

# Tasmanian Acute Public Hospitals Healthcare Associated Infection Surveillance Report

June 2012

Report No: 13 (Period ending 31 Mar 2012)

# **Tasmanian Acute Public Hospitals Healthcare Associated Infection Surveillance Report**

Tasmanian Infection Prevention and Control Unit (TIPCU)

Department of Health and Human Services, Tasmania

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Suggested reference: Mitchell, B., McGregor, A., Wells, A., Wilson, F. (2012). Tasmanian Acute Public Hospitals Healthcare Associated Infection Surveillance Report No.13. Hobart: Department of Health and Human Services.

## **Notes**

- This report does not contain the methodology used to collect the data. Protocols relating to the surveillance programs are published on the TIPCU website, [www.dhhs.tas.gov.au/tipcu](http://www.dhhs.tas.gov.au/tipcu)
- An explanatory document is available on the TIPCU website. This document provides insight into understanding the surveillance report.
- Data from previous reports should not be relied upon. Use the most to date report when quoting/using data.

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# Executive Summary

This surveillance report describes data relating to a number of key Healthcare Associated Infection (HAI) 'indicators'. It is the intention of the Tasmanian Infection Prevention and Control Unit (TIPCU) to publish this report quarterly. The TIPCU website ([www.dhhs.tas.gov.au/tipcu](http://www.dhhs.tas.gov.au/tipcu)) contains details of the surveillance program, including the rationale for the indicators surveyed and the methodologies used in data collection, validation and analysis. These details are not contained in this report but are freely available online should further information be required. In addition, an explanatory document has been developed to accompany this surveillance report.

Any form of comparison between hospitals should be done with extreme caution and direct comparisons are not recommended. Information about how Tasmanian rates compare with those of other Australian states and internationally, are provided in the Key Points sections of this report. A question and answer document and an explanatory document are also available on the TIPCU website ([www.dhhs.tas.gov.au/tipcu](http://www.dhhs.tas.gov.au/tipcu)). The Appendices in this report contain more detailed information.

The key findings of this report are:

- The rate of healthcare associated *Staphylococcus aureus* bacteraemia remains steady
- The rate of hospital identified *Clostridium difficile* infection and healthcare associated healthcare facility onset *Clostridium difficile* infection have not increased in the last reported quarter over the previous quarter. However, the rates are still higher than prior to Quarter 4 2011, as discussed in our previous Quarterly Report. Investigations are continuing.
- The occurrence of vancomycin resistant enterococcus remains low
- An increase in hand hygiene compliance was reported in the last period.



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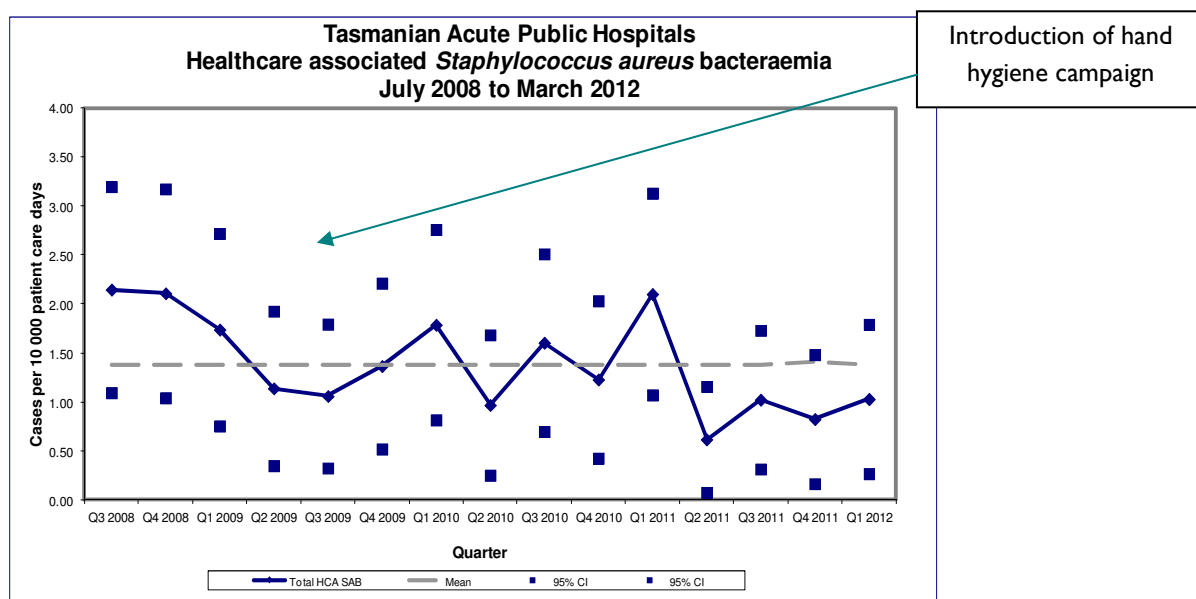
# Staphylococcus aureus bacteraemia (Bloodstream Infection)

## Tasmanian Rates

Figure 1 outlines the Tasmanian acute public hospital combined rate of Healthcare Associated *Staphylococcus aureus* bacteraemia.

The average (mean) rate of healthcare associated *Staphylococcus aureus* bacteraemia between 1<sup>st</sup> July 2008 and 31<sup>st</sup> March 2012 is 1.38 per 10 000 patient care days (95% CI 1.16 -1.60).

