



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

**Hand Hygiene New Zealand
National Hand Hygiene Performance Report
for District Health Boards
1 July to 31 October 2014**

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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 three years (2011 to 2014). 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 July to 31 October 2014.

Achievements in this audit period

- For the first time since the HHNZ Programme began, DHBs have achieved a nationally aggregated average of **75%** for hand hygiene performance. This is significant milestone and HHNZ congratulates all DHBs for their ongoing efforts to drive hand hygiene improvement.
- Nurses (77.7%), allied health (74.1%), doctors (67.3%), and student doctors (72.9%) attained their highest performance results to date. Student doctors demonstrated an unprecedented improvement in hand hygiene performance of 12% from the previous audit period.
- 19 DHBs submitted 100% or more of the required hand hygiene data (moments) in this period compared to 16 DHBs in the last audit period.
- 15 DHBs achieved at or above 75%. Of the 15, six DHBs achieved at 80% or greater (Swedish rounding) compared to only two DHBs in June 2014.
- 12 DHBs improved on their last audit and three DHBs improved by 10% or more.

Having six DHBs reach 80% and above is particularly significant as the goal for DHB hand hygiene performance by **30 June 2015 is 80%**. To have nearly a third of DHBs already achieving this figure, with others well on the way, is an excellent result.

Continuing to drive improvement

Drawing upon the principles of frontline ownership 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 frontline ownership 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=16&Itemid=129.

National hand hygiene performance data: 1 July to 31 October 2014

The nationally aggregated hand hygiene performance rate for this measurement period is 75.0%.

The national average performance by district health board (DHB) is 75.3%

Correct hand hygiene actions	Total moments	% correct moments	Lower 95% confidence interval	Upper 95% confidence interval
25,289	33,702	75%	74.6%	75.5%

Table 1. National performance rates by DHB

District health board	01 July 2014 to 31 October 2014			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					
Lakes DHB	707	825	85.70%	83.10%	87.90%
Whanganui DHB	676	816	82.80%	80.10%	85.30%
Hawkes Bay DHB	1,495	1,842	81.20%	79.30%	82.90%
Waitemata DHB	2,298	2,863	80.30%	78.80%	81.70%
West Coast DHB	788	990	79.60%	77.00%	82.00%
Wairarapa DHB	159	200	79.50%	73.40%	84.50%
Waikato DHB	1,962	2,493	78.70%	77.00%	80.30%
South Canterbury DHB	491	626	78.40%	75.00%	81.50%
Bay of Plenty DHB	1,635	2,118	77.20%	75.40%	78.90%
Counties Manukau DHB	1,968	2,567	76.70%	75.00%	78.30%
Southern DHB	1,972	2,580	76.40%	74.80%	78.00%
Northland DHB	1,336	1,752	76.30%	74.20%	78.20%
Auckland DHB	1,878	2,474	75.90%	74.20%	77.60%
Capital and Coast DHB	1,956	2,577	75.90%	74.20%	77.50%
Nelson Marlborough DHB	670	889	75.40%	72.40%	78.10%
MidCentral DHB	1,655	2,289	72.30%	70.40%	74.10%
Tairāwhiti DHB	624	872	71.60%	68.50%	74.50%
Canterbury DHB	1,906	3,086	61.80%	60.00%	63.50%
Hutt Valley DHB	1,087	1,800	60.40%	58.10%	62.60%
DHBs that submitted 50% or fewer of the required hand hygiene data					
Taranaki DHB	26	43	60.50%	45.60%	73.60%

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 marginally improved across all 5 moments. Confidence intervals indicate the greatest improvement is with moments 1 and 4.

