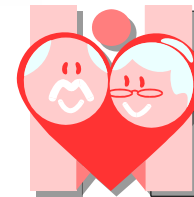


Survey on Infection Control Measures in Residential Care Homes for the Elderly (RCHEs) in Hong Kong



Dr Edmund HO, MO
Elderly Health Service
Department of Health





Infection Control Measures in RCHEs

- **Introduction**
- **History of the Development of the Infection Control Programme**
- **Infection Control Enhancement Programme**
- **Way forward**



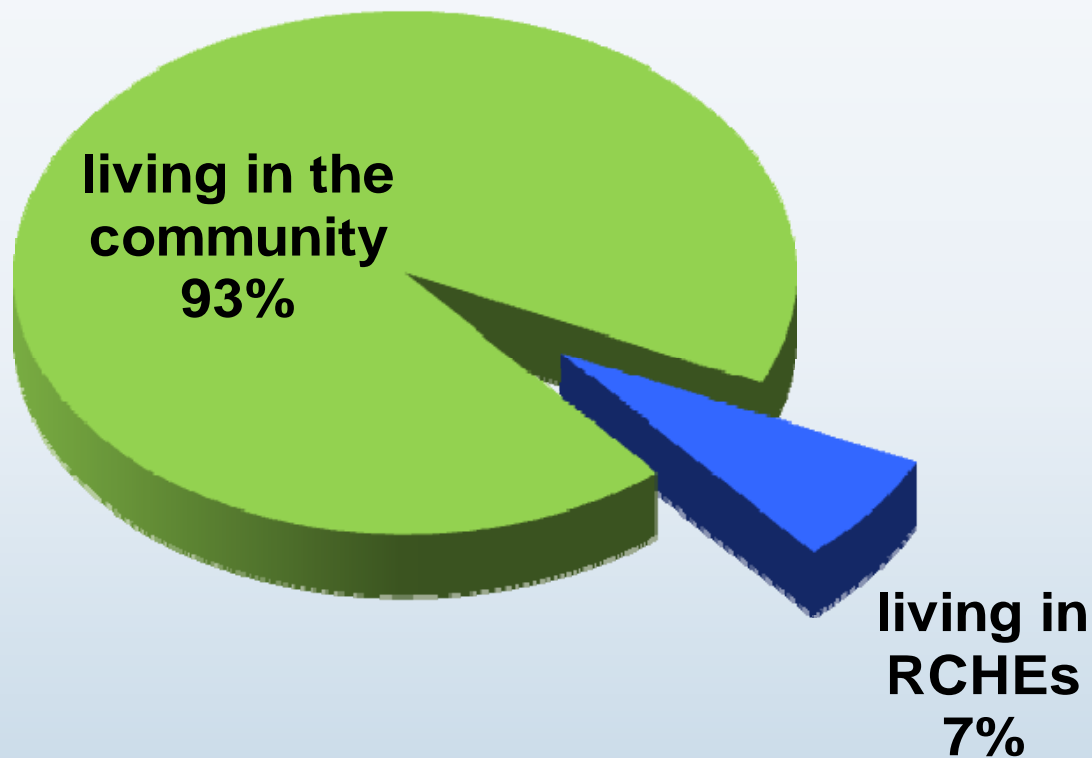


Most of our elderly population are healthy and live in the community





Proportion of Elderly Staying in RCHEs





RCHEs in Hong Kong

- **Definition:** Any premises at which more than 5 persons who have attained the age of 60 years are habitually received for the purpose of care while residents therein
- **Types:**
 - Care and attention home
 - Aged home
 - Self-care hostel





Control of RCHEs

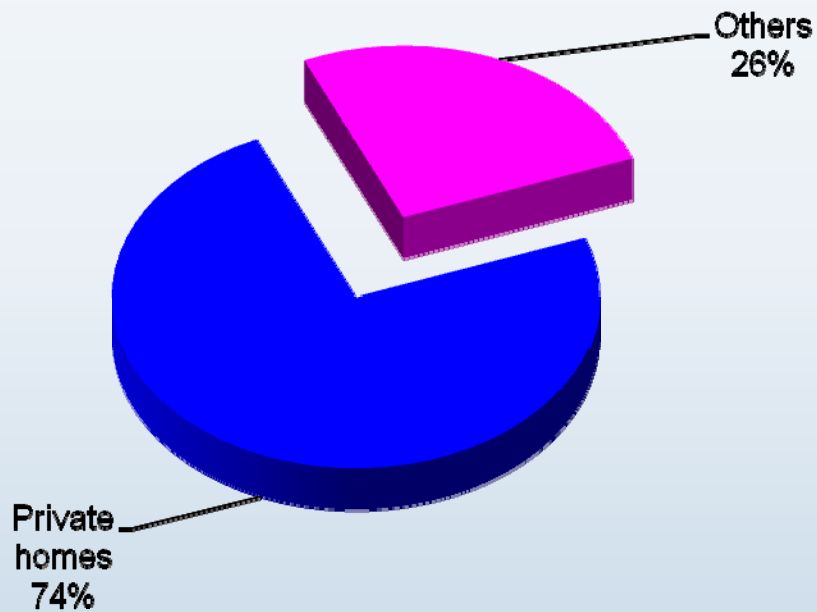
- All RCHEs are under the control of Residential Care Home (Elderly Persons) Ordinance (Cap. 459) and must comply with the Code of Practice
- All RCHEs are licensed with the Licensing Office for Residential Care Homes for the Elderly (LORCHE) of Social Welfare Department



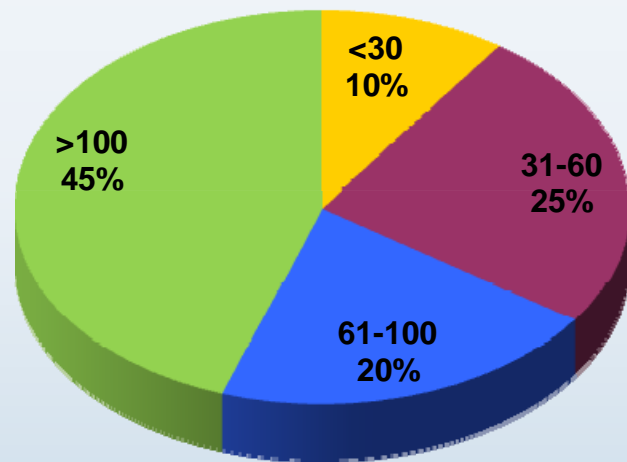


RCHEs in Hong Kong (2010: 788 homes)

