



Te Tāhū Hauora Health Quality & Safety Commission

## National hand hygiene compliance report: 1 March to 30 June 2023 | Pūrongo ā-motu mō te tautukunga horoi ringa: 1 o Poutū-te-rangi ki te 30 o Pipiri 2023

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### Introduction | Kupu whakataki

Te Tāhū Hauora Health Quality & Safety Commission (Te Tāhū Hauora) measures compliance as part of the Hand Hygiene New Zealand (HHNZ) programme.

The HHNZ programme uses the World Health Organization's '5 Moments for Hand Hygiene' multimodal improvement strategy to drive culture change and establish hand hygiene best practice for every patient, every time.

Good hand hygiene is one of the simplest, most effective ways to prevent the spread of healthcareassociated infections, which makes it a key patient safety priority.

This report presents results for the period 1 March 2023 to 30 June 2023, including national hand hygiene compliance for:

- 19 health districts (districts)\*
- 23 private surgical hospitals (PSHs).

\*(Capital and Coast results are now combined with Hutt Valley)

Data was extracted on 6 July 2023.

# Summary of results for this audit period | He whakarāpopoto hua mō tēnei wā arotake

- The national compliance rate for districts was 84.8 percent, compared with 85.0 percent in the previous audit period.
- The national compliance rate for PSHs was 78.0 percent, compared with 81.7 percent in the previous audit period.
- Twelve districts and fourteen PSHs either achieved or exceeded the national target rate of 80 percent compliance.

Please note the following:

- Twelve districts achieved the ≥ 80 percent target rate for hand hygiene compliance and, of these, seven districts achieved a compliance rate of ≥ 85 percent.
- Seven districts did not reach the national compliance target of ≥ 80 percent. These districts were: Hauora a Toi Bay of Plenty, Lakes, Te Pae Hauora o Ruahine o Tararua MidCentral, Southern, Taranaki, Wairarapa and Te Tai o Poutini West Coast.
- Hand hygiene auditors collected 64,600 moments for hand hygiene.
- Medical staff compliance was 78.7 percent in districts.
- Medical staff compliance decreased in PSHs to 52.7 percent.
- Eight districts did not meet the minimum data collection requirements and were more than 100 moments short of the minimum requirement for this auditing period. These districts were: Hauora a Toi Bay of Plenty, Waitaha Canterbury, Te Matau a Māui Hawke's Bay, Lakes, Te Tai Tokerau, South Canterbury, Taranaki and Waikato.
- In the districts, of all moments where glove use was recorded, health care workers failed to complete hand hygiene 16.3 percent of the time compared with 16.5 percent in the previous audit period.
- In PSHs, of all moments where glove use was recorded, health care workers failed to complete hand hygiene 22.8 percent of the time compared with 19.7 percent in the previous audit period.

### Hand hygiene auditing periods | Ngā wā tātari horoi ringa

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

### Useful resources | Ngā rauemi

- Hand hygiene posters for public areas: <u>How to hand rub/How to hand wash</u>. These posters are available in English, te reo Māori, Samoan, Hindi, Tongan, Arabic and Simplified Chinese.
- Hard copies of hand hygiene posters/resources are available for ordering through Te Tāhū Hauora. You can find more information about the HHNZ resources here: <u>HHNZ resources</u>.
- HHNZ auditing manual (2019)
- HHNZ webpage
- World hand hygiene day 2023: New resources.

### National hand hygiene compliance data: 1 March to 30 June 2023 | Pūrongo ā-motu mō te tautukunga horoi ringa: 1 o Poutū-te-rangi ki te 30 o Pipiri 2023

The districts' national aggregated hand hygiene compliance rate was 84.8 percent. The national average performance by district was 80.5 percent.

The PSH national aggregated hand hygiene compliance rate was 78.0 percent. The national average performance by PSH was 80.0 percent.

The average rate gives equal weighting to each district/PSH result regardless of size, whereas the aggregate rate is more affected by the performance of larger districts/PSHs. Similar rates indicate comparable performance by large/small districts/PSHs.

