



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

National hand hygiene compliance report: 1 November 2018 to 31 March 2019

Contents

Introduction	3
Achievements in this audit period.....	3
Continuing to drive improvement.....	4
National hand hygiene compliance data: 1 November 2018 to 31 March 2019	5
Table 1: National aggregated hand hygiene compliance, 1 November 2018 to 31 March 2019.....	5
Table 2: National compliance rates by DHB, 1 November 2018 to 31 March 2019.....	5
Table 3: Hand hygiene compliance by geographic region, 1 November 2018 to 31 March 2019.....	6
Table 4: Compliance by moment, 1 November 2018 to 31 March 2019	6
Table 5: Department compliance rates, 1 November 2018 to 31 March 2019	7
Table 6: Health care worker compliance rates, 1 November 2018 to 31 March 2019	8
Hand hygiene compliance in glove use	8
National hand hygiene compliance over time	9
Figure 1: Trends in national aggregate and average hand hygiene compliance, October 2012 to March 2019.....	9
Figure 2: Compliance over time by DHB, July 2012 to March 2019.....	10
Figure 3: Change in national hand hygiene compliance over time by moment, July 2012 to March 2019.....	11
Figure 4: Change in national hand hygiene compliance over time for health care workers, July 2012 to March 2019.....	12
Figure 5: Changes in national hand hygiene compliance by high-risk ward type, July 2012 to March 2019.....	12

Introduction

This report presents results for national hand hygiene compliance by district health boards (DHBs) for the period 1 November 2018 to 31 March 2019.

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 (IPC) 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.

Achievements in this audit period

- National compliance was 85.6 percent compared with 84.9 percent in the previous audit period.
- Fifteen DHBs achieved at or above the national target of 80 percent compared with 16 in the previous audit period.
- Sixteen DHBs maintained or improved their compliance rates compared with the previous audit period.
- Seventeen DHBs met the minimum requirement of moments.

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. HHNZ sent letters in November 2018 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.

World Hand Hygiene Day 5 May 2019

The WHO has many great resources that IPC teams can use for World Hand Hygiene Day, including editable posters, social media cards and photo boards. The WHO is also encouraging organisations to demonstrate their commitment to 'Clean Care for All' through clean hands by forming a solidarity chain. More information and the resources can be viewed here:

<https://www.who.int/infection-prevention/campaigns/clean-hands/5may2019/en/>.

A specific call to action this World Hand Hygiene Day is to complete the '2019 WHO Global Survey on IPC and Hand Hygiene'. IPC teams can use the survey to assess the progress of their programmes and use that information to implement actions for improvement. The HHNZ programme team is working with the WHO to set up a New Zealand account so we can receive the assessment data from anyone completing the survey in New Zealand. This information would be used for improvement purposes only. More information about the New Zealand account will be supplied to hand hygiene coordinators shortly.

Useful resources

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

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

[Other HHNZ resources](#)

National hand hygiene compliance data: 1 November 2018 to 31 March 2019

The nationally aggregated hand hygiene compliance rate for this measurement period was 85.6 percent. The national average performance by DHB was similar, at 82.9 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 November 2018 to 31 March 2019

Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
76,591	89,431	85.6%	85.4%	85.9%

Table 2: National compliance rates by DHB, 1 November 2018 to 31 March 2019

DHB	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Auckland DHB	11,889	13,845	85.9%	85.3%	86.4%
Bay of Plenty DHB	1,799	2,363	76.1%	74.4%	77.8%
Canterbury DHB	4,631	5,654	81.9%	80.9%	82.9%
Capital & Coast DHB	2,703	3,251	83.1%	81.8%	84.4%
Counties Manukau Health	15,353	17,566	87.4%	86.9%	87.9%
Hauora Tairāwhiti*	289	401	72.1%	67.5%	76.2%
Hawke's Bay DHB*	1,418	1,612	88.0%	86.3%	89.5%
Hutt Valley DHB	1,520	1,830	83.1%	81.3%	84.7%
Lakes DHB	893	1,095	81.6%	79.1%	83.7%
MidCentral DHB	1,568	1,991	78.8%	76.9%	80.5%
Nelson Marlborough DHB*	1,438	1,641	87.6%	85.9%	89.1%
Northland DHB	2,841	3,244	87.6%	86.4%	88.7%
South Canterbury DHB	712	845	84.3%	81.7%	86.6%
Southern DHB	2,057	2,543	80.9%	79.3%	82.4%
Taranaki DHB	581	835	69.6%	66.4%	72.6%
Waikato DHB	3,263	4,123	79.1%	77.9%	80.4%
Wairarapa DHB	242	265	91.3%	87.3%	94.1%
Waitemata DHB	21,837	24,490	89.2%	88.8%	89.6%
West Coast DHB	674	798	84.5%	81.8%	86.8%
Whanganui DHB	883	1,039	85.0%	82.7%	87.0%