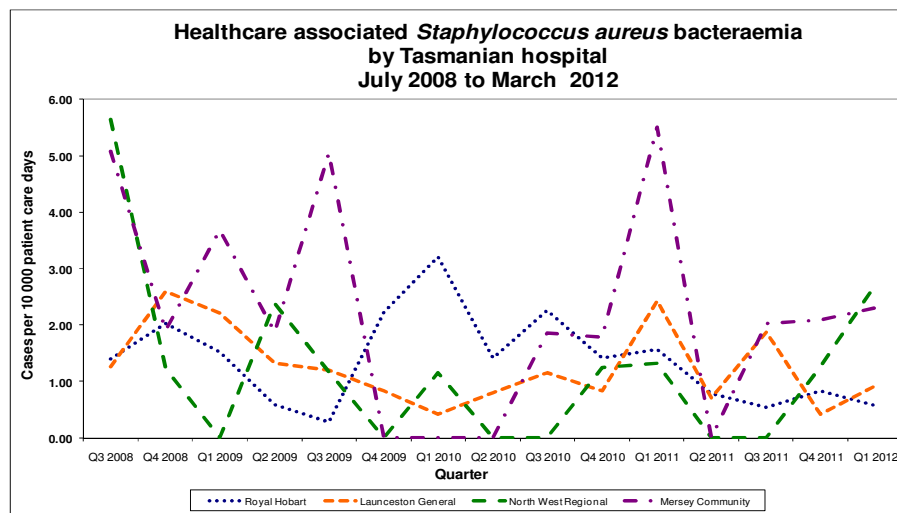
**Figure 1** Tasmanian rates of healthcare associated *Staphylococcus aureus* bacteraemia



## Hospital Rates

Figure 2 (and tables contained in the Appendix) outlines the rate of *Staphylococcus aureus* bacteraemia in each of Tasmania's acute public hospitals.

**Figure 2** - Healthcare associated *Staphylococcus aureus* bacteraemia by acute public hospital



## Key Points

- The Tasmanian rate of healthcare associated *Staphylococcus aureus* bacteraemia is 1.38 per 10 000 patient care days. This is comparable to other Australian states.
  - The rate of HCA SAB in Western Australia public hospitals (2010–11) was 1.11 per 10 000 bed days<sup>1</sup>.
  - The rate of HCA SAB in South Australia is reported as 1.4 per 10 000 occupied bed days in 2008<sup>2</sup>.
  - The rate of hospital onset SAB in New South Wales is reported as 1.1 per 10 000 bed days in 2010<sup>3</sup>. 'Hospital onset' rates are an underestimate of the total HCA rate as they only include cases in hospital >48hrs.
  - The rate of HCA SAB at The Canberra Hospital in 2010-2011 is reported as 1.06 cases per 10,000 days of patient care<sup>4</sup>.

<sup>1</sup>HISWA Annual Report 2010-2011.

<sup>2</sup>South Australian Healthcare Associated Infection Bloodstream Report 2006-2008

<sup>3</sup>NSW Health, NSW Healthcare Associated Infections.

[http://www.health.nsw.gov.au/resources/quality/hai/pdf/report\\_jan\\_mar\\_2010.pdf](http://www.health.nsw.gov.au/resources/quality/hai/pdf/report_jan_mar_2010.pdf)

<sup>4</sup> MyHospitals <http://www.myhospitals.gov.au/hospital/the-canberra-hospital/safety-and-quality/sab>

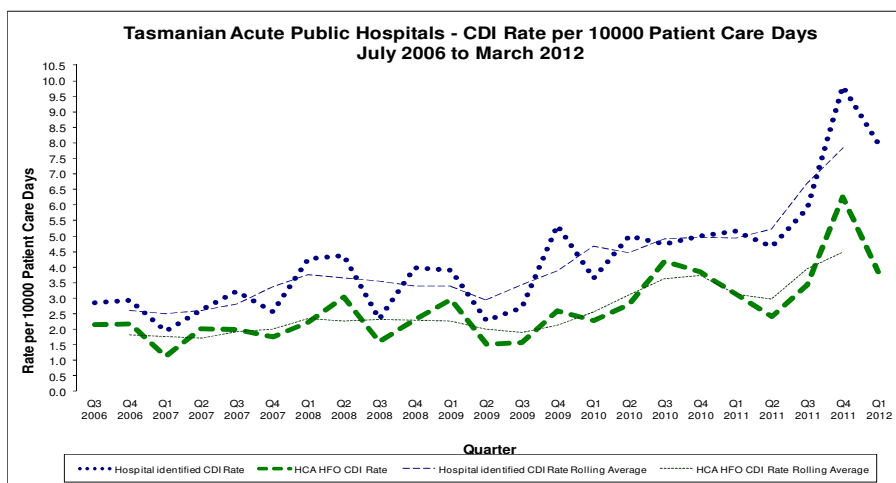
# Clostridium difficile Infection

## Tasmanian Rate

Figure 3 and the tables contained in the Appendix, outlines the rate of *Clostridium difficile* infection (CDI) for patients >2 years old presenting to or in each of Tasmania's acute public hospitals. The average (mean) rate of **hospital identified** *Clostridium difficile* infection between the 1<sup>st</sup> July 2006 and 31<sup>st</sup> March 2012 is 4.25 per 10 000 patient care days (95% CI 4.07-4.42)

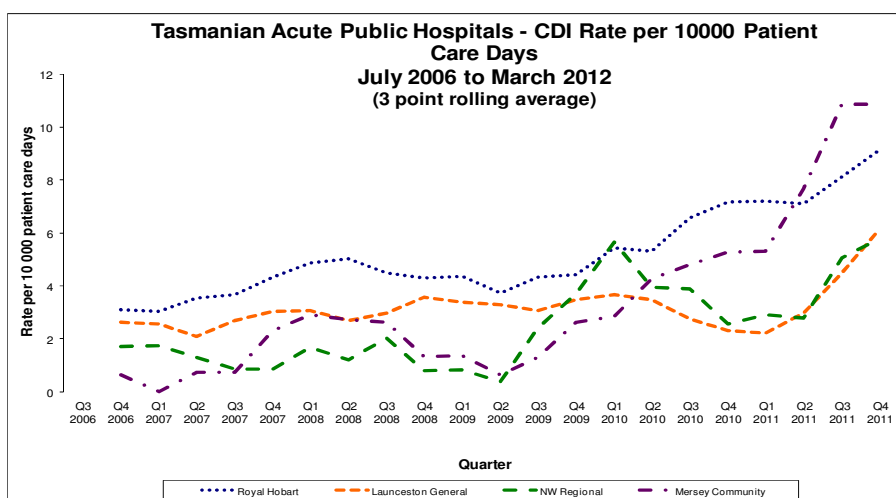
The average (mean) rate of **healthcare associated healthcare facility onset** (HCA HFO) *Clostridium difficile* infection between the 1<sup>st</sup> July 2006 and 31<sup>st</sup> March 2012 is 2.67 per 10 000 patient care days (95% CI 2.55-2.80).

