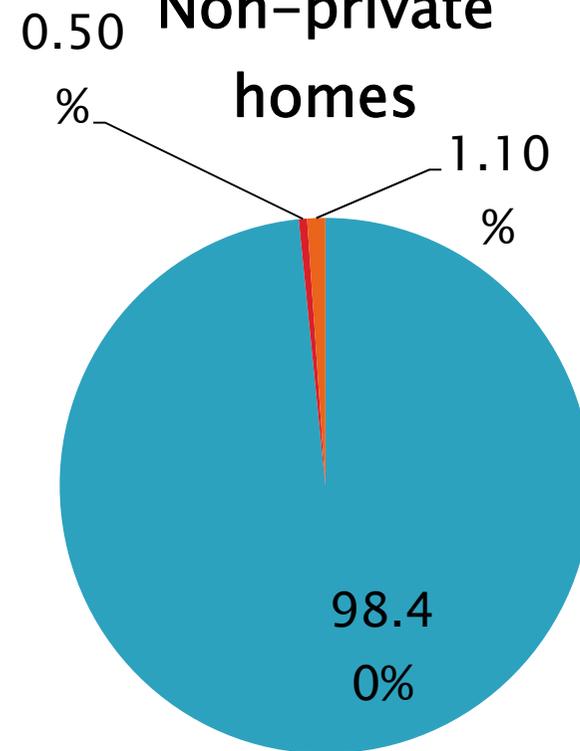
Alcohol based hand rub- Conditions

Private homes



- Correct concentration, not expired
- Incorrect/uncertain concentration
- Expired/uncertain expiry date

Non-private homes



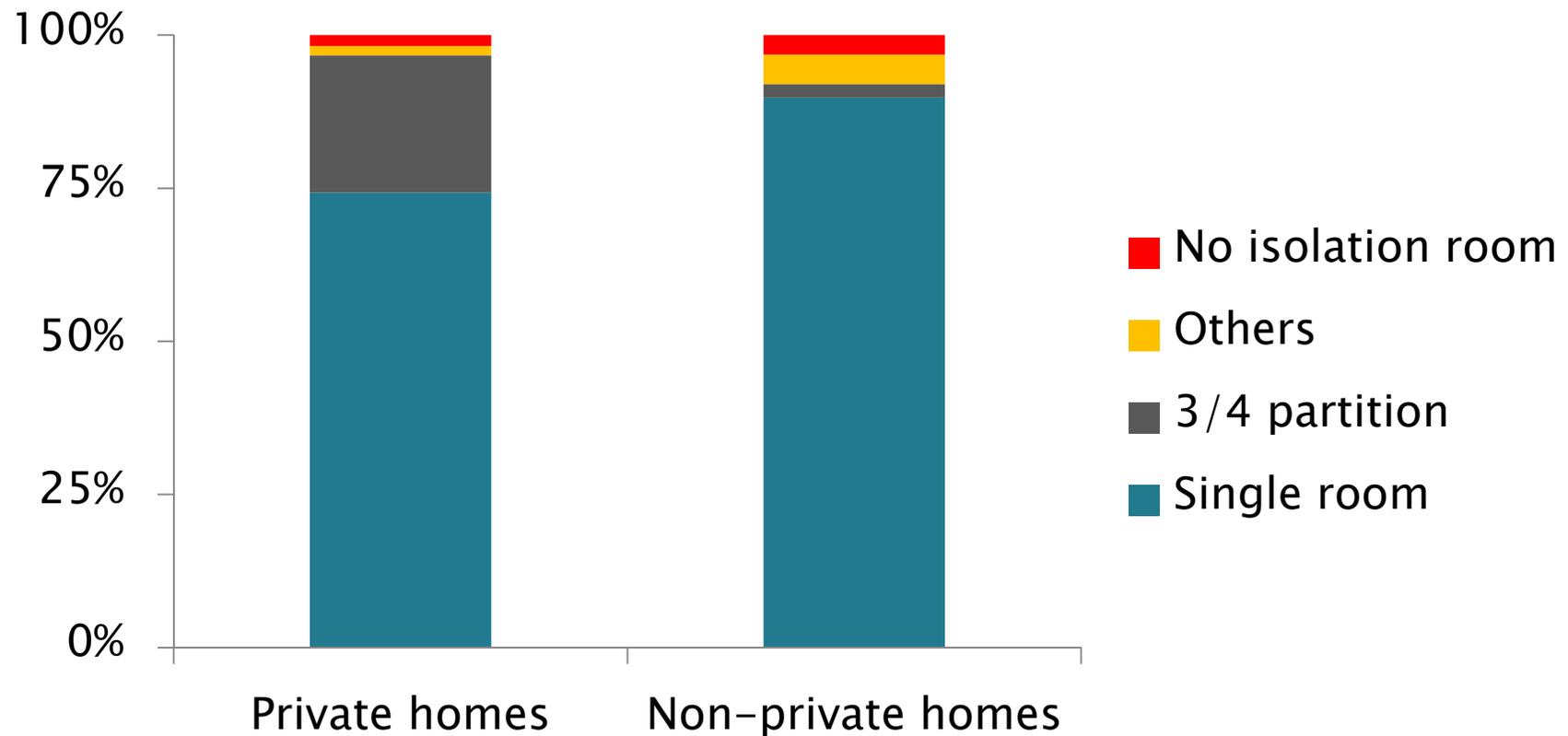
Facilities: Isolation Area

- ▶ COP s4.5
 - Shall provide isolation facility/room
- ▶ COP 12.4.3
 - A designated area or room
 - With good ventilation
 - Space for equipment for disposal of clinical waste
 - Basic hand hygiene and hand drying facilities

