



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

**National hand hygiene compliance report:
1 July 2017 to 31 October 2017**

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Introduction

This report presents results for national hand hygiene compliance by district health boards (DHBs) for the period 1 July 2017 to 31 October 2017.

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 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

- Thirteen DHBs achieved at or above the national target of 80 percent compared with 16 in the previous audit period.
- Ten DHBs maintained or improved their compliance rate compared with the previous audit period.
- Eighteen out of 20 DHBs met the minimum requirement of moments.
- There are continual improvements being made in the areas where patients at high risk of infection are cared for, including emergency departments.
- Hand hygiene compliance and glove use has also continued to improve for before gloves are put on, and when gloves are taken off.

Continuing to drive improvement

The HHNZ auditing manual was updated and released in July 2017. It includes updated guidance for hand hygiene auditing to encourage spread of improvement. Spreading hand hygiene improvement across clinical areas is an area of focus for the HHNZ programme because it will help embed strong hand hygiene practices within DHBs.

The updated auditing manual includes:

- a stronger focus on spreading and sustaining improvement
- a revised section on selection of clinical areas for auditing
- a new section on validation of the auditing process
- new criteria to demonstrate the spread of improvement across high-risk and other clinical areas.

A national HHNZ workshop on creating a solid platform for infection prevention was held on 15 October 2017 in Auckland, and built on the updated auditing guidance. The workshop featured presentations from the HHNZ programme team and organisations involved in the local delivery of the HHNZ programme. Jenny Parr, director of patient care, chief nurse and allied health professions, Counties Manukau Health gave a keynote speech on effective engagement across organisations. Workshop activities focused on spreading auditing and validation. The presentations and outputs from the workshop activities will be shared with hand hygiene coordinators and workshop participants soon.



Useful resources

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

[Results from the 2016 hand hygiene stocktake survey](#)

[Frontline ownership having a positive impact on hand hygiene compliance](#)

[Frontline ownership workshop with Dr Michael Gardam](#)

[Other HHNZ resources](#)

National hand hygiene compliance data: 1 July 2017 to 31 October 2017

The nationally aggregated hand hygiene compliance rate for this measurement period is 84.7 percent. The national average performance by DHB is similar, at 82.3 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 that performance rates between large and small DHBs are very similar.

Table 1: Aggregated hand hygiene compliance, 1 July 2017 to 31 October 2017

Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
62,822	74,129	84.7%	84.5%	85.0%

Table 2: National compliance rates by DHB, 1 July 2017 to 31 October 2017

DHB	1 July 2017 to 31 October 2017			Lower 95% confidence interval	Upper 95% confidence interval
	Correct moments	Total moments	Compliance rate		
Auckland DHB	10,208	11,816	86.4%	85.8%	87.0%
Bay of Plenty DHB	1,964	2,315	84.8%	83.3%	86.2%
Canterbury DHB	2,601	3,254	79.9%	78.5%	81.3%
Capital & Coast DHB	2,382	2,843	83.8%	82.4%	85.1%
Counties Manukau Health	9,170	10,787	85.0%	84.3%	85.7%
Hauora Tairāwhiti	570	804	70.9%	67.7%	73.9%
Hawke's Bay DHB	1,909	2,180	87.6%	86.1%	88.9%
Hutt Valley DHB	1,264	1,574	80.3%	78.3%	82.2%
Lakes DHB	805	958	84.0%	81.6%	86.2%
MidCentral DHB	1,474	1,865	79.0%	77.1%	80.8%
Nelson Marlborough DHB	1,005	1,272	79.0%	76.7%	81.2%
Northland DHB	3,020	3,575	84.5%	83.3%	85.6%
South Canterbury DHB	639	805	79.4%	76.4%	82.0%
Southern DHB	2,343	2,859	82.0%	80.5%	83.3%
Taranaki DHB	633	865	73.2%	70.1%	76.0%
Waikato DHB	2,746	3,337	82.3%	81.0%	83.5%
Wairarapa DHB	198	214	92.5%	88.2%	95.3%
Waitemata DHB	18,603	21,254	87.5%	87.1%	88.0%
West Coast DHB	571	726	78.7%	75.5%	81.5%
Whanganui DHB	717	826	86.8%	84.3%	88.9%