#### Table 1: National aggregated hand hygiene compliance, 1 March 2023 to 30 June 2023

	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Districts	54,801	64,600	84.8%	84.6%	85.1%
PSHs	2,771	3,552	78.0%	76.6%	79.3%

District	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Te Toka Tumai Auckland	10,726	12,451	86.1%	85.5%	86.7%
Hauora a Toi Bay of Plenty*	1,181	1,591	74.2%	72.0%	76.3%
Waitaha Canterbury*	2,344	2,722	86.1%	84.8%	87.4%
Capital, Coast and Hutt Valley	4,160	4,862	85.6%	84.1%	87.0%
Counties Manukau	12,020	14,349	83.8 %	83.2%	84.4%
Tairāwhiti	702	807	87.0%	84.5%	89.1%
Te Matau a Māui Hawke's Bay*	495	598	82.8%	79.5%	85.6%
Lakes*	697	881	79.1%	76.3%	81.7%
Te Pae Hauora o Ruahine o Tararua MidCentral	1,564	2,120	73.8%	71.9%	75.6%
Nelson Marlborough	1,093	1,350	81.0%	78.8%	83.0%
Te Tai Tokerau*	1,079	1,295	83.3%	81.2%	85.3%
South Canterbury*	291	338	86.1%	82.0%	89.4%
Southern	2,257	2,898	77.9%	76.3%	79.4%
Taranaki*	339	598	56.7%	52.7%	60.6%
Waikato*	2,772	3,228	85.9%	84.6%	87.0%
Wairarapa	169	243	69.5%	63.5%	75.0%
Waitematā	11,798	12,891	91.0%	91.0%	92.0%
Te Tai o Poutini West Coast	242	340	71.2%	66.1%	75.7%
Whanganui	872	1,038	84.0%	81.7%	86.1%

#### Table 2: National compliance rates by district, 1 March 2023 to 30 June 2023

\* These districts have not met the minimum data collection requirements and are more than 100 moments short of the minimum requirement for this audit period.

#### Notes:

- Disruptions to auditing may have been caused by severe weather events and staffing shortages.
- The minimum number of moments for each district is based on the number of areas (departments or wards) and the total number of beds for each hospital.
- Data has now been combined for Capital, Coast and Hutt Valley districts.
- Reporting remains separate for Te Tai o Poutini West Coast and Waitaha Canterbury.

 Table 3: Hand hygiene compliance by geographic region, 1 March 2023 to 30 June 2023

Region	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Northern North Island	35,623	40,986	86.9%	86.6%	87.2%
Te Manawa Taki	5,619	7,105	80.1%	79.2%	81.0%
Central North Island	7,260	8,861	81.9%	81.1%	82.7%
Te Waipounamu	6,227	7,648	81.4%	80.5%	82.3%

 Table 4: Compliance by moment, 1 March 2023 to 30 June 2023

Moment	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Districts					
1. Before touching a patient	14,649	18,431	79.5%	78.9%	80.1%
2. Before a procedure	6,367	7,307	87.1%	86.3%	87.9%
<ol> <li>After a procedure or body fluid exposure risk</li> </ol>	8,639	9,420	91.7%	91.1%	92.2%
4. After touching a patient	16,636	18,728	88.8%	88.4%	89.3%
5. After touching a patient's surroundings	8,510	10,714	79.4%	78.7%	80.2%
PSHs					
1. Before touching a patient	819	1,079	75.9%	73.3%	78.4%
2. Before a procedure	276	333	80.2%	75.6%	84.1%
<ol> <li>After a procedure or body fluid exposure risk</li> </ol>	330	402	82.1%	78.0%	85.5%
4. After touching a patient	854	1,066	80.1%	77.6%	82.4%
5. After touching a patient's surroundings	501	672	74.6%	71.1%	77.7%

Table 5: Department comp	liance rates. 1 March	2023 to 30 June 2023
Tuble 0. Department comp		

