



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

**National hand hygiene compliance report:  
1 April 2018 to 30 June 2018**

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## **Introduction**

This report presents results for national hand hygiene compliance by district health boards (DHBs) for the period 1 April 2018 to 30 June 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 85.5 percent compared with 85.3 percent in the previous audit period.
- Fifteen DHBs achieved at or above the national target of 80 percent compared with 14 in the previous audit period.
- Thirteen 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 most areas where patients at high risk of infection are cared for, including emergency departments.

## **Continuing to drive improvement**

A key focus for HHNZ throughout 2017/18 has been encouraging the spread of auditing across all clinical areas. Spreading and sustaining the improvements already achieved in hand hygiene practice is essential to prevent healthcare associated infections and to respond to the growing threat of infections caused by multi-drug resistant microorganisms. There have been opportunities for DHBs to share how they have approached spreading hand hygiene improvement through the national hand hygiene workshop last October and the more recent hand hygiene webinar earlier this year. The progress made is a real tribute to the hard work and dedication of the hand hygiene Coordinators, IPC teams, gold auditors and other hand hygiene champions. Throughout 2018/19 HHNZ will continue to focus on spreading improvement and looking at how this may be reported.

### **Patient Safety Week: 4–10 November 2018**

Theme: Infection prevention and control

The importance of good hand hygiene: Are you giving bugs a hand?

The theme has been chosen because:

- effective hand hygiene is the simplest, most effective way to prevent healthcare associated infections (good hand hygiene practice is variable with people working in the health sector)
- good hand hygiene at home is important to prevent spread of infection within families and whānau
- reducing infections not only lessens the need for antibiotics but also reduces the opportunity for microorganisms to develop resistance and share resistance genes.

Planning for Patient Safety Week 2018 is well underway. The focus for the public will be 'hand hygiene', and for the health sector that 'good hand hygiene helps stop the spread of antibiotic resistant infections'. There have been two meetings with our sector 'ideas group' and they have given some valuable input into development and refinement of our resources.

Activity for the week will take place between 4 and 10 November 2018, however we will also be running a nationwide poster competition for schools from August, and the winner will be announced during Patient Safety Week 2018. The competition is aimed at children in years five to eight and asks them to create a poster about the importance of hand hygiene in preventing antimicrobial resistance.

The week following Patient Safety Week is World Antibiotic Awareness Week, where we will continue the focus on minimising antimicrobial resistance, so continued hand hygiene promotion will be relevant.

#### **Useful resources**

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

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

[Other HHNZ resources](#)

#### **Website update**

The HHNZ website address ([www.handhygiene.org.nz](http://www.handhygiene.org.nz)) now links you directly to a new webpage on the Commission website, enabling us to have more up-to-date and informative content.

## National hand hygiene compliance data: 1 April 2018 to 30 June 2018

The nationally aggregated hand hygiene compliance rate for this measurement period is 85.5 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 April 2018 to 30 June 2018**

Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
54,164	63,378	85.5%	85.2%	85.7%

**Table 2: National compliance rates by DHB, 1 April 2018 to 30 June 2018**

DHB	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Auckland DHB	7,398	8,660	85.4%	84.7%	86.2%
Bay of Plenty DHB	1,999	2,402	83.2%	81.7%	84.7%
Canterbury DHB	3,221	3,949	81.6%	80.3%	82.7%
Capital & Coast DHB	2,236	2,778	80.5%	79.0%	81.9%
Counties Manukau Health	8,834	10,132	87.2%	86.5%	87.8%
Hauora Tairāwhiti	201	306*	65.7%	60.2%	70.8%
Hawke's Bay DHB	1,462	1,728	84.6%	82.8%	86.2%
Hutt Valley DHB	1,478	1,875	78.8%	76.9%	80.6%
Lakes DHB	800	1,036	77.2%	74.6%	79.7%
MidCentral DHB	900	1,134	79.4%	76.9%	81.6%
Nelson Marlborough DHB	1,199	1,484*	80.8%	78.7%	82.7%
Northland DHB	1,999	2,277	87.8%	86.4%	89.1%
South Canterbury DHB	661	810	81.6%	78.8%	84.1%
Southern DHB	2,165	2,640	82.0%	80.5%	83.4%
Taranaki DHB	315	404*	78.0%	73.7%	81.7%
Waikato DHB	2,905	3,504	82.9%	81.6%	84.1%
Wairarapa DHB	289	332	87.0%	83.0%	90.2%
Waitemata DHB	14,657	16,230	90.3%	89.8%	90.8%
West Coast DHB	717	874	82.0%	79.4%	84.4%
Whanganui DHB	728	823	88.5%	86.1%	90.5%