Table 3: Hand hygiene compliance by geographic region, 1 July 2017 to 31 October 2017

Region	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Northern	41,001	47,432	86.4%	86.1%	86.7%
Midland	6,718	8,279	81.1%	80.3%	82.0%
Central	7,944	9,502	83.6%	82.8%	84.3%
South Island	7,159	8,916	80.3%	79.5%	81.1%

National compliance rates by each of the WHO ‘five moments for hand hygiene’

Table 4: Compliance by moment, 1 July 2017 to 31 October 2017

Moment	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
1. Before touching a patient	17,597	21,897	80.4%	79.8%	80.9%
2. Before procedure	6,726	7,753	86.8%	86.0%	87.5%
3. After a procedure or body fluid exposure risk	9,010	9,887	91.1%	90.6%	91.7%
4. After touching a patient	19,607	22,023	89.0%	88.6%	89.4%
5. After touching a patient's surroundings	9,882	12,569	78.6%	77.9%	79.3%

National compliance rates by health care worker category

Table 5: Health care worker compliance rates, 1 July 2017 to 31 October 2017

Health care worker	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Phlebotomy invasive technician	2,385	2,646	90.1%	88.9%	91.2%
Nurse/midwife	38,584	44,113	87.5%	87.2%	87.8%
Student nurse/midwife	3,193	3,770	84.7%	83.5%	85.8%
Allied health care worker	2,898	3,479	83.3%	82.0%	84.5%
Health care assistant	5,393	6,480	83.2%	82.3%	84.1%
Student doctor	270	337	80.1%	75.5%	84.0%
Student allied health	189	237	79.7%	74.2%	84.4%
Medical practitioner	8,237	10,755	76.6%	75.8%	77.4%
Cleaner and meal staff	845	1,141	74.1%	71.4%	76.5%
Other – orderly and not categorised elsewhere	685	969	70.7%	67.7%	73.5%
Administrative and clerical staff	140	199	70.4%	63.7%	76.3%