Department type	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Districts					
Acute aged care	1,545	1,766	87.5%	85.9%	88.9%
Ambulatory care	1,561	1,745	89.5%	87.9%	90.8%
Critical care unit	3,889	4,663	83.4%	82.3%	84.4%
Emergency department	2,331	2,903	80.3%	78.8%	81.7%
Long-term care	535	614	87.1%	84.3%	89.6%
Maternity	1,091	1,257	86.8%	85.4%	89.6%
Medical	13,488	15,923	84.7%	84.1%	85.3%
Mixed	2,242	2,782	80.6%	79.1%	82.0%
Neonatal care	2,136	2,445	87.0%	85.6%	88.3%
Oncology/haematology	2,088	2,405	86.8%	85.4%	88.1%
Other	2,520	2,968	84.9%	83.6%	86.1%
Paediatrics	3,752	4,212	91.0%	90.1%	91.9%
Perioperative	1,815	2,381	76.2%	74.5%	77.9%
Radiology/radiation oncology	538	599	89.8%	87.1%	92.0%
Renal	4,600	5,293	86.9%	86.0%	87.8%
Surgical	10,042	12,059	83.3%	82.6%	83.9%
PSHs					
Ambulatory care	136	146	93.2%	87.9%	96.2%
Critical care unit	193	315	61.3%	55.8%	66.5%
Medical	30	40	75.0%	59.8%	85.8%
Perioperative	451	588	76.7%	73.1%	79.9%
Surgical	1,957	2,459	79.6%	77.9%	81.1%

Table 6: Health care worker compliance rates,	1 March 2023 to 30 June 2023
Table 0. Health care worker compliance rates,	

Health care worker	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Districts					
Nurse/midwife	32,578	34,472	86.9%	86.6%	87.3%
Medical practitioner	6,995	8,886	78.7%	77.9%	79.6%
Allied health care worker	2,433	2,859	85.1%	83.7%	86.4%
Phlebotomy invasive technician	1,740	1,886	92.3%	91.0%	93.4%
Health care assistant	5,834	7,099	82.2%	81.3%	83.1%
Cleaner and meal staff	1,079	1,378	78.3%	76.0%	80.4%
Administrative and clerical staff	146	166	88.0%	82.1%	92.1%
Student doctor	196	244	80.3%	74.9%	84.8%
Other – orderly and not categorised elsewhere	1,189	1,497	79.4%	77.3%	81.4%
Student allied health	158	189	83.6%	77.7%	88.2%
Student nurse/midwife	2,367	2,807	84.3%	82.9%	85.6%
Student health care assistant	1	4	25.0%	4.6%	69.9%
PSHs					
Nurse/midwife	2,136	2,557	83.5%	82.0%	84.9%
Medical practitioner	238	452	52.7%	48.0%	57.2%
Allied health care worker	98	141	69.5%	61.5%	76.5%
Phlebotomy invasive technician	14	20	70.0%	48.1%	85.5%
Health care assistant	164	224	73.2%	67.1%	78.6%
Cleaner and meal staff	23	27	67.6%	50.8%	80.9%
Administrative and clerical staff	21	27	77.8%	59.2%	89.4%
Student doctor	1	1	100.0%	20.7%	100.0%
Other – orderly and not categorised elsewhere	32	40	80.0%	65.2%	89.5%
Student nurse/midwife	41	53	77.4%	64.5%	86.5%
Student health care assistant	3	3	100.0%	43.9%	100.0%

### Hand hygiene compliance in glove use | Te tautuku horoi ringa ā-karapu

Non-sterile gloves continue to be a key cause of missed hand hygiene opportunities.

The latest glove statistics for districts are:

- when gloves are taken OFF, the proportion of hand hygiene opportunities missed was 5.8 percent compared with 5.3 percent in the previous audit period
- when gloves are put ON, the proportion of hand hygiene opportunities missed was 15.0 percent compared with 15.3 percent in the previous audit period
- of all moments where glove use was recorded, health care workers failed to complete hand hygiene 16.3 percent of the time compared with 16.5 percent in the previous audit period.

The latest PSH glove statistics are:

- when gloves are taken OFF, the proportion of hand hygiene opportunities missed was 13.4 percent compared with 7.1 percent in the previous audit period
- when gloves are put ON, the proportion of hand hygiene opportunities missed was 15.4 percent compared with 14.0 percent in the previous audit period
- of all moments where glove use was recorded, health care workers failed to complete hand hygiene 22.8 percent of the time compared with 19.7 percent in the previous audit period.