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

Table 3: Hand hygiene compliance by geographic region, 1 November 2018 to 31 March 2019

Region	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Northern	51,920	59,145	87.8%	87.5%	88.0%
Midland	6,825	8,817	77.4%	76.5%	78.3%
Central	8,334	9,988	83.4%	82.7%	84.2%
South Island	9,512	11,481	82.8%	82.1%	83.5%

Table 4: Compliance by moment, 1 November 2018 to 31 March 2019

Moment	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
1. Before touching a patient	21,493	26,203	82.0%	81.6%	82.5%
2. Before procedure	8,654	9,852	87.8%	87.2%	88.5%
3. After a procedure or body fluid exposure risk	11,647	12,546	92.8%	92.4%	93.3%
4. After touching a patient	23,125	25,874	89.4%	89.0%	89.7%
5. After touching a patient's surroundings	11,672	14,956	78.0%	77.4%	78.7%

Table 5: Department compliance rates, 1 November 2018 to 31 March 2019

Department type	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Acute aged care	2,659	2,971	89.5%	88.3%	90.6%
Ambulatory care	2,168	2,499	86.8%	85.4%	88.0%
Critical care unit	5,844	6,957	84.0%	83.1%	84.8%
Emergency department	3,832	4,734	80.9%	79.8%	82.0%
Maternity	1,982	2,304	86.0%	84.5%	87.4%
Medical	17,755	21,140	84.0%	83.5%	84.5%
Mental health	1,332	1,393	95.6%	94.4%	96.6%
Mixed	2,387	2,746	86.9%	85.6%	88.1%
Neonatal care	3,810	4,155	91.7%	90.8%	92.5%
Oncology/haematology	2,824	3,223	87.6%	86.4%	88.7%
Other	2,561	2,980	85.9%	84.6%	87.1%
Paediatrics	4,879	5,412	90.2%	89.3%	90.9%
Perioperative	2,619	3,270	80.1%	78.7%	81.4%
Radiology/radiation oncology	634	764	83.0%	80.2%	85.5%
Renal	7,060	7,861	89.8%	89.1%	90.5%
Surgical	14,245	17,022	83.7%	83.1%	84.2%

Table 6: Health care worker compliance rates, 1 November 2018 to 31 March 2019

Health care worker	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Administrative and clerical staff	137	182	75.3%	68.5%	81.0%
Allied health care worker	3,537	4,159	85.0%	83.9%	86.1%
Cleaner and meal staff	816	1,163	70.2%	67.5%	72.7%
Health care assistant	7,453	8,955	83.2%	82.4%	84.0%
Medical practitioner	10,541	13,242	79.6%	78.9%	80.3%
Nurse/midwife	47,746	54,044	88.3%	88.1%	88.6%
Other – orderly and not categorised elsewhere	1,196	1,761	67.9%	65.7%	70.1%
Phlebotomy invasive technician	2,930	3,225	90.9%	89.8%	91.8%
Student allied health	123	143	86.0%	79.4%	90.8%
Student doctor	340	437	77.8%	73.7%	81.4%
Student nurse/midwife	1,772	2,120	83.6%	81.9%	85.1%

