



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

**National hand hygiene compliance report:  
1 November 2021 to 28 February 2022 |  
He pūrongo tautukunga ā-motu mō te horoi ringa:  
Te 1 o Whiringa-ā-nuku 2021 ki te 28 o  
Huitanguru 2022**

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Available online at: [www.hqsc.govt.nz](http://www.hqsc.govt.nz)

Contact for enquiries: [HHNZ@hqsc.govt.nz](mailto:HHNZ@hqsc.govt.nz)

## Introduction | Kupu whakataki

This report presents results for the period 1 November 2021 to 28 February 2022 including national hand hygiene compliance for:

- 20 district health boards (DHBs)
- 22 private surgical hospitals (PSHs).

Data was extracted on 7 March 2022.

The Health Quality & Safety Commission (the Commission) measures compliance as part of the Hand Hygiene New Zealand (HHNZ) programme, one of its two current infection prevention and control (IPC) programmes. These targeted improvement initiatives aim to reduce the harm and cost of healthcare-associated infections within Aotearoa New Zealand's health sector.

The HHNZ programme uses the World Health Organization'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 | Ngā hua o tēnei wā tātari

- National compliance for DHBs was 86.7 percent, compared with 87.5 percent in the previous audit period.
- National compliance for PSHs was 82.9 percent, compared with 82.4 percent in the previous audit period.
- Nineteen DHBs and 17 PSHs achieved at or above the national target of 80 percent compliance.

Well done to all the hand hygiene auditors, coordinators and gold auditor trainers who continued to audit, educate and promote hand hygiene over the last year while responding to the COVID-19 pandemic. Compliance has remained high over this period, which is important for patient safety.

Please note the following:

- The compliance rate for 11 DHBs was 85–90 percent over the most recent audit period.
- Despite the current challenges, DHB and PSH hand hygiene auditors audited more than 65,000 moments for hand hygiene.
- DHBs continue to exceed the  $\geq 80$  percent target for all five moments.
- Medical staff have exceeded 80 percent compliance for the second consecutive audit period.
- DHBs in the Auckland region have maintained both high compliance and high numbers for the collection of moments during the delta and omicron outbreaks.
- In DHBs, critical care, emergency care and renal all achieved their highest level of compliance to date for this audit period.
- Acute aged care, maternity, paediatrics and neonatal in DHBs all achieved over 90 percent compliance during this 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

- [Commission COVID-19 resources](#)
- Hand hygiene posters, for public areas: [How to hand rub/How to hand wash](#). These posters are available in English, te reo Māori, Samoan, Hindi, Tongan, Arabic and Simplified Chinese.
- Hard copies of some hand hygiene posters/resources are available for ordering through the Commission as part of the COVID-19 response. You can find more information about the HHNZ resources here: [HHNZ resources](#)
- [HHNZ auditing manual \(2019\)](#)
- [HHNZ communication toolkit](#)

## National hand hygiene compliance data: 1 November 2021 to 28 February 2022 | Ngā raraunga tautukunga ā-motu mō te horoi ringa: Te 1 o Whiringa-ā-nuku 2021 ki te 28 o Huitanguru 2022

The DHB national aggregated hand hygiene compliance rate for this audit period was 86.7 percent. The national average performance by DHB was similar, at 84.8 percent (this figure represents the average of DHBs that submitted data).

The PSH national aggregated hand hygiene compliance rate for this audit period was 82.9 percent. The national average performance by PSH was similar, at 84.6 percent (this figure represents the average of PSHs that submitted data).