***Not necessarily an isolation room**

Facilities: Isolation Area

Types of Isolation Area available



▶ Examples of Isolation Area



Single room

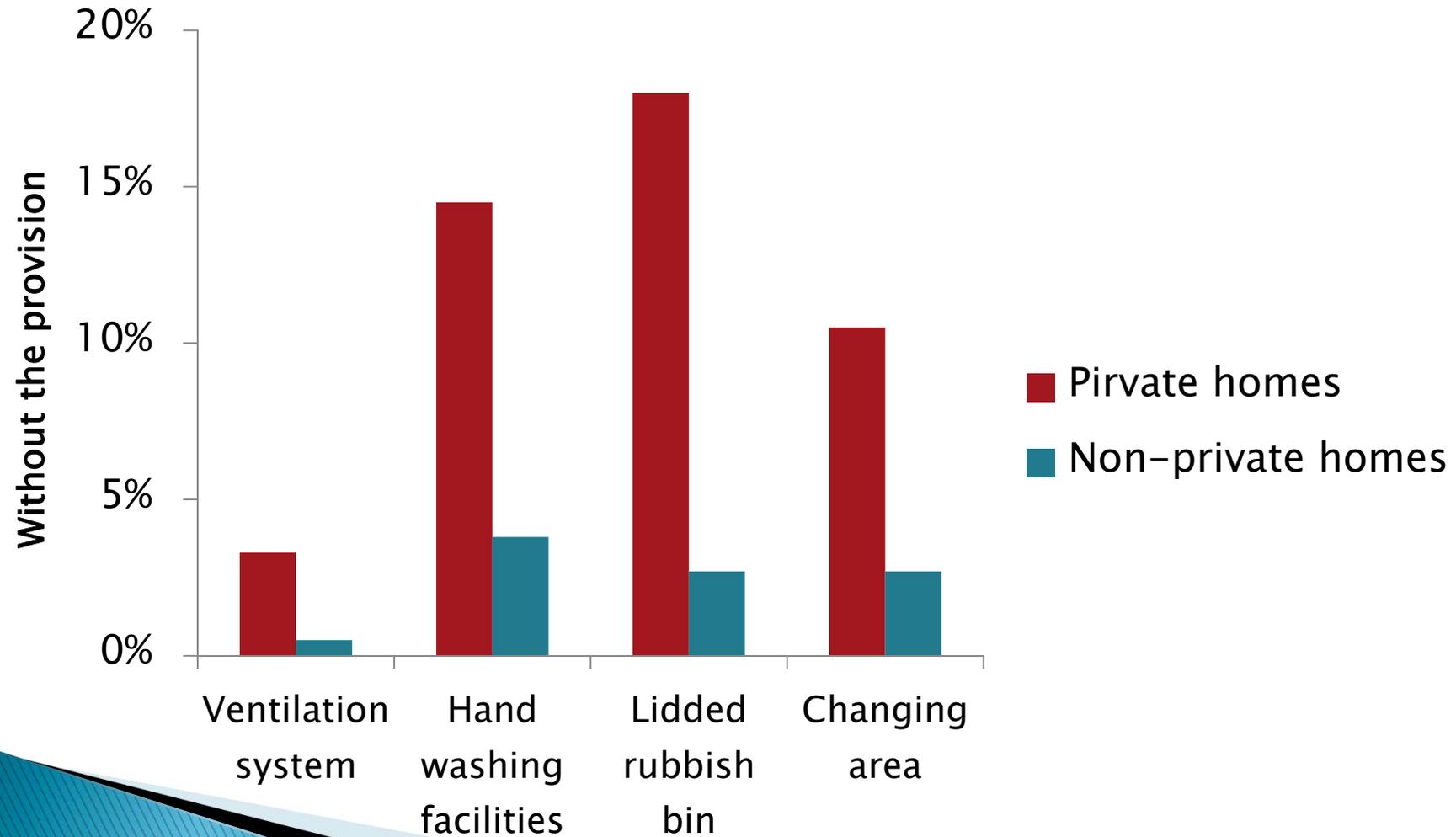


Half height partition

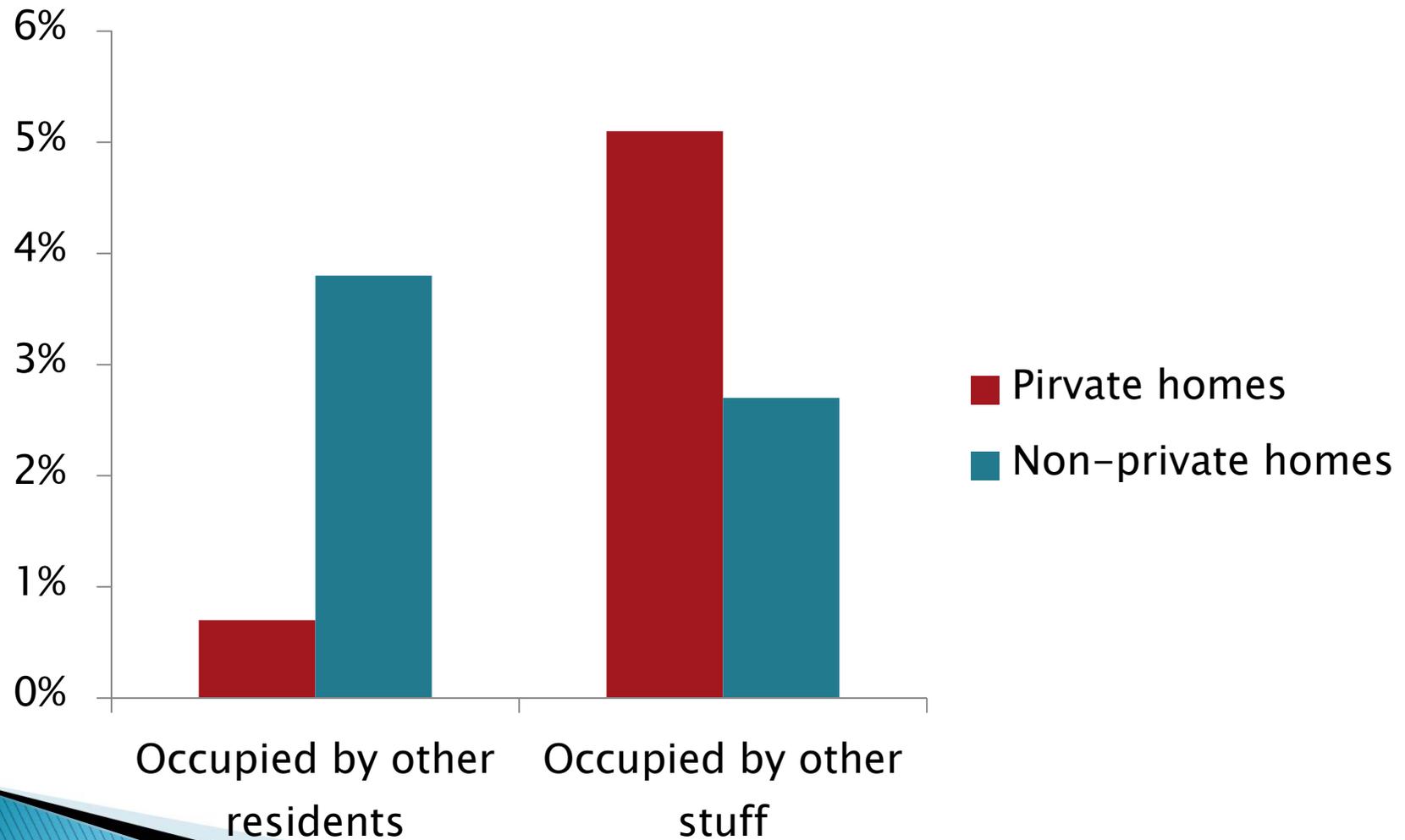


