



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

**National hand hygiene compliance report:
1 November 2017 to 31 March 2018**

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Introduction

This report presents results for national hand hygiene compliance by district health boards (DHBs) for the period 1 November 2017 to 31 March 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 85.3 percent compared with 84.7 percent in the previous audit period.
- Fourteen DHBs achieved at or above the national target of 80 percent compared with 13 in the previous audit period.
- Nine DHBs maintained or improved their compliance rate compared with the previous audit period.
- Sixteen 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.

Continuing to drive improvement

The Commission's infection prevention and control programme is hosting a national multidisciplinary workshop, *Putting prevention first – leadership and action on preventing healthcare associated infections*, in Wellington on Thursday 17 May 2018.

The workshop is designed for clinical leaders, infection prevention and control nurse specialists, clinical microbiologists, infectious diseases physicians, antimicrobial stewardship, pharmacists and anyone with an interest in infection prevention or quality improvement.

You can register for the workshop [here](#).

This year's World Hand Hygiene Day is 5 May and the WHO is focusing on sepsis. Sepsis is estimated to affect more than 30 million patients annually worldwide.

The WHO's campaign slogan is 'It's in your hands – prevent sepsis in health care'. It represents a joined-up approach to action by targeting a range of professionals, as well as patient advocacy groups, who can all play their part. At every level of the health system, infection prevention and control measures, including hand hygiene action, should be a marker of quality care – with individuals, both frontline and leaders, each deciding to take individual responsibility for improvements in patient safety. The WHO asks infection prevention and control leaders to take part and champion the dissemination of campaign messages and resources, to engage with and get commitment from all target audiences. 'By taking part and aiming to continue to improve hand hygiene, you will help prevent sepsis.'



Useful resources

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

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

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

[Other HHNZ resources](#)

National hand hygiene compliance data: 1 November 2017 to 31 March 2018

The nationally aggregated hand hygiene compliance rate for this measurement period is 85.3 percent. The national average performance by DHB is similar, at 81.8 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: Aggregated hand hygiene compliance, 1 November 2017 to 31 March 2018

Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
72,045	84,496	85.3%	85.0%	85.5%

Table 2: National compliance rates by DHB, 1 November 2017 to 31 March 2018

DHB	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Auckland DHB	11,534	13,551	85.1%	84.5%	85.7%
Bay of Plenty DHB	2,005	2,423	82.7%	81.2%	84.2%
Canterbury DHB	3,323	4,096	81.1%	79.9%	82.3%
Capital & Coast DHB	2,336	2,837	82.3%	80.9%	83.7%
Counties Manukau Health	11,719	13,490	86.9%	86.3%	87.4%
Hauora Tairāwhiti	298	467*	63.8%	59.4%	68.0%
Hawke's Bay DHB	1,784	2,006	88.9%	87.5%	90.2%
Hutt Valley DHB	1,173	1,508*	77.8%	75.6%	79.8%
Lakes DHB	953	1,166	81.7%	79.4%	83.8%
MidCentral DHB	1,323	1,772	74.7%	72.6%	76.6%
Nelson Marlborough DHB	1,107	1,392*	79.5%	77.3%	81.6%
Northland DHB	2,697	3,115	86.6%	85.3%	87.7%
South Canterbury DHB	627	833	75.3%	72.2%	78.1%
Southern DHB	2,201	2,697	81.6%	80.1%	83.0%
Taranaki DHB	559	681*	82.1%	79.0%	84.8%
Waikato DHB	3,644	4,326	84.2%	83.1%	85.3%
Wairarapa DHB	260	289	90.0%	86.0%	92.9%
Waitemata DHB	22,897	25,866	88.5%	88.1%	88.9%
West Coast DHB	913	1,173	77.8%	75.4%	80.1%
Whanganui DHB	692	808	85.6%	83.1%	87.9%

* These DHBs were more than 100 moments short of the minimum requirement for this audit period.