**Figure 3-** Rates of *Clostridium difficile* infection



## Hospital Rates

**Figure 4 -** Rates of *Clostridium difficile* infection by acute public hospital



## Key Points

- The rate of hospital identified *Clostridium difficile* infection (CDI) and healthcare associated healthcare facility onset CDI did not increase in the quarter ending March 2012 over the increase noted in the final quarter of 2011. However, the rates are still higher than in the reporting period prior to Quarter 4, 2011.
- The TIPCU is undertaking activities to understand this issue more thoroughly including investigating testing efforts and changes to testing methodologies for *Clostridium difficile*, investigating strains of *Clostridium difficile*, analysing data for trends in healthcare associated community onset CDI and community onset CDI and liaising with other jurisdictions to assess if other States and Territories have observed recent increases in CDI.
- The rate of laboratory detection of CDI will be affected by how frequently laboratories test faecal samples for *Clostridium difficile* and the sensitivity of the laboratory techniques used to identify *Clostridium difficile*, which may vary. These two factors can impact on the number of *Clostridium difficile* cases identified and therefore the rate of CDI. Variations in laboratory testing methodology are not unique to Tasmania.
- Inconsistencies in the way CDI is diagnosed, classified and reported make benchmarking difficult, and potentially confound the ability to identify clear regional trends or outbreaks.
- TIPCU is working with interstate counterparts and the Australian Commission on Safety and Quality in Health Care (ACSQHC) in standardising the reporting and testing of CDI, allowing for improved benchmarking.
- Direct comparisons between Tasmanian hospitals are not recommended given the variations described above.
- While it remains difficult to compare CDI rates, it appears Tasmanian rates are slightly higher than in other parts of Australia, but generally lower than, or comparable to, those published internationally.
  - The rate of CDI in tertiary Western Australian hospitals is reported as 3.88 per 10 000 bed days or 1.85 per 10 000 bed days for all Western Australian hospitals in 2010-2011<sup>1</sup>.
  - The rate of CDI in England was 9.1 per 10 000 bed days in 2007–2008<sup>2</sup>.

<sup>1</sup>HISWA Annual Report 2010-2011.

<sup>2</sup>Health Protection Agency. Results of the voluntary reporting scheme for *Clostridium difficile*, England, Wales and Northern Ireland, 2009



# Vancomycin Resistant Enterococcus (VRE)

## Tasmanian Numbers

Table 1 - Number of people identified with VRE per quarter

Quarter	Colonisation	Infection	Total*
2006^	Unknown	Unknown	1
2007^	Unknown	Unknown	7
Q1 2008	12	1	13
Q2 2008	28	4	32
Q3 2008	10	2	12
Q4 2008	16	2	18
Q1 2009	7	0	9
Q2 2009	13	1	14
Q3 2009	3	1	4
Q4 2009	5	0	5
Q1 2010	2	0	2
Q2 2010	4	1	5
Q3 2010	13	1	14
Q4 2010	6	2	8
Q1 2011	3	0	3
Q2 2011	6	2	8
Q3 2011	3	0	3
Q4 2011	3	0	3
Q1 2012	8	2	10

\* Total does not necessarily equal colonisation plus infection due to unknown cases

^ Calendar year.

## Hospital Numbers

Table 2 - Number of people identified with VRE by acute public hospital

Quarter	Royal Hobart		Launceston General		North West Regional		Mersey Community	
	Col	Inf	Col	Inf	Col	Inf	Col	Inf
Q1 2008	10	1	-	-	-	-	-	-
Q2 2008	15	2	6	-	6	1	-	-
Q3 2008	1	-	1	-	8	2	-	-
Q4 2008	2	1	8	1	5	-	-	-
Q1 2009	-	-	4	-	3	-	2	-
Q2 2009	7	1	-	-	2	-	4	-
Q3 2009	1	-	-	-	-	1	2	-
Q4 2009	2	-	2	-	1	-	-	-
Q1 2010	1	-	1	-	-	-	-	-
Q2 2010	4	-	-	-	-	-	-	1
Q3 2010	10	-	-	-	2	-	1	1
Q4 2010	3	-	-	-	1	-	1	2
Q1 2011	-	-	-	-	1	-	2	-
Q2 2011	3	1	1	-	-	-	-	-
Q3 2011	1	-	1	-	-	-	-	-
Q4 2011	3	-	-	-	-	-	-	-
Q1 2012	3	-	2	-	2	-	1	1

Col - colonisation Inf – infection

### Key Points

- Table 2 provides information on hospital identified VRE. This does not necessarily mean that VRE was acquired at this hospital.
- The numbers of VRE identified are affected by the amount of screening undertaken by hospitals. There is a TIPCU developed VRE protocol for screening, but some hospitals may be more aggressive in their approach and hence are likely to identify more VRE.
- The TIPCU data reflects both colonisation and infection with VRE.
- The absolute number of VRE infections identified in Tasmania is lower than many other Australian states. In Victoria, a total of 221 infections were reported during 2007<sup>1</sup>.

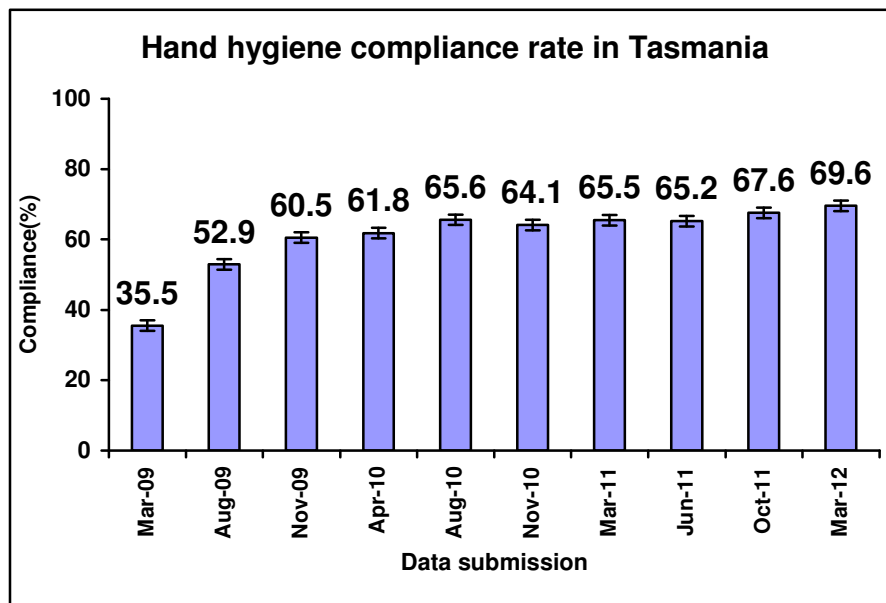
<sup>1</sup>VRE in Victorian Health Facilities. <http://www.health.vic.gov.au/infectionprevention/downloads/vre-report.pdf>