Hand hygiene compliance in glove use

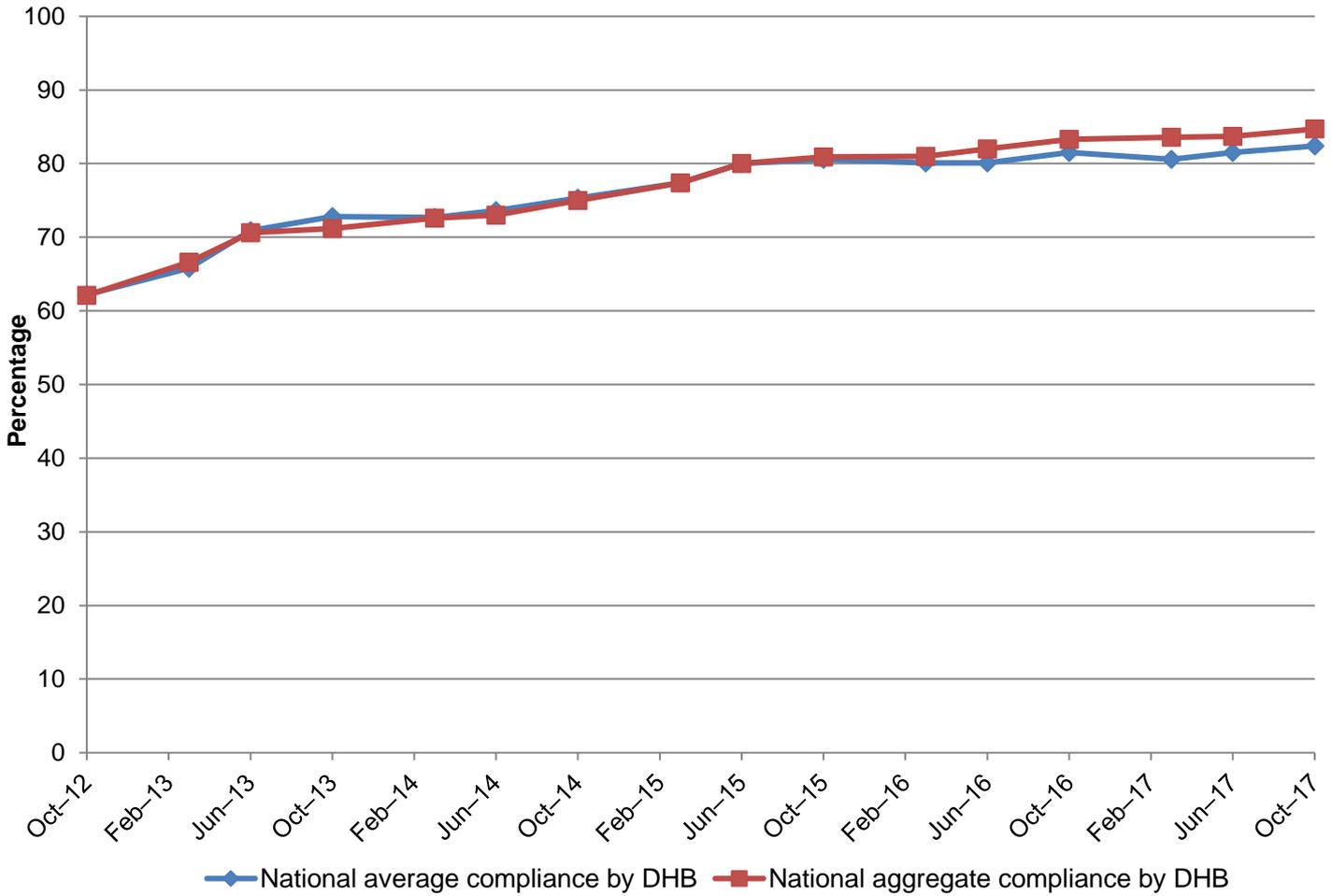
Inappropriate use of non-sterile gloves remains a barrier to excellent hand hygiene practice.

However, it is good to see continued, ongoing improvement in better glove use and hand hygiene performance during this measurement period: before gloves are put on and when they are taken off.

The latest glove statistics are:

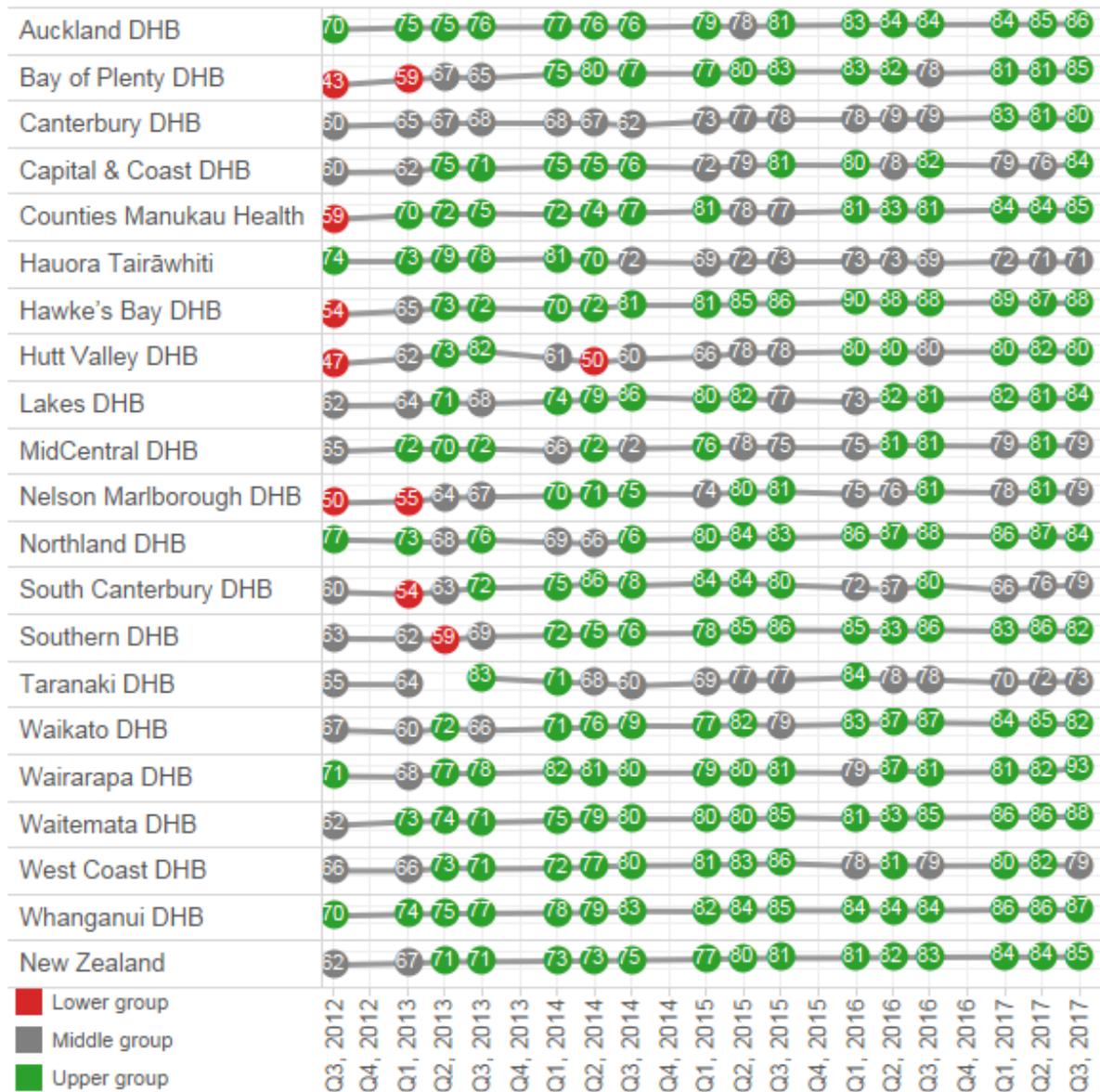
- when gloves are taken OFF, the proportion of hand hygiene opportunities missed was 5.5 percent compared with 6.4 percent in the June 2017 audit
- when gloves are put ON, the proportion of hand hygiene opportunities missed was 14.2 percent compared with 17.2 percent in the June 2017 audit
- of all moments where glove use is recorded, health care workers failed to complete hand hygiene 12.5 percent of the time, compared with 14.4 percent in the June 2017 audit
- when gloves were worn continuously, hand hygiene opportunities were missed on every occasion.

Figure 1: Trends in national aggregate and average hand hygiene compliance, October 2012 to October 2017



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, 2017



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.

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.

Figure 3: Change in national hand hygiene compliance over time by moment, October 2012 to October 2017

