



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

**National hand hygiene compliance report:  
1 April 2019 to 30 June 2019**

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## **Introduction**

This report presents results for national hand hygiene compliance by district health boards (DHBs) for the period 1 April 2019 to 30 June 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 85.1 percent compared with 85.6 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.
- Fifteen DHBs maintained or improved their compliance rates compared with the previous audit period.
- Sixteen DHBs met the minimum requirement of moments.

## **Auditing requirements updated to ensure sustainability**

Over the past two years, the HHNZ programme has focused on spread of auditing and improvement throughout all clinical areas so hand hygiene is consistent across all public hospitals. 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.

As of 1 July 2019, modifications to some of the auditing requirements have been made. These are related to continuously auditing across all clinical areas throughout each audit period and amending the number of minimum moments required, per hospital ward, per audit period. The HHNZ auditing manual has been updated to reflect these changes and can be found at [www.hqsc.govt.nz/our-programmes/infection-prevention-and-control/publications-and-resources/publication/3762](http://www.hqsc.govt.nz/our-programmes/infection-prevention-and-control/publications-and-resources/publication/3762).

Thank you for your continued dedication to hand hygiene compliance across New Zealand hospitals. If you have any questions about the updated auditing requirements, please email [HHNZ@hqsc.govt.nz](mailto:HHNZ@hqsc.govt.nz).

## **Hand hygiene auditing periods**

There has been recent discussion about the variation in audit periods (April–June, July–October, November–March). The HHNZ programme will send out a survey to key enrolled stakeholders across the public and private sector. This will be to determine if there is widespread consensus to amend the audit periods to either three four-month periods or four three-month periods or keep the current audit periods. This survey will be distributed to hand hygiene coordinators and gold auditor trainers in July 2019.

## **Useful resources**

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

[HHNZ auditing manual \(2019\)](#)

[Other HHNZ resources](#)

## National hand hygiene compliance data: 1 April 2019 to 30 June 2019

The nationally aggregated hand hygiene compliance rate for this measurement period was 85.1 percent. The national average performance by DHB was similar, at 82.6 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 2019 to 30 June 2019**

Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
54,792	64,371	85.1%	84.8%	85.4%

**Table 2: National compliance rates by DHB, 1 April 2019 to 30 June 2019**

DHB	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Auckland DHB	7,561	8,837	85.6%	84.8%	86.3%
Bay of Plenty DHB	1,773	2,333	76.0%	74.2%	77.7%
Canterbury DHB	3,502	4,233	82.7%	81.6%	83.8%
Capital & Coast DHB	3,370	4,005	84.1%	83.0%	85.2%
Counties Manukau Health	9,956	11,350	87.7%	87.1%	88.3%
Hauora Tairāwhiti	584	815	71.7%	68.5%	74.6%
Hawke's Bay DHB*	1,107	1,299	85.2%	83.2%	87.0%
Hutt Valley DHB	1,528	1,787	85.5%	83.8%	87.1%
Lakes DHB	861	1,080	79.7%	77.2%	82.0%
MidCentral DHB*	885	1,092	81.0%	78.6%	83.3%
Nelson Marlborough DHB	1,349	1,697	79.5%	77.5%	81.3%
Northland DHB	1,660	1,892	87.7%	86.2%	89.1%
South Canterbury DHB	581	704	82.5%	79.5%	85.2%
Southern DHB	2,218	2,687	82.5%	81.1%	83.9%
Taranaki DHB	558	800	69.8%	66.5%	72.8%
Waikato DHB	2,969	3,709	80.0%	78.7%	81.3%
Wairarapa DHB	233	260	89.6%	85.3%	92.8%
Waitematā DHB	12,629	14,085	89.7%	89.1%	90.2%
West Coast DHB	624	729	85.6%	82.9%	88.0%
Whanganui DHB	844	977	86.4%	84.1%	88.4%

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

**Table 3: Hand hygiene compliance by geographic region, 1 April 2019 to 30 June 2019**

Region	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Northern	31,806	36,164	87.9%	87.6%	88.3%
Midland	6,745	8,737	77.2%	76.3%	78.1%
Central	7,967	9,420	84.6%	83.8%	85.3%
South Island	8,274	10,050	82.3%	81.6%	83.1%

