**Figure 1. Distribution of group B Streptococcus (GBS) clonal complexes (CCs) and**

**serotypes across age groups and over time.** The top panel displays the proportions of CCs across different age groups (left) and annually from 2007 to 2021 (right), while the bottom panel presents the corresponding distributions for serotypes. The age groups are defined as follows: early-onset disease (EOD) is diagnosed within 7 days of birth, late-onset disease (LOD) between 7 days and 3 months, very late-onset disease (VLOD) between 3 months and 1 year, older children range from 1 to 18 years, and adults are 18 years and older.

**Figure 2. Phylogenies of Boston Children’s Hospital (BCH) and Global Group B Streptococcus (GBS) isolates.** Panel A presents the phylogenetic tree of Group B Streptococcus (GBS) isolates from Boston Children’s Hospital (BCH), categorized by age groups: early-onset disease (EOD, diagnosed within 7 days of birth), late-onset disease (LOD, 7 days to 3 months), very late-onset disease (VLOD, 3 months to 1 year), older children (1 to 18 years), and adults (18 years and older). Various genes for virulence factors and surface proteins are detailed, including the Alpha-like proteins in blue (A :ALP1, B:ALP23, C:Alpha, D:RIB), pilus islands in green (E:PI-1, F:PI-2a1, G:PI-2a2, H: PI-2a, I: PI-2b), and other factors in orange such as the hypervirulence gene cluster A (J:HVGA), serine-rich repeat proteins (K:SRR1, L:SRR2), Sip (M), laminin-binding protein (N:lmb), C5a peptidase (O:scpB), hyaluronidase (P:hylB), and fibrinogen-binding protein (Q:fbsB). Panel B extends the context by situating BCH LOD isolates (in blue on heatmap 6) within a broader phylogenetic framework, including national and global LOD isolates. It features isolates from the USA (yellow on heatmap 6), gathered through the CDC’s ABCs program, and from other international sources such as Ireland, Malawi, Canada, and The Netherlands (orange on heatmap 6).

**Figure 3. GBS Phylogeny split by age of onset and disease severity.** (A) and (B) are phylogenies containing only infants and older patients with GBS infection, respectively. We observe that CC17-cpsIa is more common among infant cases. (C) and (D) are phylogenies containing only patients admitted to the ICU and those not, respectively. (E) and (F) are phylogenies containing only patients with and without meningitis, respectively.