



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

Hand Hygiene New Zealand National Hand Hygiene Performance Report 1 November 2014 to 31 March 2015

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Background

The Hand Hygiene New Zealand (HHNZ) programme is one of two infection prevention and control (IPC) improvement initiatives delivered in partnership with the Health Quality & Safety Commission (the Commission). HHNZ is joined in the IPC portfolio by the Surgical Site Infection Improvement Programme. As quality improvement initiatives, these programmes aim to reduce the incidence and impact of healthcare associated infections within the New Zealand health and disability sector.

Auckland District Health Board has delivered the HHNZ programme on behalf of the Commission for the past four years (2011 to 2015). The programme is a multi-modal quality improvement programme that uses the WHO '5 moments for hand hygiene' framework to drive culture change and establish best hand hygiene practice as the expectation for every patient, every time.

This report presents the results for district health board and national hand hygiene performance for 1 November 2014 to 31 March 2015.

The national district health board hand hygiene performance target to achieve by 30 June 2015 is 80%.

Achievements in this audit period

- National hand hygiene performance climbs to a nationally aggregated average of 77.4% this audit period, up from 75% last audit period.
- Performance among many of the healthcare worker categories has continued to improve. Particularly pleasing is the continued improvement among medical practitioners and student doctors.
- 20 DHBs submitted 100% or more of the required hand hygiene data (moments) in this period compared to 19 DHBs in the last audit period.
- 14 DHBs achieved at or above 75%. Of the 14, eight DHBs achieved at 80% or greater (Swedish rounding).
- 11 DHBs improved on their last audit and one DHB improved by more than 10%
- Performance according to each of the five moments has improved across all 5 moments with moment 5 (after touching a patient's surroundings), up from 70.1% to 76.2%
- Hand hygiene performance and glove use has improved in all three situations: before gloves are put on, when they are taken off, and at the appropriate times during patient care.

Having seven DHBs reach 80% and above is particularly significant as the goal for DHB hand hygiene performance by **30 June 2015 is 80%**.

Continuing to drive improvement

Drawing upon the principles of frontline ownership (FLO) by encouraging frontline staff to devise their own solutions to improve hand hygiene performance for their unique work area, can result in hand hygiene improvement that resonates more strongly and is more likely to be successful and sustainable.

Many DHBs have started to use the FLO approach to further improve their hand hygiene performance. DHBs can find further information about using this approach at www.handhygiene.org.nz within guidance documents in HHNZ's resource library:

http://www.handhygiene.org.nz/index.php?option=com_content&view=article&id=13&Itemid=115 and via a presentation delivered by Dr Michael Gardam at the HHNZ Quality Improvement Workshop, http://www.handhygiene.org.nz/index.php?option=com_content&view=article&id=10&Itemid=114.

An ongoing priority to address is glove use and hand hygiene. While the performance rates for hand hygiene before, during, and after glove use are improving, DHBs should consider using FLO to find new solutions to increase awareness and drive improvement in this area.

National hand hygiene performance data: 1 November 2014 to 31 March 2015

The nationally aggregated hand hygiene performance rate for this measurement period is 77.4%. The national average performance by district health board (DHB) is also 77.4%. 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 the same indicates that performance rates between large and small DHBs are similar.

Correct Hand Hygiene Actions	Total Moments	Compliance Rate	Lower 95% Confidence Interval	Upper 95% Confidence Interval
35,616	46,026	77.4%	77%	77.8%

Table 1. National performance rates by DHB

District health board	1 November 2014 to 31 March 2015			Lower 95% confidence interval (%)	Upper 95% confidence interval (%)
	Correct moments	Total moments	% correct moments		
DHBs that submitted 100% or greater of the required hand hygiene data					
South Canterbury DHB	516	612	84.3%	81.2%	87.0%
Whanganui DHB	738	903	81.7%	79.1%	84.1%
Hawkes Bay DHB	1,442	1,778	81.1%	79.2%	82.9%
West Coast DHB	1,627	2,008	81.0%	79.3%	82.7%
Counties Manukau DHB	2,072	2,562	80.9%	79.3%	82.4%
Waitemata DHB	2,331	2,902	80.3%	78.8%	81.7%
Northland DHB	1,499	1,881	79.7%	77.8%	81.4%
Lakes DHB	692	870	79.5%	76.7%	82.1%
Auckland DHB	10,350	13,059	79.3%	78.6%	79.9%
Wairarapa DHB	160	202	79.2%	73.1%	84.2%
Southern DHB	1,926	2,484	77.5%	75.9%	79.1%
Waikato DHB	2,008	2,600	77.2%	75.6%	78.8%
Bay of Plenty DHB	1,619	2,100	77.1%	75.2%	78.8%
Mid Central DHB	1,799	2,382	75.5%	73.8%	77.2%
Nelson-Marlborough DHB	655	889	73.7%	70.7%	76.5%
Canterbury DHB	1,829	2,516	72.7%	70.9%	74.4%
Capital & Coast DHB	1,776	2,450	72.5%	70.7%	74.2%
Tairāwhiti DHB	618	901	68.6%	65.5%	71.5%
Taranaki DHB	576	840	68.6%	65.4%	71.6%
Hutt Valley DHB	1,383	2,087	66.3%	64.2%	68.30%