100 90 80 70 60 Compliance 50 40 30 20 10 0 Oct-12 -Feb-13 Jun-13 Oct-13 Feb-14 Oct-14 Feb-15 Jun-15 Oct-15 Feb-16 Jun-16 Oct-16 Feb-17 Feb-18 Jun–18 Oct-18 Feb-19 Jun-19 Oct-19 Feb-20 Jun-20 Oct-20 Jun-22 Feb-23 Jun-14 Jun-17 Oct-17 Jun-21 Oct-21 Feb-22 Oct-22 Feb-21 Jun-23 Audit period ending ----National average compliance by district -----National aggregate compliance by district

Figure 1: Trends in national aggregate and average hand hygiene compliance, October 2012 to June 2023

National district hand hygiene compliance over time | Tautukunga horoi ringa ā-rohe i roto i te haere o te wā

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### National targets for districts | Ngā whāinga ā-motu mō ngā poari hauora ā-rohe

The districts' national target for hand hygiene compliance has increased over time as the programme has gained traction. The targets were 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 now focuses on spreading and embedding good hand hygiene practice to support sustained increases in compliance across districts.

#### . . . . . . . . . . . . . . . . . . . Auckland Bay of Plenty Canterbury ..... Capital & Coast Capital, Coast and Hutt Valley • • Counties Manukau . . . Hawke's Bay Hutt Valley Lakes MidCentral Nelson Marlborough • • Northland South Canterbury Southern . . . . . . . . . . Tairāwhiti Taranaki Waikato . . . . . . . Wairarapa •••• Waitematā West Coast Whanganui . . . . . . . . . . . . . . . . . . New Zealand Vov 2012-Mar 2013 Jul-Oct 2013 Jul-Oct 2015 Apr-Jun 2016 Apr-Jun 2018 Vov 2018-Mar 2019 Vov 2022-Feb 2023 Apr-Jun 2014 Vov 2014–Mar 2015 Jul-Oct 2019 2016–Mar 2017 Jul-Oct 2017 Mar-Jun 2020 Vov 2020-Feb 2021 Mar-Jun 2022 Jul-Oct 2021 20 ≥ 70 percent before quarter 3, 2014 Upper group: ≥ 75 percent before quarter 3, 2015 ≥ 80 percent from quarter 3, 2015 Percentage is 60 percent to target Middle group: Percentage < 60 percent Lower group:

#### *Figure 2: Compliance over time by district, October 2012 to June 2023*

Notes:

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

• District names are the old district health board names currently in this figure.

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### Traffic light approach for districts | Te ara rama whero mo nga poari hauora a-rohe

The red–amber–green figures (Figures 3–6) use a 'traffic light' approach. A cell is coloured green if the current 80 percent target was achieved, amber if results were within 5 percent of the target and red if results were more than 5 percent from the target. Every year's rate until 2020 has been averaged.

# Figure 3: Change in national hand hygiene compliance over time by moment, October 2012 to June 2023

Key

< 75% 75–80% ≥ 80% target achieved

Moment	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Feb 23	Jun 23
Before touching a patient	55.5	64.7	69.1	75.6	78.1	79.9	81.3	81.5	82.4	83.1	81.5	80.2	79.5
Before a procedure	55.6	62.6	69.7	78.2	81.9	84.4	87.8	87.8	88.7	89.3	85.6	87.1	87.1
After a procedure or body fluid exposure risk	69.4	74.1	78.3	84.2	88.8	90.7	91.9	92.4	92.8	93.6	93.1	93.1	91.7
After touching a patient	71.9	76.5	80.0	85.9	87.1	88.7	89.2	89.3	89.9	90.7	89.6	88.8	88.8
After touching a patient's surroundings	54.9	64.6	69.0	75.7	76.6	77.9	78.5	77.0	79.5	79.7	79.5	77.9	79.4

Figure 4: Change in national hand hygiene compliance over time for health care workers, October 2012 to June 2023 Key