$\frac{3}{4}$ partition

Facilities: Deficiencies in Isolation Area



Facilities: Improper use of Isolation Area





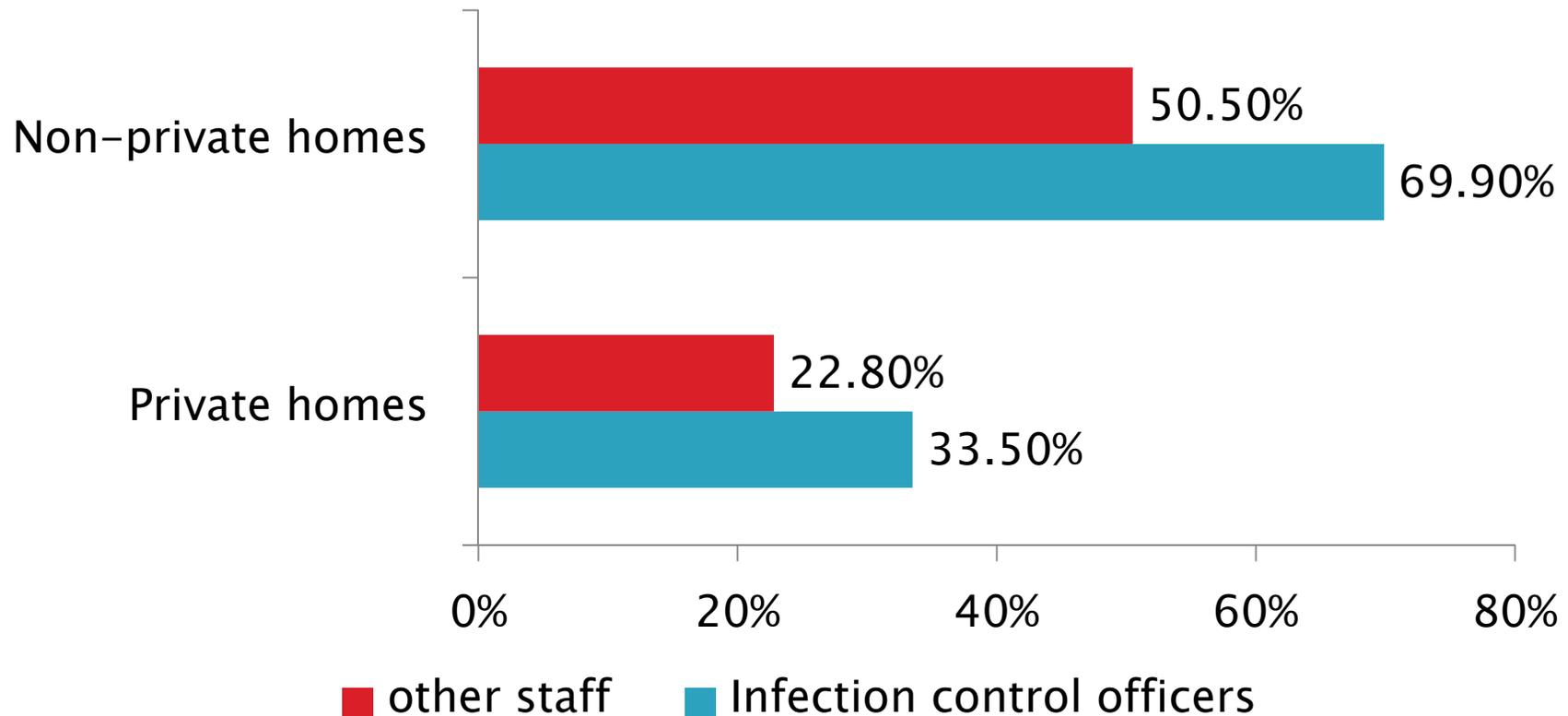
Isolation area is being
used as store room

Knowledge