Table 3: Hand hygiene compliance by geographic region, 1 November 2017 to 31 March 2018

Region	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Northern	48,847	56,022	87.2%	86.9%	87.5%
Midland	7,459	9,063	82.3%	81.5%	83.1%
Central	7,568	9,220	82.1%	81.3%	82.9%
South Island	8,171	10,191	80.2%	79.4%	80.9%

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

Table 4: Compliance by moment, 1 November 2017 to 31 March 2018

Moment	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
1. Before touching a patient	20,231	25,012	80.9%	80.4%	81.4%
2. Before procedure	8,065	9,214	87.5%	86.8%	88.2%
3. After a procedure or body fluid exposure risk	10,298	11,284	91.3%	90.7%	91.8%
4. After touching a patient	22,497	25,066	89.8%	89.4%	90.1%
5. After touching a patient's surroundings	10,954	13,920	78.7%	78.0%	79.4%

National compliance rates by health care worker category

Table 5: Health care worker compliance rates, 1 November 2017 to 31 March 2018

Health care worker	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Administrative and clerical staff	182	224	81.2%	75.6%	85.8%
Allied health care worker	3,270	3,785	86.4%	85.3%	87.4%
Cleaner and meal staff	639	923	69.2%	66.2%	72.1%
Health care assistant	6,489	7,743	83.8%	83.0%	84.6%
Medical practitioner	10,133	13,070	77.5%	76.8%	78.2%
Nurse/midwife	45,404	51,586	88.0%	87.7%	88.3%
Other – orderly and not categorised elsewhere	1,039	1,480	70.2%	67.8%	72.5%
Phlebotomy invasive technician	2,714	3,006	90.3%	89.2%	91.3%
Student allied health	90	104	86.5%	78.7%	91.8%
Student doctor	303	451	67.2%	62.7%	71.4%
Student nurse/midwife	1,781	2123	83.90%	82.30%	85.40%

Hand hygiene compliance in glove use

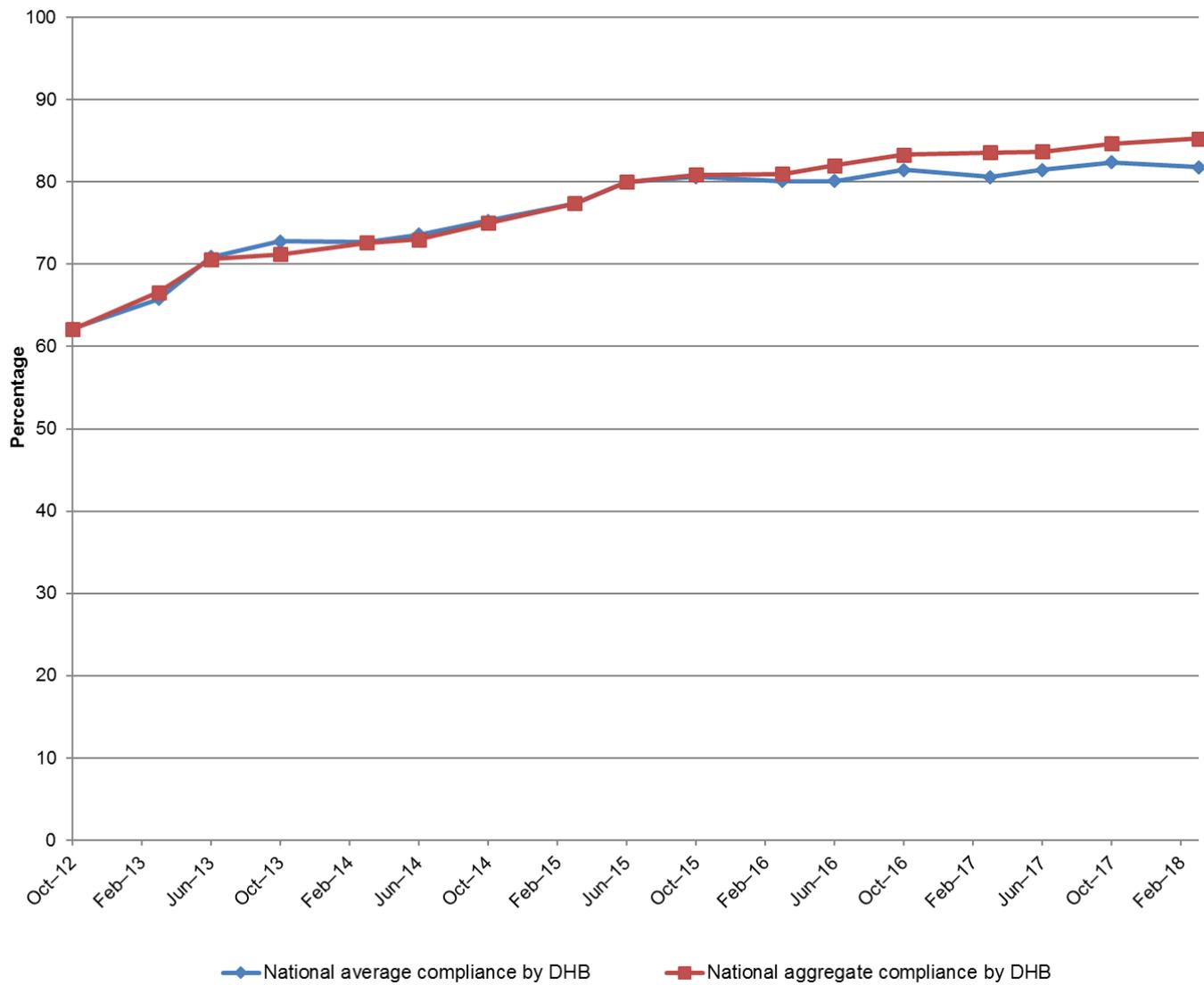
Inappropriate use of non-sterile gloves remains a barrier to excellent hand hygiene practice.