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

**Table 1: National aggregated hand hygiene compliance, 1 November 2021 to 28 February 2022**

	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
DHBs	55,225	63,699	86.7%	86.4%	87.0%
PSHs	2,919	3,521	82.9%	81.6%	84.1%

**Table 2: National compliance rates by DHB, 1 November 2021 to 28 February 2021**

DHB	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Auckland DHB	10,599	12,388	85.6%	84.9%	86.2%
Bay of Plenty DHB	763	933	81.8%	79.2%	84.1%
Canterbury DHB	3,075	3,539	86.9%	85.7%	88.0%
Capital & Coast DHB	2,245	2,593	86.6%	85.2%	87.8%
Counties Manukau DHB	11,082	12,860	86.2%	85.6%	86.8%
Hauora Tairāwhiti	552	659	83.8%	80.8%	86.4%
Hawke's Bay DHB	1,021	1,162	87.9%	85.9%	89.6%
Hutt Valley DHB	1,529	1,850	82.6%	80.9%	84.3%
Lakes DHB	765	927	82.5%	79.9%	84.8%
MidCentral DHB	324	360	90.0%	86.5%	92.7%
Nelson Marlborough DHB	1,364	1,658	82.3%	80.4%	84.0%
Northland DHB	1,326	1,550	85.5%	83.7%	87.2%
South Canterbury DHB	307	368	83.4%	79.3%	86.9%
Southern DHB	1,747	2,123	82.3%	80.6%	83.9%
Taranaki DHB	194	224	86.6%	81.5%	90.5%
Waikato DHB	2,057	2,377	86.5%	85.1%	87.9%
Wairarapa DHB	263	323	81.4%	76.8%	85.3%
Waitematā DHB	15,190	16,765	90.6%	90.2%	91.0%
West Coast DHB	204	237	86.1%	81.1%	89.9%
Whanganui DHB	618	803	77.0%	73.9%	79.7%

**Table 3: Hand hygiene compliance by geographic region, 1 November 2021 to 28 February 2022**

Region	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
Northern	38,197	43,563	87.7%	87.4%	88.0%
Midland	4,331	5,120	84.6%	83.6%	85.6%
Central	6,000	7,091	84.6%	83.8%	85.4%
South Island	6,697	7,925	84.5%	83.7%	85.3%

**Table 4: Compliance by moment, 1 November 2021 to 28 February 2022**

Moment	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
<b>DHBs</b>					
1. Before touching a patient	15,509	18,724	82.3%	82.3%	83.4%
2. Before procedure	6,375	7,106	82.8%	89.0%	90.4%
3. After a procedure or body fluid exposure risk	8,466	9,088	93.2%	92.6%	93.7%
4. After touching a patient	16,638	18,489	90.0%	89.5%	90.4%
5. After touching a patient's surroundings	8,237	10,292	80.0%	79.2%	80.2%
<b>PSHs</b>					
1. Before touching a patient	868	1094	79.3%	76.8%	81.6%
2. Before procedure	286	346	82.7%	78.3%	86.3%
3. After a procedure or body fluid exposure risk	388	445	87.2%	83.8%	90.0%
4. After touching a patient	878	996	88.2%	86.0%	90.0%
5. After touching a patient's surroundings	499	640	78.0%	74.6%	81.0%

**Table 5: Department compliance rates, 1 November 2021 to 28 February 2021**

Department type	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
<b>DHBs</b>					
Acute aged care	1,581	1,737	91.0%	89.6%	92.3%
Ambulatory care	1,701	1,944	87.5%	86.0%	88.9%
Critical care unit	3,627	4,151	87.4%	86.3%	88.4%
Emergency department	2,373	2,833	83.8%	82.4%	85.1%
Long-term care	66	79	83.5%	73.9%	90.1%
Maternity	1,426	1,568	90.9%	89.4%	92.3%
Medical	13,702	15,733	87.1%	86.6%	87.6%
Mixed	1,521	1,780	85.4%	83.7%	87.0%
Neonatal care	2,152	2,357	91.2%	90.0%	92.3%
Oncology/haematology	1,829	2,073	88.2%	86.8%	89.5%
Other	3,139	3,590	87.4%	86.3%	88.5%
Paediatrics	3,374	3,651	92.4%	91.5%	93.2%
Perioperative	2,257	3,113	72.5%	70.9%	74.0%
Radiology/radiation oncology	721	889	81.1%	78.4%	83.5%
Renal	3,867	4,245	91.1%	90.2%	91.9%
Surgical	11,223	13,241	84.8%	84.1%	85.4%
<b>PSHs</b>					
Ambulatory care	81	86	94.2%	87.1%	97.5%
Critical care unit	75	92	81.5%	72.4%	88.1%
Medical	63	71	88.7%	79.3%	94.2%
Other	91	104	87.5%	79.8%	92.5%
Perioperative	359	442	81.2%	77.3%	84.6%
Surgical	2,250	2,726	82.5%	81.1%	83.9%

