



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

**National hand hygiene compliance report:  
1 March 2020 to 30 June 2020**

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## Introduction

This report presents results for national hand hygiene compliance by district health boards (DHBs) for the period 1 March 2020 to 30 June 2020. The data used in this report was extracted on 10 July 2020.

During this period, DHBs were not required to collect moments; this was to allow them to determine the most appropriate auditing approach while they focused on COVID-19 preparedness. Despite the increased workload with COVID-19, the DHB infection prevention and control (IPC) and hand hygiene teams remained committed to ensuring there were excellent hand hygiene practices throughout their DHB to prevent the spread of COVID-19 in hospitals.

Compliance is measured as part of the Health Quality & Safety Commission's (the Commission's) Hand Hygiene New Zealand (HHNZ) programme, one of the Commission's two current IPC programmes. These targeted improvement initiatives aim to reduce the harm and cost of healthcare associated infections within Aotearoa 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

- Nineteen DHBs submitted data even though it was not a requirement.
- National compliance was 87.2 percent compared with 84.7 percent in the previous audit period.
- Sixteen DHBs achieved at or above the national target of 80 percent compliance.

## Auditing requirements updated to ensure sustainability

Over the past few 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 microorganisms.

As of 1 July 2019, modifications to some of the auditing requirements were made. These 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.

Thank you for your continued dedication to hand hygiene compliance across Aotearoa 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

Start date	End date
1 July	31 October
1 November	28 February
1 March	30 June

## Useful resources

Hard copies of hand hygiene posters/resources are available for ordering through the Commission as part of the COVID-19 response.

[Commission COVID-19 page](#)

[Order hard copies of hand hygiene posters/resources](#)

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

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

[Other HHNZ resources](#)

## National hand hygiene compliance data: 1 March to 30 June 2020

The nationally aggregated hand hygiene compliance rate for this measurement period was 87.2 percent. The national average performance by DHB was similar, at 84.7 percent (this figure represents the average of DHBs that submitted data). 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 similar indicates there are comparable performance rates between large and small DHBs.

**Table 1: National aggregated hand hygiene compliance, 1 March to 30 June 2020**

Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
54,867	62,955	87.2%	86.9%	87.4%

**Table 2: National compliance rates by DHB, 1 March to 30 June 2020**

DHB	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Auckland DHB	12,454	14,396	86.5%	85.9%	87.1%
Bay of Plenty DHB	1,636	2,102	77.8%	76.0%	79.6%
Canterbury DHB	3,865	4,596	84.1%	83.0%	85.1%
Capital & Coast DHB	568	636	89.3%	86.7%	91.5%
Counties Manukau DHB	7,479	8,601	87.0%	86.2%	87.7%
Hauora Tairāwhiti DHB	271	314	86.3%	82.1%	89.7%
Hawke's Bay DHB	754	910	82.9%	80.3%	85.2%
Hutt Valley DHB	1,387	1,602	86.6%	84.8%	88.2%
Lakes DHB	760	943	80.6%	77.9%	83.0%
MidCentral DHB	1,079	1,278	84.4%	82.3%	86.3%
Nelson Marlborough DHB	608	721	84.3%	81.5%	86.8%
Northland DHB	1,713	1,942	88.2%	86.7%	89.6%
South Canterbury DHB	236	306	77.1%	72.1%	81.5%
Southern DHB	1,014	1,176	86.2%	84.1%	88.1%
Taranaki DHB	1,120	1,568	71.4%	69.1%	73.6%
Waikato DHB	2,304	2,715	84.9%	83.5%	86.2%

Wairarapa DHB	0	0	0.0%	0.0%	0.0%
Waitematā DHB	16,561	17,967	92.2%	91.8%	92.6%
West Coast DHB	332	371	89.5%	86.0%	92.2%
Whanganui DHB	726	811	89.5%	87.2%	91.4%

**Please note:** The minimum number of moments for each DHB is based on the number of areas (departments or wards) and the total number of beds for each hospital. The information for this, currently held by HHNZ, has been recently reviewed to ensure accuracy.