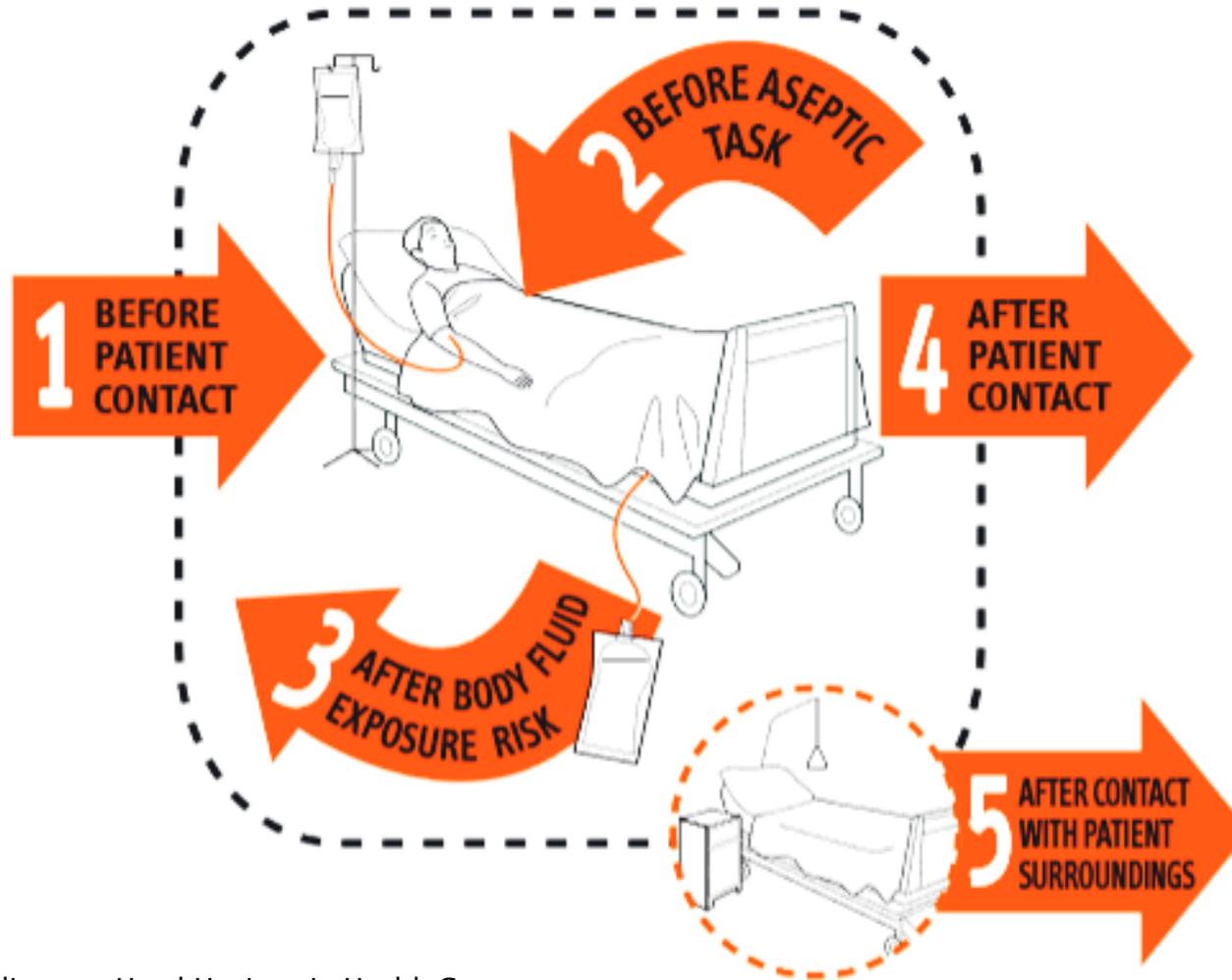
Knowledge: Hand hygiene

Correctly name the 5 moments for hand hygiene



Your 5 moments for **HAND HYGIENE**

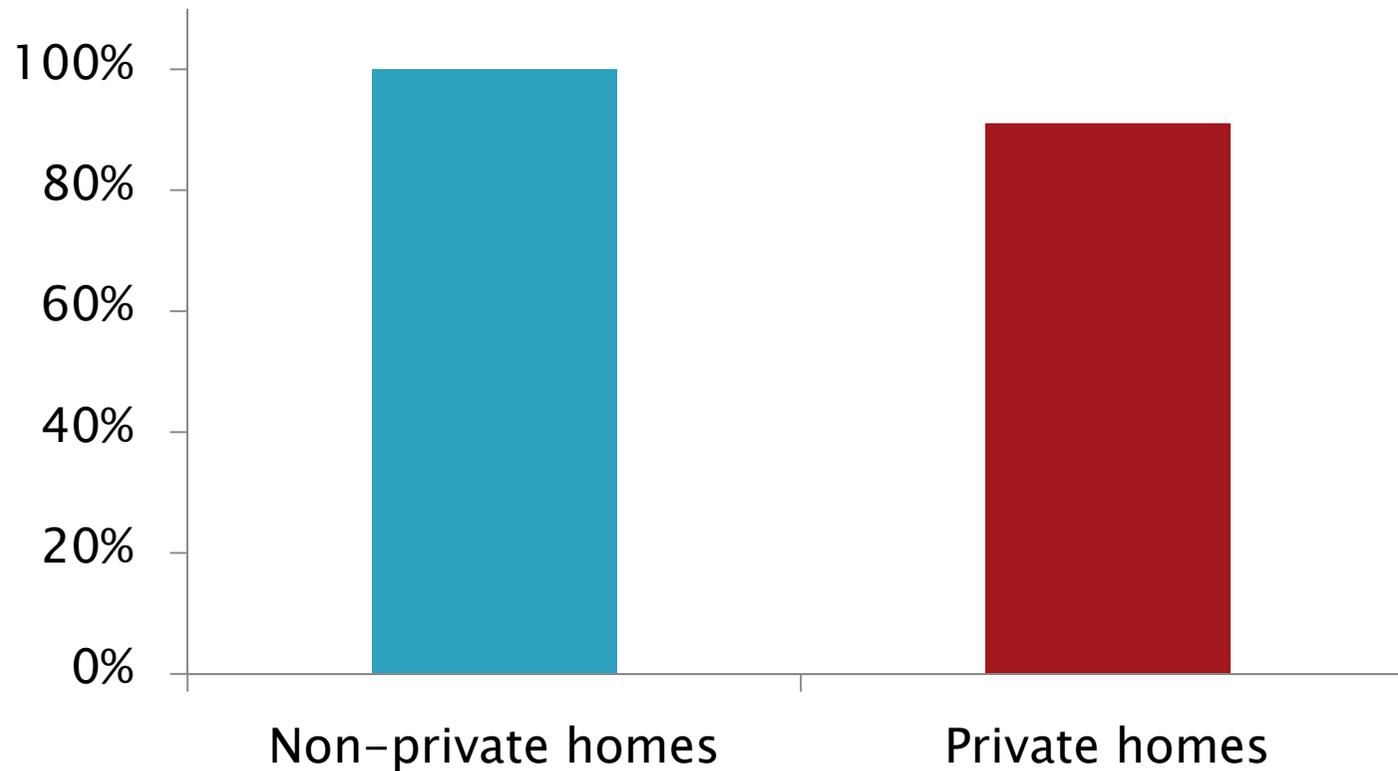
Design: [mozablog.com](http://www.mozzablog.com)