\* 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 April 2018 to 30 June 2018**

Region	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Northern	32,888	37,299	88.2%	87.8%	88.5%
Midland	6,220	7,652	81.3%	80.4%	82.1%
Central	7,093	8,670	81.8%	81.0%	82.6%
South Island	7,963	9,757	81.6%	80.8%	82.4%

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

**Table 4: Compliance by moment, 1 April 2018 to 30 June 2018**

Moment	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
1. Before touching a patient	15,337	18,728	81.9%	81.3%	82.4%
2. Before procedure	5,917	6,719	88.1%	87.3%	88.8%
3. After a procedure or body fluid exposure risk	7,651	8,336	91.8%	91.2%	92.4%
4. After touching a patient	16,632	18,580	89.5%	89.1%	89.9%
5. After touching a patient's surroundings	8,627	11,015	78.3%	77.5%	79.1%

## National compliance rates by health care worker category

**Table 5: Health care worker compliance rates, 1 April 2018 to 30 June 2018**

Health care worker	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Administrative and clerical staff	137	179	76.5%	69.8%	82.1%
Allied health care worker	2,332	2,696	86.5%	85.2%	87.7%
Cleaner and meal staff	556	748	74.3%	71.1%	77.3%
Health care assistant	4,938	5,875	84.1%	83.1%	85.0%
Medical practitioner	7,325	9,337	78.5%	77.6%	79.3%
Nurse/midwife	33,718	38,418	87.8%	87.4%	88.1%
Other – orderly and not categorised elsewhere	710	1,023	69.4%	66.5%	72.2%
Phlebotomy invasive technician	1,959	2,164	90.5%	89.2%	91.7%
Student allied health	171	202	84.7%	79.0%	89.0%
Student doctor	203	283	71.7%	66.2%	76.7%
Student nurse/midwife	2,115	2,453	86.2%	84.8%	87.5%

## Hand hygiene compliance in glove use

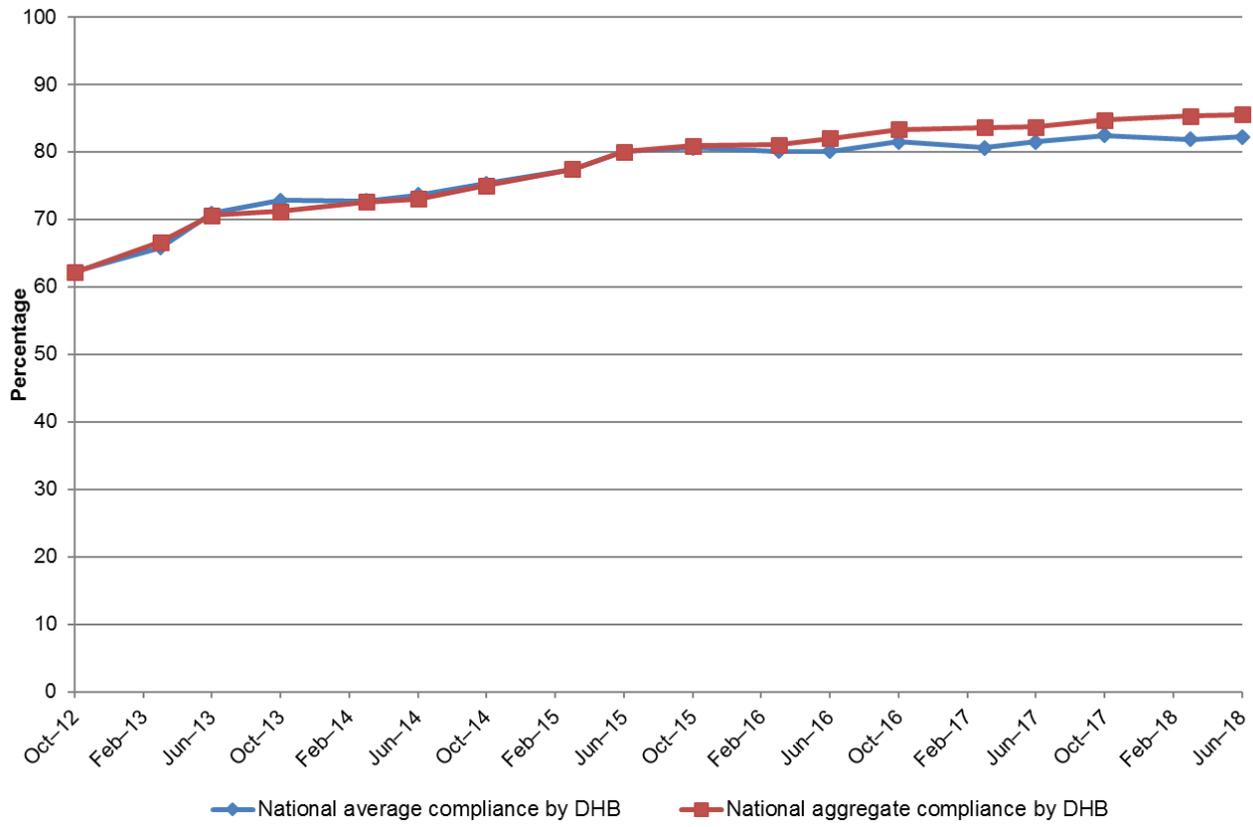
Inappropriate use of non-sterile gloves remains a barrier to excellent hand hygiene practice.