**Table 3: Hand hygiene compliance by geographic region, 1 March to 30 June 2020**

Region	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Northern	38,207	42,906	89.0%	88.7%	89.3%
Midland	6,091	7,642	79.7%	78.8%	80.6%
Central	4,514	5,237	86.2%	85.2%	87.1%
South Island	6,055	7,170	84.4%	83.6%	85.3%

**Table 4: Compliance by moment, 1 March to 30 June 2020**

Moment	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
1. Before touching a patient	15,281	18,230	83.8%	83.3%	84.4%
2. Before procedure	6,195	6,874	90.1%	89.4%	90.8%
3. After a procedure or body fluid exposure risk	7,943	8,464	93.8%	93.3%	94.3%
4. After touching a patient	16,464	18,095	91.0%	90.6%	91.4%
5. After touching a patient's surroundings	8,984	11,292	79.6%	78.8%	80.3%

**Table 5: Department compliance rates, 1 March to 30 June 2020**

Department type	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Acute aged care	1,163	1,261	92.2%	90.6%	93.6%
Ambulatory care	1,379	1,542	89.4%	87.8%	90.9%
Critical care unit	3,413	4,030	84.7%	83.5%	85.8%
Emergency department	2,894	3,446	84%	83%	85%
Maternity	1,875	2,117	89%	87%	90%
Medical	13,688	15,557	88%	88%	89%
Mixed	1,498	1,725	87%	85%	88%
Neonatal care	2,481	2,732	91%	90%	92%
Oncology/haematology	1,622	1,760	92%	91%	93%

Paediatrics	4,204	4,490	94%	93%	94%
Perioperative	2,603	3,182	82%	80%	83%
Radiology/radiation oncology	522	602	87%	84%	89%
Renal	4,280	4,818	89%	88%	90%
Sub-acute	6	12	50%	25%	75%
Surgical	9,914	11,876	84%	83%	84%

**Table 6: Health care worker compliance rates, 1 March to 30 June 2020**

Health care worker	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Administrative and clerical staff	215	248	86.7%	81.9%	90.4%
Allied health care worker	2,498	2,825	88.4%	87.2%	89.6%
Cleaner and meal staff	902	1,260	71.6%	69.0%	74.0%
Health care assistant	5,073	5,941	85.4%	84.5%	86.3%
Medical practitioner	8,018	9,932	80.7%	79.9%	81.5%
Nurse/midwife	32,757	36,521	89.7%	89.4%	90.0%
Other – orderly and not categorised elsewhere	1,308	1,686	77.6%	75.5%	79.5%
Phlebotomy invasive technician	2,011	2135	94.2%	93.1%	95.1%
Student allied health	49	54	90.7%	80.1%	96.0%
Student doctor	268	331	81.0%	76.4%	84.8%
Student nurse/midwife	1,768	2022	87.4%	85.9%	88.8%