Hand hygiene compliance in glove use

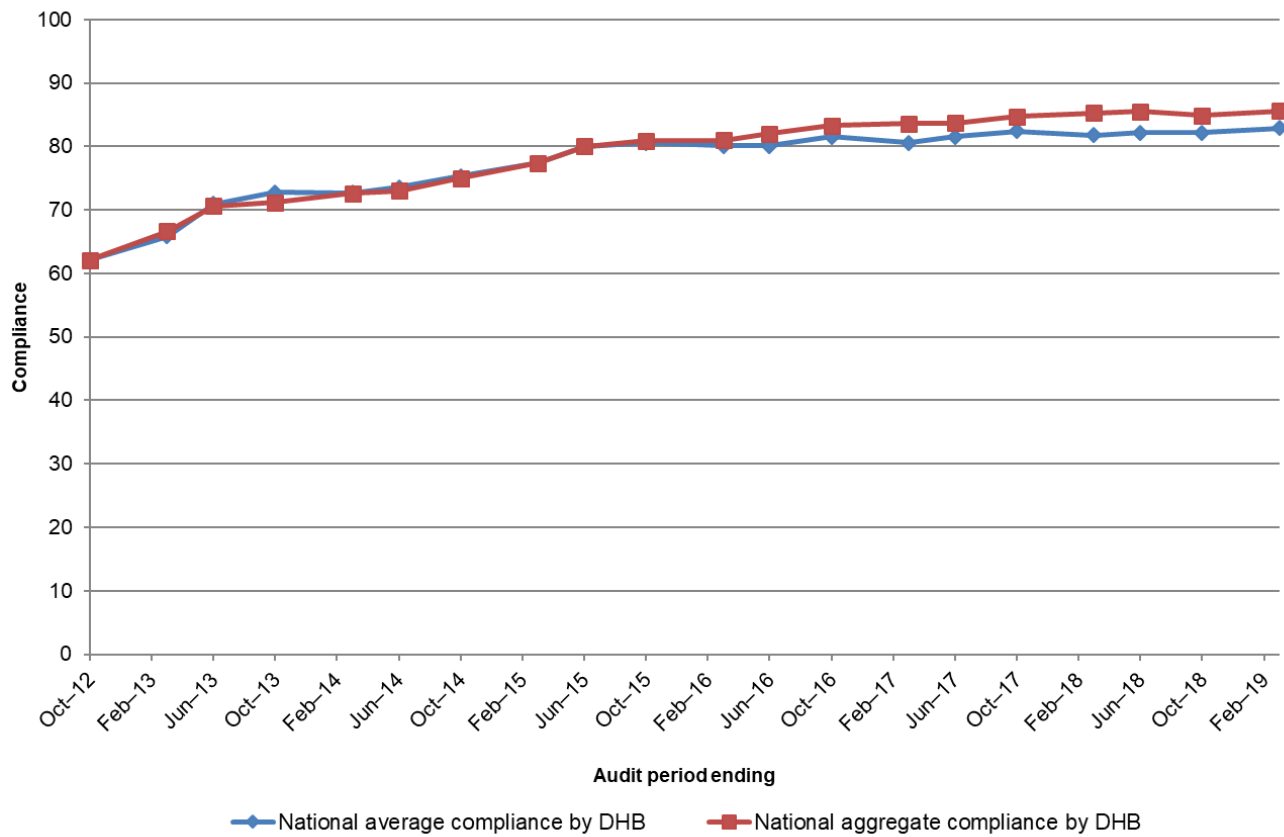
Inappropriate use of non-sterile gloves remains a barrier to excellent hand hygiene practice.

The latest glove statistics are:

- when gloves are taken OFF, the proportion of hand hygiene opportunities missed was 5.4 percent compared with 6.0 percent in the October 2018 audit period
- when gloves are put ON, the proportion of hand hygiene opportunities missed was 12.6 percent compared with 14.4 in the October 2018 audit period
- of all moments where glove use is recorded, health care workers failed to complete hand hygiene 11.4 percent of the time compared with 12.3 percent in the October 2018 audit period.

National hand hygiene compliance over time

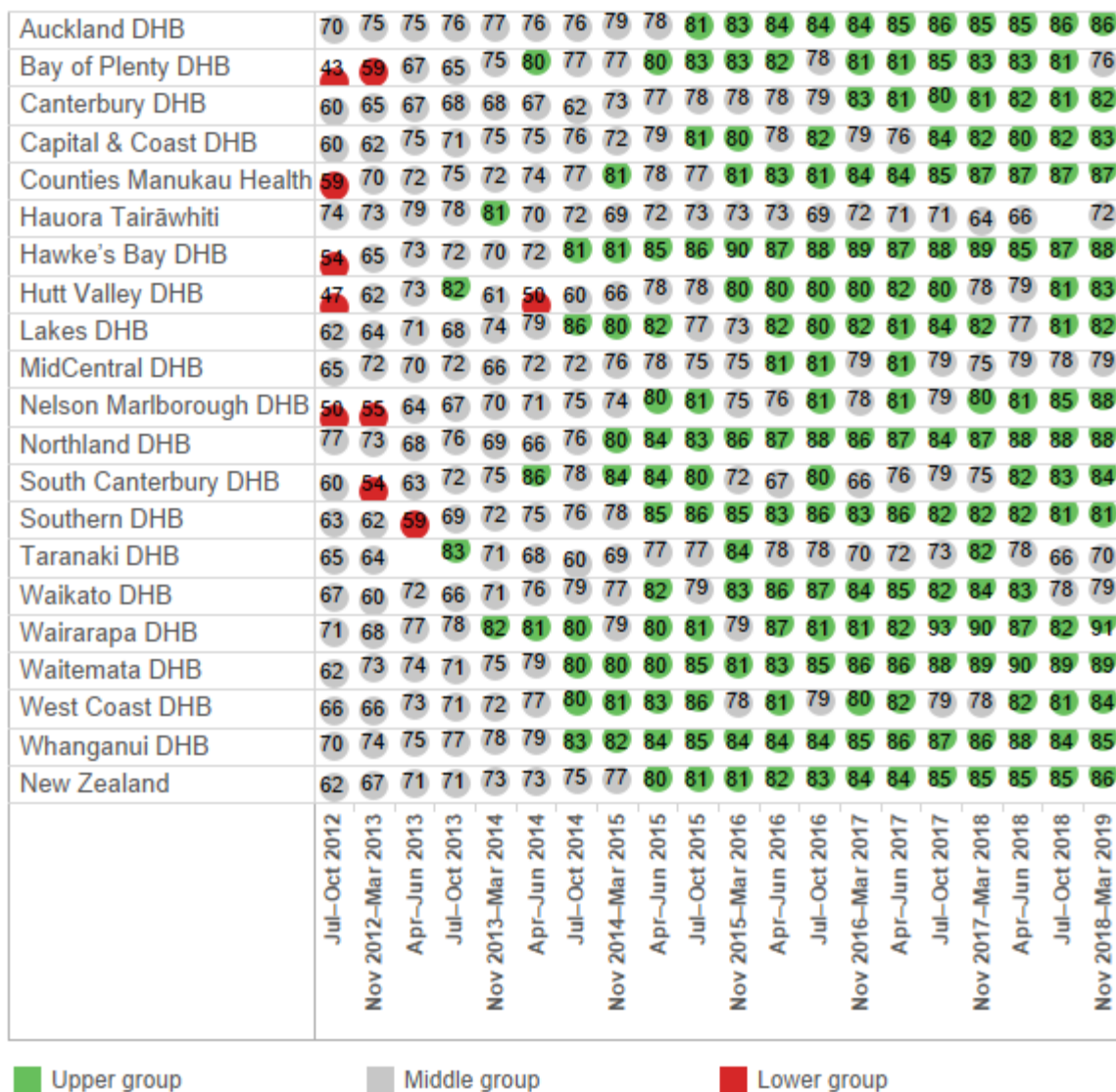
Figure 1: Trends in national aggregate and average hand hygiene compliance, October 2012 to March 2019