Source: WHO Guidelines on Hand Hygiene in Health Care

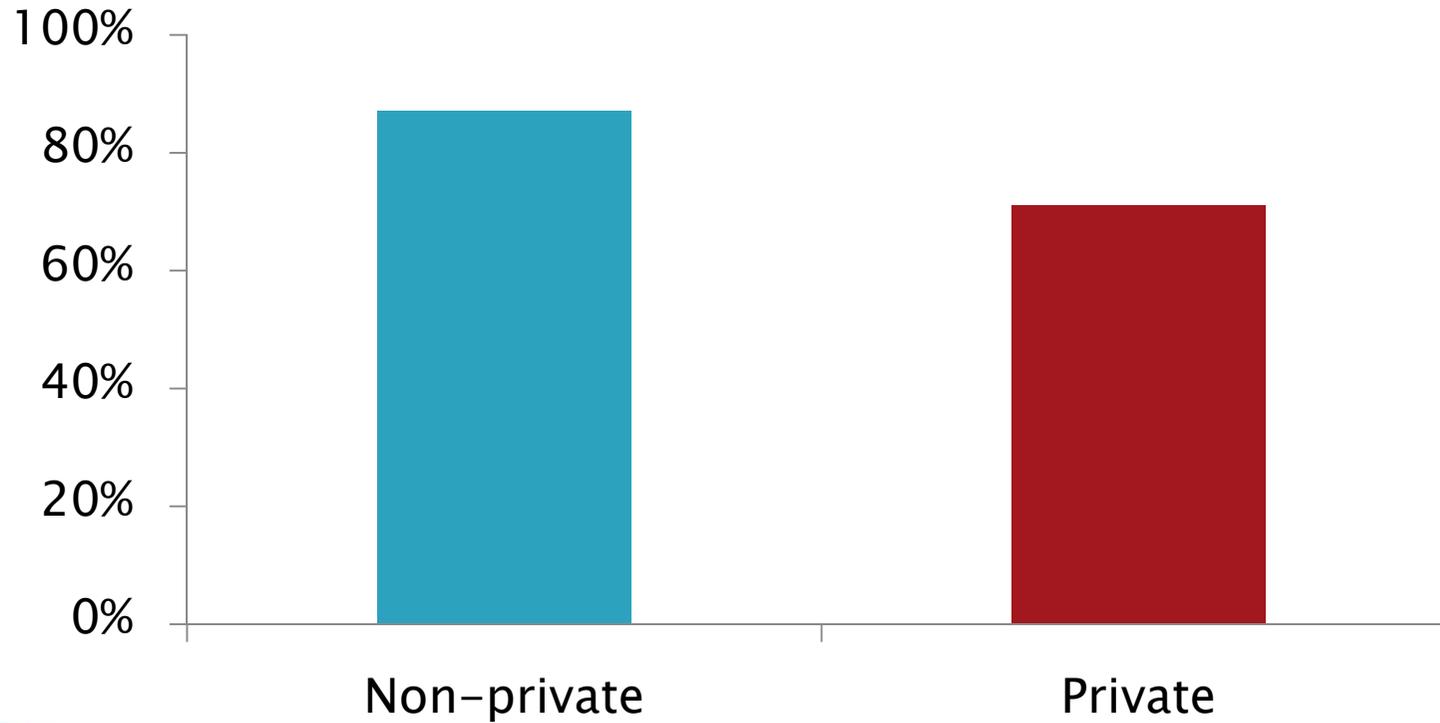
Knowledge: Cleansing and Disinfection

Proper disinfection of feeding funnel



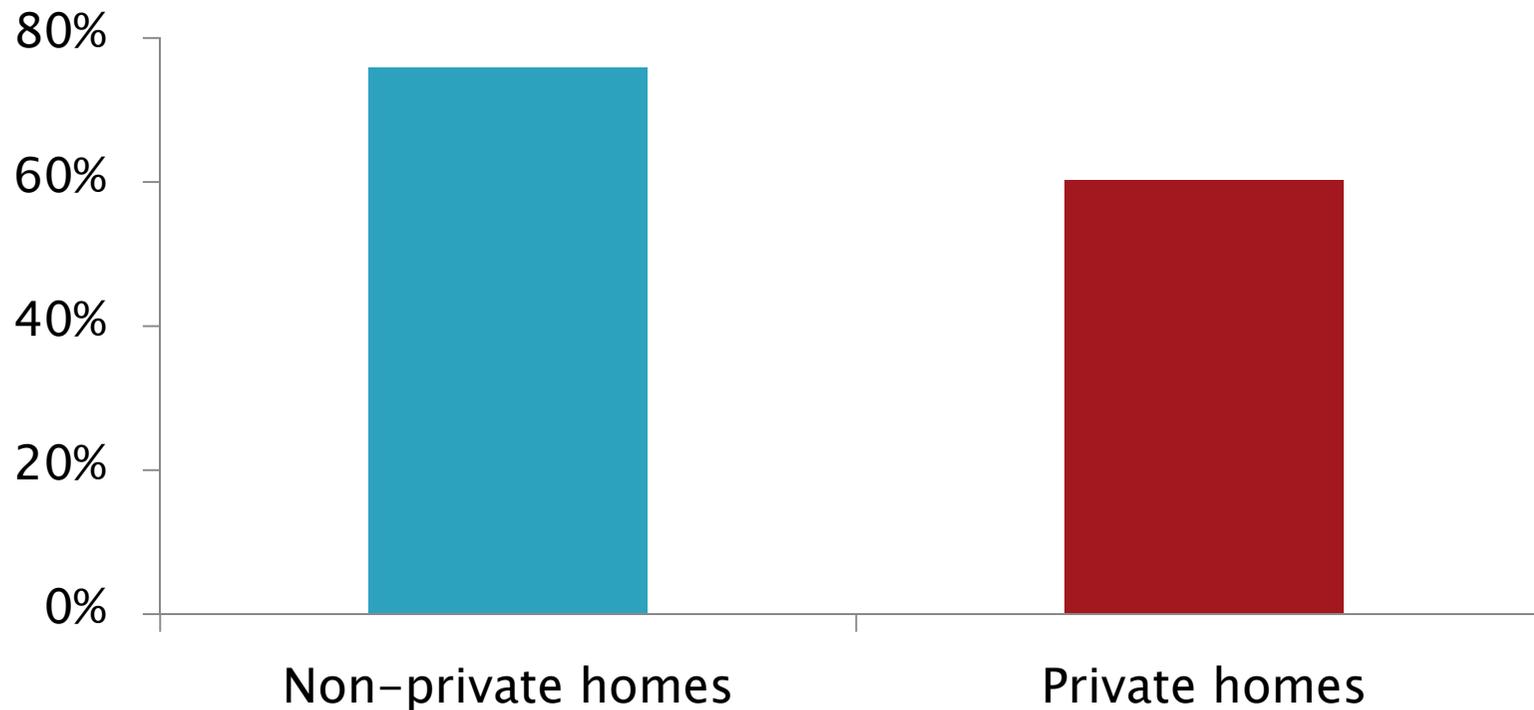
Knowledge: Decontamination (Blood)

