



HEALTH QUALITY & SAFETY
COMMISSION NEW ZEALAND
Kupu Taurangi Hauora o Aotearoa

**National hand hygiene compliance report:
1 July 2018 to 31 October 2018**

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Introduction

This report presents results for national hand hygiene compliance by district health boards (DHBs) for the period 1 July 2018 to 31 October 2018.

Compliance is measured as part of the Health Quality & Safety Commission's (the Commission's) Hand Hygiene New Zealand (HHNZ) programme.

The HHNZ programme is one of two current programmes that are part of the Commission's infection prevention and control programme. These targeted improvement initiatives aim to reduce the harm and cost of healthcare associated infections within New Zealand's health and disability sector.

The HHNZ programme uses the World Health Organization's (WHO's) '5 moments for hand hygiene' framework to drive culture change and establish best hand hygiene practice for every patient, every time.

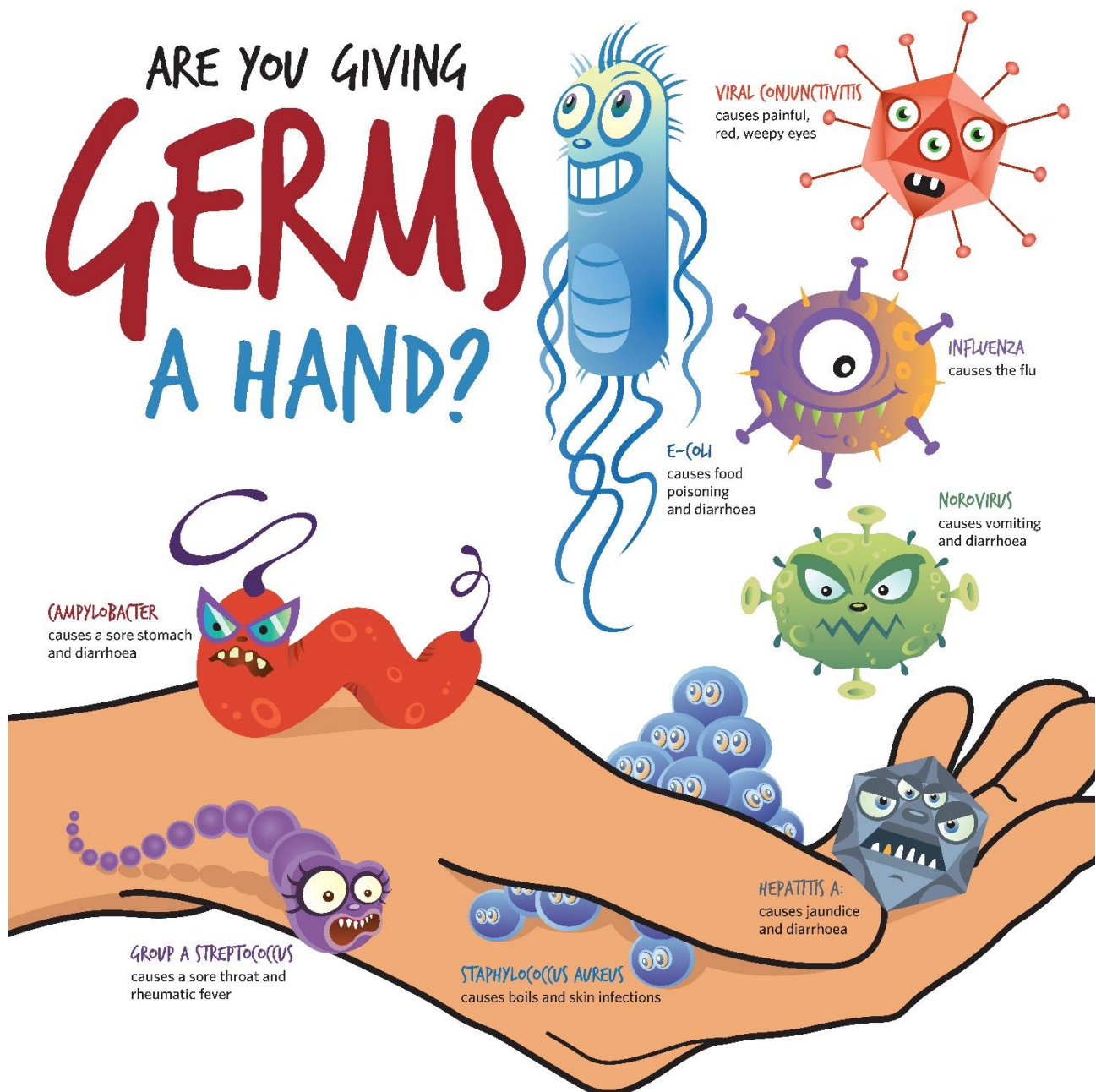
Auckland DHB delivered the HHNZ programme on behalf of the Commission between 2011 and 2015. In February 2016 the programme was transitioned to the Commission.