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, July 2012 to March 2019



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

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, July 2012 to March 2019

Key

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

Moment	2012	2013	2014	2015	2016	2017	Mar 18	Jun 18	Oct 18	Mar 19
Before touching a patient	55.5	64.7	69.1	75.6	78.1	79.9	80.9	81.9	80.7	82.0
Before a procedure	55.6	62.6	69.7	78.2	81.9	84.4	87.5	88.1	87.7	87.8
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	92.8
After touching a patient	71.9	76.5	80.0	85.9	87.1	88.7	89.8	89.5	88.4	89.4
After touching a patient's surroundings	54.9	64.6	69.0	75.7	76.6	77.9	78.7	78.3	78.6	78.0

Figure 4: Change in national hand hygiene compliance over time for health care workers, July 2012 to March 2019

Key

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

Health care worker	2012	2013	2014	2015	2016	2017	Mar 18	Jun 18	Oct 18	Mar 19
Allied health care worker	62.7	66.7	73.0	78.8	80.5	83.5	86.4	86.5	83.9	85.0
Health care assistant	61.5	71.7	74.1	76.4	79.2	81.4	83.8	84.1	83.8	83.2
Medical practitioner	55.0	60.1	64.5	72.7	75.5	75.5	77.5	78.5	78.2	79.6
Nurse/midwife	65.0	72.0	76.2	82.4	85.7	87.1	88.0	87.8	87.5	88.3
Phlebotomy invasive technician	70.4	74.7	81.5	81.6	88.2	89.6	90.3	90.5	90.2	90.9
Student allied health	46.7	65.2	70.3	79.7	83.1	80.9	86.5	84.7	80.4	86.0
Student doctor	42.6	53.7	63.9	78.9	77.6	79.9	67.2	71.7	75.5	77.8
Student nurse/midwife	61.2	69.0	70.6	78.4	82.1	83.5	83.9	86.2	84.8	83.6

Figure 5: Changes in national hand hygiene compliance by high-risk ward type, July 2012 to March 2019

Key

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

Ward type	2012	2013	2014	2015	2016	2017	Mar 18	Jun 18	Oct 18	Mar 19
Critical care	61.0	67.1	71.0	76.3	80.7	84.0	82.1	83.0	82.6	84.0
Emergency department	34.1	56.3	66.5	70.0	75.1	77.0	77.3	79.8	77.8	80.9
Neonatal intensive care	70.1	73.2	81.3	85.0	87.2	88.4	91.1	89.4	91.5	91.7
Oncology/haematology	68.7	72.2	78.2	84.3	88.3	87.0	86.5	86.9	87.4	87.6
Renal	64.7	73.5	79.7	81.3	87.0	88.6	90.2	90.3	89.0	89.8