Table 2. Hand hygiene performance by geographic region

Name	Correct moments	Total moments	Compliance rate	Lower confidence interval	Upper confidence interval
Northern DHB network	16,252	20,404	79.7%	79.1%	80.2%
Midland DHB network	4,937	6,471	76.3%	75.2%	77.3%
Central DHB network	7,874	10,642	74%	73.1%	74.8%
South Island DHB network	6,553	8,509	77%	76.1%	77.9%

National performance rates by each of the World Health Organization (WHO) 5 moments for hand hygiene

Performance according to each of the five moments has improved across all 5 moments. The greatest improvement since the last measurement period was with moment 5 (after touching a patient's surroundings), up from 70.1%.

Table 3. Performance by moment: 1 November 2014 to 31 March 2015

Moment	Correct hand hygiene actions	Total moments	Performance rate	Lower 95% confidence interval	Upper 95% confidence interval
1 - Before touching A patient	9,896	13,527	73.3%	69.5%	76.8%
2 - Before procedure	2,963	3,887	75.5%	68.1%	81.6%
3 - After a procedure or body fluid exposure risk	4,428	5,326	82.5%	76.0%	87.6%
4 - After touching a patient	11,816	14,254	87.3%	84.5%	89.7%
5 - After touching a patient's surroundings	6,513	9,032	76.2%	71.4%	80.4%

National performance rates by healthcare worker category

Rates have continued to increase in all healthcare worker categories except two, with a slight decrease among phlebotomists of 2.8% and a larger decrease among cleaning and meal staff. The largest improvement was among administrative and clerical staff of 10.7%.

Table 4. Healthcare worker performance rates: 1 November 2014 to 31 March 2015

Name	Correct moments	Total moments	Performance rate	Lower 95% confidence interval	Upper 95% confidence interval
Administrative and clerical staff	55	67	82.1%	71.3%	89.4%
Phlebotomy invasive technician	1,360	1,682	80.9%	78.9%	82.7%
Nurse/midwife	23,081	28,656	80.5%	80.1%	81.0%
Student nurse/midwife	868	1,130	76.8%	74.3%	79.2%
Student doctor	151	198	76.3%	69.9%	81.7%
Allied health care worker	1,792	2,352	76.2%	74.4%	77.9%
Health care assistant	2,087	2,792	74.7%	73.1%	76.3%
Student allied health	65	87	74.7%	64.7%	82.7%
Medical practitioner	5,218	7,518	69.4%	68.4%	70.4%
Cleaner and meal staff	489	768	63.7%	60.2%	67.0%
Other - Orderly and not categorised elsewhere	367	604	60.8%	56.8%	64.60%

Glove use

Inappropriate use of non-sterile gloves has been identified as a key cause of missed hand hygiene opportunities and rates highly as one of the barriers to excellent hand hygiene practice.

During this measurement period hand hygiene performance has improved in all three situations: before gloves are put on, when they are taken off, and at the appropriate times during patient care.

The latest glove statistics are:

- When gloves are taken OFF, the proportion of hand hygiene opportunities that were MISSED was 9.8%.
- When gloves are put ON, the proportion of hand hygiene opportunities that were MISSED was 22.7%.
- Once healthcare workers donned gloves they then went on to fail to complete hand hygiene at the appropriate 5 moment times 22.2% of the time, due to continuous wearing of gloves.

Slowly but surely healthcare workers may be beginning to understand that glove use is not a substitute for hand hygiene; however, further improvement is still required. This means that education about glove use and hand hygiene should remain a priority for DHBs. An education tool and new poster is available for DHBs to use to highlight this area. This should be an ongoing area of education for healthcare workers.