Achievements in this audit period

- National compliance is 84.9 percent compared with 85.5 percent in the previous audit period.
- Sixteen DHBs achieved at or above the national target of 80 percent compared with 15 in the previous audit period.
- Eight DHBs maintained or improved their compliance rate compared with the previous audit period.
- Eighteen DHBs met the minimum requirement of moments. Hauora Tairāwhiti did not submit any moments this audit period.

Continuing to drive improvement

Encouraging the spread of auditing across all clinical areas is a key focus for HHNZ. Spreading and sustaining the improvements already achieved in hand hygiene practice is essential to prevent healthcare associated infections and respond to the growing threat of infections caused by multi-drug resistant micro-organisms. We recently sent letters to the senior leadership at all 20 DHBs with an update on spreading hand hygiene across all clinical areas. Throughout 2018/19 HHNZ will continue to focus on spreading improvement and looking at how this may be reported. The 2018 theme for Patient Safety Week was hand hygiene and this provided an opportunity to highlight the topic and support spread.



Useful resources

[Presentations from the HHNZ workshop \(2017\)](#)

[HHNZ auditing manual \(2017\)](#)

[Other HHNZ resources](#)

National hand hygiene compliance report: 1 July 2018 to 31 October 2018

National hand hygiene compliance data: 1 July 2018 to 31 October 2018

The nationally aggregated hand hygiene compliance rate for this measurement period is 84.9 percent. The national average performance by DHB is similar, at 82.2 percent. The average rate gives equal weighting to each DHB's result regardless of size, whereas the aggregate rate is more affected by the performance of large DHBs. The fact that the two rates are within three percentage points indicates performance rates between large and small DHBs are very similar.

Table 1: National aggregated hand hygiene compliance, 1 July 2018 to 31 October 2018

Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
65,504	77,127	84.9%	84.7%	85.2%

Table 2: National compliance rates by DHB, 1 July 2018 to 31 October 2018

DHB	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Auckland DHB	9,596	11,178	85.8%	85.2%	86.5%
Bay of Plenty DHB	2,107	2,596	81.2%	79.6%	82.6%
Canterbury DHB	3,363	4,163	80.8%	79.6%	82.0%
Capital & Coast DHB	2,808	3,407	82.4%	81.1%	83.7%
Counties Manukau Health	11,563	13,352	86.6%	86.0%	87.2%
Hauora Tairāwhiti					
Hawke's Bay DHB	1,552	1,777	87.3%	85.7%	88.8%
Hutt Valley DHB	1,473	1,816	81.1%	79.2%	82.8%
Lakes DHB	1,008	1,237	81.5%	79.2%	83.6%
MidCentral DHB	1,848	2,355	78.5%	76.8%	80.1%
Nelson Marlborough DHB*	1,270	1,502	84.6%	82.6%	86.3%
Northland DHB	2,472	2,815	87.8%	86.6%	89.0%
South Canterbury DHB	665	805	82.6%	79.8%	85.1%
Southern DHB	2,076	2,560	81.1%	79.5%	82.6%
Taranaki DHB	560	843	66.4%	63.2%	69.5%
Waikato DHB	2,942	3,784	77.7%	76.4%	79.0%
Wairarapa DHB	246	299	82.3%	77.5%	86.2%
Waitemata DHB	18,303	20,628	88.7%	88.3%	89.2%
West Coast DHB	964	1,194	80.7%	78.4%	82.9%
Whanganui DHB	688	816	84.3%	81.7%	86.6%

* This DHB was more than 100 moments short of the minimum requirement for this audit period.