**Table 4: Compliance by moment, 1 April 2019 to 30 June 2019**

Moment	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
1. Before touching a patient	15,315	18,810	81.4%	80.9%	82.0%
2. Before procedure	6,322	7,175	88.1%	87.3%	88.8%
3. After a procedure or body fluid exposure risk	8,100	8,778	92.3%	91.7%	92.8%
4. After touching a patient	16,748	18,753	89.3%	88.9%	89.7%
5. After touching a patient's surroundings	8,307	10,855	76.5%	75.7%	77.3%

**Table 5: Department compliance rates, 1 April 2019 to 30 June 2019**

Department type	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Acute aged care	1,656	1,850	89.5%	88.0%	90.8%
Ambulatory care	1,392	1,640	84.9%	83.1%	86.5%
Critical care unit	4,570	5,509	83.0%	81.9%	83.9%
Emergency department	2,798	3,493	80.1%	78.7%	81.4%
Maternity	1,509	1,780	84.8%	83.0%	86.4%
Medical	12,953	15,307	84.6%	84.0%	85.2%
Mental health	683	729	93.7%	91.7%	95.2%
Mixed	1,696	2,046	82.9%	81.2%	84.5%
Neonatal care	2,665	2,923	91.2%	90.1%	92.1%
Oncology/haematology	2,205	2,503	88.1%	86.8%	89.3%
Other	2,091	2,487	84.1%	82.6%	85.5%
Paediatrics	3,345	3,778	88.5%	87.5%	89.5%
Perioperative	1,447	1,726	83.8%	82.0%	85.5%
Radiology/radiation oncology	330	396	83.3%	79.3%	86.7%
Renal	4,611	5,248	87.9%	87.0%	88.7%
Sub-acute	37	42	88.1%	75.0%	94.8%
Surgical	10,804	12,914	83.7%	83.0%	84.3%

**Table 6: Health care worker compliance rates, 1 April 2018 to 30 June 2019**

Health care worker	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Administrative and clerical staff	125	176	71.0%	63.9%	77.2%
Allied health care worker	2,353	2,813	83.6%	82.2%	85.0%
Cleaner and meal staff	591	857	69.0%	65.8%	72.0%
Health care assistant	4,948	5,917	83.6%	82.7%	84.5%
Medical practitioner	7,478	9,651	77.5%	76.6%	78.3%
Nurse/midwife	33,716	38,254	88.1%	87.8%	88.5%
Other – orderly and not categorised elsewhere	901	1284	70.2%	67.6%	72.6%
Phlebotomy invasive technician	2,184	2,397	91.1%	89.9%	92.2%
Student allied health	163	194	84.0%	78.2%	88.5%
Student doctor	273	330	82.7%	78.3%	86.4%
Student nurse/midwife	2,060	2,498	82.5%	80.9%	83.9%