## Hand hygiene compliance in glove use

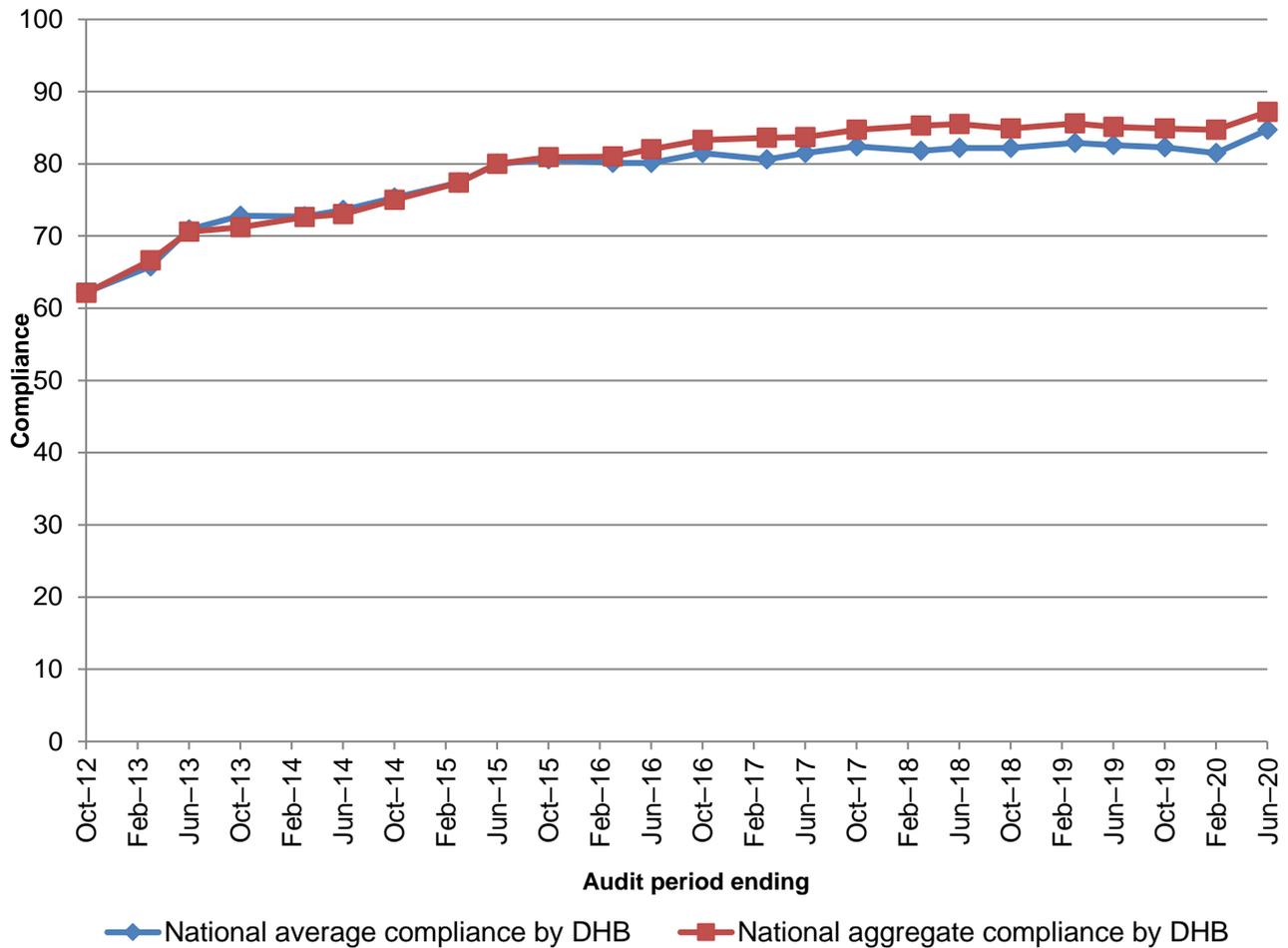
Inappropriate use of non-sterile gloves remains a barrier to excellent hand hygiene practice.

The latest glove statistics are:

- when gloves are taken OFF, the proportion of hand hygiene opportunities missed was 4.2 percent compared with 5.7 percent in the Nov 2019–Feb 2020 audit period
- when gloves are put ON, the proportion of hand hygiene opportunities missed was 10.8 percent compared with 12.8 in the Nov 2019–Feb 2020 audit period
- of all moments where glove use was recorded, health care workers failed to complete hand hygiene 7.2 percent of the time compared with 11.3 percent in the Nov 2019–Feb 2020 audit period.

## National hand hygiene compliance over time

Figure 1: Trends in national aggregate and average hand hygiene compliance, October 2012 to June 2020



## 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, October 2012 to 30 June 2020**



■ 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

**Note:** Colours may not accurately represent compliance as rates are rounded to the nearest whole number before colour groups are assigned.