# Hand Hygiene Compliance Data

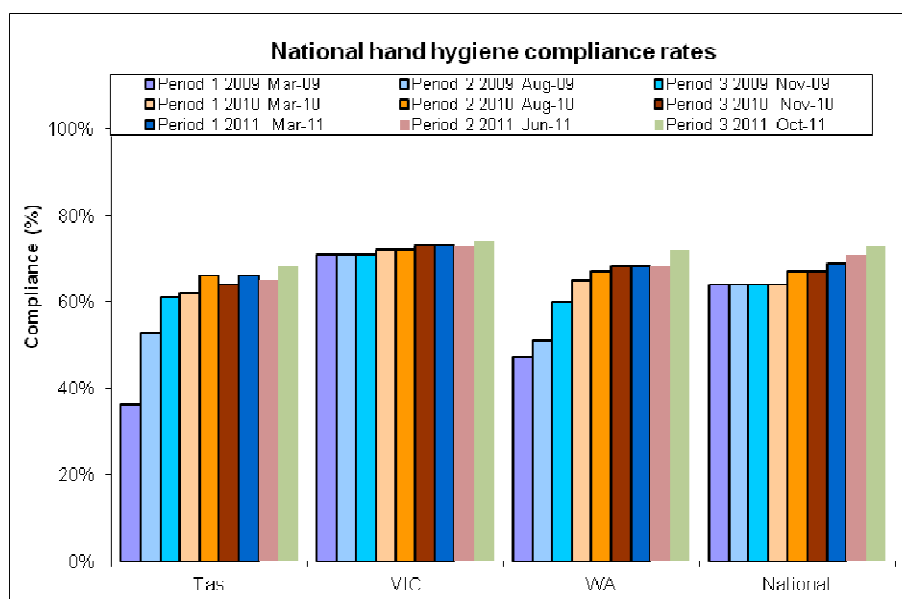
Data from the 10<sup>th</sup> Hand Hygiene Data Submission, March 2012.

## Tasmanian Rates

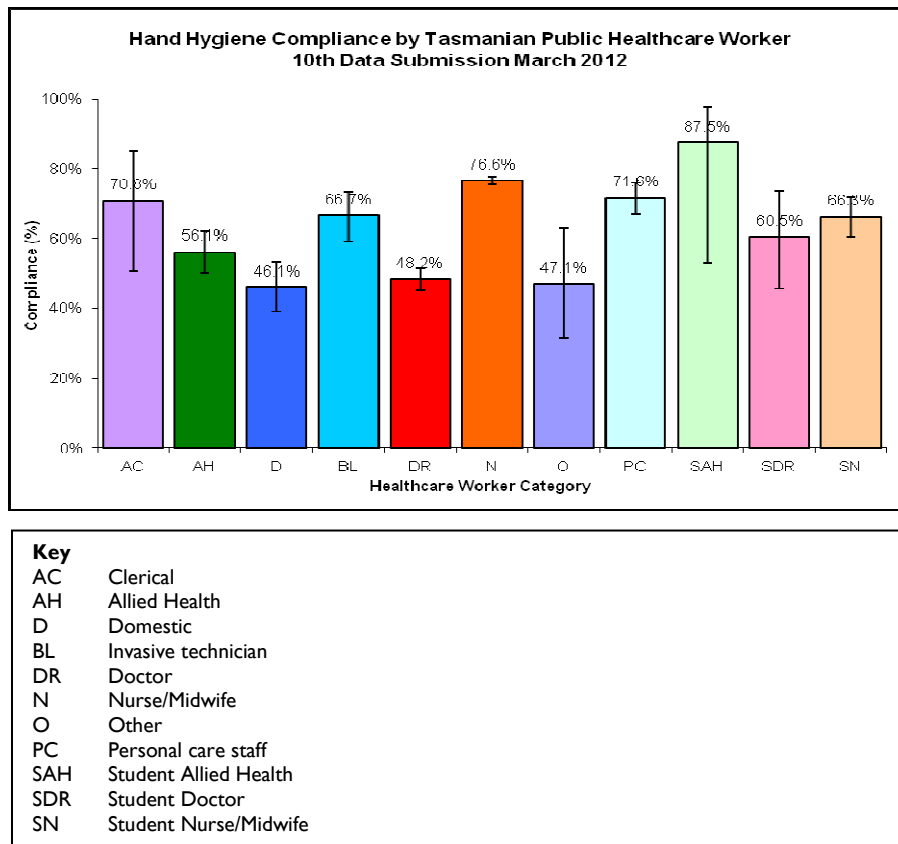
**Figure 5** Hand hygiene compliance rate in Tasmanian public hospitals