Key
< 75% 75–80% ≥ 80% target achieved

Moment	Oct 12	Mar 13	Jun 13	Oct 13	Mar 14	Jun 14	Oct 14	Mar 15	Jun 15	Oct 15	Mar 16	Jun 16	Oct 16	Mar 17	Jun 17	Oct 17
Before touching a patient	55.5	61.8	66.0	66.4	68.0	68.8	70.6	73.3	76.0	77.6	76.1	78.4	79.8	79.3	79.9	80.4
Before procedure	55.6	60.5	61.4	65.9	70.3	68.5	70.2	75.5	78.7	80.5	80.5	82.0	83.3	83.2	83.2	86.8
After a procedure or body fluid exposure risk	69.4	73.1	73.8	75.4	79.0	76.9	79.0	82.5	85.1	85.0	88.7	87.7	90.0	90.6	90.3	91.1
After touching a patient	71.9	74.2	77.7	77.6	78.5	79.3	82.3	87.3	84.9	85.6	86.2	87.4	87.6	88.6	88.5	89.0
After touching a patient's surroundings	54.9	60.7	65.2	68.0	67.6	69.2	70.1	76.2	74.7	76.1	75.3	77.4	77.0	77.7	77.3	78.6

Figure 4: Change in national hand hygiene compliance over time for health care workers, October 2012 to October 2017

Key
< 75% 75–80% ≥ 80% target achieved

Health care worker	Oct 12	Mar 13	Jun 13	Oct 13	Mar 14	Jun 14	Oct 14	Mar 15	Jun 15	Oct 15	Mar 16	Jun 16	Oct 16	Mar 17	Jun 17	Oct 17
Nurse/midwife	65.0	69.4	72.4	74.1	75.3	75.7	77.7	80.5	83.1	83.5	84.4	86.0	86.6	87.0	86.8	87.5
Medical practitioner	55.0	56.6	61.4	62.2	62.5	63.8	67.3	69.4	72.3	76.4	74.2	76.0	76.3	75.0	75.0	76.6
Allied health care worker	62.7	66.2	65.3	68.5	72.8	72.2	74.1	76.2	76.9	83.4	79.0	81.0	81.5	84.0	83.3	83.3
Phlebotomy invasive technician	70.4	73.0	76.3	74.9	84.9	76.1	83.6	80.9	79.1	84.8	88.9	87.0	88.7	88.0	90.6	90.1
Health care assistant	61.5	69.8	75.2	70.0	73.0	74.9	74.3	74.7	77.9	76.7	76.9	80.0	80.6	81.0	79.9	83.2
Student doctor	42.6	46.6	62.5	52.1	61.2	57.5	72.9	76.3	81.2	79.2	75.8	78.0	78.9	82.0	77.5	80.1
Student allied health	46.7	68.2	61.7	65.6	69.5	70.1	71.4	74.7	84.6	79.7	80.7	84.0	84.7	79.0	84.1	79.7
Student nurse/midwife	61.2	68.4	68.5	70.1	72.5	69.1	70.3	76.8	78.4	79.9	82.6	82.0	81.6	84.0	81.7	84.7

Figure 5: Changes in national hand hygiene compliance by high-risk ward type, October 2012 to October 2017

Key

< 75% 75–80% ≥ 80% target achieved

Ward type	Oct 12	Mar 13	Jun 13	Oct 13	Mar 14	Jun 14	Oct 14	Mar 15	Jun 15	Oct 15	Mar 16	Jun 16	Oct 16	Mar 17	Jun 17	Oct 17
Critical care	61.0	63.8	68.3	69.3	71.0	71.1	71.0	74.0	77.0	78.0	79.6	80.4	82.1	83.0	83.9	85.0
Neonatal intensive care	70.1	74.8	69.2	75.7	81.1	81.7	81.0	84.0	85.0	86.0	86.8	88.2	86.6	88.5	87.1	89.5
Oncology/haematology	68.7	70.0	72.8	73.7	75.6	75.9	83.0	82.0	84.0	87.0	87.0	87.6	90.3	86.6	87.9	86.6
Renal	64.7	72.4	73.0	75.1	79.0	80.2	80.0	82.0	81.0	81.0	86.7	85.9	88.3	88.4	87.8	89.5
Emergency department	34.1	46.8	60.5	61.5	62.8	63.7	73.0	69.0	67.0	74.0	73.2	74.6	77.5	78.6	76.1	76.4