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 5.8 percent compared with 5.7 percent in the March 2018 audit
- when gloves are put ON, the proportion of hand hygiene opportunities missed was 12.9 percent compared with 13.2 percent in the March 2018 audit
- of all moments where glove use is recorded, health care workers failed to complete hand hygiene 11.7 percent of the time compared with 12.1 percent in the March 2018 audit
- when gloves were worn continuously, hand hygiene opportunities were missed on every occasion.

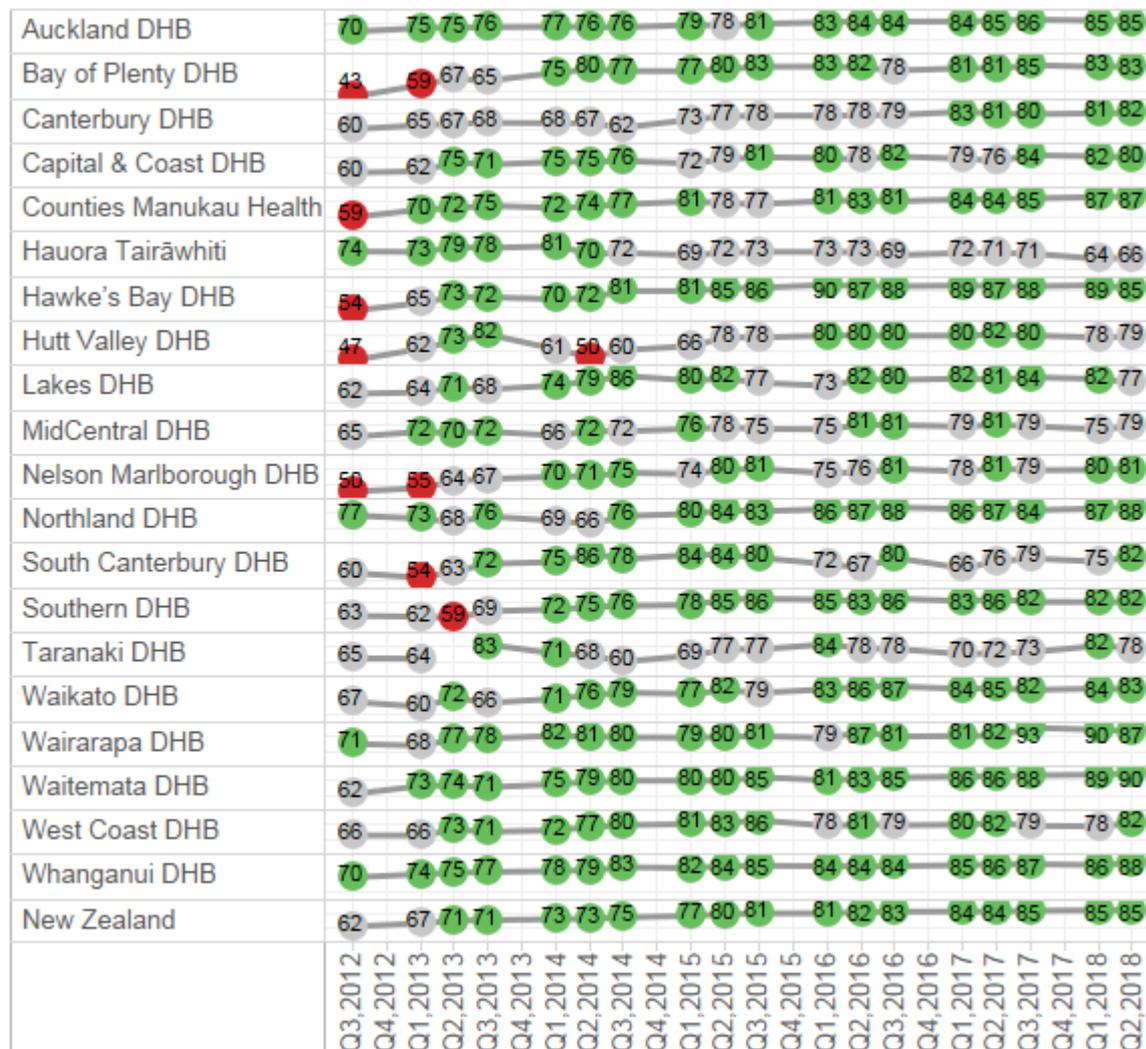
**Figure 1: Trends in national aggregate and average hand hygiene compliance, October 2012 to June 2018**



