



*DELAWARE HEALTH AND SOCIAL SERVICES*

Division of Public Health

Bureau of Epidemiology

**Central Line Associated Bloodstream Infection (CLABSI) Rates and Utilization  
Delaware Intensive Care Units  
July - September, 2010**

Delaware Health and Social Services  
Division of Public Health  
Health Promotion and Disease Prevention  
Bureau of Epidemiology

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Notes:

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](http://www.dhss.delaware.gov/dhss/dph/dpc/files/hai_report_2008_final.pdf)

The data in this report was accurate at the time prepared and does not reflect updates based on hospital findings that may have occurred subsequently.

**Central Line Associated Bloodstream Infection (CLABSI) Rates in Intensive Care Units  
Delaware, 3<sup>rd</sup> Quarter (July-September) 2010** (Delaware statistics)  
**And as reported by the National Health Safety Network (2006 – 2008)** (NHSN statistics)

<b>Hospital</b>	<b>Number of Infections</b>	<b>Number of Central Line days<sup>1</sup></b>	<b>Hospital CLABSI Rate/1000<sup>2</sup></b>	<b>NHSN CLABSI Rate/1000<sup>3</sup></b>	<b>CLABSI Rate Percentile<sup>4</sup></b>	<b>p value<sup>5</sup></b>	<b>Interpretation<sup>6</sup></b>
A. I. duPont Hospital for Children	1	978	1.0	3.0	24%	0.2161	Rate is not statistically different than NHSN rate
Christiana Care Health System-Christiana Hospital	0	1239	0.0	2.6	0%	0.0415	Rate is statistically lower than NHSN rate
Christiana Care Health System – Wilmington Hospital	2	320	6.3	2.1	95%	0.1470	Rate is not statistically different than NHSN rate
St. Francis Hospital	1	355	2.8	1.9	78%	0.4898	Rate is not statistically different than NHSN rate
BayHealth Medical Center – Kent General Hospital	1	434	2.3	1.5	79%	0.4775	Rate is not statistically different than NHSN rate
BayHealth Medical Center – Milford Memorial Hospital	0	214	0.0	1.5	50%	0.7261	Rate is not statistically different than NHSN rate
Beebe Medical Center	0	535	0.0	1.5	50%	0.4492	Rate is not statistically different than NHSN rate
Nanticoke Memorial Hospital	1	273	3.7	1.5	90%	0.3353	Rate is not statistically different than NHSN rate

<sup>1</sup> 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 (July – September 2010).

<sup>2</sup> (Infections/device-days) x 1000

<sup>3</sup> 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).

<sup>4</sup> 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.

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

<sup>6</sup> Significance criterion is p<0.05 (95% confidence)

**Central Line Utilization Ratios in Intensive Care Units,  
Delaware, 3<sup>rd</sup> Quarter (July - September) 2010** (Delaware statistics)  
**And as reported by the National Health Safety Network (2006 – 2008)** (NHSN statistics)

Hospital	Number of Central Line days <sup>7</sup>	Number of Patient days <sup>8</sup>	Utilization Ratio <sup>9</sup>	NHSN Utilization Ratio <sup>10</sup>	Utilization Ratio Percentile <sup>11</sup>	P value <sup>12</sup>	Interpretation <sup>13</sup>
A. I. duPont Hospital for Children	978	1488	0.66	0.48	91%	0.0000	Utilization ratio is significantly higher than NHSN ratio
Christiana Care Health System Christiana	1239	1698	0.73	0.61	68%	0.0000	Utilization ratio is significantly higher than NHSN ratio
Christiana Care Health System – Wilmington Hospital	320	521	0.61	0.59	54%	0.1774	Utilization ratio is not significantly different than NHSN ratio
St. Francis Hospital	355	691	0.51	0.45	62%	0.0006	Utilization ratio is significantly higher than NHSN ratio
BayHealth Medical Center – Kent General Hospital	434	963	0.45	0.39	75%	0.0001	Utilization ratio is significantly higher than NHSN ratio
BayHealth Medical Center – Milford Memorial Hospital	214	524	0.41	0.39	59%	0.1974	Utilization ratio is not significantly different than NHSN ratio
Beebe Medical Center	535	894	0.60	0.39	87%	0.0000	Utilization ratio is significantly higher than NHSN ratio
Nanticoke Memorial Hospital	273	358	0.76	0.39	94%	0.0000	Utilization ratio is significantly higher than NHSN ratio

<sup>7</sup> 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 (July – September 2010).

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

<sup>9</sup> Central line days/patient days

<sup>10</sup> 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).

<sup>11</sup> 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.

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

<sup>13</sup> Significance criterion is  $p < 0.05$  (95% confidence)