### **Hand hygiene compliance in glove use**

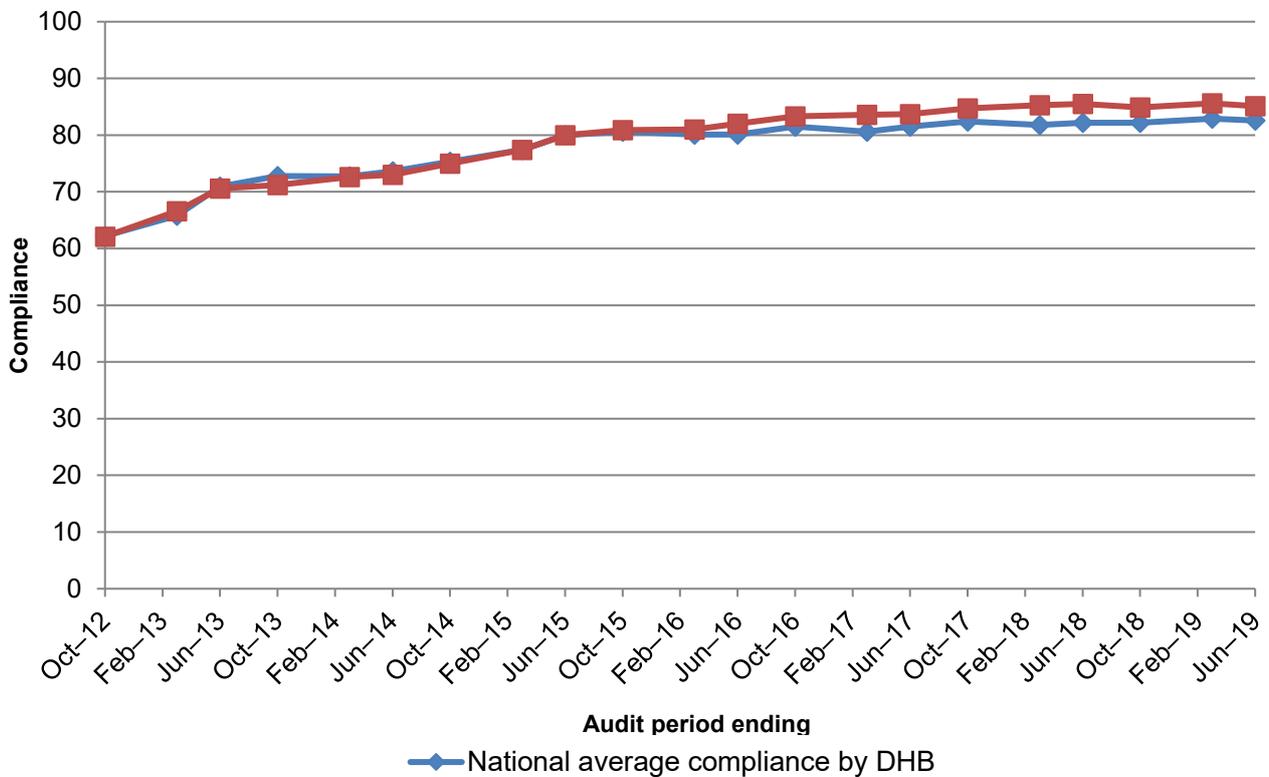
Inappropriate use of non-sterile gloves remains a barrier to excellent hand hygiene practice.

The latest glove statistics are:

- when gloves are taken OFF, the proportion of hand hygiene opportunities missed was 5.4 percent compared with 5.4 percent in the March 2019 audit period
- when gloves are put ON, the proportion of hand hygiene opportunities missed was 12.6 percent compared with 12.6 in the March 2019 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 11.3 percent in the March 2019 audit period.