**Table 6: Health care worker compliance rates, 1 November 2021 to 28 February 2022**

Health care worker	Correct moments	Total moments	Compliance rate	Lower 95% confidence interval	Upper 95% confidence interval
<b>DHBs</b>					
Nurse/midwife	32,882	36,827	89.3%	89.0%	89.6%
Medical practitioner	7,813	9,748	80.1%	79.3%	80.9%
Allied health care worker	2,375	2,696	88.1%	86.8%	89.3%
Phlebotomy invasive technician	2,264	2,398	94.4%	93.4%	95.3%
Health care assistant	5,681	6,673	85.1%	83.3%	86.0%
Cleaner and meal staff	1,325	1,755	75.5%	73.4%	77.5%
Administrative and clerical staff	150	167	89.8%	84.3%	93.5%
Student doctor	190	244	77.9%	72.3%	82.6%
Other – orderly and not categorised elsewhere	1,470	1,935	76.0%	74.0%	77.8%
Student allied health	64	79	81.0%	71.0%	88.1%
Student nurse/midwife	1,011	1,177	85.9%	83.8%	87.8%
<b>PSHs</b>					
Nurse/midwife	2,081	2,386	87.2%	85.8%	88.5%
Medical practitioner	388	565	68.7%	64.7%	72.4%
Allied health care worker	125	158	79.1%	72.1%	84.7%
Phlebotomy invasive technician	41	46	89.1%	77.0%	95.3%
Health care assistant	197	248	79.4%	74.0%	84.0%
Cleaner and meal staff	34	53	64.2%	50.7%	75.7%
Administrative and clerical staff	18	18	100.0%	82.4%	100.0%
Other – orderly and not categorised elsewhere	25	36	69.4%	54.9%	83.7%
Student allied health	2	2	100.0%	34.2%	100.0%
Student nurse/midwife	8	9	88.9%	56.5%	98.0%