Table 2. Performance by moment: 1 July to 31 October 2014

Moment	Correct hand hygiene actions	Total moments	Performance rate	Lower 95% confidence interval	Upper 95% confidence interval
1 - Before touching a patient	7007	9928	70.6%	69.7%	71.5%
2 - Before procedure	1721	2452	70.2%	68.3%	72.0%
3 - After a procedure or body fluid exposure risk	3101	3924	79.0%	77.7%	80.3%
4 - After touching a patient	8520	10355	82.3%	81.5%	83%
5 - After touching a patient's surroundings	4940	7043	70.1%	69%	71.2%

National performance rates by healthcare worker category

Rates have been sustained or improved across the table. The only small decrease was with student nurses but within 1.3%. The largest improvement was with student doctors of 12%.

Table 3. Healthcare worker performance rates: 1 July 2014 to 31 October 2014

Name	Correct moments	Total moments	Performance rate	Lower 95% confidence interval	Upper 95% confidence interval
Phlebotomy invasive technician	887	1,061	83.60%	81.30%	85.70%
Nurse/midwife	15826	20363	77.70%	77.1%	78.30%
Healthcare assistant	1,603	2,157	74.30%	72.40%	76.10%
Allied healthcare worker	1230	1,659	74.10%	72.0%	76.20%
Domestic cleaner and meal staff	397	544	73.00%	69.10%	76.50%
Student allied health	157	215	73.00%	66.70%	78.50%
Student doctor	70	96	72.90%	63.30%	80.80%
Administrative and clerical staff	30	42	71.40%	56.40%	82.80%
Student	1,244	1,769	70.30%	68.20%	72.40%

nurse/midwife					
Medical practitioner	3577	5316	67.30%	66.00%	68.50%
Other - orderly and not categorised elsewhere	267	479	55.70%	51.30%	60.10%

Glove use

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

The latest glove statistics are:

- When gloves are taken OFF, the proportion of hand hygiene opportunities that were MISSED was 11.4%.
- When gloves are put ON, the proportion of hand hygiene opportunities that were MISSED was 29%.
- Once healthcare workers donned gloves they then went on to fail to complete hand hygiene at the appropriate 5 moment times 28% of the time, due to continuous wearing of gloves.

Healthcare workers still find it difficult to understand the need to perform hand hygiene at the appropriate times during patient care while wearing gloves (as well as before and after donning and doffing gloves). The statistics for this audit period have changed very little. 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 October 2014

Figure 1. Trends in national aggregate and average hand hygiene performance: October 2012 to October 2014