Proper knowledge of management of blood stained surface



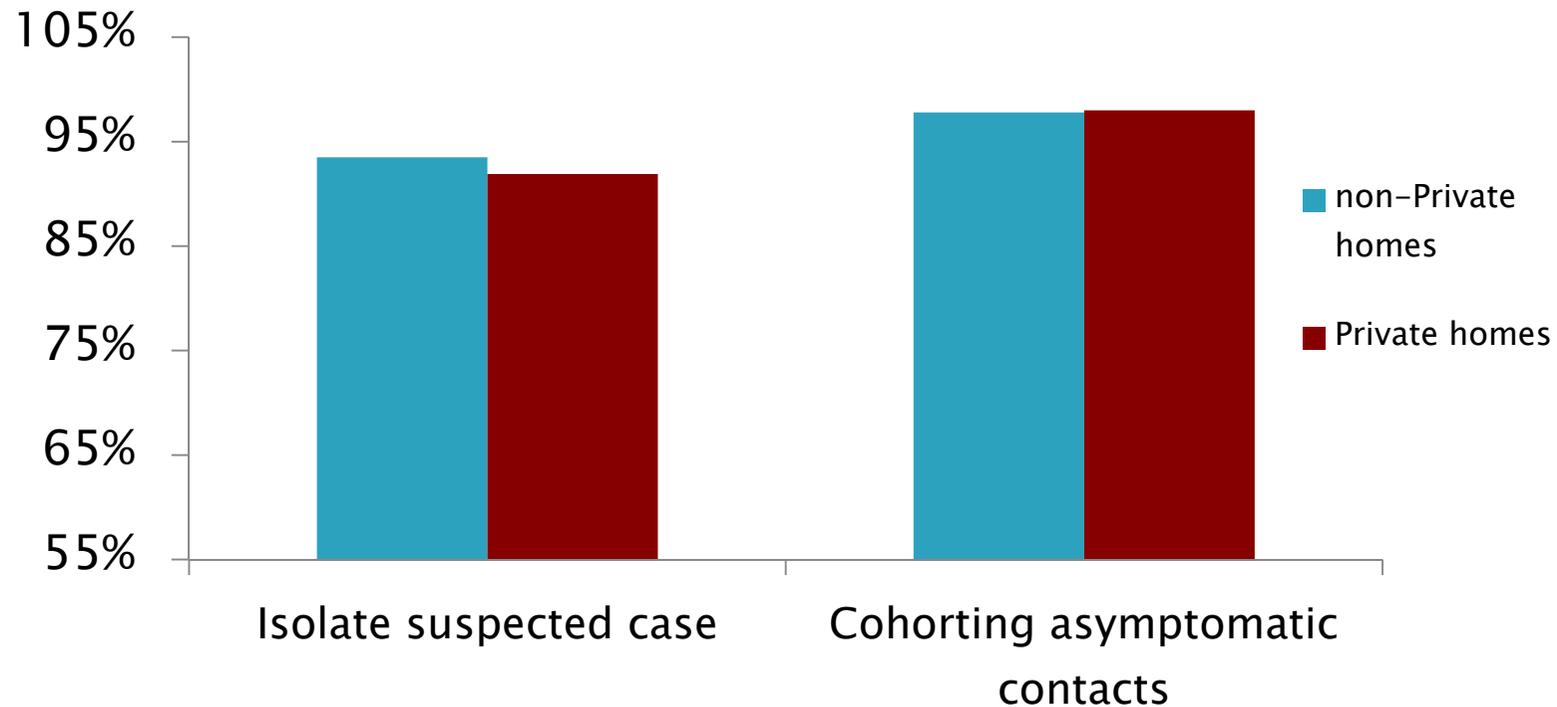
Knowledge: Decontamination (Scabies)

Can tell all correct management of contaminated articles



Knowledge: Handling of Suspected Case and Contacts of Infectious Disease

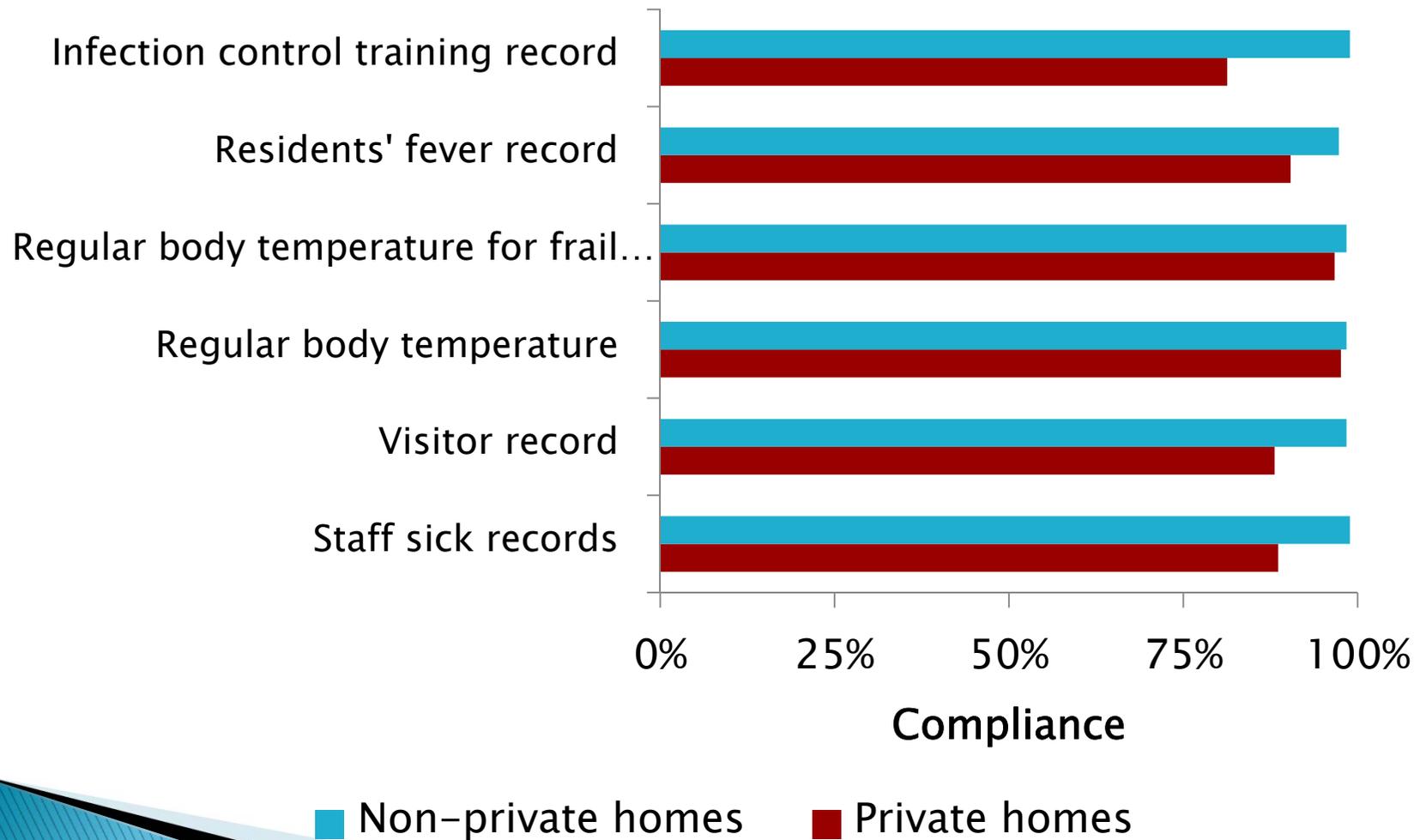
Correct management of suspected cases and contacts