## 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 DHB glove statistics are:

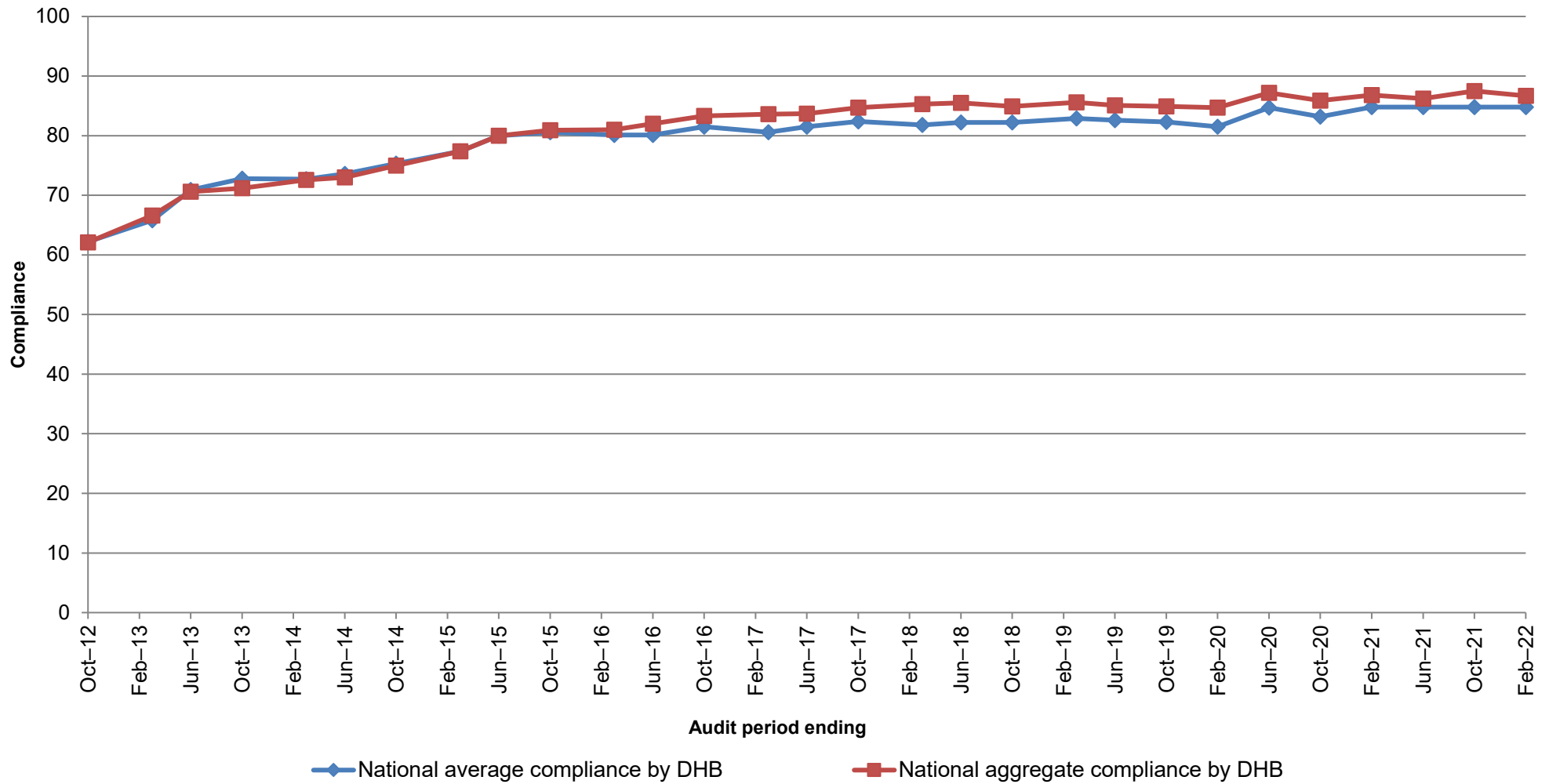
- when gloves are taken OFF, the proportion of hand hygiene opportunities missed was 4.7 percent compared with 3.8 percent in the previous audit period
- when gloves are put ON, the proportion of hand hygiene opportunities missed was 11.7 percent compared with 10.5 percent in the previous audit period
- of all moments where glove use was recorded, health care workers failed to complete hand hygiene 15.1 percent of the time compared with 13.8 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 5.9 percent compared with 5.2 percent in the previous audit period
- when gloves are put ON, the proportion of hand hygiene opportunities missed was 15.8 percent compared with 14.8 percent in the previous audit period
- of all moments where glove use was recorded, health care workers failed to complete hand hygiene 17.9 percent of the time compared with 18.7 percent in the previous audit period.

## National DHB hand hygiene compliance over time | Te tautuku horoi ringa ā-motu e haere ake nei

Figure 1: Trends in national aggregate and average hand hygiene compliance, October 2012 to February 2022