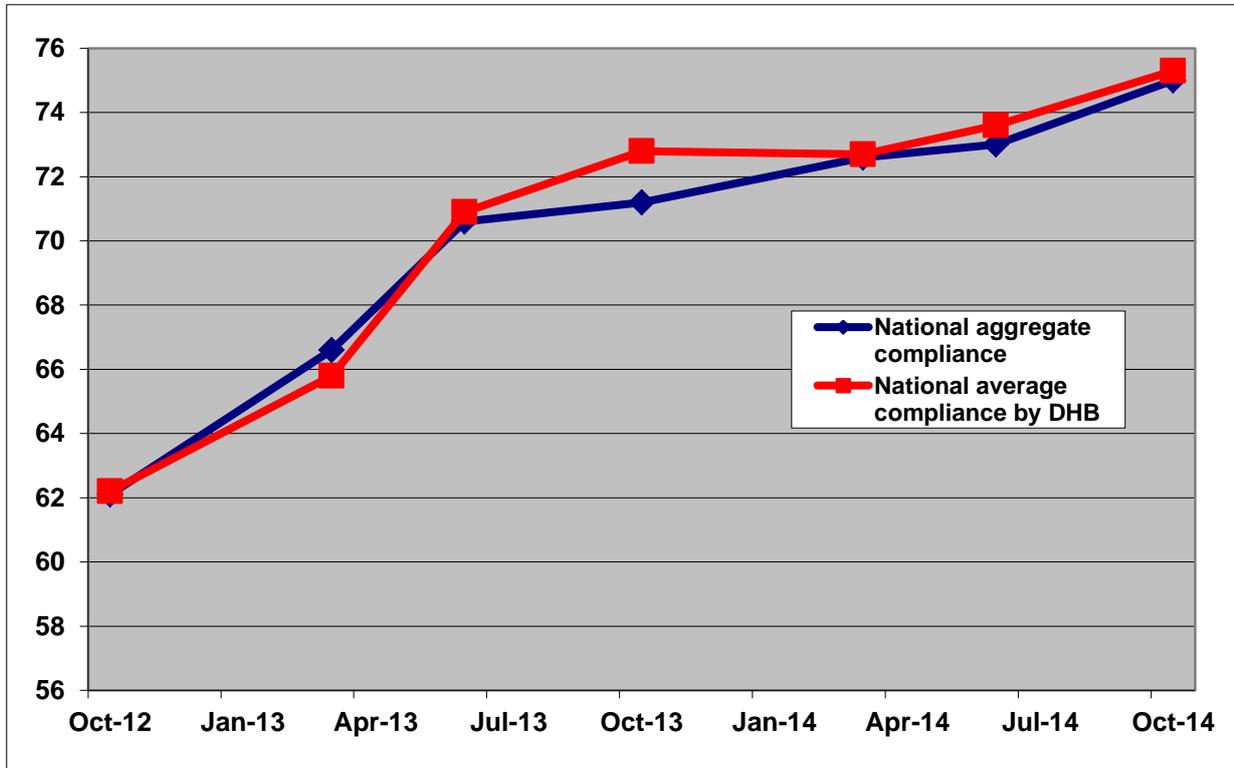


Figure 2. Trends over time by DHB: October 2012 to October 2014

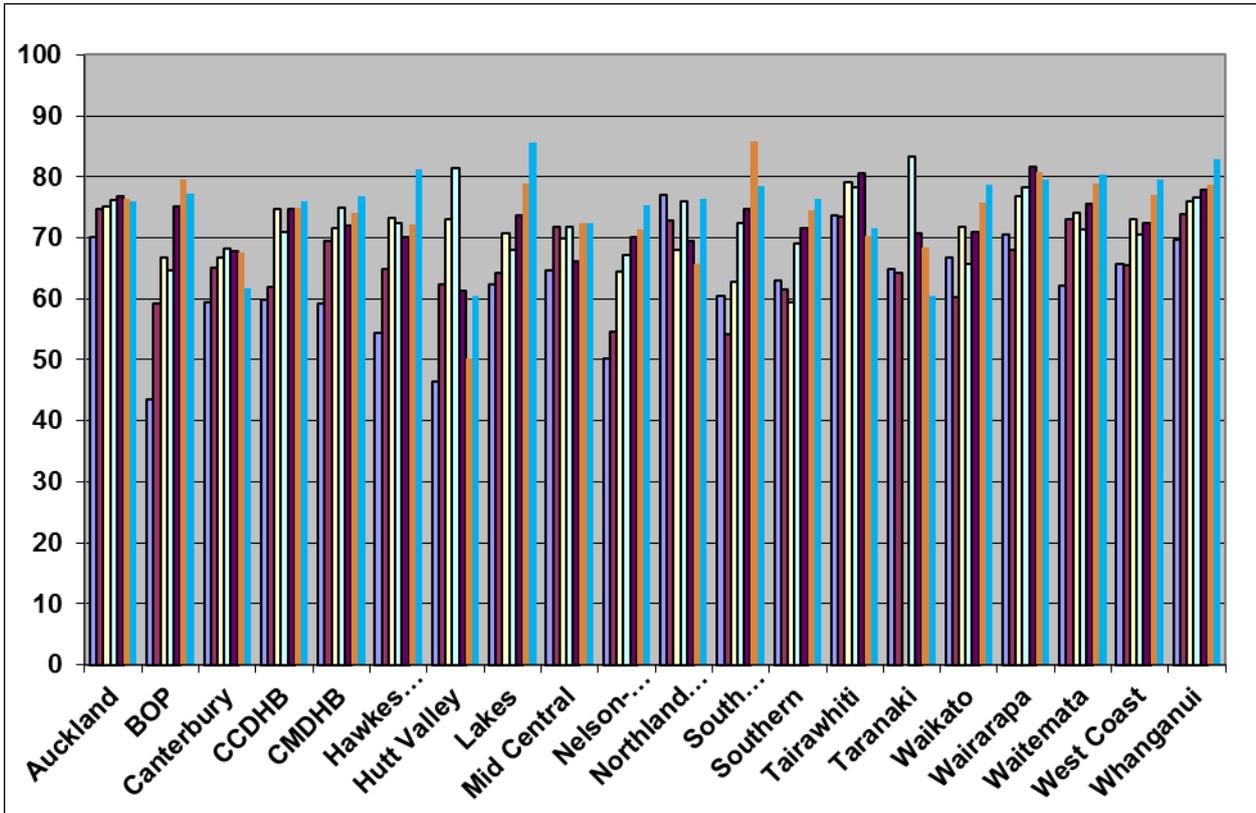