Table 3: Hand hygiene compliance by geographic region, 1 July 2018 to 31 October 2018

Region	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Northern	41,934	47,973	87.4%	87.1%	87.7%
Midland	6,617	8,460	78.2%	77.3%	79.1%
Central	8,615	10,470	82.3%	81.5%	83.0%
South Island	8,338	10,224	81.6%	80.8%	82.3%

Table 4: Compliance by moment, 1 July 2018 to 31 October 2018

Moment	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
1. Before touching a patient	18,166	22,514	80.7%	80.2%	81.2%
2. Before procedure	7,216	8,231	87.7%	86.9%	88.4%
3. After a procedure or body fluid exposure risk	9,657	10,443	92.5%	92.0%	93.0%
4. After touching a patient	19,960	22,569	88.4%	88.0%	88.9%
5. After touching a patient's surroundings	10,505	13,370	78.6%	77.9%	79.3%

Table 5: Department compliance rates, 1 July 2018 to 31 October 2018

Department type	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Acute aged care	2,051	2,356	87.1%	85.6%	88.3%
Ambulatory care	1,661	1,892	87.8%	86.2%	89.2%
Critical care unit	5,391	6,526	82.6%	81.7%	83.5%
Emergency department	2,954	3,797	77.8%	76.4%	79.1%
Maternity	2,027	2,285	88.7%	87.3%	89.9%
Medical	14,957	17,756	84.2%	83.7%	84.8%
Mixed	1,963	2,287	85.8%	84.3%	87.2%
Neonatal care	3,244	3,544	91.5%	90.6%	92.4%
Oncology/haematology	2,703	3,092	87.4%	86.2%	88.5%
Other	2,122	2,461	86.2%	84.8%	87.5%
Paediatrics	4,193	4,706	89.1%	88.2%	90.0%
Peri-operative	1,691	1,978	85.5%	83.9%	87.0%
Radiology/radiation oncology	807	1,024	78.8%	76.2%	81.2%
Renal	5,933	6,665	89.0%	88.2%	89.7%
Surgical	12,657	15,522	81.5%	80.9%	82.1%

Table 6: Health care worker compliance rates, 1 July 2018 to 31 October 2018

Health care worker	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Administrative and clerical staff	120	160	75.0%	67.8%	81.1%
Allied health care worker	3,109	3,706	83.9%	82.7%	85.0%
Cleaner and meal staff	576	809	71.2%	68.0%	74.2%
Health care assistant	5,882	7,018	83.8%	82.9%	84.7%
Medical practitioner	8,542	10,926	78.2%	77.4%	78.9%
Nurse/midwife	40,270	46,047	87.5%	87.1%	87.8%
Other – orderly and not categorised elsewhere	1,024	1,520	67.4%	65.0%	69.7%
Phlebotomy invasive technician	2,463	2,730	90.2%	89.0%	91.3%
Student allied health	251	312	80.4%	75.7%	84.5%
Student doctor	333	441	75.5%	71.3%	79.3%
Student nurse/midwife	2,934	3,458	84.8%	83.6%	86.0%

