



DELAWARE HEALTH AND SOCIAL SERVICES

Division of Public Health

Bureau of Epidemiology

Central Line Associated Bloodstream (CLABSI) Rates and Utilization in Intensive Care Units, Delaware January – March 2009

Note: For a full description of the background and methodology for this report, please refer to *Delaware Hospital Infection Reporting Data: 2008*, which can be found at the following website:
http://www.dhss.delaware.gov/dhss/dph/dpc/files/hai_report_2008_final.pdf

Central Line Associated Bloodstream (CLABSI) Rates in Intensive Care Units, Delaware, 1st Quarter 2009 (January – March) and as reported by the National Health Safety Network (2006-2007)

Hospital	Number of Infections	Number of Central Line days¹	Hospital CLABSI Rate/1000²	NHSN CLABSI Rate/1000³	CLABSI Rate Percentile⁴	p value⁵	Interpretation⁶
A. I. duPont Hospital for Children	0	767	0.0	2.9	25%	0.1108	Rate is not statistically different than NHSN rate
Christiana Care Health System-Christiana Hospital	1	1082	0.9	2.4	31%	0.2767	Rate is not statistically different than NHSN rate
Christiana Care Health System – Wilmington Hospital	4	406	9.9	1.5	100%	0.0033	Rate is significantly higher than NHSN rate
St. Francis Hospital	0	279	0.0	2.4	10%	0.5178	Rate is not statistically different than NHSN rate
BayHealth Medical Center – Kent General Hospital	0	522	0.0	1.5	25%	0.4649	Rate is not statistically different than NHSN rate
BayHealth Medical Center – Milford Memorial Hospital	0	114	0.0	1.5	25%	0.8460	Rate is not statistically different than NHSN rate
Beebe Medical Center	0	437	0.0	1.5	25%	0.5267	Rate is not statistically different than NHSN rate
Nanticoke Memorial Hospital	0	382	0.0	1.5	25%	0.5709	Rate is not statistically different than NHSN rate

¹ The total number of days of exposure to the device (central line) by all of the patients in the selected population (ICU) during the selected time period (2008).

² (Infections/device-days) x 1000

³ Rate for all participating NHSN hospitals of that location type (the patient care area to which a patient is assigned while receiving care while in the facility).

⁴ An estimate of where the local facility rate falls on the distribution of the rate for all NHSN facilities of that type of location. For example, a percentile of 75% means that 75% of NHSN hospitals were below this rate.

⁵ The probability value from a significance test comparing the local hospital to the NHSN aggregate rate.

⁶ Significance criteria is p<0.05 (95% confidence)

**Central Line Utilization Rates in Intensive Care Units, Delaware, 1st Quarter
(January- March) 2009 and as reported by the National Health Safety
Network (2006-2007)**

Hospital	Number of Central Line days⁷	Number of Patient days⁸	Utilization Ratio⁹	NHSN Utilization Ratio¹⁰	Utilization Ratio Percentile¹¹	P value¹²	Interpretation¹³
A. I. duPont Hospital for Children	767	1454	0.53	0.46	71%	0.0000	Utilization ratio is significantly higher than NHSN ratio
Christiana Care Health System Christiana	1082	1693	0.64	0.58	58%	0.0000	Utilization ratio is significantly higher than NHSN ratio
Christiana Care Health System – Wilmington Hospital	406	573	0.71	0.46	91%	0.0000	Utilization ratio is significantly higher than NHSN ratio
St. Francis Hospital	279	396	0.70	0.58	78%	0.0000	Utilization ratio is significantly higher than NHSN ratio
BayHealth Medical Center – Kent General Hospital	522	1103	0.47	0.46	64%	0.2730	Utilization ratio is statistically similar to NHSN ratio
BayHealth Medical Center – Milford Memorial Hospital	114	469	0.24	0.46	17%	0.0000	Utilization ratio is significantly lower than NHSN ratio
Beebe Medical Center	437	822	0.53	0.46	64%	0.0001	Utilization ratio is significantly higher than NHSN ratio
Nanticoke Memorial Hospital	382	562	0.68	0.46	91%	0.0000	Utilization ratio is significantly higher than NHSN ratio

⁷ The total number of days of exposure to the device (central line) by all of the patients in the selected population (ICU) during the selected time period (2008).

⁸ The total number of days that patients are in the location during the selected time period.

⁹ Central line days/patient days

¹⁰ Ratio for all participating NHSN hospitals of that location type (the patient care area to which a patient is assigned while receiving care while in the facility).

¹¹ An estimate of where the local facility ratio falls on the distribution of the ratio for all facilities of that type of location. For example, a percentile of 75% means that 75% of NHSN hospitals were below this ratio.

¹² The probability value from a significance test comparing the local hospital to the NHSN aggregate ratio.

¹³ Significance criteria is $p < 0.05$ (95% confidence)