Time trended graphs October 2012 to March 2015

Figure 1. Trends in national aggregate and average hand hygiene performance: October 2012 to March 2015

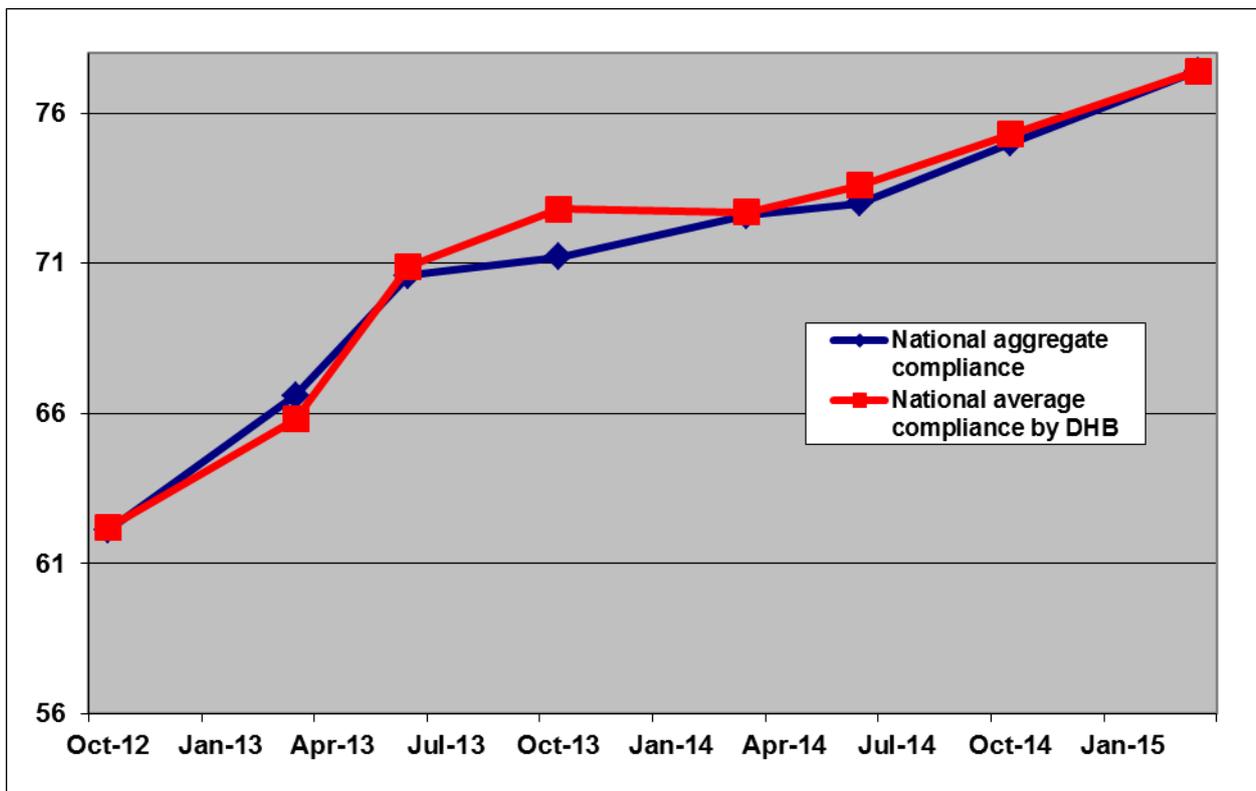


Figure 2. Trends over time by DHB: June 2013 to March 2015