Type of RCHEs

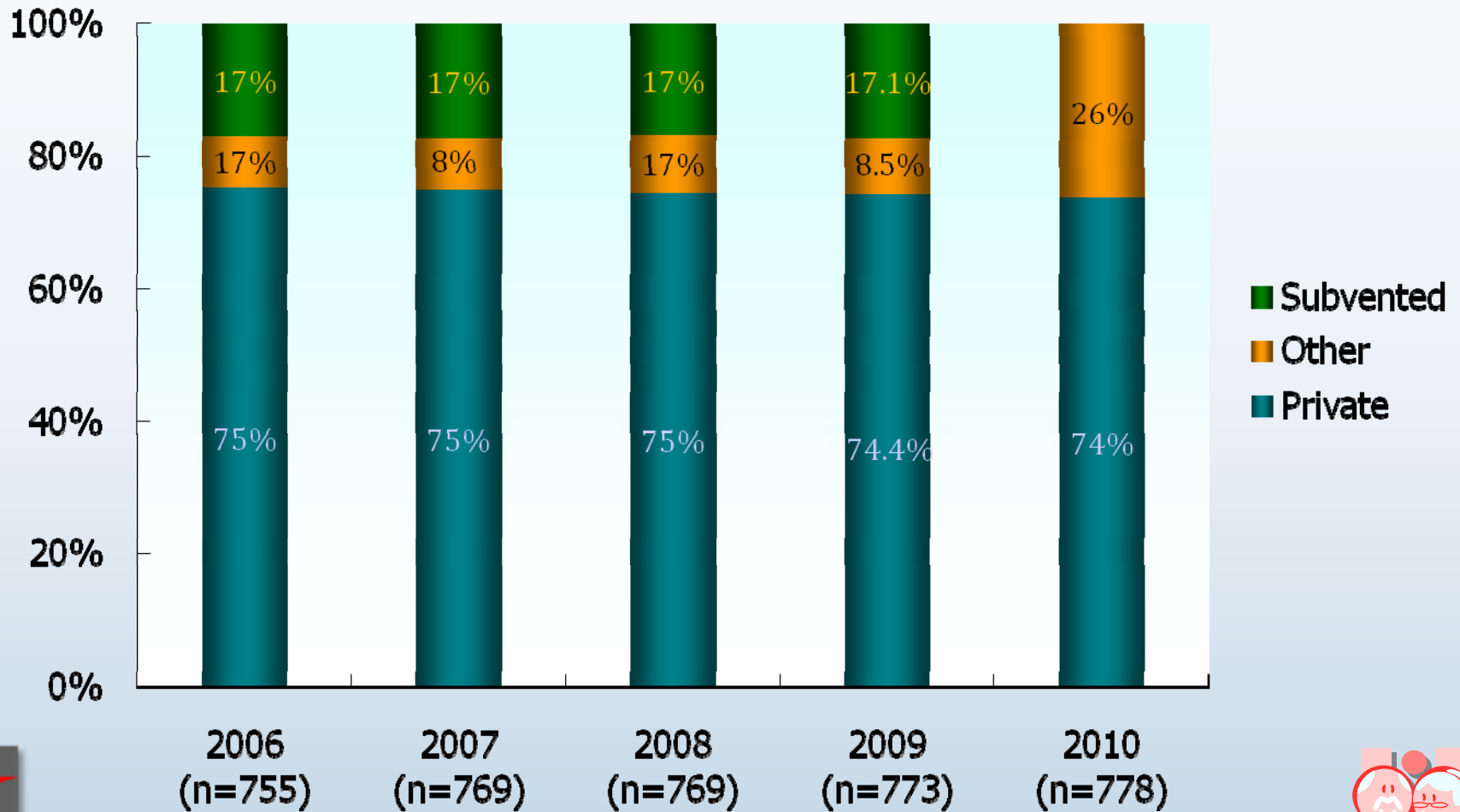


Capacity of RCHEs (number of residents)





