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Reference:

Patrick, S.W., Kawai, A.T., Kleinman, K., Jin, R., Vaz, L., Gay, C., Kassler, W., Goldmann, D., and Lee, G.M. (2014) Health Care-Associated Infections Among Critically Ill Children in the US, 2007-2012. Pediatrics. September 8th. .

Review of central line-associated bloodstream infections 2007-2012 among critically ill children [@ivteam #ivteam](http://ctt.ec/9G4f6+)

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Abstract:

**BACKGROUND:** Health care-associated infections (HAIs) are harmful and costly and can result in substantial morbidity for hospitalized children; however, little is known about national trends in HAIs in neonatal and pediatric populations. Our objective was to determine the incidence of HAIs among a large sample of hospitals in the United States caring for critically ill children from 2007 to 2012.

**METHODS:** In this cohort study, we included NICUs and PICUs located in hospitals reporting data to the Centers for Disease Control and Prevention’s National Healthcare Safety Network for central line-associated bloodstream infections (CLABSIs), ventilator-associated pneumonias, and catheter-associated urinary tract infections. We used a time-series design to evaluate changes in HAI rates.

**RESULTS:** A total of 173 US hospitals provided data from NICUs, and 64 provided data from PICUs. From 2007 to 2012, rates of CLABSIs decreased in NICUs from 4.9 to 1.5 per 1000 central-line days (incidence rate ratio (IRR) per quarter = 0.96, 95% confidence interval 0.94-0.97) and in PICUs from 4.7 to 1.0 per 1000 central-line days (IRR per quarter = 0.96 [0.94-0.98]). Rates of ventilator-associated pneumonias decreased in NICUs from 1.6 to 0.6 per 1000 ventilator days (IRR per quarter = 0.97 [0.93-0.99]) and PICUs from 1.9 to 0.7 per 1000 ventilator-days (IRR per quarter = 0.95 [0.92-0.98]). Rates of catheter-associated urinary tract infections did not change significantly in PICUs.



CONCLUSIONS: Between 2007 and 2012 there were substantial reductions in HAIs among hospitalized neonates and children.

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