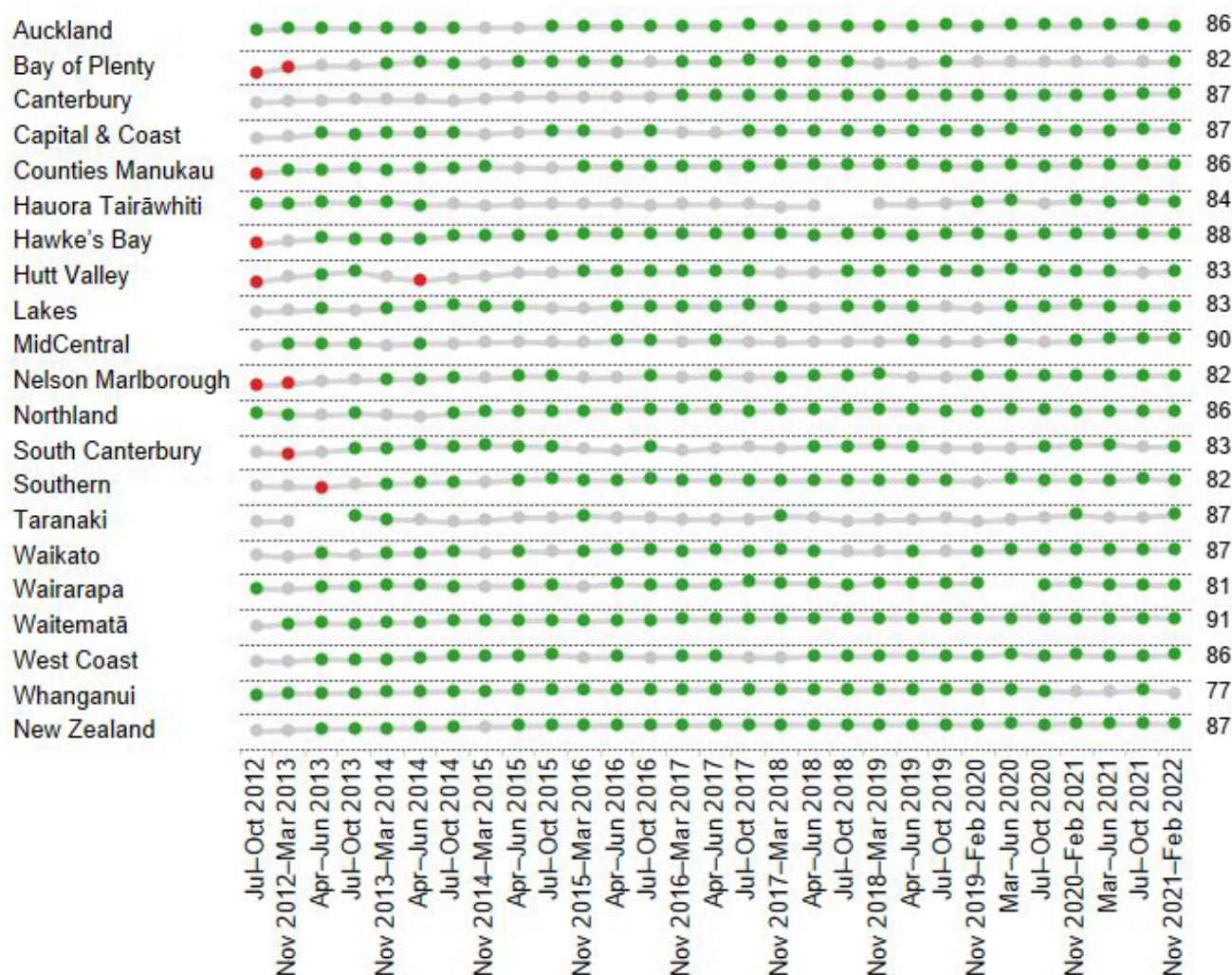
## National targets for DHBs | Ngā whāinga ā-motu mō ngā poari hauora ā-rohe

The DHB national target for hand hygiene compliance has increased over time, as the programme has successfully gained traction. 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 now focuses 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 February 2022**

### Measure definition

Five moments: Percentage of opportunities for hand hygiene taken.



<b>Upper group:</b>	≥ 70 percent before quarter 3, 2014 ≥ 75 percent before quarter 3, 2015 ≥ 80 percent from quarter 3, 2015
<b>Middle group:</b>	Percentage is 60 percent to target
<b>Lower group:</b>	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 for DHBs | Te ara rama whero mō ngā poari hauora ā-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 within 5 percent of the target and red if 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 February 2022**

### Key

< 75%	75–80%	≥ 80% target achieved
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Moment	2012	2013	2014	2015	2016	2017	2018	2019	2020	Feb 21	Jun 21	Oct 21	Feb 22
Before touching a patient	55.5	64.7	69.1	75.6	78.1	79.9	81.3	81.5	82.4	83.1	82.3	84.0	82.3
Before a procedure	55.6	62.6	69.7	78.2	81.9	84.4	87.8	87.8	88.7	89.2	89.4	89.4	82.8
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	94.1	93.2
After touching a patient	71.9	76.5	80.0	85.9	87.1	88.7	89.2	89.3	89.9	90.9	90.0	91.1	90.0
After touching a patient’s surroundings	54.9	64.6	69.0	75.7	76.6	77.9	78.5	77.0	79.5	79.2	79.3	80.5	80.0