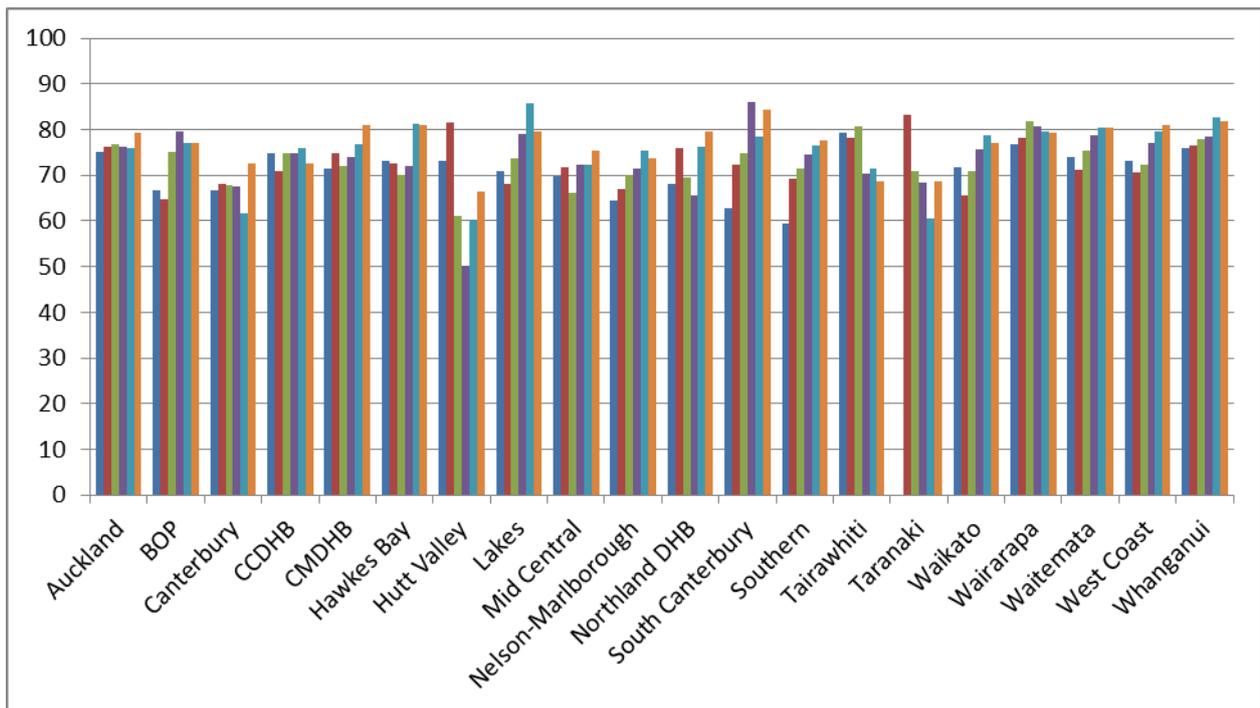


Figure 3. Change over time by moment: October 2012 to March 2015

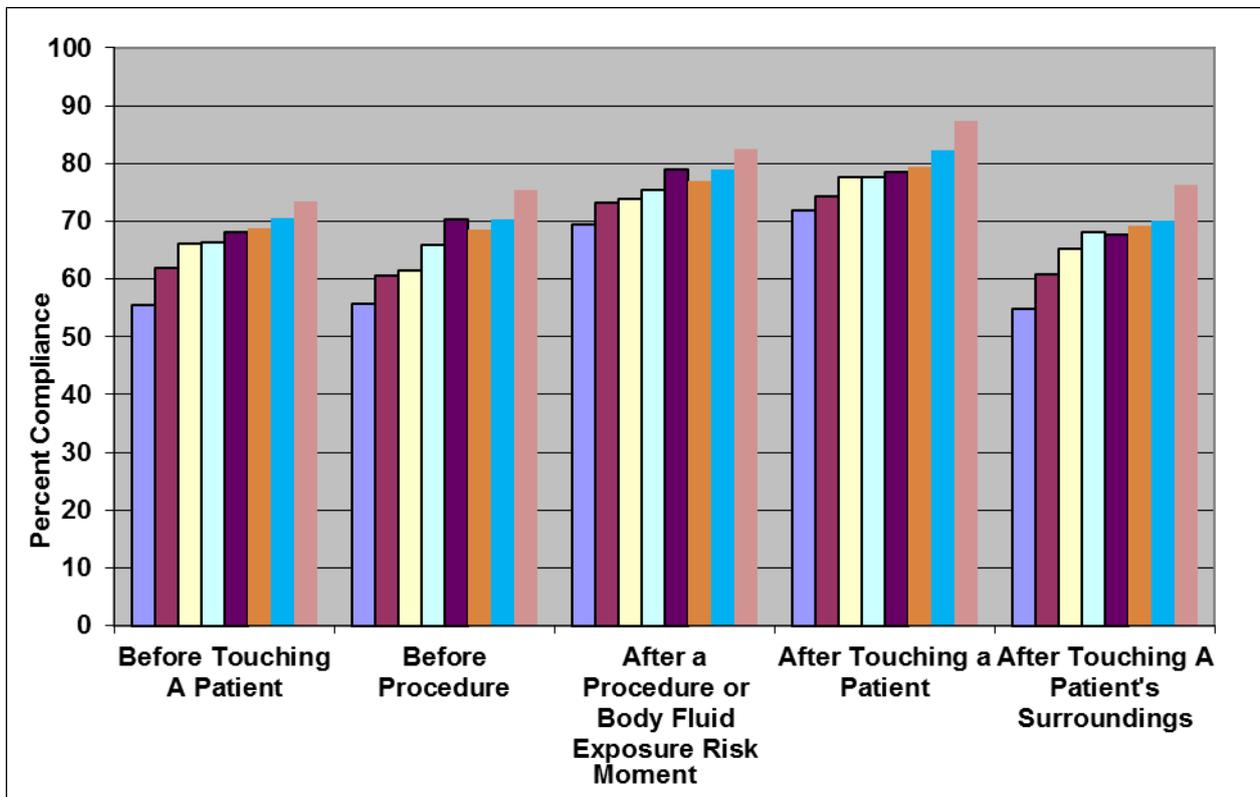


Figure 4. Change over time for healthcare workers: October 2012 to March 2015