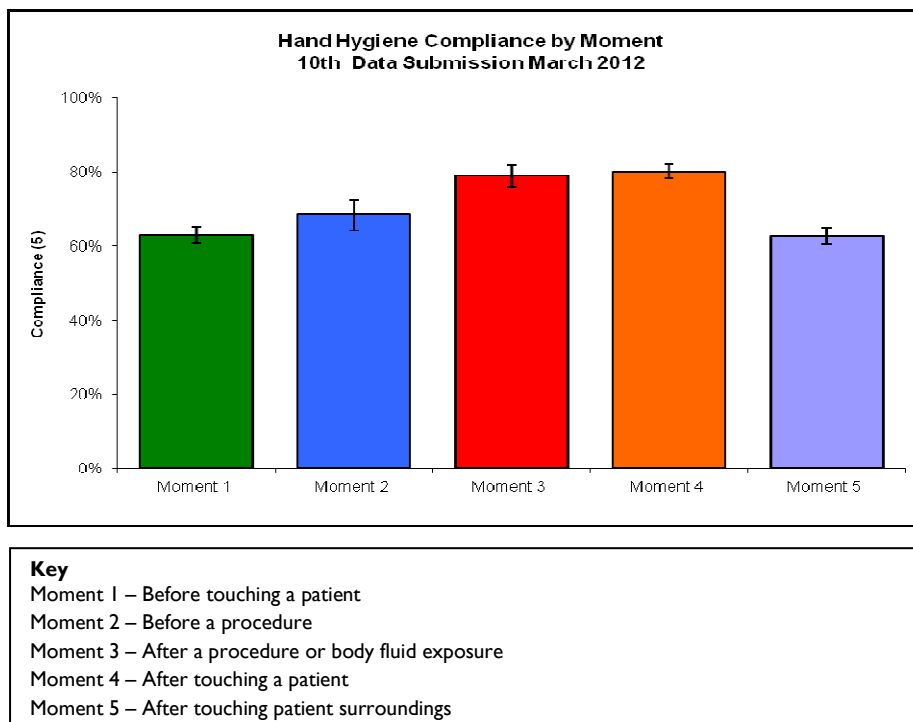
**Figure 6-** Hand hygiene compliance rate by state/territory



**Figure 7 - Hand hygiene compliance by healthcare worker**

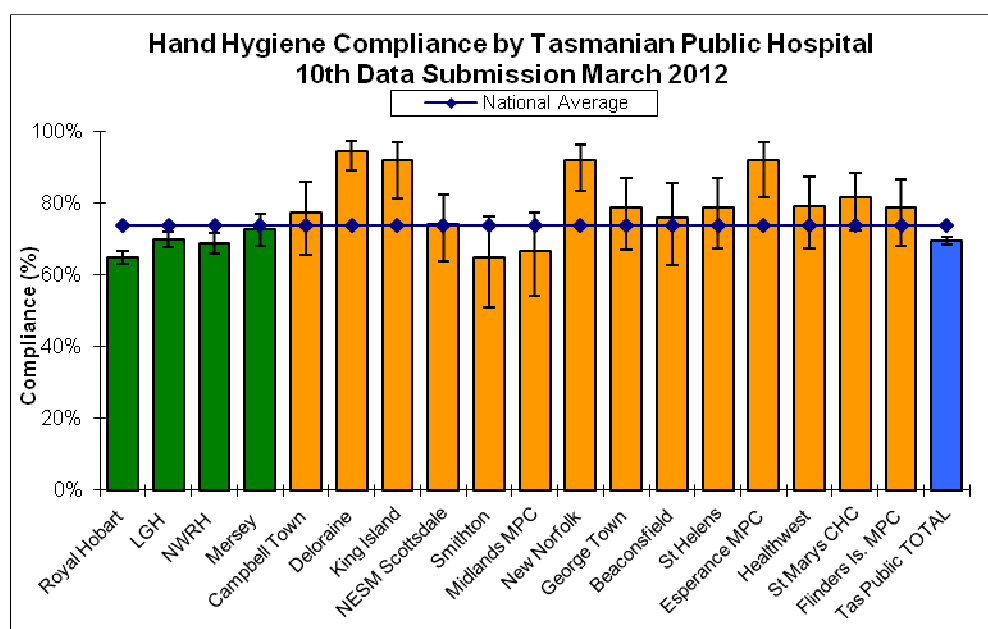


**Figure 8 - Hand hygiene compliance by moment**



## Hospital Rates

Figure 9 - Hand hygiene compliance rate by hospital



## Key Points

- Rural hospitals do not collect as much data as the four acute public hospitals, so comparisons between rural and acute hospitals are not recommended.
- The overall rate of Tasmanian hand hygiene compliance has increased from a baseline of 35.5 per cent in March 2009 to 69.6 per cent in the latest report.
- The rate of hand hygiene compliance in Tasmania is comparable to that of other states.
- The majority of hand hygiene compliance data is collected from nurse patient interactions (64.9 per cent in the latest report).
- Hand hygiene compliance before touching a patient (Moment 1), undertaking a procedure (Moment 2) and after touching patient surroundings (Moment 5) are lower than those reported after undertaking a procedure (Moment 3) or after touching a patient (Moment 4).

# **Antibiotic Utilisation Surveillance**

## **Future Reports**

Future reports will also include the rates of antibiotic utilisation in acute hospitals.

# Acknowledgements

The production of this report is the culmination of work from a number of different organisations. In particular, we would like to acknowledge:

- Launceston General Hospital Infection Control Team and Executive Director of Nursing
- Royal Hobart Hospital Infection Control Team and Executive Director of Nursing
- North West Area Health Service Infection Control Team and Executive Director of Nursing
- Microbiology Departments at the Royal Hobart Hospital, Launceston General Hospital, DSPL and Gribbles Pathology
- Hand Hygiene Australia
- Communicable Disease Prevention Unit, Population Health
- Contributing Primary Health Sites
- Epidemiology Unit, Population Health.

# Appendix

## *Staphylococcus aureus* bacteraemia

**Table 3** - Tasmanian numbers and rate/10 000 bed days of *Staphylococcus aureus* bacteraemia July 2008 to March 2012

Quarter	HCA total		HCA inpatients		HCA non inpatients		HCA MRSA		Community	
	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate
Q3 2008	16	2.15	11	1.48	5	0.67	3	0.40	13	1.74
Q4 2008	15	2.11	10	1.41	5	0.70	2	0.28	9	1.26
Q1 2009	12	1.74	6	0.87	6	0.87	2	0.29	17	2.46
Q2 2009	8	1.14	3	0.43	5	0.71	1	0.14	10	1.42
Q3 2009	8	1.06	5	0.66	3	0.40	1	0.13	14	1.85
Q4 2009	10	1.36	7	0.96	3	0.41	0	0.00	21	2.87
Q1 2010	13	1.79	8	1.10	5	0.69	0	0.00	13	1.79
Q2 2010	7	0.97	5	0.69	2	0.28	0	0.00	12	1.66
Q3 2010	12	1.60	9	1.20	3	0.40	1	0.13	12	1.60
Q4 2010	9	1.23	6	0.82	3	0.41	3	0.41	9	1.23
Q1 2011	15	1.97	10	1.31	5	0.66	2	0.26	16	2.10
Q2 2011	5	0.62	2	0.25	3	0.37	0	0.00	10	1.23
Q3 2011	8	1.02	8	1.02	0	0.00	1	0.13	12	1.53
Q4 2011	6	0.82	3	0.41	3	0.41	2	0.27	17	2.33
Q1 2012	7	1.03	6	0.88	1	0.15	1	0.15	26	3.82



