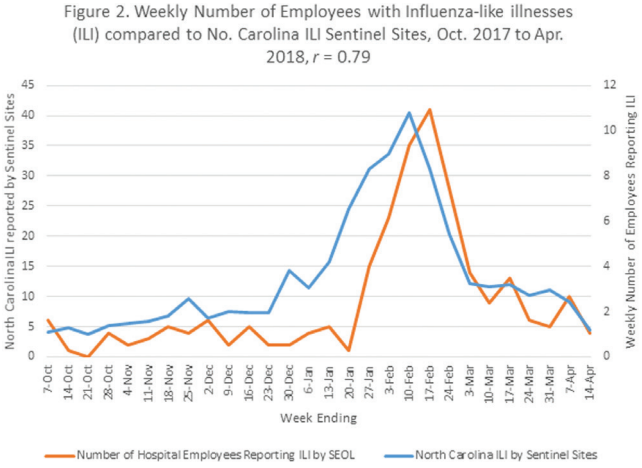

Disclosures. **All authors:** No reported disclosures.

113. Accuracy of the NHSN Central Line-Associated Bloodstream Infection (CLABSI) Definition

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Background. CLABSIs are serious infections that cause prolonged hospital length of stay, increased cost, and mortality. Acute care hospitals must report CLABSIs to NHSN to participate in CMS programs. NHSN definitions must be met to attribute a secondary BSI (SBSI), or bacteremia is defaulted to CLABSI if a central line is present. The lack of CDC/NHSN definitions for certain secondary sites of infections or problems in the definitions may lead to over-labeling CLABSIs. We reviewed the accuracy of NHSN definitions in a large healthcare system.

Methods. We retrospectively reviewed medical records of 279 patients with positive blood cultures on or after hospital day 3 and a central line from 15 hospitals belonging to a large healthcare system from January 1 to November 27, 2017. A team of centralized infection preventionists (IPs) adjudicated each case as a CLABSI or as SBSI through routine surveillance following NHSN methodology. A clinical review was performed by a PGY6 infectious diseases fellow. Descriptive statistics are presented.

Results. A total of 279 bacteremia cases were analyzed. Of those 279 patients, 237 (85%) were ≥18 years old, 162 (58%) were males, 92 (33%) were white, 62 (22.2%) were black, 5 (1.8%) were Asian, and 12 (4.3%) were "other." Ninety-seven (34.8%) were from the reference hospital. IPs classified 171 CLABSIs and 108 as SBSI. Of the 171 CLABSIs classified by IPs, in 62 patients (36.3%), a primary site infection clinically explaining the BSI, but which did not meet the NHSN infection criteria, could be attributed as follows during the clinical review: 30 pneumonia, 6 urinary tract infections, 4 surgical site infections, 2 vascular infections, 2 mucosal barrier injury associated blood stream infections, 7 gastrointestinal infections, 1 decubitus ulcer infection, 4 skin and soft-tissue infections, 2 left ventricular-assisted device infections, 2 endocarditis, and 2 infected thrombi. Misclassification most often occurred due to missing elements of the definitions or infections not defined by NHSN.

Conclusion. Current NHSN definitions may overestimate CLABSIs by nearly 30%. As hospitals continue to work in CLABSI reduction, accurate and precise definitions/methodology will be key in focusing efforts and attention of the engaged parties and avoiding penalties.

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114. Birth Prevalence of Congenital Cytomegalovirus Infection and Language, Hearing, and Developmental Outcomes in a Cohort of HIV-Exposed, Uninfected Preschool Children

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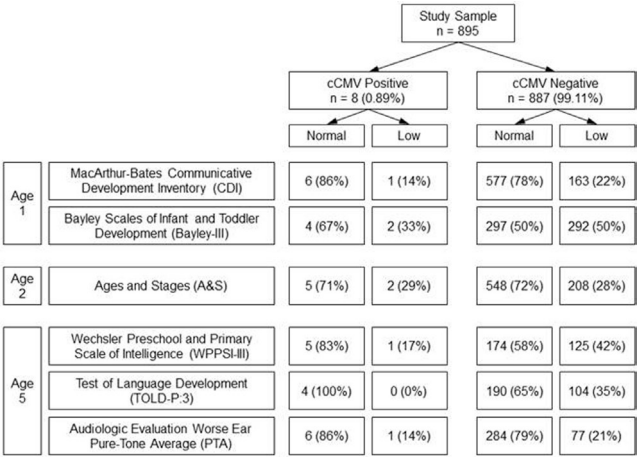
Background. The prevalence of congenital cytomegalovirus infection (cCMV) at birth is 0.5%–1% in the United States. Most cCMV newborns are asymptomatic at birth with 10%–15% subsequently developing sequelae, such as hearing loss. Higher cCMV prevalence (2.5%–11.4%) is reported in infants born to HIV-infected women, associated with maternal immune suppression and lack of antiretroviral therapy (ART), with few studies addressing neurodevelopmental (ND) outcomes in their offspring. We report birth prevalence of cCMV in a cohort of HIV-exposed, uninfected infants (HEU) born to women on combination ART with well-controlled HIV and describe ND outcomes through age 5 years.

Methods. The Surveillance Monitoring for ART Toxicities (SMARTT) study is an ongoing NICHD-funded observational multi-centered cohort study (United States and Puerto Rico) of growth and development of HEU children that commenced in 2007. As of August 1, 2017, participants with stored blood pellets collected ≤3 weeks after birth and at least 1 ND assessment ≥1 year of age had pellets tested by DNA PCR to establish cCMV. Comparisons of ND outcomes (defined in figure) at ages 1, 2, and 5 by cCMV status were made using Wilcoxon and Fisher's Exact tests.

Results. Of 895 children meeting study criteria (55% black; 32% white; 40% Latino), 8 had cCMV, yielding a birth prevalence of 0.89% (95% CI 0.39–1.75%). All were asymptomatic and similar to CMV-uninfected infants in gestational age and anthropometric measurements at birth. The last HIV viral load prior to delivery was undetectable in 88% of women. The last available CD4% was <20% in 3/8 mothers of cCMV newborns compared with 112/873 in those without (38% vs. 13%, $P < 0.07$). The mean duration of follow-up (± standard deviation) of children with cCMV was 7.2 years (1.6) and those without 5.9 (2.3) years ($P < 0.11$). ND assessments for language development (CDI at 1, A&S at 2, TOLD-P:3 at 5), cognition (Bayleys-III at 1), intelligence (WPPSI-III at 5), and hearing (PTA at 5) did not differ by cCMV status (figure).

Conclusion. Birth prevalence of cCMV in HEU children born within the last decade approaches national US prevalence. Preschool HEU children with asymptomatic cCMV at birth did not show poorer language, hearing, and developmental outcomes compared with CMV-uninfected HEU children.



Disclosures. **All authors:** No reported disclosures.

115. Results of a Targeted Neonatal Screening Program for Congenital Cytomegalovirus Infection in Montreal, Quebec

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Session: 31. Infant Viral Infections
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Background. There remains considerable debate on the role of symptomatic, targeted vs. universal screening of newborns for congenital cytomegalovirus infection (cCMV). Here we report on a hospital-based targeted screening program for (1) infants who failed their newborn hearing screen and (2) infants of HIV-infected