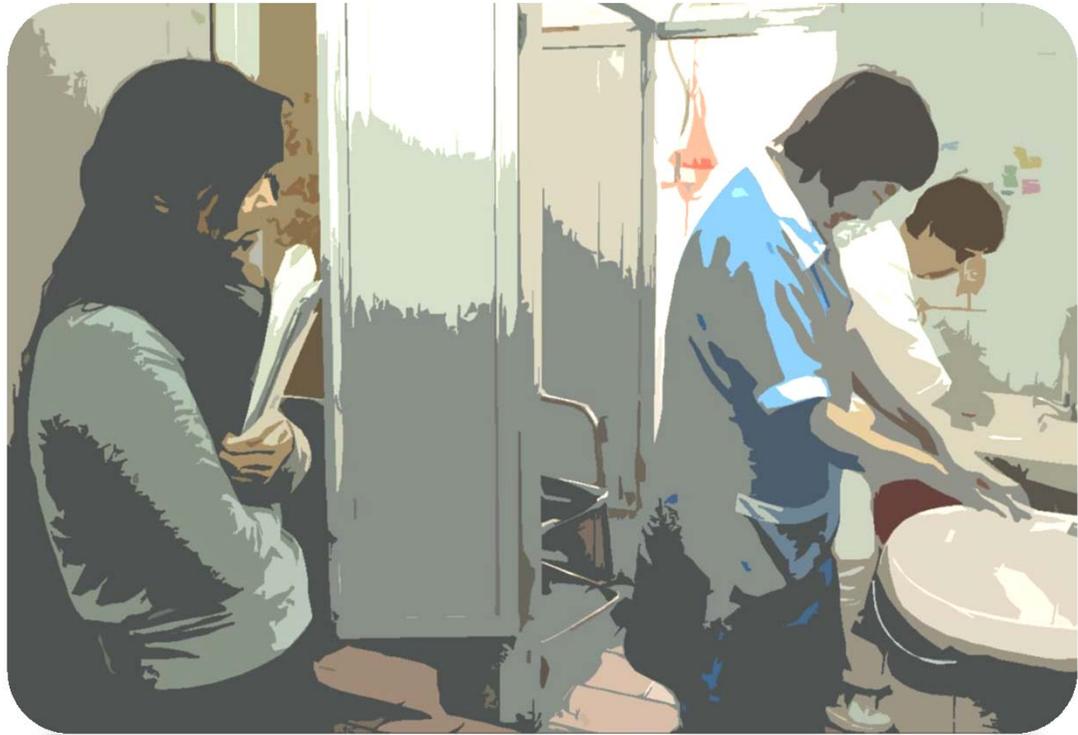
Practice



Practice: Surveillance and Records

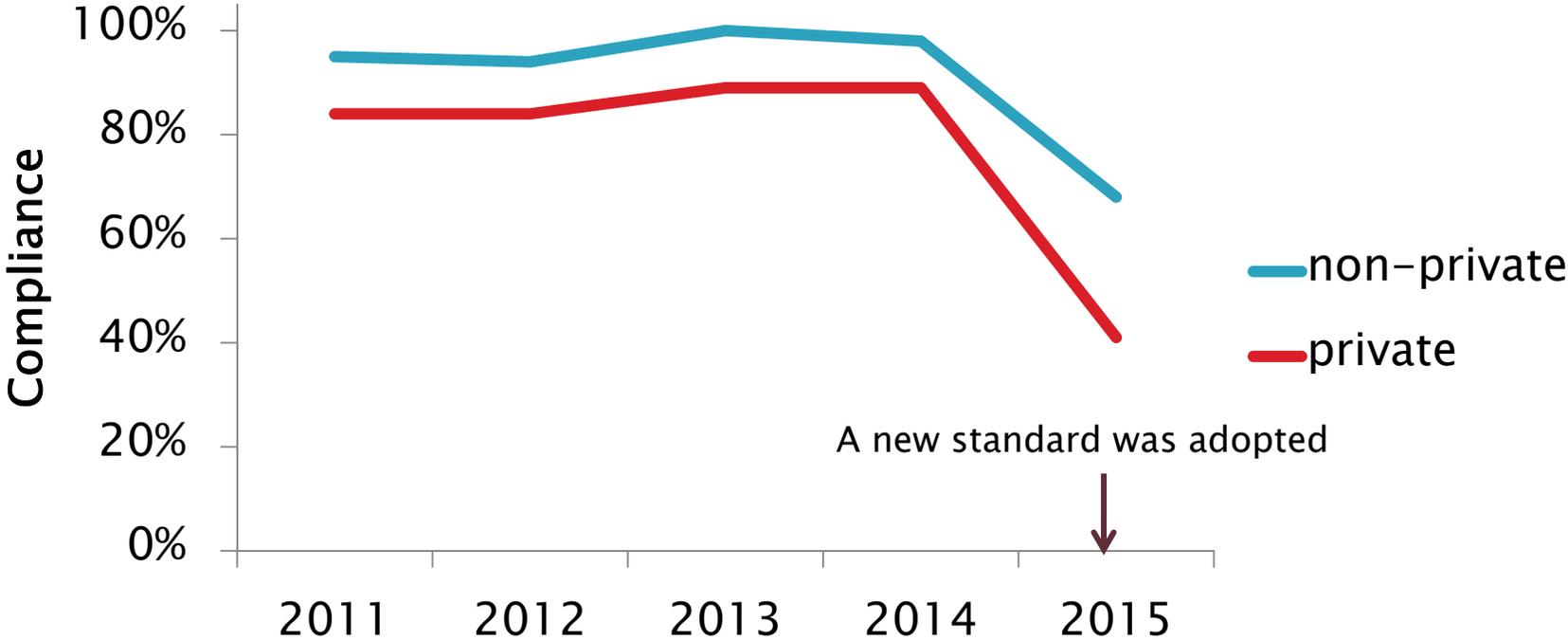


Practice: Hand hygiene



Practice: Hand hygiene

Demonstration of proper hand hygiene technique

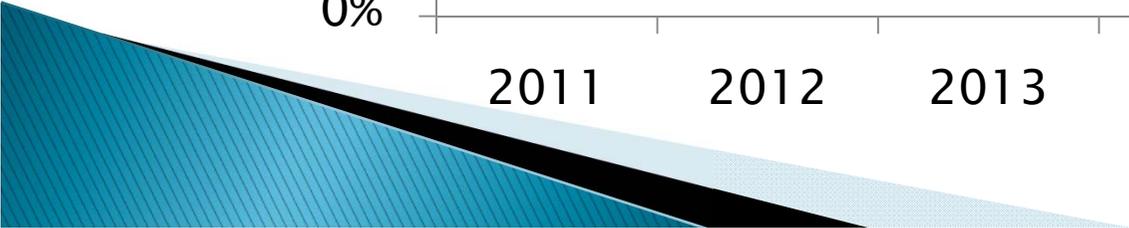
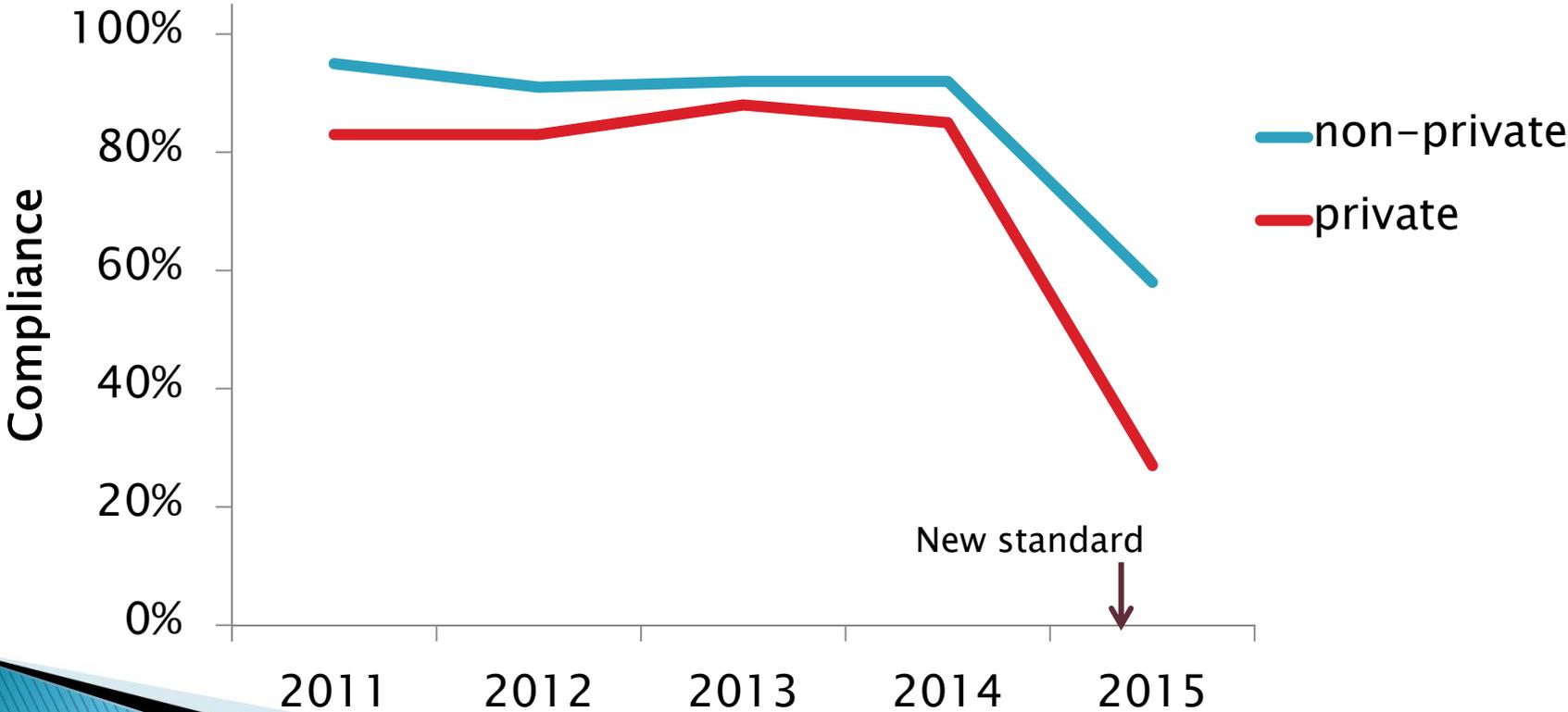