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

The latest glove statistics are:

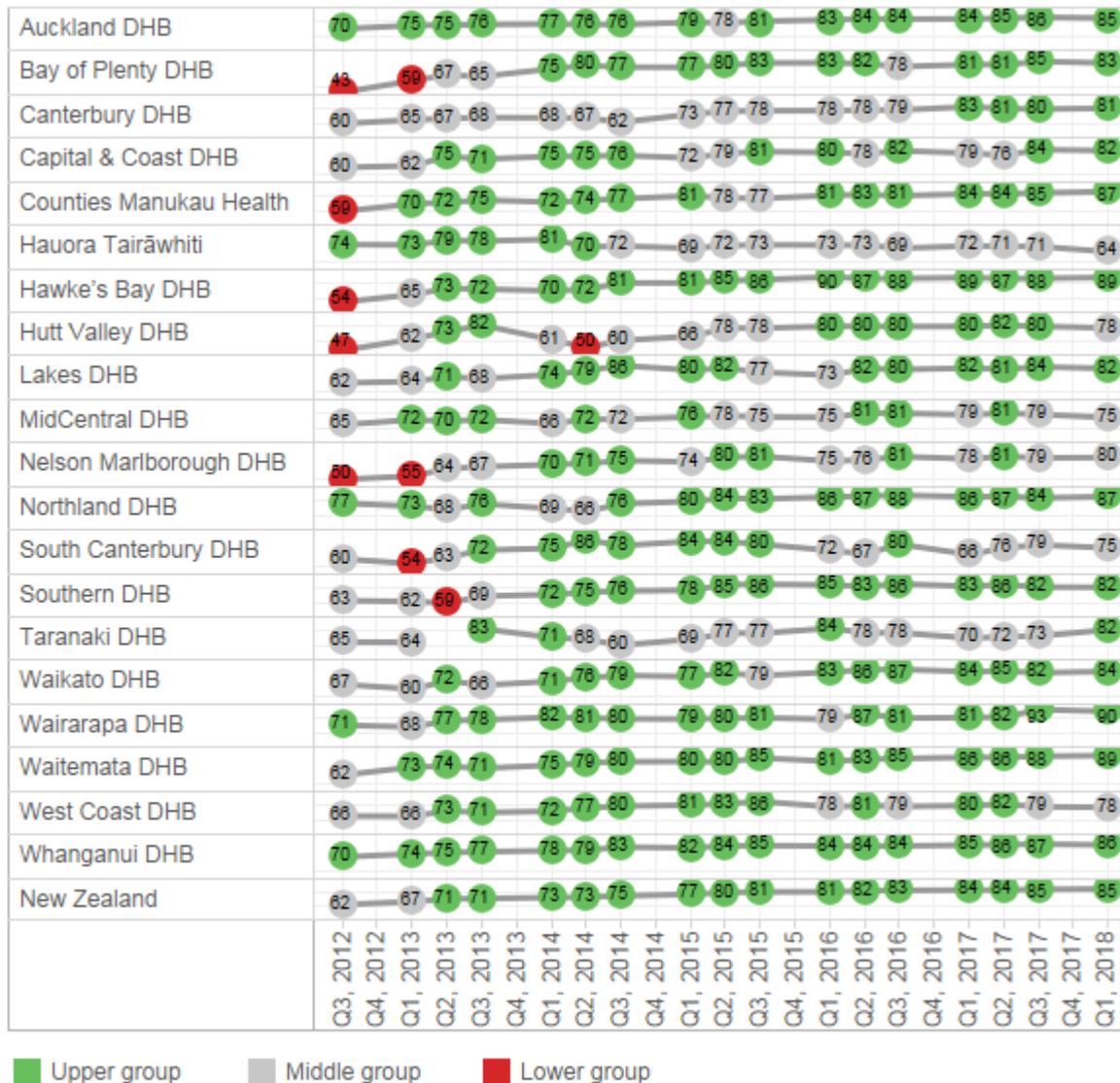
- when gloves are taken OFF, the proportion of hand hygiene opportunities missed was 5.7 percent compared with 5.5 percent in the October 2017 audit
- when gloves are put ON, the proportion of hand hygiene opportunities missed was 13.2 percent compared with 14.2 percent in the October 2017 audit
- of all moments where glove use is recorded, health care workers failed to complete hand hygiene 12.1 percent of the time compared with 12.5 percent in the October 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 March 2018