## National hand hygiene compliance over time

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

Auckland DHB	70	75	75	76	77	76	76	79	78	81	83	84	84	84	85	86	85	85	86	86	86
Bay of Plenty DHB	43	59	67	65	75	80	77	77	80	83	83	82	78	81	81	85	83	83	81	76	76
Canterbury DHB	60	65	67	68	68	67	62	73	77	78	78	78	79	83	81	80	81	82	81	82	83
Capital & Coast DHB	60	62	75	71	75	75	76	72	79	81	80	78	82	79	76	84	82	80	82	83	84
Counties Manukau Health	59	70	72	75	72	74	77	81	78	77	81	83	81	84	84	85	87	87	87	87	88
Hauora Tairāwhiti	74	73	79	78	81	70	72	69	72	73	73	73	69	72	71	71	64	66		72	72
Hawke's Bay DHB	54	65	73	72	70	72	81	81	85	86	90	87	88	89	87	88	89	85	87	88	85
Hutt Valley DHB	47	62	73	82	61	50	60	66	78	78	80	80	80	80	82	80	78	79	81	83	86
Lakes DHB	62	64	71	68	74	79	86	80	82	77	73	82	80	82	81	84	82	77	81	82	80
MidCentral DHB	65	72	70	72	66	72	72	76	78	75	75	81	81	79	81	79	75	79	78	79	81
Nelson Marlborough DHB	50	55	64	67	70	71	75	74	80	81	75	76	81	78	81	79	80	81	85	88	79
Northland DHB	77	73	68	76	69	66	76	80	84	83	86	87	88	86	87	84	87	88	88	88	88
South Canterbury DHB	60	54	63	72	75	86	78	84	84	80	72	67	80	66	76	79	75	82	83	84	83
Southern DHB	63	62	59	69	72	75	76	78	85	86	85	83	86	83	86	82	82	82	81	81	83
Taranaki DHB	65	64		83	71	68	60	69	77	77	84	78	78	70	72	73	82	78	66	70	70
Waikato DHB	67	60	72	66	71	76	79	77	82	79	83	86	87	84	85	82	84	83	78	79	80
Wairarapa DHB	71	68	77	78	82	81	80	79	80	81	79	87	81	81	82	93	90	87	82	91	90
Waitematā DHB	62	73	74	71	75	79	80	80	80	85	81	83	85	86	86	88	89	90	89	89	90
West Coast DHB	66	66	73	71	72	77	80	81	83	86	78	81	79	80	82	79	78	82	81	84	86
Whanganui DHB	70	74	75	77	78	79	83	82	84	85	84	84	84	85	86	87	86	88	84	85	86
New Zealand	62	67	71	71	73	73	75	77	80	81	81	82	83	84	84	85	85	85	85	85	85
	Jul-Oct 2012	Nov 2012-Mar 2013	Apr-Jun 2013	Jul-Oct 2013	Nov 2013-Mar 2014	Apr-Jun 2014	Jul-Oct 2014	Nov 2014-Mar 2015	Apr-Jun 2015	Jul-Oct 2015	Nov 2015-Mar 2016	Apr-Jun 2016	Jul-Oct 2016	Nov 2016-Mar 2017	Apr-Jun 2017	Jul-Oct 2017	Nov 2017-Mar 2018	Apr-Jun 2018	Jul-Oct 2018	Nov 2018-Mar 2019	Apr-Jun 2019

■ Upper group

■ Middle group

■ Lower group

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

## 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 June 2019**

### Key

< 75%	75–80%	≥ 80% target achieved
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Moment	2012	2013	2014	2015	2016	2017	Mar 18	Jun 18	Oct 18	Mar 19	Jun 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	81.4
Before a procedure	55.6	62.6	69.7	78.2	81.9	84.4	87.5	88.1	87.7	87.8	88.1
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	92.3
After touching a patient	71.9	76.5	80.0	85.9	87.1	88.7	89.8	89.5	88.4	89.4	89.3
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	76.5

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

**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	Mar 19	Jun 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	83.6
Health care assistant	61.5	71.7	74.1	76.4	79.2	81.4	83.8	84.1	83.8	83.2	83.6
Medical practitioner	55.0	60.1	64.5	72.7	75.5	75.5	77.5	78.5	78.2	79.6	77.5
Nurse/midwife	65.0	72.0	76.2	82.4	85.7	87.1	88.0	87.8	87.5	88.3	88.1
Phlebotomy invasive technician	70.4	74.7	81.5	81.6	88.2	89.6	90.3	90.5	90.2	90.9	91.1
Student allied health	46.7	65.2	70.3	79.7	83.1	80.9	86.5	84.7	80.4	86.0	84.0
Student doctor	42.6	53.7	63.9	78.9	77.6	79.9	67.2	71.7	75.5	77.8	82.7
Student nurse/midwife	61.2	69.0	70.6	78.4	82.1	83.5	83.9	86.2	84.8	83.6	82.5

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

**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	Mar 19	Jun 19
Critical care	61.0	67.1	71.0	76.3	80.7	84.0	82.1	83.0	82.6	84.0	83.0
Emergency department	34.1	56.3	66.5	70.0	75.1	77.0	77.3	79.8	77.8	80.9	80.1
Neonatal intensive care	70.1	73.2	81.3	85.0	87.2	88.4	91.1	89.4	91.5	91.7	91.2
Oncology/haematology	68.7	72.2	78.2	84.3	88.3	87.0	86.5	86.9	87.4	87.6	88.1
Renal	64.7	73.5	79.7	81.3	87.0	88.6	90.2	90.3	89.0	89.8	87.9