Home Types



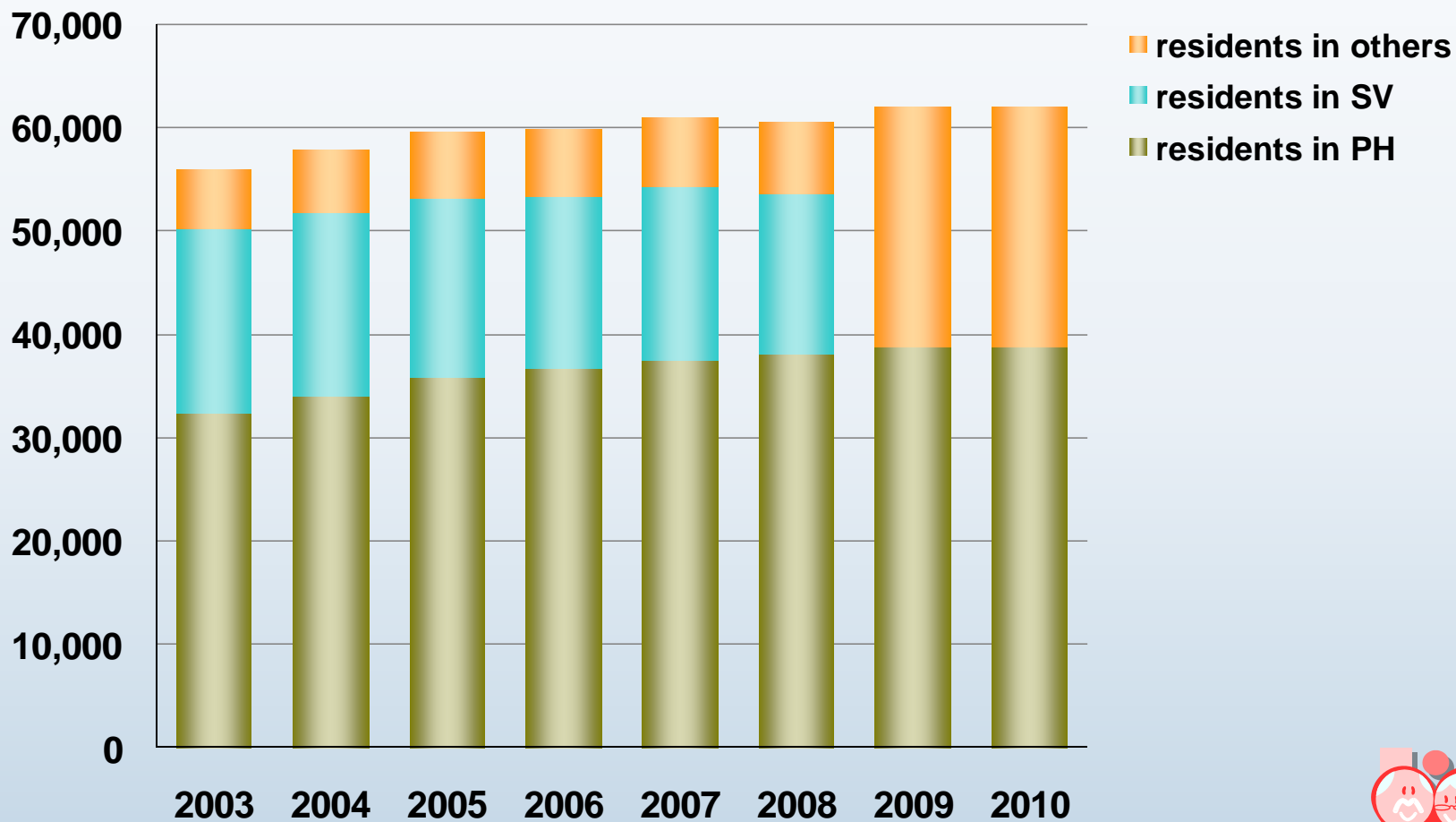


Residents in RCHEs





Residents in RCHEs





staff : resident ratio

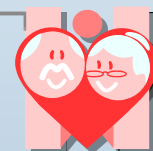
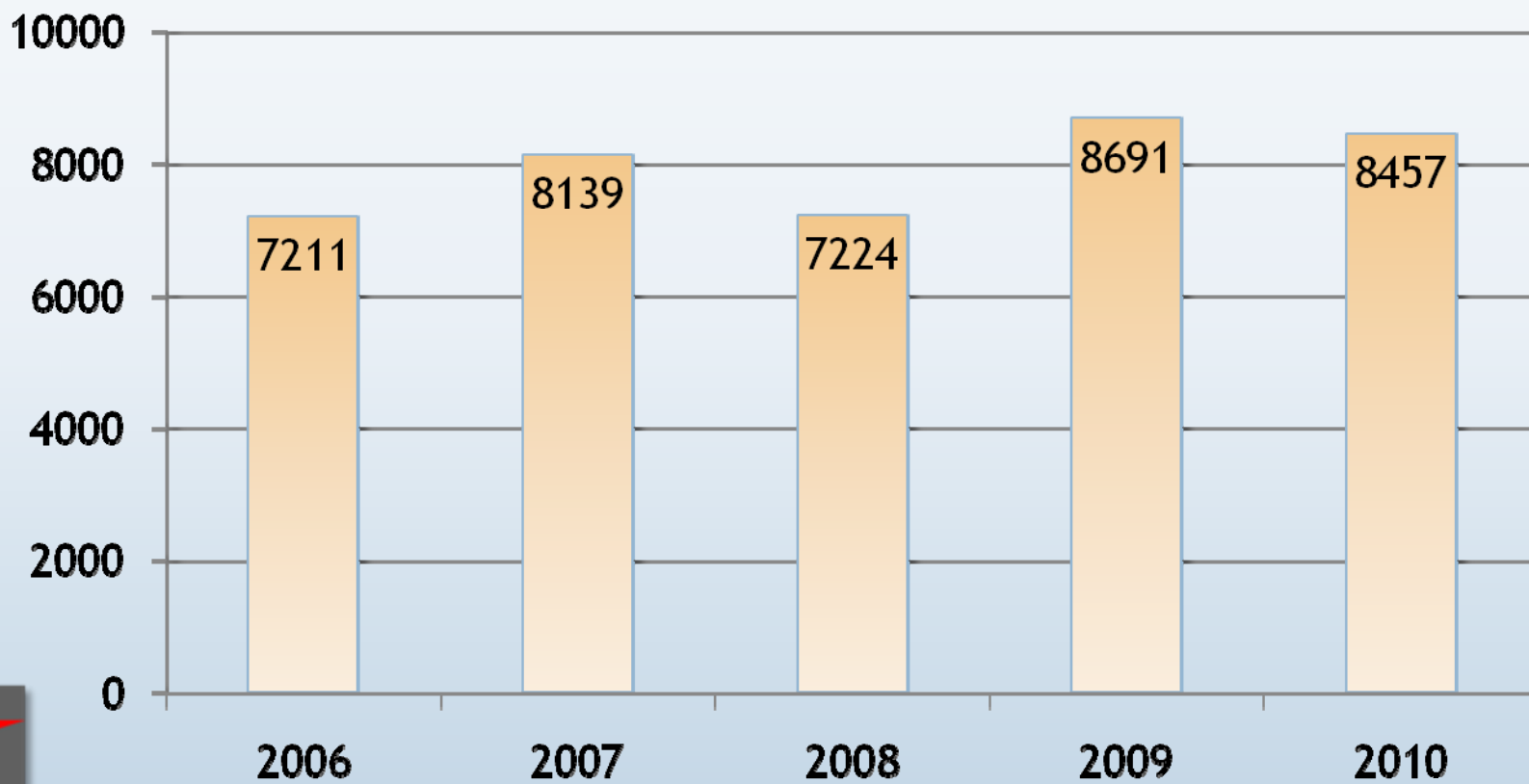
	2006	2007	2008	2009	2010	% of PH (n=575) without staff (incl. full/part time)
Total	21162	21267	22089	22789	23224	
All staff	1:3	1:3	1:3	1:3	1:3	
PCW	1:6	1:6	1:6	1:6	1:6	
HW	1:24	1:22	1:20	1:19	1:18	
Nurse	1:33	1:30	1:30	1:30	1:28	433 (75.3%)
PT	1:180	1:169	1:172	1:155	1:175	413 (71.8%)
OT	1:446	1:362	1:380	1:309	1:265	495 (86.1%)
DT	1:933	1:609	1:715	1:634	1:521	497 (86.4%)
Dispenser	1:1957	1:1352	1:1538	1:1218	1:621	563 (97.9%)





Residents in RCHEs

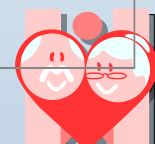
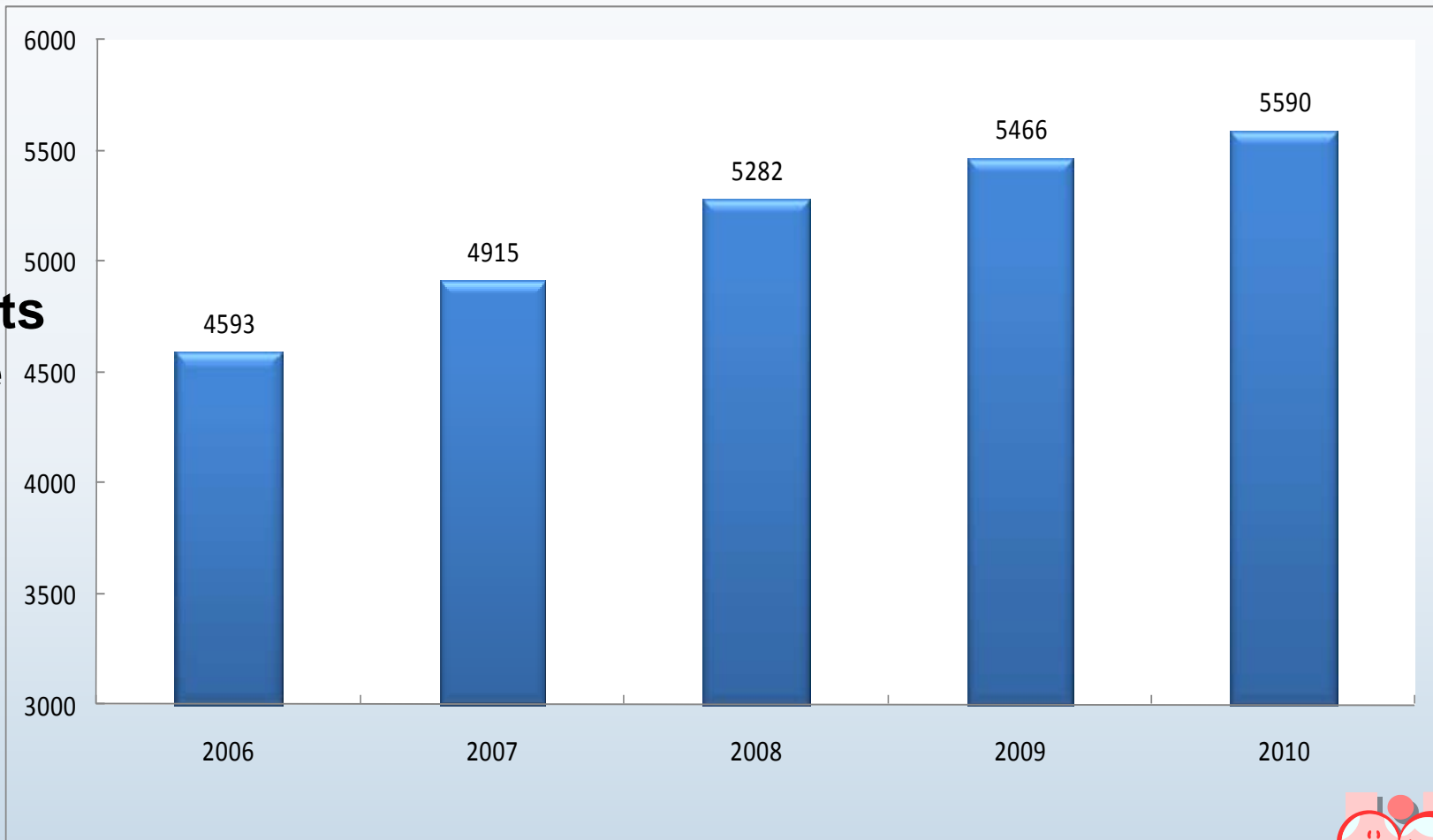
No. of bedridden residents