**Figure 4: Change in national hand hygiene compliance over time for health care workers, October 2012 to February 2022**

**Key**

< 75%	75–80%	≥ 80% target achieved
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Health care worker	2012	2013	2014	2015	2016	2017	2018	2019	2020	Feb 21	Jun 21	Oct 21	Feb 22
Allied health care worker	62.7	66.7	73.0	78.8	80.5	83.5	85.6	84.6	86.3	87.5	83.9	88.8	88.1
Health care assistant	61.5	71.7	74.1	76.4	79.2	81.4	83.9	85.9	84.6	85.7	85.2	84.2	85.1
Medical practitioner	55.0	60.1	64.5	72.7	75.5	75.5	78.2	78.2	78.6	78.3	79.1	81.6	80.1
Nurse/midwife	65.0	72.0	76.2	82.4	85.7	87.1	87.8	88.1	88.7	89.6	89.3	90.0	89.3
Phlebotomy invasive technician	70.4	74.7	81.5	81.6	88.2	89.6	90.4	91.5	92.9	92.2	92.6	94.1	94.4
Student allied health	46.7	65.2	70.3	79.7	83.1	80.9	83.9	84.8	84.7	93.8	86.1	92.9	81.0
Student doctor	42.6	53.7	63.9	78.9	77.6	79.9	71.5	79.0	81.6	84.5	82.5	81.4	77.9
Student nurse/midwife	61.2	69.0	70.6	78.4	82.1	83.5	85.0	84.1	85.5	86.4	84.5	87.7	85.9

**Figure 5: Change in national hand hygiene compliance by high-risk ward type, October 2012 to February 2022**

High risk ward type	2012	2013	2014	2015	2016	2017	2018	2019	2020	Feb 21	Jun 21	Oct 21	Feb 22
Critical care	61.0	67.1	71.0	76.3	80.7	84.0	82.6	83.3	83.9	85.5	84.9	86.2	87.4
Emergency department	34.1	56.3	66.5	70.0	75.1	77.0	78.3	80.4	80.5	80.7	79.7	82.6	83.8
Neonatal intensive care	70.1	73.2	81.3	85.0	87.2	88.4	90.7	91.0	89.5	88.7	88.5	92.2	91.2
Oncology/haematology	68.7	72.2	78.2	84.3	88.3	87.0	86.9	88.4	89.9	91.1	91.2	87.9	88.2
Renal	64.7	73.5	79.7	81.3	87.0	88.6	89.0	88.7	88.1	88.1	90.2	90.4	91.1

**Key**

< 75%	75–80%	≥ 80% target achieved
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**Figure 6: Change in national hand hygiene compliance by standard-risk ward type, October 2018 to February 2022**

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

**Key**

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

Standard risk ward type	Oct 18	Mar 18	Jun 19	Oct 19	Feb 20	Jun 20	Oct 20	Feb 21	Jun 21	Oct 21	Feb 22
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
Ambulatory care	87.8	87.6	84.9	85.1	86.0	89.4	89.8	87.0	87.1	88.5	87.5
Maternity	88.9	86.1	84.3	85.5	82.7	88.6	86.4	87.0	85.1	87.8	90.9
Medical	84.3	84.0	84.6	83.8	85.0	88.0	86.7	87.0	86.5	87.4	87.1
Mixed	85.7	87.0	83.0	81.4	84.5	86.8	87.4	88.1	85.1	86.3	85.4
Paediatrics	89.1	90.2	88.5	89.7	90.5	93.6	92.5	92.4	91.6	93.7	92.4
Perioperative	85.6	80.2	83.7	76.7	79.5	81.8	79.3	82.0	81.8	84.2	72.5
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
Surgical	81.8	83.7	83.6	84.3	83.3	83.5	83.1	85.3	84.4	85.4	84.8