

## Central Line Associated Bloodstream (CLABSI) Rates and Utilization in Intensive Care Units, Delaware April – June 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, 2<sup>nd</sup> Quarter 2009 (April – June) and as reported by the National Health Safety Network (2006-2007)

Number III III III III III III III III III I										
Hospital	Number of Infections	of Central Line days <sup>1</sup>	Hospital CLABSI Rate/1000 <sup>2</sup>	NHSN CLABSI Rate/1000 <sup>3</sup>	CLABSI Rate Percentile <sup>4</sup>	p value <sup>5</sup>	Interpretation <sup>6</sup>			
A. I. duPont Hospital for Children	0	1154	0.0	2.9	25%	0.0365	Rate is significantly lower than NHSN rate			
Christiana Care Health System- Christiana Hospital	3	1122	2.7	2.4	62%	0.4933	Rate is not statistically different than NHSN rate			
Christiana Care Health System – Wilmington Hospital	4	370	10.8	1.5	100%	0.0024	Rate is significantly higher than NHSN rate			
St. Francis Hospital	Not Reporting	Not Reporting	Not Reporting	2.4						
BayHealth Medical Center – Kent General Hospital	1	511	2.0	1.5	75%	0.5275	Rate is not statistically different than NHSN rate			
BayHealth Medical Center – Milford Memorial Hospital	0	197	0.0	1.5	25%	0.7490	Rate is not statistically different than NHSN rate			
Beebe Medical Center	1	475	2.1	1.5	76%	0.5019	Rate is not statistically different than NHSN rate			
Nanticoke Memorial Hospital	0	325	0.0	1.5	25%	0.6207	Rate is not statistically different than NHSN rate			

.

<sup>&</sup>lt;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>(</sup>Infections/device-days) x 1000

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

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

## Central Line Utilization Rates in Intensive Care Units, Delaware, 2<sup>nd</sup> Quarter (April-June) 2009 and as reported by the National Health Safety Network (2006-2007)

(2000 2001)											
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	1154	1402	0.82	0.46	96%	0.0000	Utilization ratio is significantly higher than NHSN ratio				
Christiana Care Health System Christiana	1122	1631	0.69	0.58	78%	0.0000	Utilization ratio is significantly higher than NHSN ratio				
Christiana Care Health System – Wilmington Hospital	370	496	0.75	0.46	91%	0.0000	Utilization ratio is significantly higher than NHSN ratio				
St. Francis Hospital	Not Reporting	Not Reporting	Not Reporting	0.58							
BayHealth Medical Center – Kent General Hospital	511	1021	0.50	0.46	64%	0.0101	Utilization ratio is significantly higher than NHSN ratio				
BayHealth Medical Center – Milford Memorial Hospital	197	510	0.39	0.46	47%	0.0003	Utilization ratio is significantly lower than NHSN ratio				
Beebe Medical Center	475	829	0.57	0.46	80%	0.0000	Utilization ratio is significantly higher than NHSN ratio				
Nanticoke Memorial Hospital	325	503	0.65	0.46	80%	0.0000	Utilization ratio is significantly higher than NHSN ratio				

<sup>&</sup>lt;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).

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

Central line days/patient days

<sup>&</sup>lt;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).

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

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