Residents in RCHEs

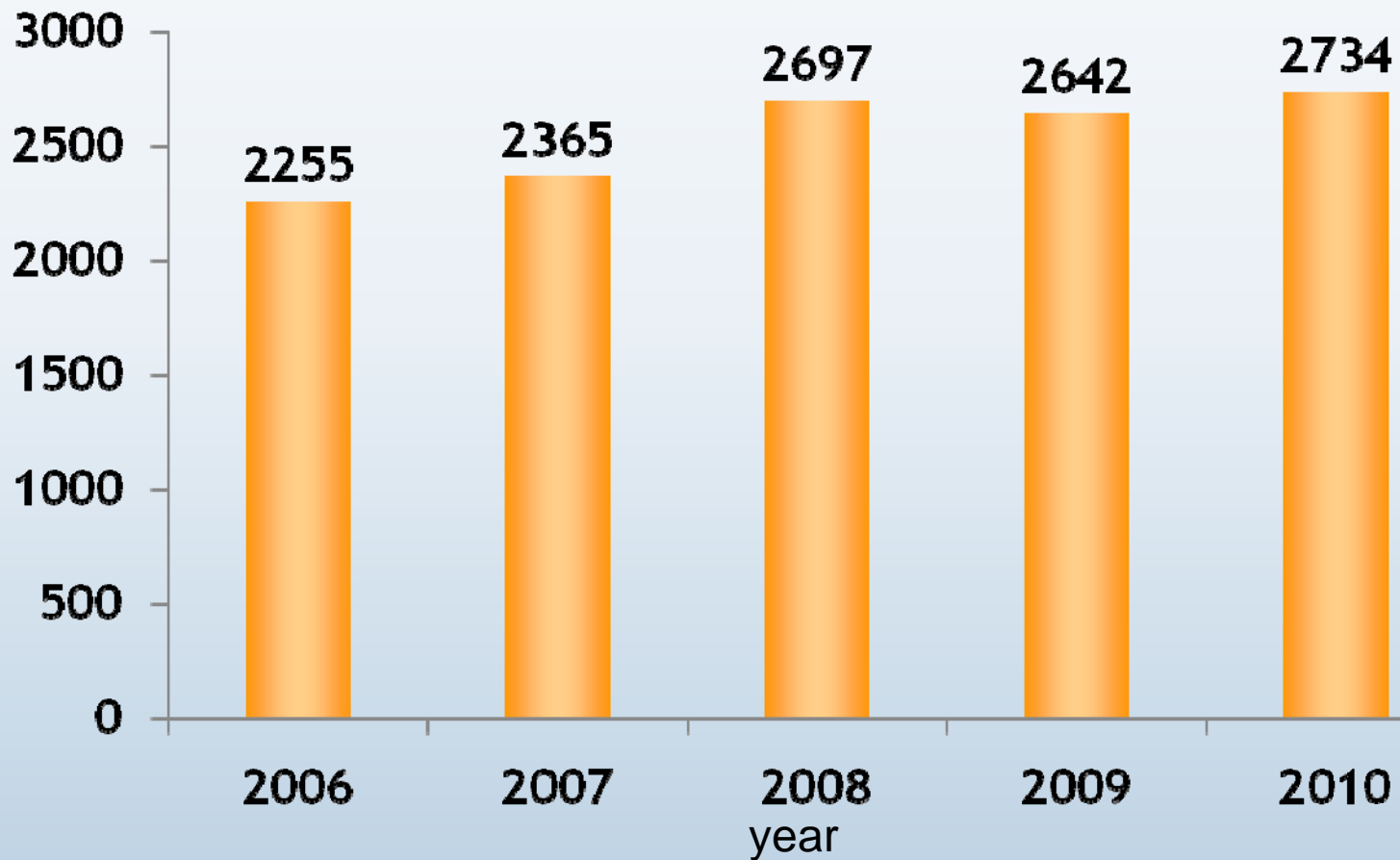
No. of residents on tube feeding





Residents in RCHEs

No. of residents on urinary catheter





History of the Development of the Infection Control Programme



Before SARS era



Before SARS era (1)

- **Infection Control Nurses in large RCHEs**
- **Different parties including VHT, CGAT and LORCHE played a part**
- **No systematic liaison**
 - Overlapping roles
 - Inconsistency in health education
 - Delayed notification





Before SARS era (2)

- **Role of Visiting Health Teams (VHTs)**
 - General health education
 - Discussion on ad hoc hot topic (e.g. cholera, influenza)
 - Annual Influenza Vaccination Programme for all residents since 1998



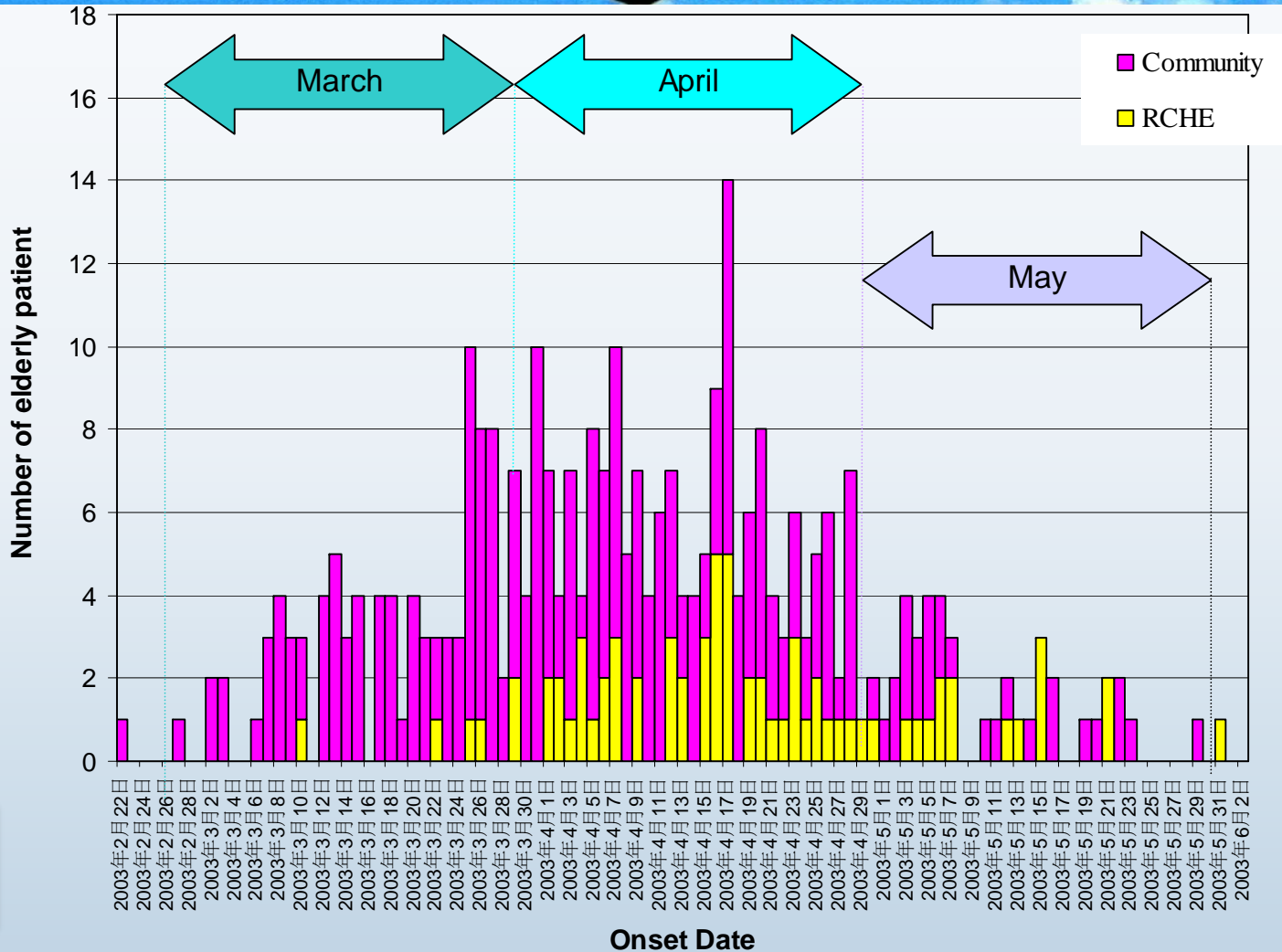


SARS:

- **A threat?**
- **An opportunity?**
- **A challenge?**



The SARS Epidemic





	<u>Hong Kong</u>	<u>RCHE residents</u>
Infected with SARS	1755	72
Died from SARS	299	57
Mortality	17%	79%





In view of

- the **vulnerability** of the residents and
- the **group-living** environment that will predispose to infectious disease outbreaks,

An **active** infection control program is mandatory.





