**Table 1: Demographic and Respiratory Characteristics**

|  |  |  |
| --- | --- | --- |
| **Characteristic** |  |  |
| **Demographic and perinatal characteristics** |  |  |
|  Birth weight (g)…mean (SD) Median birth weight (g) | 1203(807)840 |  |
|  Gestational age (wk)…mean (SD) Median gestational age (wk) Corrected gest. age (wk) at vaccinationmean (SD) Median corrected gestational age (wk) at vaccination | 28 (4.89)2641 (7.8)40 |  |
|  Multiple gestation (%) | 10 |  |
|  Race/ethnicity (%) |  |  |
|  Non-Hispanic black | 33 |  |
|  Non-Hispanic white | 23 |  |
|  Hispanic | 26 |  |
|  Asian | 4.5 |  |
|  Other | 14 |  |
|  Male | 52 |  |
| **Respiratory characteristics at time of vaccination (%)**  |  |  |
|  Intubated | 21.4 |  |
|  CPAP | 17 |  |
|  High-flow nasal cannula | 8.6 |  |
|  Nasal Cannula | 13 |  |
|  Room Air | 40 |  |
| *g: grams; SD: standard deviation; wk: weeks; CPAP: Continuous positive airway pressure* |

**Table 2: Reasons documented for vaccination delay**

|  |  |
| --- | --- |
| **Item** | **N (%)** |
| No documentation | 48 (59.26) |
| Awaiting signed consent | 10 (12.35) |
| Medically unstable | 17 (20.99) |
| Vaccination not available (shortage) | 2 (2.47) |
| Parental request to delay | 1 (1.24) |
| Delayed to stay on track with sibling | 3 (3.7) |
| **Total** | **81** |

**Table 3: Adverse events following vaccination (Total study n=337)**

|  |  |
| --- | --- |
| **Item** | **N (%)** |
| Infants with change in respiratory support\* Recent wean in support Recent worsening status Overnight ventilator mucus plug (resolved after treatment) Visiting parent with URIInfants with change in respiratory support without confounding factors\* | 32 (9.94)17 (53.13)8 (25)1 (3.12)1 (3.21)5 (1.48) |
| Infants with increased A/Bs\* Recent wean in support Increasing A/Bs prior to immunization Visiting parent with URIInfants with increased A/Bs without confounding factors\* | 28 (8.31)12 (42.86)8 (28.57)1 (3.57)7 (2.08) |
| Infants with axillary temperature >99.9F\*Infants undergoing sepsis evaluation | 7 (20.8)*1 (14.29)* |
| Infants undergoing sepsis evaluation\*Infants with proven sepsis\* | 4 (1.19)0 (0) |
| Infants with feeding intolerance\* *Infants with poor nippling* *Infants with increased residuals* | 4 (1.19)*2 (50)**2 (50)* |

*URI: upper respiratory infection; A/Bs: Apnea/Bradycardia*

*\*= as compared to total vaccination events for study (n=337)*

**Table 4: Reported barriers to vaccination**

|  |  |
| --- | --- |
| **Barriers** | **%** |
| Unable to get consent | 39.1% |
| Infant too sick at the time they are due | 25.0% |
| No reminder system | 10.9% |
| Want to wait so baby will not get sick | 7.8% |
| Following a delayed schedule per another provider’s plan | 6.3% |
| Other* Parental hesitancy
* Nurse forgot to consent
* Infant previously critical, if infant deteriorate may be from vaccine
* Live vaccines have to wait for discharge
 | 6.3% |
| Forgetting to order | 4.7% |

**Table 5: Vaccine knowledge assessment (n=26)**

|  |  |
| --- | --- |
| **Questions with answers** | **% correct** |
| For a newborn weighing 2kg or more, the hepatitis B vaccine is recommended: within 24 hours of birth | 84% |
| For a newborn weighing less than 2 kg, the hepatitis B vaccine is recommended: at one month of life | 80.8% |
| The earliest the Dtap, Hib, PCV, or IPV vaccines can be given is: at 6 weeks | 11.5% |
| Which vaccines are recommended at 2 months: Dtap-PCV-Hib-IPV | 92.3% |
| If an infant received vaccines late, what is the minimum interval between dose 1 and dose 2 for Dtap: 4 weeks | 64.0% |

*kg: kilograms; Dtap: Diphtheria-Tetanus-Pertussis; Hib: Haemophilus influenzae type b; PCV: Pneumococcal vaccine; IPV: Inactivated Polio Vaccine*

**Table 6: Provider score on vaccine knowledge assessment**

|  |  |  |
| --- | --- | --- |
| **Provider Role** | **Average Score** | **Percentage** |
| -Attending-Fellow-Neonatal Nurse Practitioner-Neonatal Nurse-Discharge Planner | 3.57/54.67/53.89/51.85/51.87/5 | 71.493.377.837.037.5 |