



*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, 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 (CLABSI) Rates in Intensive Care Units, Delaware, 1<sup>st</sup> Quarter (Jan-March) and as reported by the National Health Safety Network (2006-2008)**

<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	724	1.4	3.0	30%	0.3695	Rate is not statistically different than NHSN rate
Christiana Care Health System-Christiana Hospital	3	1137	2.6	2.6	55%	0.5586	Rate is not statistically different than NHSN rate
Christiana Care Health System – Wilmington Hospital	3	365	8.2	2.1	100%	0.0431	Rate is significantly higher than NHSN rate
St. Francis Hospital	1	381	2.6	1.9	77%	0.5144	Rate is not statistically different than NHSN rate
BayHealth Medical Center – Kent General Hospital	0	328	0.0	1.5	50%	0.6122	Rate is not statistically different than NHSN rate
BayHealth Medical Center – Milford Memorial Hospital	0	204	0.0	1.5	50%	0.7370	Rate is not statistically different than NHSN rate
Beebe Medical Center	0	518	0.0	1.5	50%	0.4608	Rate is not statistically different than NHSN rate
Nanticoke Memorial Hospital	0	292	0.0	1.5	50%	0.6461	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 (2008).

<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. There is no percentile ranking for comparison of the hospitals that participate below the 50<sup>th</sup> percentile.

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

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

**Central Line Utilization Rates in Intensive Care Units, Delaware, 1<sup>st</sup> Quarter (Jan-March) 2010 and as reported by the National Health Safety Network (2006-2008)**

<b>Hospital</b>	<b>Number of Central Line days<sup>7</sup></b>	<b>Number of Patient days<sup>8</sup></b>	<b>Utilization Ratio<sup>9</sup></b>	<b>NHSN Utilization Ratio<sup>10</sup></b>	<b>Utilization Ratio Percentile<sup>11</sup></b>	<b>P value<sup>12</sup></b>	<b>Interpretation<sup>13</sup></b>
A. I. duPont Hospital for Children	724	1377	0.53	0.48	67%	0.0003	Utilization ratio is significantly higher than NHSN ratio
Christiana Care Health System Christiana	1137	1689	0.67	0.61	68%	0.0000	Utilization ratio is significantly higher than NHSN ratio
Christiana Care Health System – Wilmington Hospital	365	491	0.74	0.59	73%	0.0000	Utilization ratio is significantly higher than NHSN ratio
St. Francis Hospital	381	588	0.65	0.45	79%	0.0000	Utilization ratio is significantly higher than NHSN ratio
BayHealth Medical Center – Kent General Hospital	328	1008	0.33	0.39	43%	0.0000	Utilization ratio is significantly lower than NHSN ratio
BayHealth Medical Center – Milford Memorial Hospital	204	511	0.40	0.39	59%	0.3395	Utilization ratio is not significantly different than NHSN ratio
Beebe Medical Center	518	900	0.58	0.39	87%	0.0000	Utilization ratio is significantly higher than NHSN ratio
Nanticoke Memorial Hospital	292	585	0.50	0.39	75%	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 (2008).

<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. There is no percentile ranking for comparison of the hospitals that participate below the 50<sup>th</sup> percentile.

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

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