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 2, 2018**

Figure 6: Process marker, percentage of opportunities for hand hygiene taken



■ 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.

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 five percent of the target, and red if more than five 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 June 2018**

**Key**



Moment	2012	2013	2014	2015	2016	Mar 17	Jun 17	Oct 17	Mar 18	Jun 18
Before touching a patient	55.5	64.7	69.1	75.6	78.1	79.3	79.9	80.4	80.9	81.9
Before procedure	55.6	62.6	69.7	78.2	81.9	83.2	83.2	86.8	87.5	88.1
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	91.8
After touching a patient	71.9	76.5	80.0	85.9	87.1	88.6	88.5	89.0	89.8	89.5
After touching a patient's surroundings	54.9	64.6	69.0	75.7	76.6	77.7	77.3	78.6	78.7	78.3

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

**Key**

<b>&lt; 75%</b>	<b>75–80%</b>	<b>≥ 80% target achieved</b>
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Health care worker	2012	2013	2014	2015	2016	Mar 17	Jun 17	Oct 17	Mar 18	Jun 18
Allied health care worker	62.7	66.7	73.0	78.8	80.5	84.0	83.3	83.3	86.4	86.5
Health care assistant	61.5	71.7	74.1	76.4	79.2	81.0	79.9	83.2	83.8	84.1
Medical practitioner	55.0	60.1	64.5	72.7	75.5	75.0	75.0	76.6	77.5	78.5
Nurse/midwife	65.0	72.0	76.2	82.4	85.7	87.0	86.8	87.5	88.0	87.8
Phlebotomy invasive technician	70.4	74.7	81.5	81.6	88.2	88.0	90.6	90.1	90.3	90.5
Student allied health	46.7	65.2	70.3	79.7	83.1	79.0	84.1	79.7	86.5	84.7
Student doctor	42.6	53.7	63.9	78.9	77.6	82.0	77.5	80.1	67.2	71.7
Student nurse/midwife	61.2	69.0	70.6	78.4	82.1	84.0	81.7	84.7	83.9	86.2

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

**Key**

<b>&lt; 75%</b>	<b>75–80%</b>	<b>≥ 80% target achieved</b>
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Ward type	2012	2013	2014	2015	2016	Mar 17	Jun 17	Oct 17	Mar 18	Jun 18
Critical care	61.0	67.1	71.0	76.3	80.7	83.0	83.9	85.0	82.1	83.0
Emergency department	34.1	56.3	66.5	70.0	75.1	78.6	76.1	76.4	77.3	79.8
Neonatal intensive care	70.1	73.2	81.3	85.0	87.2	88.5	87.1	89.5	91.1	89.4
Oncology/haematology	68.7	72.2	78.2	84.3	88.3	86.6	87.9	86.6	86.5	86.9
Renal	64.7	73.5	79.7	81.3	87.0	88.4	87.8	89.5	90.2	90.3