Practice: Use of PPE



Practice: Use of PPE

Demonstration of proper donning and doffing technique

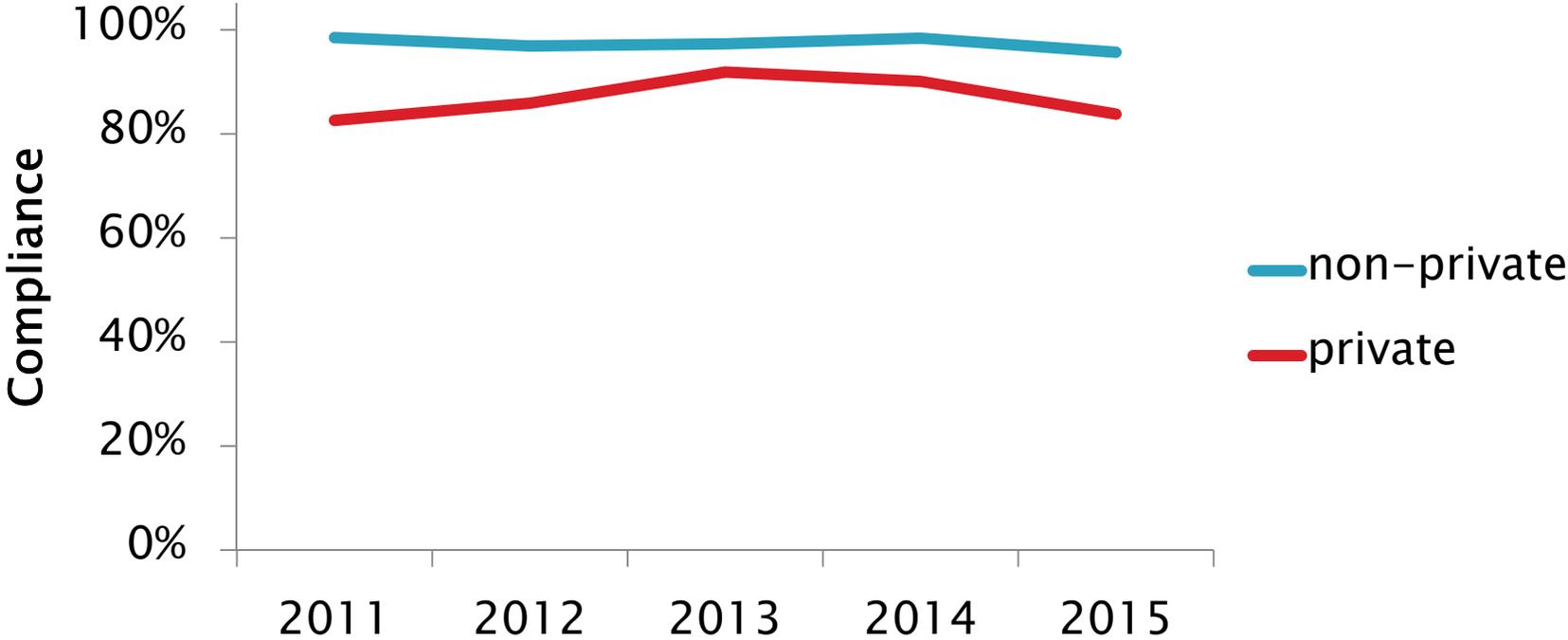




Practice: Bleach dilution technique

Practice: Bleach dilution technique

Demonstration of proper bleach dilution technique



Limitations and Challenges



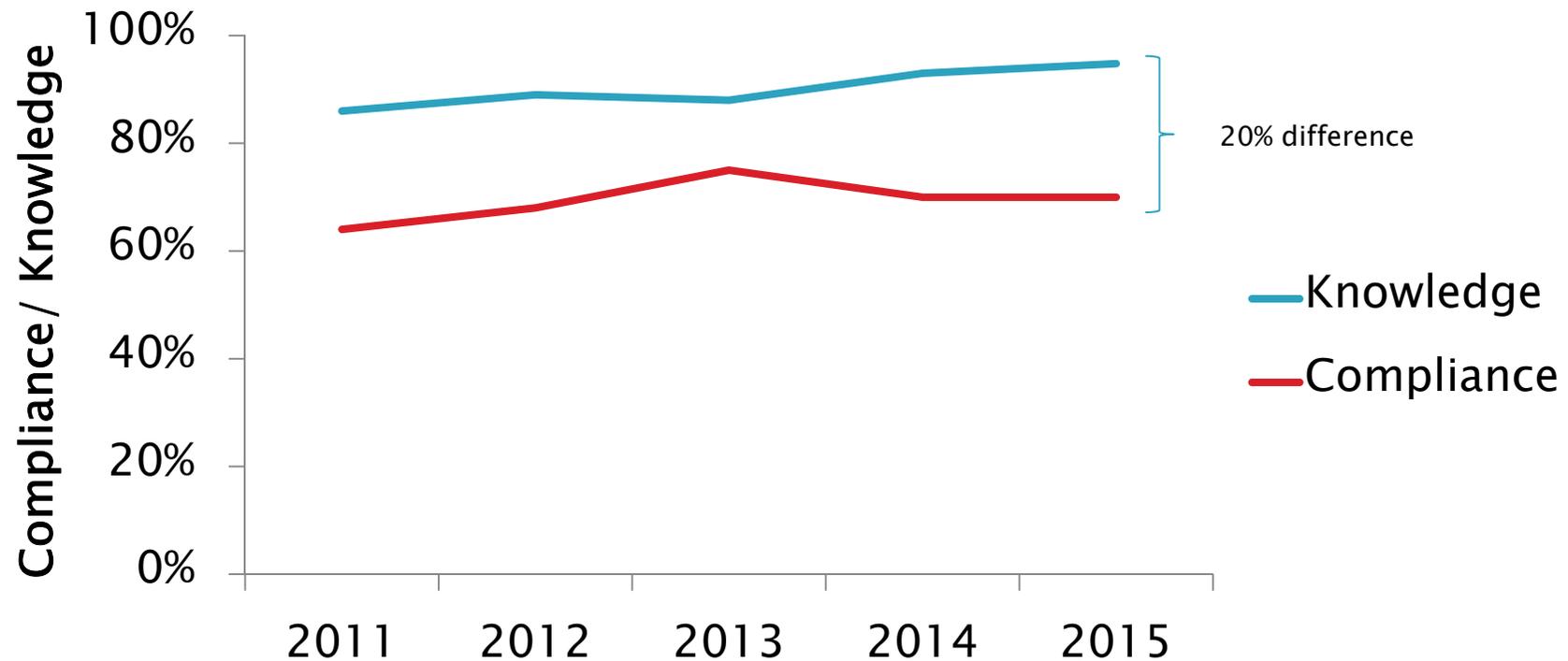
Limitations

- ▶ The performance observed is not representing that for all staff in the RCHE as a whole
- ▶ Only assess the infection control measure at one particular point in time

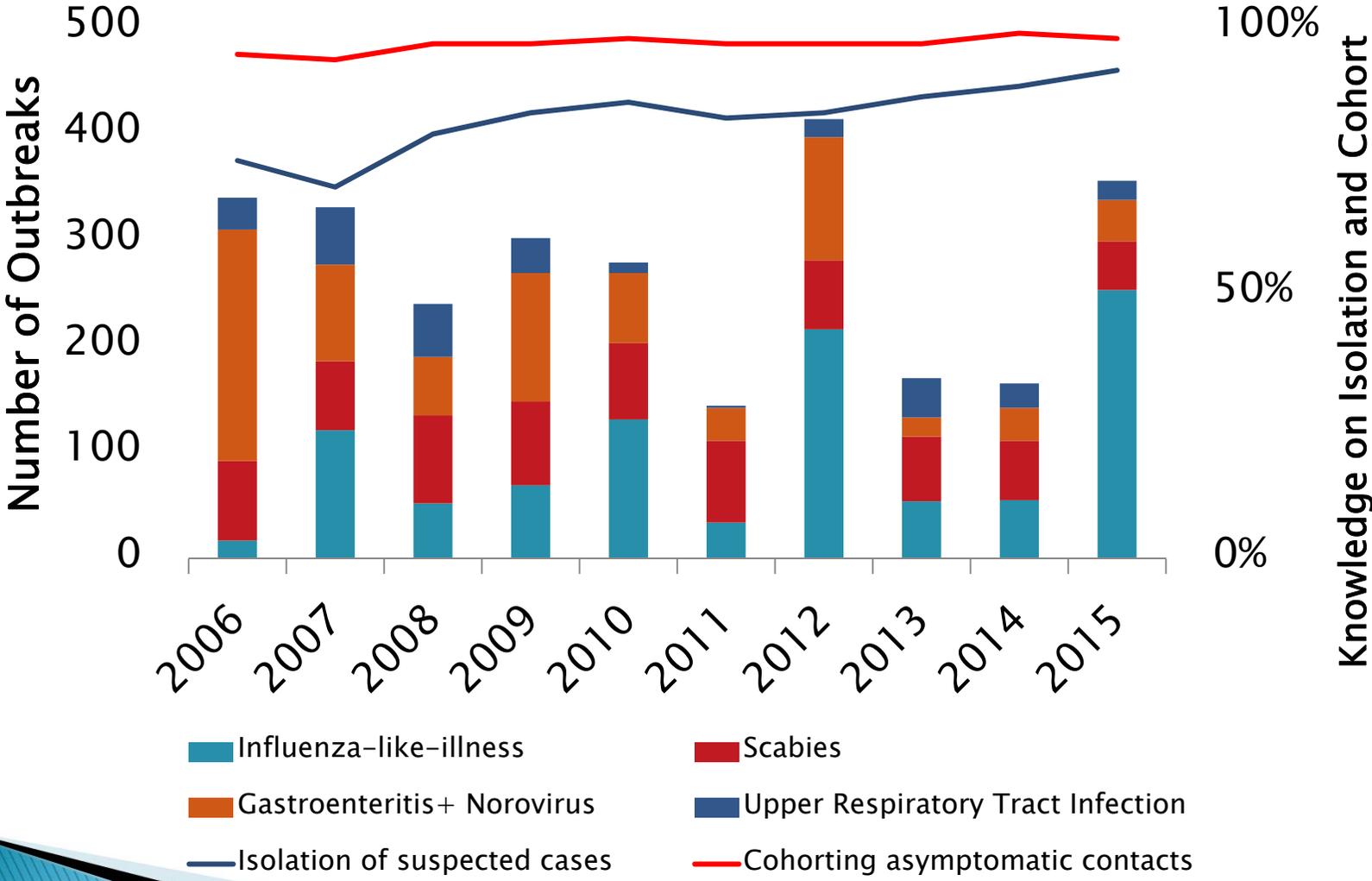


Translation of knowledge into behaviour

Refrigerator temperature – Knowledge vs Compliance



Infection control knowledge vs Outbreaks



Challenges

- ▶ Resource implication
- ▶ High staff turnover rate
- ▶ Failure to engage all front-line staff in training



Way forward

- ▶ Enhancement in education programmes
 - Sustainable behaviour modification
 - Encourage self-auditing
- ▶ Review the policy of residential care service



THANK
YOU!