**Table 4** - Royal Hobart Hospital numbers and rates of *Staphylococcus aureus* bacteraemia  
July 2008 to March 2012

Quarter	HCA total			HCA inpatients		HCA Non inpatients		HCA MRSA		Community	
	Total	Rate	Rate <sup>2</sup>	Total	Rate	Total	Rate	Total	Rate	Total	Rate*
Q3 2008	5	1.39	0.45	5	1.39	0	0.00	2	0.56	6	1.67
Q4 2008	7	2.02	0.61	5	1.44	2	0.58	1	0.29	4	1.16
Q1 2009	5	1.52	0.46	2	0.61	3	0.91	1	0.30	4	1.21
Q2 2009	2	0.59	0.17	2	0.59	0	0.00	1	0.29	1	0.29
Q3 2009	1	0.28	0.09	1	0.28	0	0.00	0	0	7	1.95
Q4 2009	8	2.22	0.70	5	1.39	3	0.83	0	0	6	1.67
Q1 2010	11	3.20	1.01	6	1.75	5	1.46	0	0	2	0.58
Q2 2010	5	1.42	0.47	3	0.85	2	0.57	0	0	5	1.42
Q3 2010	8	2.26	0.72	7	1.98	1	0.28	1	0.28	4	1.13
Q4 2010	5	1.41	0.45	4	1.13	1	0.28	1	0.28	5	1.41
Q1 2011	6	1.56	0.49	5	1.30	1	0.26	2	0.52	6	1.56
Q2 2011	3	0.78	0.19	2	0.52	1	0.26	0	0.00	2	0.52
Q3 2011	2	0.53	0.12	2	0.53	0	0.00	0	0.00	4	1.06
Q4 2011	3	0.83	0.19	2	0.56	1	0.28	1	0.28	3	0.83
Q1 2012	2	0.58	0.13	2	0.58	0	0.00	0	0.00	10	2.88

Rate is the number of patients per 10 000 patient care days

Rate<sup>2</sup> is the number of patients per 1000 separations

**Table 5** - Launceston General Hospital numbers and rates of *Staphylococcus aureus* bacteraemia July 2008 to March 2012

Quarter	HCA total			HCA inpatients		HCA non Inpatients		HCA MRSA		Community	
	Total	Rate	Rate <sup>2</sup>	Total	Rate	Total	Rate	Total	Rate	Total	Rate*
Q3 2008	3	1.25	0.32	0	0.00	3	1.25	1	0.42	3	1.25
Q4 2008	6	2.59	0.63	3	1.29	3	1.29	1	0.43	2	0.86
Q1 2009	5	2.21	0.56	3	1.32	2	0.88	1	0.44	8	3.53
Q2 2009	3	1.33	0.33	1	0.44	2	0.88	0	0.00	6	2.65
Q3 2009	3	1.20	0.31	1	0.40	2	0.80	1	0.40	4	1.59
Q4 2009	2	0.83	0.25	2	0.83	0	0.00	0	0.00	12	5.00
Q1 2010	1	0.41	0.12	1	0.41	0	0.00	0	0.00	8	3.27
Q2 2010	2	0.80	0.24	2	0.80	0	0.00	0	0.00	2	0.80
Q3 2010	3	1.16	0.36	2	0.77	1	0.39	0	0.00	2	0.77
Q4 2010	2	0.83	0.25	2	0.83	0	0.00	2	0.83	2	0.83
Q1 2011	5	2.02	0.63	3	1.21	2	0.81	0	0.00	8	3.23
Q2 2011	2	0.70	0.22	0	0.00	2	0.70	0	0.00	5	1.75
Q3 2011	5	1.88	0.54	5	1.88	0	0.00	1	0.38	5	1.88
Q4 2011	1	0.41	0.11	0	0.00	1	0.41	0	0.00	7	2.90
Q1 2012	2	0.93	0.23	2	0.93	0	0.00	1	0.46	9	4.17

Rate is the number of patients per 10 000 patient care days

Rate<sup>2</sup> is the number of patients per 1000 separations

**Table 6** - North West Regional Hospital numbers and rates of *Staphylococcus aureus* bacteraemia July 2008 to March 2012

Quarter	HCA total			HCA inpatients		HCA non inpatients		HCA MRSA		Community	
	Total	Rate	Rate <sup>2</sup>	Total	Rate	Total	Rate	Total	Rate	Total	Rate*
Q3 2008	5	5.65	2.15	3	3.39	2	2.26	0	0.00	1	1.13
Q4 2008	1	1.24	0.44	1	1.24	0	0.00	0	0.00	1	1.24
Q1 2009	0	0.00	0.00	0	0.00	0	0.00	0	0.00	4	4.97
Q2 2009	2	2.38	0.88	0	0.00	2	2.38	0	0.00	3	3.58
Q3 2009	1	1.17	0.44	0	0.00	1	1.17	0	0.00	2	2.33
Q4 2009	0	0.00	0.00	0	0.00	0	0.00	0	0.00	2	2.50
Q1 2010	1	1.15	0.41	1	1.15	0	0.00	0	0.00	2	2.29
Q2 2010	0	0.00	0.00	0	0.00	0	0.00	0	0.00	2	2.71
Q3 2010	0	0.00	0.00	0	0.00	0	0.00	0	0.00	4	4.91
Q4 2010	1	1.24	0.48	0	0.00	1	1.24	0	0.00	2	2.49
Q1 2011	1	1.32	0.50	1	1.32	0	0.00	0	0.00	1	1.32
Q2 2011	0	0.00	0.00	0	0.00	0	0.00	0	0.00	3	3.40
Q3 2011	0	0.00	0.00	0	0.00	0	0.00	0	0.00	2	2.20
Q4 2011	1	1.26	0.51	0	0.00	1	1.26	0	0.00	6	7.53
Q1 2012	2	2.72	1.17	1	1.36	1	1.36	0	0.00	2	2.72