Figure 3. Change over time by moment: October 2012 to October 2014

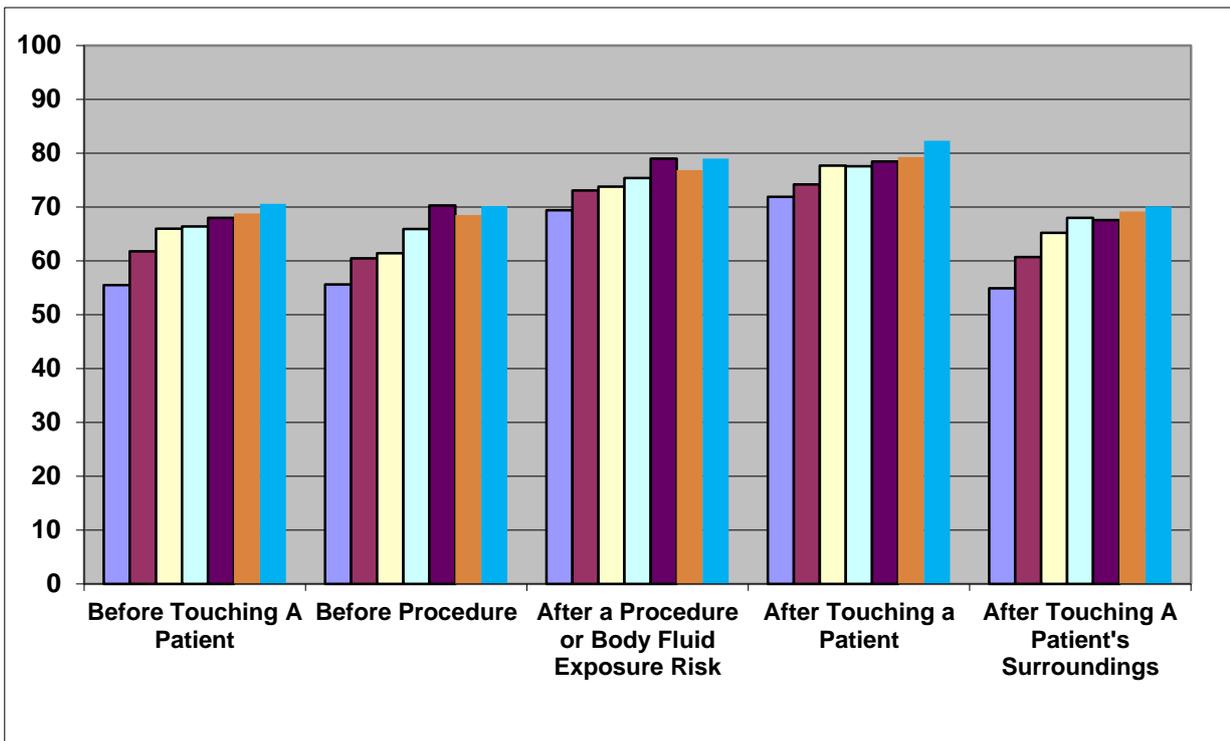


Figure 4. Change over time for healthcare workers: October 2012 to October 2014