## 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 2019 has been averaged.

**Figure 3: Change in national hand hygiene compliance over time by moment, October 2012 to June 2020**

### Key

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

Moment	2012	2013	2014	2015	2016	2017	2018	Mar 2019	Jun 2019	Oct 2019	Feb 2020	Jun 2020
Before touching a patient	55.5	64.7	69.1	75.6	78.1	79.9	81.3	82.0	81.4	81.0	81.6	83.8
Before a procedure	55.6	62.6	69.7	78.2	81.9	84.4	87.8	87.8	88.1	87.5	88.1	90.1
After a procedure or body fluid exposure risk	69.4	74.1	78.3	84.2	88.8	90.7	91.9	92.8	92.3	92.2	92.4	93.3
After touching a patient	71.9	76.5	80.0	85.9	87.1	88.7	89.2	89.4	89.3	89.1	88.7	91.0
After touching a patient's surroundings	54.9	64.6	69.0	75.7	76.6	77.9	78.5	78.0	76.5	76.5	75.1	79.6

**Figure 4: Change in national hand hygiene compliance over time for health care workers, October 2012 to June 2020**

### Key

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

Health care worker	2012	2013	2014	2015	2016	2017	2018	Mar 2019	Jun 2019	Oct 2019	Feb 2020	Jun 2020
Allied health care worker	62.7	66.7	73.0	78.8	80.5	83.5	85.6	85.0	83.6	85.2	84.9	88.4
Health care assistant	61.5	71.7	74.1	76.4	79.2	81.4	83.9	83.2	83.6	90.8	83.0	85.4
Medical practitioner	55.0	60.1	64.5	72.7	75.5	75.5	78.2	79.6	77.5	77.4	76.3	80.7
Nurse/midwife	65.0	72.0	76.2	82.4	85.7	87.1	87.8	88.3	88.1	87.9	87.9	89.7
Phlebotomy invasive technician	70.4	74.7	81.5	81.6	88.2	89.6	90.4	90.9	91.1	92.4	92.3	94.2
Student allied health	46.7	65.2	70.3	79.7	83.1	80.9	83.9	86.0	84.0	84.3	77.8	90.7
Student doctor	42.6	53.7	63.9	78.9	77.6	79.9	71.5	77.8	82.7	76.5	78.2	81.0
Student nurse/midwife	61.2	69.0	70.6	78.4	82.1	83.5	85.0	83.6	82.5	86.2	83.5	87.4

**Figure 5: Changes in national hand hygiene compliance by high-risk ward type, October 2012 to June 2020**

**Key**

<b>&lt; 75%</b>	<b>75–80%</b>	<b>≥ 80% target achieved</b>
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High-risk ward type	2012	2013	2014	2015	2016	2017	2018	Mar 2019	Jun 2019	Oct 2019	Feb 2020	Jun 2020
Critical care	61.0	67.1	71.0	76.3	80.7	84.0	82.6	84.0	83.0	83.0	82.2	84.7
Emergency department	34.1	56.3	66.5	70.0	75.1	77.0	78.3	80.9	80.1	80.1	79.1	84.0
Neonatal intensive care	70.1	73.2	81.3	85.0	87.2	88.4	90.7	91.7	91.2	90.0	89.2	90.8
Oncology/haematology	68.7	72.2	78.2	84.3	88.3	87.0	86.9	87.6	88.1	89.4	87.4	92.2
Renal	64.7	73.5	79.7	81.3	87.0	88.6	89.0	89.8	87.9	88.3	86.8	88.8

**Figure 6: Changes in national hand hygiene compliance by standard-risk ward type, July 2018 to June 2020**

On 1 July 2019 the requirement to audit across all clinical areas began.

**Key**

<b>&lt; 75%</b>	<b>75–80%</b>	<b>≥ 80% target achieved</b>
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Standard-risk ward type	Oct 2018	Mar 2019	Jun 2019	Oct 2019	Feb 2020	Jun 2020
Acute aged care	87.1	89.5	89.5	88.7	88.5	92.2
Ambulatory care	87.8	87.6	84.9	85.1	86.0	89.4
Maternity	88.9	86.1	84.3	85.5	82.7	88.6
Medical	84.3	84.0	84.6	83.8	85.0	88.0
Mixed	85.7	87.0	83.0	81.4	84.5	86.8
Paediatrics	89.1	90.2	88.5	89.7	90.5	93.6
Perioperative	85.6	80.2	83.7	76.7	79.5	81.8
Radiology/radiation oncology	80.7	83.0	83.1	85.7	83.0	86.7
Surgical	81.8	83.7	83.6	84.3	83.3	83.5