Rate is the number of patients per 10 000 patient care days

Rate<sup>2</sup> is the number of patients per 1000 separations

**Table 7** - Mersey Community Hospital numbers and rates of *Staphylococcus aureus* bacteraemia July 2008 to March 2012

Quarter	HCA total			HCA inpatients		HCA non inpatients		HCA MRSA		Community	
	Total	Rate	Rate <sup>2</sup>	Total	Rate	Total	Rate	Total	Rate	Total	Rate
Q3 2008	3	5.08	1.40	3	5.08	0	0.00	0	0.00	3	5.08
Q4 2008	1	1.90	0.47	1	1.90	0	0.00	0	0.00	2	3.80
Q1 2009	2	3.68	0.96	1	1.84	1	1.84	0	0.00	1	1.84
Q2 2009	1	1.87	0.43	0	0.00	1	1.87	0	0.00	0	0.00
Q3 2009	3	5.05	1.27	3	5.05	0	0.00	0	0.00	1	1.68
Q4 2009	0	0.00	0.00	0	0.00	0	0.00	0	0.00	1	1.91
Q1 2010	0	0.00	0.00	0	0.00	0	0.00	0	0.00	1	1.92
Q2 2010	0	0.00	0.00	0	0.00	0	0.00	0	0.00	3	6.32
Q3 2010	1	1.86	0.45	0	0.00	1	1.86	0	0.00	2	3.72
Q4 2010	1	1.78	0.43	0	0.00	1	1.78	0	0.00	0	0.00
Q1 2011	3	5.51	1.32	1	1.84	2	3.67	0	0.00	1	1.84
Q2 2011	0	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Q3 2011	1	2.03	0.41	1	2.03	0	0.00	0	0.00	1	2.03
Q4 2011	1	2.09	0.44	1	2.09	0	0.00	1	2.09	1	2.09
Q1 2012	1	2.29	0.45	1	2.29	0	0.00	0	0.00	5	11.47

Rate is the number of patients per 10 000 patient care days

Rate<sup>2</sup> is the number of patients per 1000 separations

## ***Clostridium difficile* Infection**

Table 8 - Numbers and rates of *Clostridium difficile* infection July 2006 to March 2012

<b>Quarter</b>	<b>Total CDI Identified</b>	<b>Rate*</b>	<b>Total HCA HFO<sup>^</sup></b>	<b>Rate*</b>
<b>Q3 2006</b>	20	2.9	15	2.1
<b>Q4 2006</b>	19	2.9	14	2.2
<b>Q1 2007</b>	12	1.9	7	1.1
<b>Q2 2007</b>	17	2.6	13	2.0
<b>Q3 2007</b>	21	3.2	13	2.0
<b>Q4 2007</b>	16	2.6	11	1.8
<b>Q1 2008</b>	27	4.3	14	2.2
<b>Q2 2008</b>	29	4.4	20	3.0
<b>Q3 2008</b>	16	2.3	11	1.6
<b>Q4 2008</b>	26	4.0	15	2.3
<b>Q1 2009</b>	25	3.9	19	3.0
<b>Q2 2009</b>	15	2.3	10	1.5
<b>Q3 2009</b>	19	2.7	11	1.6
<b>Q4 2009</b>	37	5.3	18	2.6
<b>Q1 2010</b>	24	3.6	15	2.3
<b>Q2 2010</b>	34	5.0	19	2.8
<b>Q3 2010</b>	34	4.7	30	4.2
<b>Q4 2010</b>	35	5.0	27	3.9
<b>Q1 2011</b>	35	5.0	25	3.6
<b>Q2 2011</b>	35	4.7	18	2.4
<b>Q3 2011</b>	43	5.9	25	3.4
<b>Q4 2011</b>	66	9.8	42	6.3
<b>Q1 2012</b>	50	8.0	24	3.8

<sup>^</sup> Healthcare associated, healthcare facility onset

\* Rate is the number of patients per 10 000 patient care days

**Table 9-** Hospital numbers and rates of **hospital identified** *Clostridium difficile* infection

July 2006 to March 2012

Quarter	Royal Hobart			Launceston General			NW Regional			Mersey Community		
	Total	Rate	Rate <sup>2</sup>	Total	Rate	Rate <sup>2</sup>	Total	Rate	Rate <sup>2</sup>	Total	Rate	Rate <sup>2</sup>
<b>Q3 2006</b>	13	4.0	1.3	6	2.6	0.7	0	0.0	0.0	1	1.6	0.5
<b>Q4 2006</b>	11	3.6	1.1	6	2.8	0.7	2	2.6	1.0	0	0.0	0.0
<b>Q1 2007</b>	5	1.7	0.5	5	2.5	0.6	2	2.7	1.0	0	0.0	0.0
<b>Q2 2007</b>	12	3.8	1.1	5	2.4	0.6	0	0.0	0.0	0	0.0	0.0
<b>Q3 2007</b>	16	5.1	1.5	3	1.4	0.3	1	1.3	0.5	1	2.3	0.6
<b>Q4 2007</b>	6	2.0	0.6	9	4.3	1.1	1	1.3	0.5	0	0.0	0.0
<b>Q1 2008</b>	18	5.9	1.7	7	3.4	0.8	0	0.0	0.0	2	4.6	1.2
<b>Q2 2008</b>	21	6.5	1.9	3	1.4	0.3	3	3.7	1.4	2	3.9	1.0
<b>Q3 2008</b>	9	2.8	0.9	7	3.2	0.8	0	0.0	0.0	0	0.0	0.0
<b>Q4 2008</b>	13	4.2	1.2	9	4.2	1.0	2	2.5	0.9	2	4.2	1.0
<b>Q1 2009</b>	18	6.1	1.7	7	3.3	0.8	0	0.0	0.0	0	0.0	0.0
<b>Q2 2009</b>	9	2.9	0.8	6	2.7	0.7	0	0.0	0.0	0	0.0	0.0
<b>Q3 2009</b>	8	2.4	0.7	9	3.9	0.9	1	1.2	0.5	1	1.8	0.4
<b>Q4 2009</b>	25	7.6	2.3	6	2.6	0.8	5	6.1	2.4	1	2.0	0.5
<b>Q1 2010</b>	10	3.2	0.9	9	4.0	1.2	3	3.9	1.4	2	4.3	1.0
<b>Q2 2010</b>	18	5.4	1.7	10	4.4	1.2	5	7.0	2.5	1	2.3	0.5
<b>Q3 2010</b>	25	7.1	2.3	5	2.1	0.6	1	1.2	0.5	3	6.0	1.3
<b>Q4 2010</b>	25	7.5	2.3	4	1.8	0.5	3	3.8	1.5	3	5.7	1.3
<b>Q1 2011</b>	25	7.2	2.1	7	3.0	0.9	2	2.7	1.0	2	4.0	0.9
<b>Q2 2011</b>	25	7.2	1.7	5	1.9	0.6	2	2.3	1.0	3	6.2	1.3
<b>Q3 2011</b>	24	6.9	1.6	10	4.1	1.2	3	3.3	1.4	6	13.2	2.7
<b>Q4 2011</b>	34	10.4	2.2	18	8.1	2.2	8	10.1	4.1	6	13.6	2.8
<b>Q1 2012</b>	32	10.2	2.2	13	6.5	1.6	3	4.1	1.8	2	5.1	1.0