Infection Control Enhancement Program





Infection Control Enhancement Program

Objectives:

- To enhance the capability of RCHEs for infection control
- To promote the prompt reporting of suspected outbreaks





Infection Control Enhancement Program

4 main components

- **Baseline Checklist Survey**
- **Issue of Revised Infection Control Guidelines**
- **Training programme to Infection Control Officer (ICO) in every RCHE**
- **Evaluation and Continuous Monitoring**





Component 1: Baseline Checklist Survey

Objective:

To study the knowledge, facilities and practices relating to infection control in RCHEs





Method

- **A cross-sectional survey**
- **From August to October 2003**
- **Nurses of EHS visited all RCHEs**
- **Structured checklist on infection control**
 - a self-administered questionnaire
 - an inspection checklist
 - an interview questionnaire





Data retrieved

- Characteristics of the residents
- Staffing
- Environment
- Practice





Findings

1. **Physical constraints (isolation area, hand washing facilities)**
2. **Variations in the education background of the staff in-charge (health workers, nurses)**
3. **Variations in the infection control practices**
4. **Misunderstanding about the outbreaks reporting**





Component 2: Issue of revised guideline

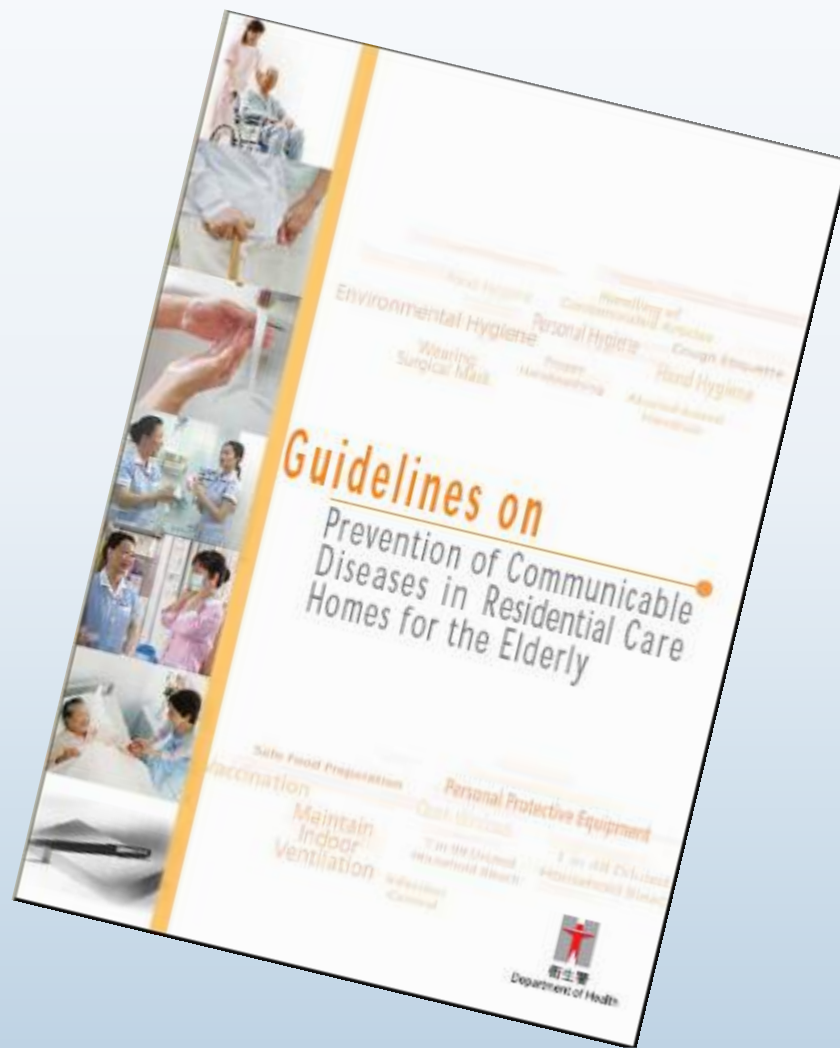
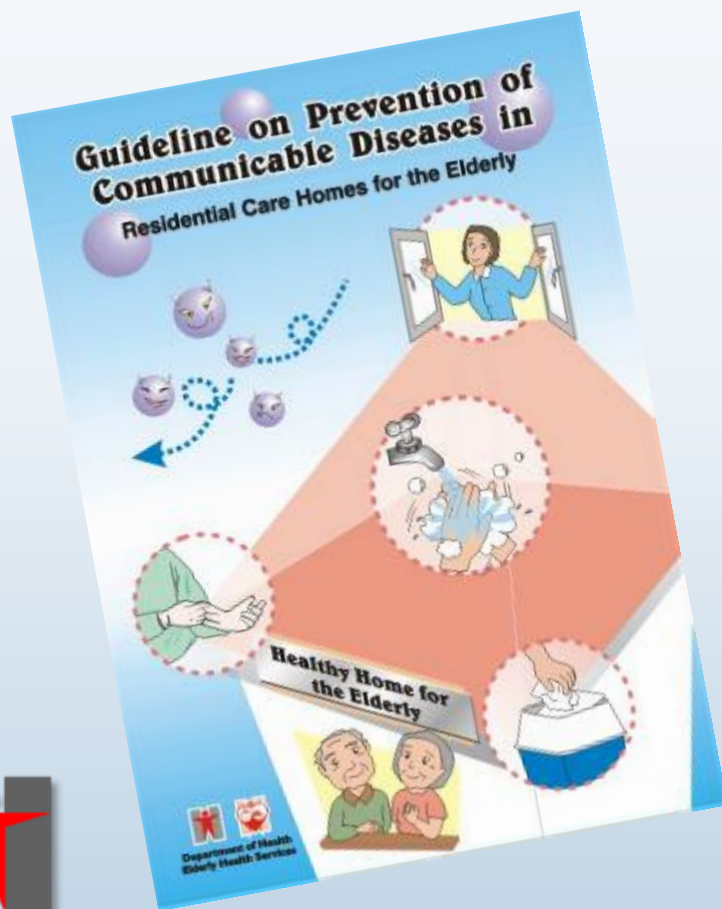
Guideline on Prevention of Communicable Diseases in RCHEs

- Input from CGATs (HA), RO (DH, now replaced by CHP), SWD
- Set up an enhanced information exchange system with RO, CGATs and LORCHEs
- Comprehensive, user-friendly, practical tips
- Situation tailored with common scenarios