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 1, 2018



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. Every year’s rate until 2017 has been averaged.

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

Key

< 75%	75–80%	≥ 80% target achieved
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Moment	2012	2013	2014	2015	2016	Mar 17	Jun 17	Oct 17	Mar 18
Before touching a patient	55.5	64.7	69.1	75.6	78.1	79.3	79.9	80.4	80.9
Before procedure	55.6	62.6	69.7	78.2	81.9	83.2	83.2	86.8	87.5
After a procedure or body fluid exposure risk	69.4	74.1	78.3	84.2	88.8	90.6	90.3	91.1	91.3
After touching a patient	71.9	76.5	80.0	85.9	87.1	88.6	88.5	89.0	89.8
After touching a patient's surroundings	54.9	64.6	69.0	75.7	76.6	77.7	77.3	78.6	78.7

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

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

Health care worker	2012	2013	2014	2015	2016	Mar 17	Jun 17	Oct 17	Mar 18
Phlebotomy invasive technician	70.4	72.0	76.2	82.4	85.7	88.0	90.6	90.1	90.3
Nurse/midwife	65.0	60.1	64.5	72.7	75.5	87.0	86.8	87.5	88.0
Student allied health	46.7	66.7	73.0	78.8	80.5	79.0	84.1	79.7	86.5
Allied health care worker	62.7	74.7	81.5	81.6	88.2	84.0	83.3	83.3	86.4
Student nurse/midwife	61.2	71.7	74.1	76.4	79.2	84.0	81.7	84.7	83.9
Health care assistant	61.5	53.7	63.9	78.9	77.6	81.0	79.9	83.2	83.8
Medical practitioner	55.0	65.2	70.3	79.7	83.1	75.0	75.0	76.6	77.5
Student doctor	42.6	69.0	70.6	78.4	82.1	82.0	77.5	80.1	67.2

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

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

Ward type	2012	2013	2014	2015	2016	Mar 17	Jun 17	Oct 17	Mar 18
Neonatal intensive care	70.1	67.1	71.0	76.3	80.7	88.5	87.1	89.5	91.1
Renal	64.7	73.2	81.3	85.0	87.2	88.4	87.8	89.5	90.2
Oncology/haematology	68.7	72.2	78.2	84.3	88.3	86.6	87.9	86.6	86.5
Critical care	61.0	73.5	79.7	81.3	87.0	83.0	83.9	85.0	82.1
Emergency department	34.1	56.3	66.5	70.0	75.1	78.6	76.1	76.4	77.3