Rate is the number of patients per 10 000 patient care days

Rate<sup>2</sup> is the number of patients per 1000 separations

**Table 10-** Hospital numbers and rates/10 000 patient care days of **healthcare associated, healthcare facility onset *Clostridium difficile*** infection July 2006 to March 2012

Quarter	Royal Hobart		Launceston General		NW Regional		Mersey Community	
	Total	Rate	Total	Rate	Total	Rate	Total	Rate
Q3 2006	10	3.0	5	2.2	0	0.0	0	0.0
Q4 2006	10	3.3	3	1.4	1	1.3	0	0.0
Q1 2007	1	0.3	5	2.5	1	1.3	0	0.0
Q2 2007	10	3.2	3	1.5	0	0.0	0	0.0
Q3 2007	9	2.8	3	1.4	1	1.3	0	0.0
Q4 2007	4	1.3	7	3.4	0	0.0	0	0.0
Q1 2008	10	3.3	4	2.0	0	0.0	0	0.0
Q2 2008	14	4.3	3	1.4	2	2.5	1	2.0
Q3 2008	7	2.2	4	1.8	0	0.0	0	0.0
Q4 2008	9	2.9	4	1.9	1	1.2	1	2.1
Q1 2009	13	4.4	6	2.8	0	0.0	0	0.0
Q2 2009	5	1.6	5	2.3	0	0.0	0	0.0
Q3 2009	6	1.8	5	2.1	0	0.0	0	0.0
Q4 2009	12	3.6	3	1.3	2	2.5	1	2.0
Q1 2010	7	2.2	5	2.2	3	3.9	0	0.0
Q2 2010	12	3.6	4	1.7	2	2.8	1	2.3
Q3 2010	21	6.0	5	2.1	1	1.2	3	6.0
Q4 2010	20	5.8	4	1.8	1	1.3	2	3.8
Q1 2011	15	4.3	5	2.2	0	0.0	2	4.0
Q2 2011	14	4.0	2	0.8	1	1.1	1	2.1
Q3 2011	15	4.3	6	2.4	0	0.0	4	8.8
Q4 2011	21	6.5	14	6.3	4	5.1	3	6.8
Q1 2012	18	5.8	5	2.5	1	1.4	0	0.0

## Hand Hygiene Compliance Data March 2012

Table II – Hand hygiene compliance rates by Tasmanian hospital and state level

Hospital	Hand Hygiene Compliance Rate	Lower 95% Confidence	Upper 95% Confidence
Royal Hobart	64.9%	63.0%	66.7%
Launceston General	69.8%	67.7%	71.9%
NW Regional	68.7%	65.8%	71.5%
Mersey Community	72.7%	68.0%	76.9%
Campbell Town	77.4%	65.6%	86.0%
Deloraine	94.6%	89.2%	97.3%
King Island	92.0%	81.2%	96.8%
Scottsdale	74.1%	63.9%	82.2%
Smithton	64.7%	51.0%	76.4%
Midlands (Oatlands)	66.7%	54.1%	77.3%
New Norfolk	91.9%	83.4%	96.2%
George Town	78.7%	66.9%	87.1%
Beaconsfield	76.0%	62.6%	85.7%
St Helens	78.8%	67.5%	86.9%
Esperance (Dover)	92.2%	81.5%	96.9%
Queenstown	79.0%	67.4%	87.3%
St Marys	81.8%	72.5%	88.5%
Flinders Island	78.9%	68.0%	86.8%
<b>Tasmanian Rate</b>	<b>69.6%</b>	<b>68.5%</b>	<b>70.7%</b>



**Table 12–** Tasmanian hand hygiene compliance rates by healthcare worker March 2012

<b>Healthcare worker code</b>	<b>Healthcare worker</b>	<b>Hand hygiene compliance rate</b>	<b>Lower 95% confidence</b>	<b>Upper 95% confidence</b>
<b>AC</b>	Clerical	70.8%	50.8%	85.1%
<b>AH</b>	Allied Health	56.1%	50.1%	61.9%
<b>BL</b>	Invasive technician	66.7%	59.2%	73.4%
<b>D</b>	Domestic	46.1%	39.0%	53.4%
<b>DR</b>	Doctor	48.2%	45.1%	51.4%
<b>N</b>	Nurse/midwife	76.6%	75.3%	77.8%
<b>O</b>	Other	47.1%	31.5%	66.3%
<b>PC</b>	Personal care staff	71.6%	67.0%	75.9%
<b>SAH</b>	Student Allied Health	87.5%	52.9%	97.8%
<b>SDR</b>	Student doctor	60.5%	45.6%	73.6%
<b>SN</b>	Student nurse/midwife	66.3%	60.3%	71.7%

**Table 13–** Tasmanian hand hygiene compliance rates by moment

<b>Moment</b>	<b>Hand hygiene compliance rate</b>	<b>Lower 95% confidence</b>	<b>Upper 95% confidence</b>
1	62.9%	60.6%	65.1%
2	68.5%	64.2%	72.5%
3	78.9%	75.8%	81.8%
4	80.1%	78.2%	81.9%
5	62.6%	60.4%	64.8%



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**Division of Population Health**

**Department of Health and Human Services**

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