Guideline on Prevention of Communicable Diseases in RCHEs





Component 3: Training programme to ICOs

- **Designation of Infection Control Officer in every RCHEs with effective from 1st of Nov. 2003**
- **This requirement is added into Code of Practice for RCHEs**





Component 3: Training programme to ICOs

Tailored training programme to the ICOs

- Workshops – annual training workshops on common infectious diseases and infection control measures
- On-site training
- Sharing forum





Training programme to ICOs

Workshop



On-site Training





ICO qualification

	2006	2007	2008	2009	2010
Nurse	261 (34.6%)	434 (29.4%)	445 (30.3%)	440 (30.2%)	461 (31.6%)
Health worker	500 (66.2%)	909 (61.5%)	891 (60.7%)	976 (67.1%)	903 (61.8%)
other	18 (2.4%)	135 (9.1%)	131 (8.9%)	64 (4.4%)	96 (6.6%)





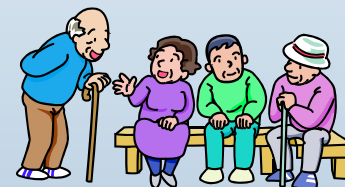
Component 4: Evaluation and Continuous Monitoring



Annual Infection Control Checklist Survey

Aims:

- To understand the infection control conditions in the RCHEs
- To identify the areas for improvement or target for health education
- To evaluate the effectiveness of the infection control programme
- To increase alertness of the home staff





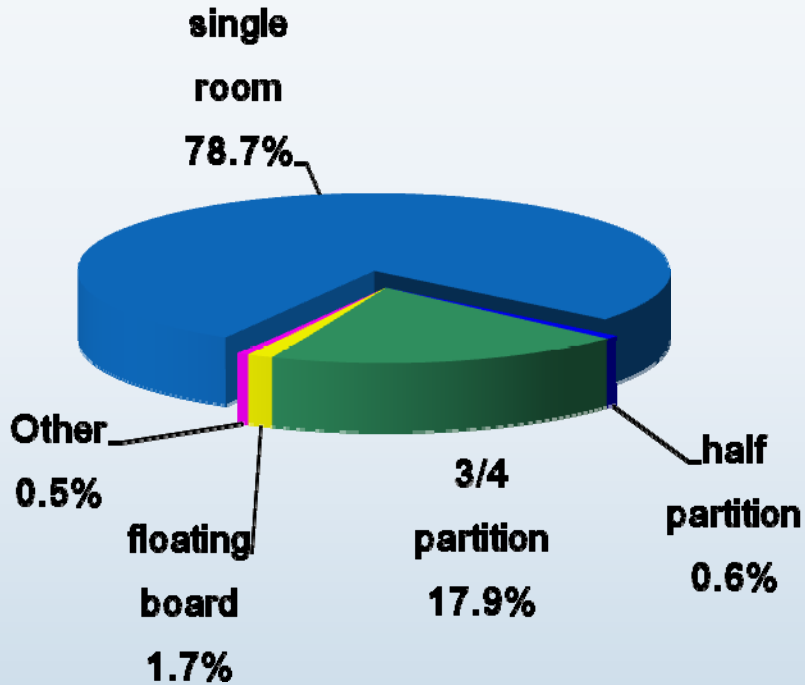
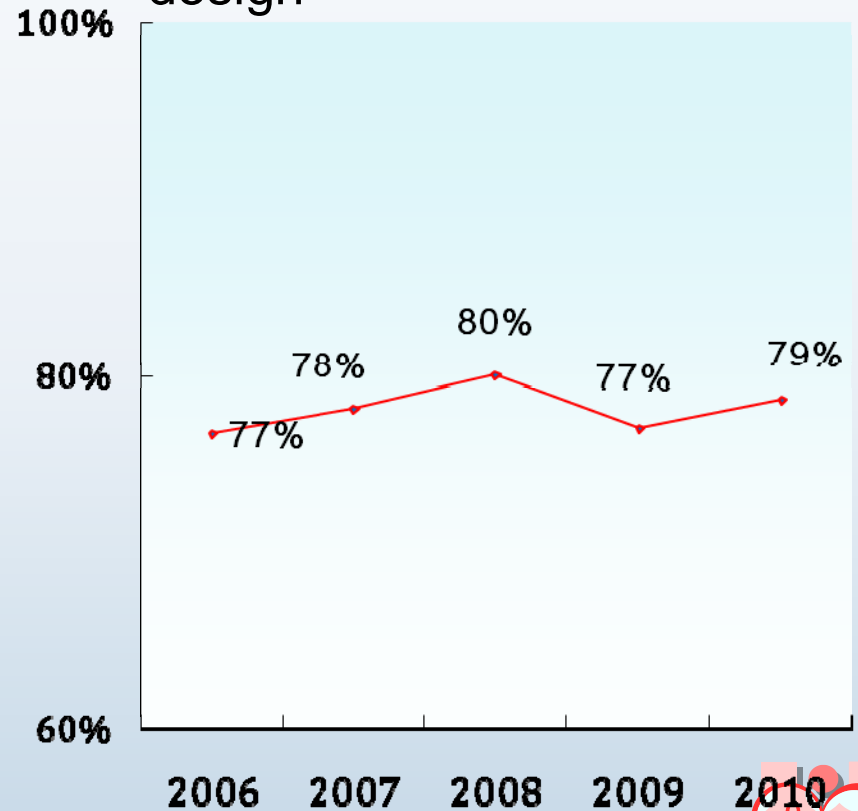
Isolation Room





Type of isolation area

Percentage of homes whose isolation area is single room design



Type of isolation area (2010)





Attitude & usage of isolation room

	2005	2006	2007	2008	2009	2010
Cohort sick resident to isolation room	73%	75%	70%	79.7%	84.2%	86.4%
Isolation concept	94%	95%	94%	96.6%	97.3%	97.8%
Isolation room ready for use		75%	81%	88.3%	89.3%	94.6%





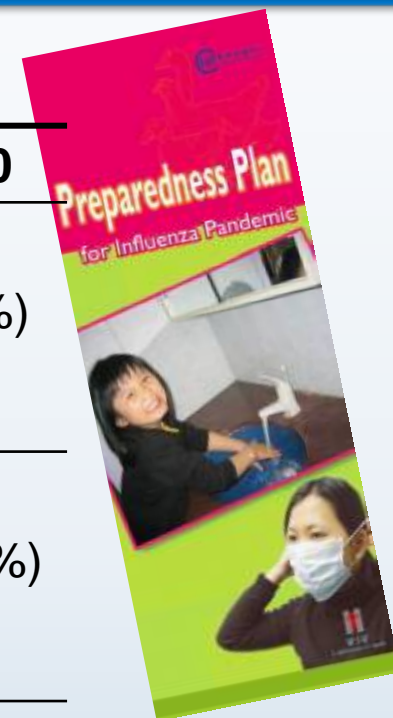
Knowledge





Knowledge on the response level

	2006	2007	2008	2009	2010
Do not aware of the response level	176 (23.3%)	143 (18.6%)	91 (11.8%)	25 (3.2%)	53 (6.8%)
Do not know the current response level	449 (59.5%)	462 (60.1%)	393 (51.1%)	296 (38.4%)	393 (50.5%)
Can name the current response level	130 (17.2%)	164 (21.3%)	285 (37.1%)	450 (58.4%)	332 (42.7%)