Hand hygiene compliance in glove use

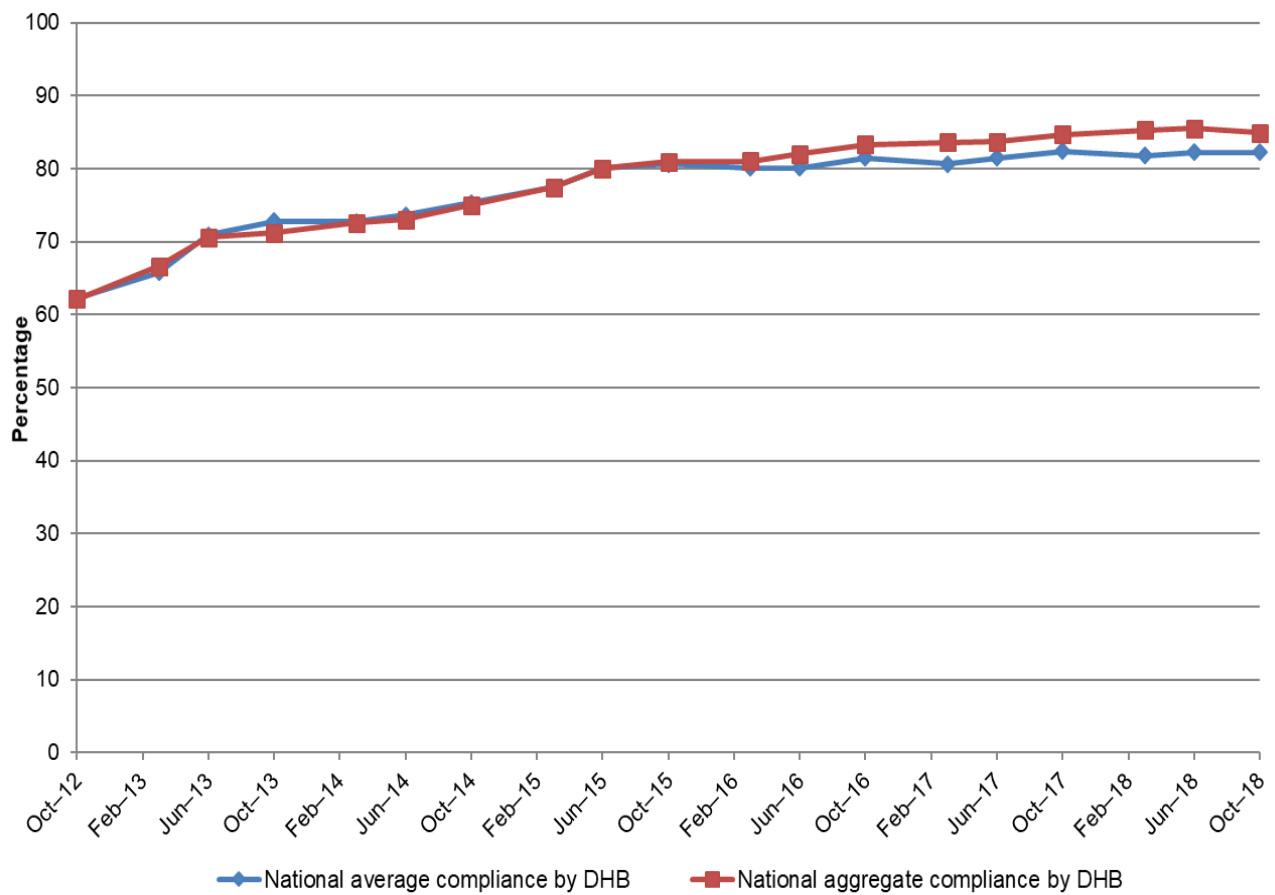
Inappropriate use of non-sterile gloves remains a barrier to excellent hand hygiene practice.

The latest glove statistics are:

- when gloves are taken OFF, the proportion of hand hygiene opportunities missed was 6.0 percent compared with 5.8 percent in the June 2018 audit period
- when gloves are put ON, the proportion of hand hygiene opportunities missed was 14.4 percent compared with 12.9 in the June 2018 audit period
- when gloves were worn continuously, hand hygiene opportunities were missed on every occasion
- of all moments where glove use is recorded, health care workers failed to complete hand hygiene 12.3 percent of the time compared with 11.7 percent in the June 2018 audit period.