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

Health care worker	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Feb 23	Jun 23
Allied health care worker	62.7	66.7	73.0	78.8	80.5	83.5	85.6	84.6	86.3	86.7	87.7	83.7	85.1
Health care assistant	61.5	71.7	74.1	76.4	79.2	81.4	83.9	85.9	84.6	85.0	84.4	81.9	82.2
Medical practitioner	55.0	60.1	64.5	72.7	75.5	75.5	78.2	78.2	78.6	79.7	79.3	78.8	78.7
Nurse/midwife	65.0	72.0	76.2	82.4	85.7	87.1	87.8	88.1	88.7	89.6	88.7	87.7	86.9
Phlebotomy invasive technician	70.4	74.7	81.5	81.6	88.2	89.6	90.4	91.5	92.9	93.0	93.7	92.2	92.3
Student allied health	46.7	65.2	70.3	79.7	83.1	80.9	83.9	84.8	84.7	91.0	83.6	70.5	83.6
Student doctor	42.6	53.7	63.9	78.9	77.6	79.9	71.5	79.0	81.6	82.8	78.2	77.2	80.3
Student nurse/midwife	61.2	69.0	70.6	78.4	82.1	83.5	85.0	84.1	85.5	86.2	85.0	82.2	84.3

### Figure 5: Change in national hand hygiene compliance by high-risk ward type, October 2012 to June 2023 Key

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

High-risk ward type	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Feb 23	Jun 23
Critical care	61.0	67.1	71.0	76.3	80.7	84.0	82.6	83.3	83.9	85.5	87.1	86.4	83.4
Emergency department	34.1	56.3	66.5	70.0	75.1	77.0	78.3	80.4	80.5	81.0	82.9	77.9	80.3
Neonatal intensive care	70.1	73.2	81.3	85.0	87.2	88.4	90.7	91.0	89.5	89.8	85.6	88.3	87.0
Oncology/ haematology	68.7	72.2	78.2	84.3	88.3	87.0	86.9	88.4	89.9	90.1	88.7	88.9	86.8
Renal	64.7	73.5	79.7	81.3	87.0	88.6	89.0	88.7	88.1	89.6	87.3	89.1	86.9

#### Figure 6: Change in national hand hygiene compliance by standard-risk ward type, October 2018 June 2023

On 1 July 2019, the requirement to audit across all clinical areas was introduced.

#### Key

<75% 75–80% ≥ 80% target achieved

Standard-risk ward type	Oct 18	Mar 19	Jun 19	Oct 19	Feb 20	Jun 20	Oct 20	Feb 21	Jun 21	Oct 21	Feb 22	Oct 22	Feb 23	Jun 23
Acute aged care	87.1	89.5	89.5	88.7	88.5	92.2	91.9	91.1	89.3	88.2	91.0	86.9	88.3	87.5
Ambulatory care	87.8	87.6	84.9	85.1	86.0	89.4	89.8	87.0	87.1	88.5	87.5	89.1	89.2	89.5
Maternity	88.9	86.1	84.3	85.5	82.7	88.6	86.4	87.0	85.1	87.8	90.9	90.5	87.7	86.8
Medical	84.3	84.0	84.6	83.8	85.0	88.0	86.7	87.0	86.5	87.4	87.1	86.1	85.3	84.7
Mixed	85.7	87.0	83.0	81.4	84.5	86.8	87.4	88.1	85.1	86.3	85.4	93.3	82.7	80.6
Paediatrics	89.1	90.2	88.5	89.7	90.5	93.6	92.5	92.4	91.6	93.7	92.4	84.7	88.4	91.0
Perioperative	85.6	80.2	83.7	76.7	79.5	81.8	79.3	82.0	81.8	84.2	72.5	89.4	78.7	76.2
Radiology/ radiation oncology	80.7	83.0	83.1	85.7	83.0	86.7	85.1	87.0	85.1	88.0	81.1	78.2	87.7	89.8
Surgical	81.8	83.7	83.6	84.3	83.3	83.5	83.1	85.3	84.4	85.4	84.8	87.6	82.6	83.3