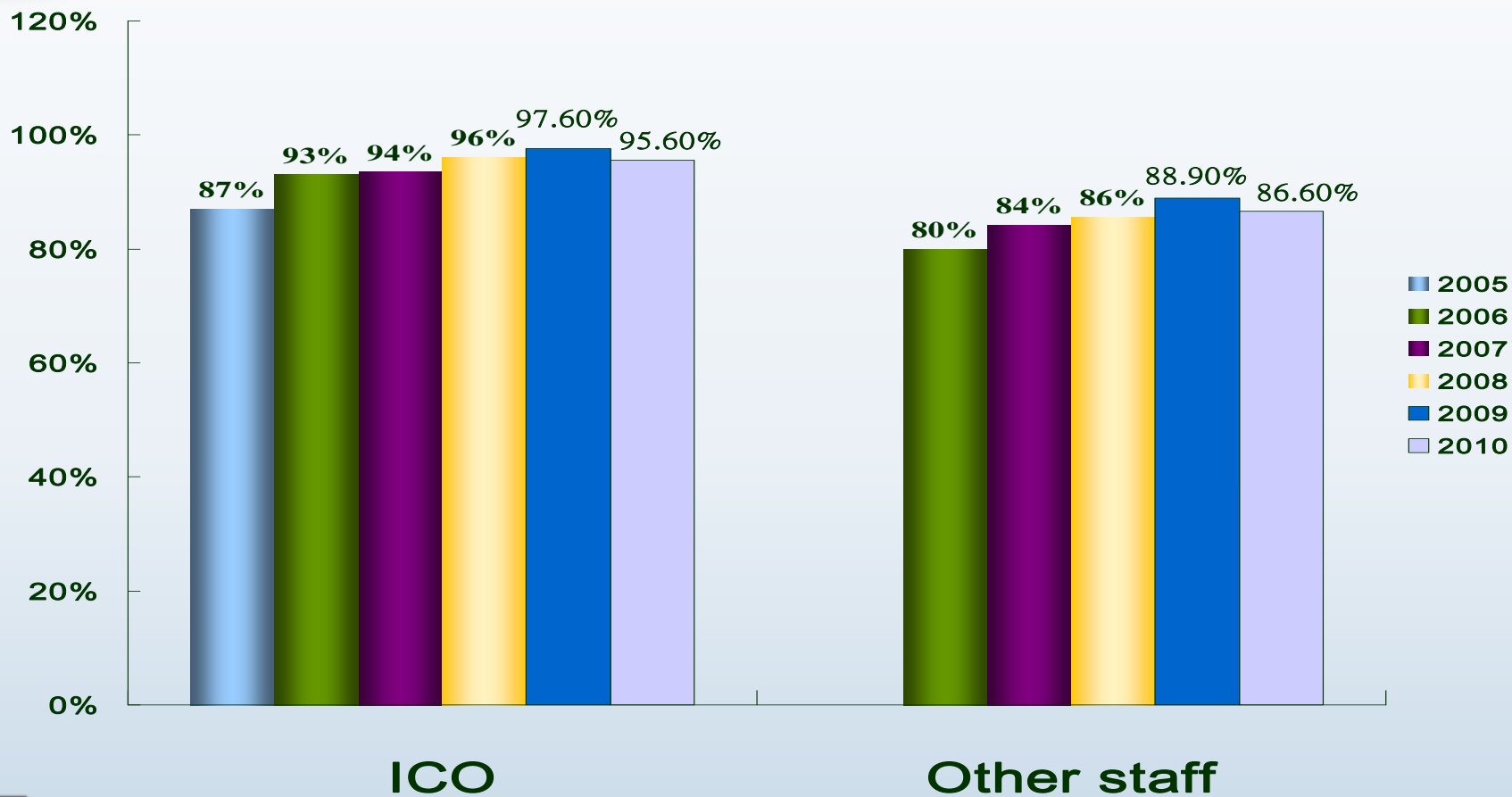


Skill





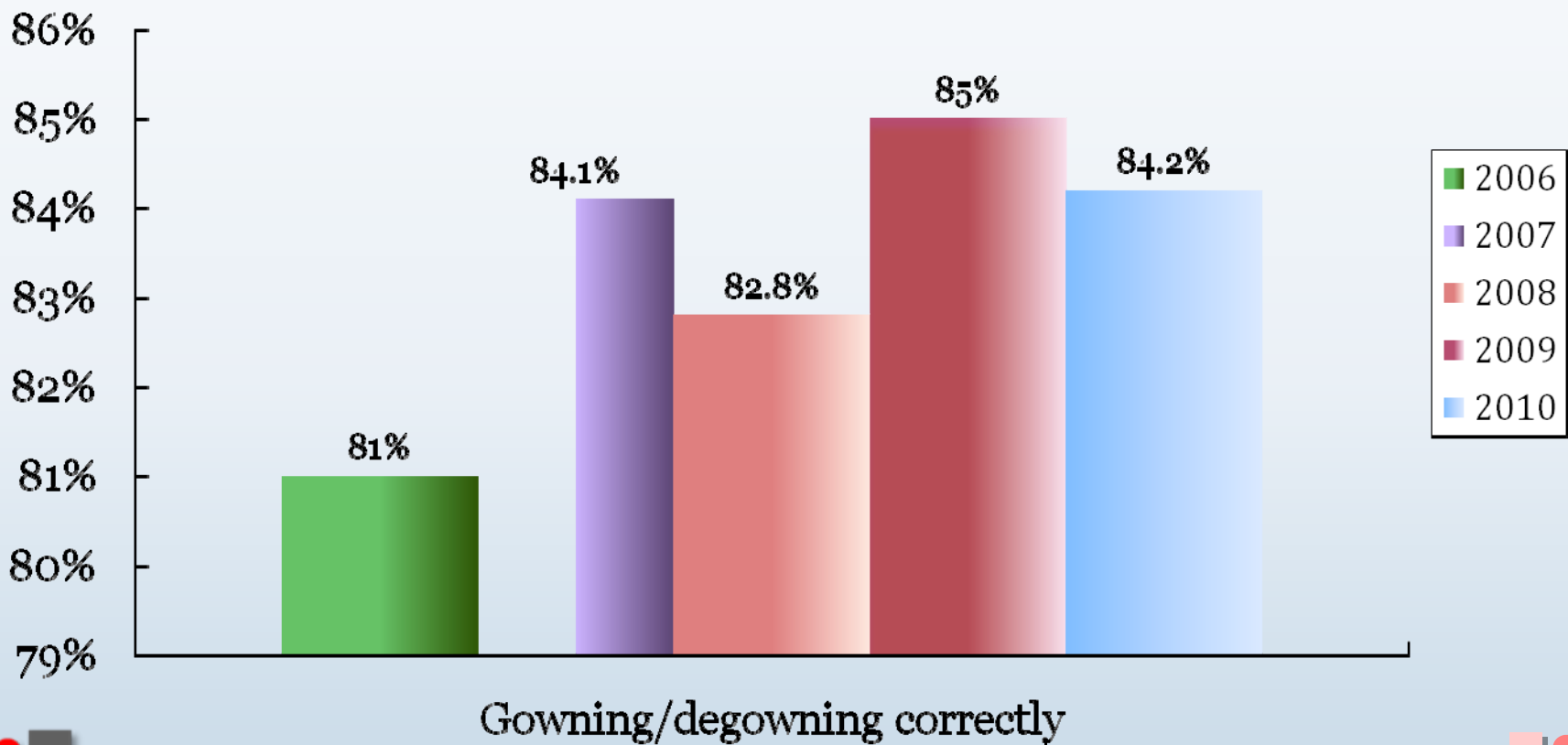
handwashing







Correct use of PPE



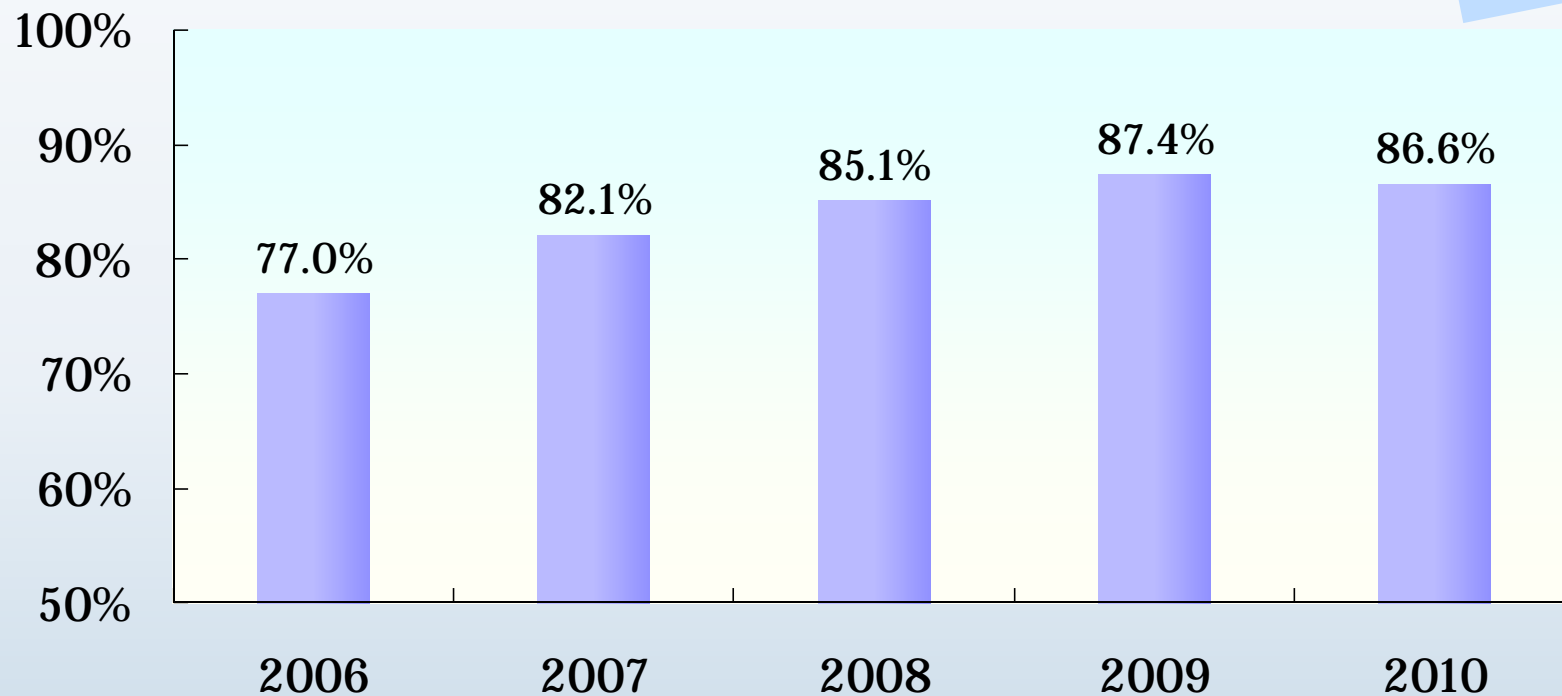


先注入100毫升漂水(備用)
再加水到相應標界





Demonstration -Bleach dilution



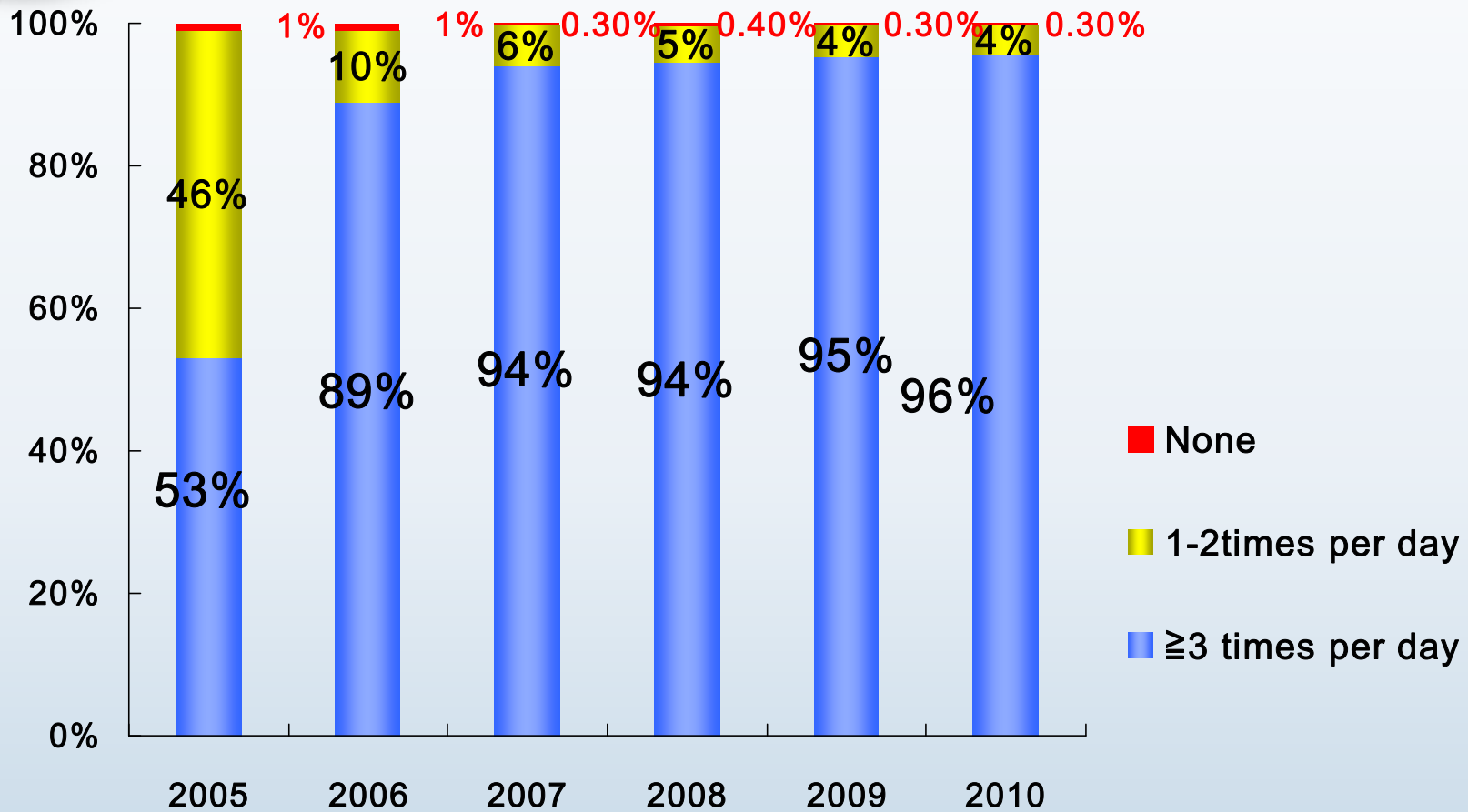


Practice





Oral care for residents





Host Factors --Get the residents involved

- **Adopt healthy lifestyle**

- Balanced diet, regular exercise, do not smoke, adequate rest



- **Get vaccinated**

- Target groups extended to home staff since 2005
- Pneumococcal vaccination had been provided to residents since 2009
- HSI vaccination in 2010



- **Promote personal hygiene**





Way forward

- **Targeted approach:** enhanced education programme to the homes with unsatisfactory performance
- **Continuous monitoring:** with special attention to areas for improvement
- **Continuous improvement:** refresher courses for the home staff
- **Better collaboration:** collaborate with relevant parties to enforce the infection control measures
- **Host factors:** get the residents involved





Thank You