National hand hygiene compliance over time

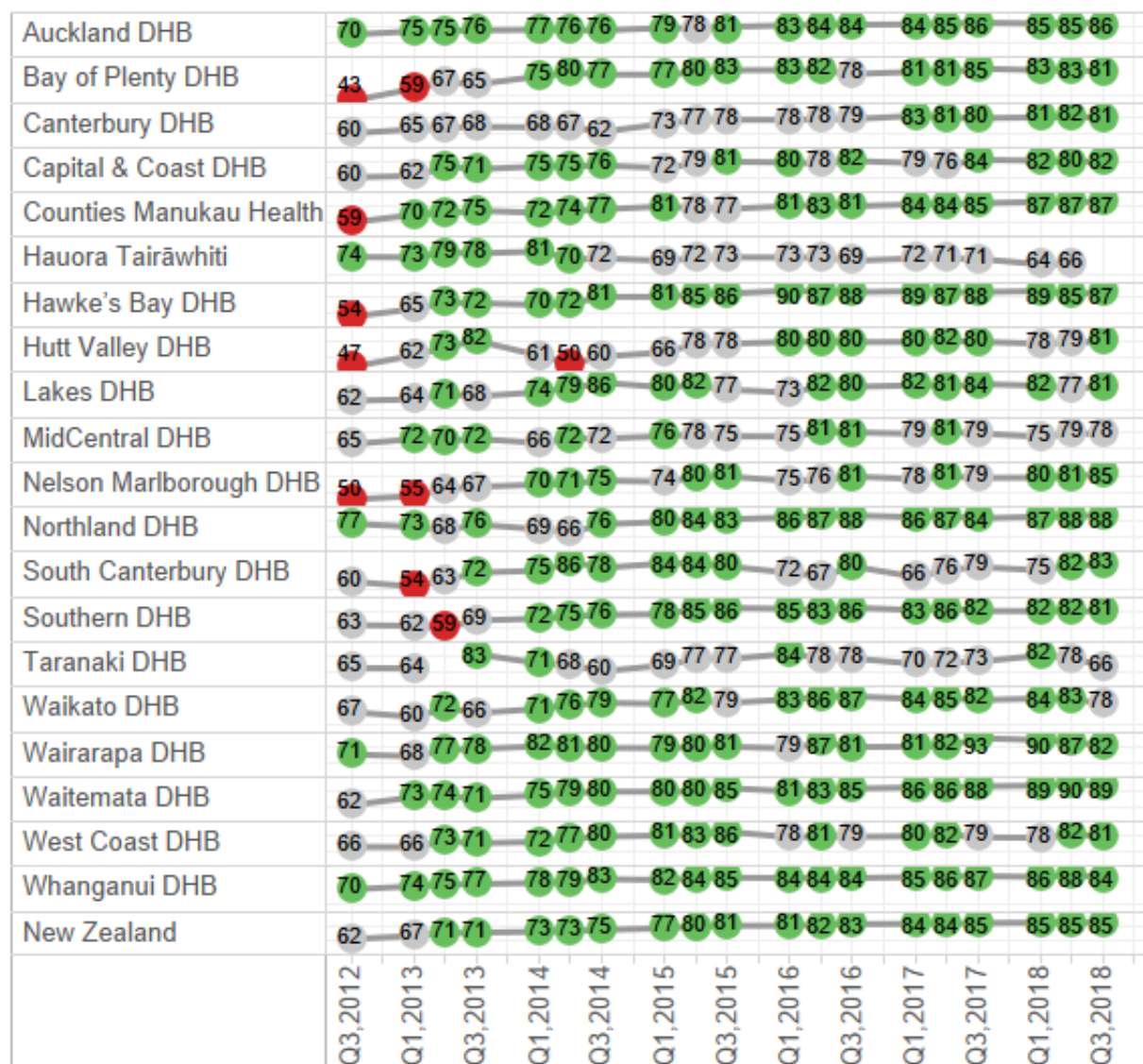
Figure 1: Trends in national aggregate and average hand hygiene compliance, October 2012 to October 2018



National target

The national target for hand hygiene compliance has increased over time, as the programme has successfully gained traction in DHBs. The target was set at 64 percent in June 2012, 70 percent in June 2013, 75 percent in June 2014 and 80 percent in June 2015. The programme is now focused on spreading and embedding good hand hygiene practice to support sustained increases in compliance across DHBs.

Figure 2: Compliance over time by DHB, quarter 3, 2012 to quarter 3, 2018



Upper group

Middle group

Lower group

Lower group:	percentage < 60 percent
Middle group:	percentage is 60 percent to target
Upper group:	≥ 70 percent before quarter 3, 2014 ≥ 75 percent before quarter 3, 2015 ≥ 80 percent from quarter 3, 2015

Hand hygiene national compliance data is reported on three times each year, therefore no data point is shown specifically for quarter 4 in any year.

Traffic light approach

The red–amber–green figures (Figures 3–5) use a ‘traffic light’ approach. A cell is coloured green if the 80 percent target was achieved, amber if within 5 percent of the target, and red if more than 5 percent from the target. Every year’s rate until 2018 has been averaged.

Figure 3: Change in national hand hygiene compliance over time by moment, October 2012 to October 2018

Key

< 75%

75–80%

≥ 80% target achieved

Moment	2012	2013	2014	2015	2016	2017	Mar 18	Jun 18	Oct 18
Before touching a patient	55.5	64.7	69.1	75.6	78.1	79.9	80.9	81.9	80.7
Before a procedure	55.6	62.6	69.7	78.2	81.9	84.4	87.5	88.1	87.7
After a procedure or body fluid exposure risk	69.4	74.1	78.3	84.2	88.8	90.7	91.3	91.8	92.5
After touching a patient	71.9	76.5	80.0	85.9	87.1	88.7	89.8	89.5	88.4
After touching a patient's surroundings	54.9	64.6	69.0	75.7	76.6	77.9	78.7	78.3	78.6

Figure 4: Change in national hand hygiene compliance over time for health care workers, October 2012 to October 2018

Key

< 75%	75–80%	≥ 80% target achieved
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Health care worker	2012	2013	2014	2015	2016	2017	Mar 18	Jun 18	Oct 18
Allied health care worker	62.7	66.7	73.0	78.8	80.5	83.5	86.4	86.5	83.9
Health care assistant	61.5	71.7	74.1	76.4	79.2	81.4	83.8	84.1	83.8
Medical practitioner	55.0	60.1	64.5	72.7	75.5	75.5	77.5	78.5	78.2
Nurse/midwife	65.0	72.0	76.2	82.4	85.7	87.1	88.0	87.8	87.5
Phlebotomy invasive technician	70.4	74.7	81.5	81.6	88.2	89.6	90.3	90.5	90.2
Student allied health	46.7	65.2	70.3	79.7	83.1	80.9	86.5	84.7	80.4
Student doctor	42.6	53.7	63.9	78.9	77.6	79.9	67.2	71.7	75.5
Student nurse/midwife	61.2	69.0	70.6	78.4	82.1	83.5	83.9	86.2	84.8

Figure 5: Changes in national hand hygiene compliance by high-risk ward type, October 2012 to October 2018

Key

< 75%	75–80%	≥ 80% target achieved
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Ward type	2012	2013	2014	2015	2016	2017	Mar 18	Jun 18	Oct 18
Critical care	61.0	67.1	71.0	76.3	80.7	84.0	82.1	83.0	82.6
Emergency department	34.1	56.3	66.5	70.0	75.1	77.0	77.3	79.8	77.8
Neonatal intensive care	70.1	73.2	81.3	85.0	87.2	88.4	91.1	89.4	91.5
Oncology/haematology	68.7	72.2	78.2	84.3	88.3	87.0	86.5	86.9	87.4
Renal	64.7	73.5	79.7	81.3	87.0	88.6	90.2	90.3	89.0