**Supplementary Table 1. Estimated average annual incidence of invasive *H. influenzae* disease among all ages, by serotype and race — United States, 2008–2017**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | *White* | *Black* | *Asian/PI* | *AI/AN* | *Total* |
|  | **Incidencea** | **IRR****(95% CI)** | **Incidencea** | **IRR****(95% CI)** | **Incidencea** | **IRR****(95% CI)** | **Incidencea** | **IRR****(95% CI)** | **Incidencea** |
| *NTHi* | 1.3 | Ref | 1.3 | 1.0(0.9–1.0) | 0.7 | 0.5(0.4–0.6) | 1.4 | 1.0(0.8–1.2) | 1.3 |
| *Hia* | 0.1 | Ref | 0.1 | 0.9(0.8–1.3) | <0.1 | 0.2(0.1–0.7) | 1.0 | 11.2(8.5–15.0) | 0.1 |
| *Hib* | <0.1 | Ref | <0.1 | 0.7(0.4–1.3) | <0.1 | 0.3(0.2–1.6) | 0.4 | 11.7(8.1–21.3) | <0.1 |
| *Hie* | 0.1 | Ref | 0.1 | 1.0(0.8–1.3) | <0.1 | 0.1(0.1–0.6) | 0.1 | 1.0(0.4–2.7) | 0.1 |
| *Hif* | 0.3 | Ref | 0.4 | 1.3 (1.2–1.6) | 0.1 | 0.3(0.2–0.5) | 0.3 | 1.0(0.7–1.9) | 0.3 |
| *Total* | 1.8 | Ref | 1.9 | 1.0 (1.0–1.1) | 0.8 | 0.4(0.4–0.5) | 3.1 | 1.7(1.5–2.0) | 1.8 |

Note: Serotype incidences omitted due to small case counts for *H. influenzae* serotype c (n=1) and serotype d (n=4)

aCases per 100,000 persons per year

Abbreviations: PI, Pacific Islander; AI/AN, American Indian and Alaska Native; IRR, Incidence Rate Ratio; CI, confidence interval; Ref, Reference category for IRR calculation; NTHi, nontypeable *H. influenzae*; Hia, *H. influenzae* serotype a; Hib, *H. influenzae* serotype b; Hie, *H. influenzae* serotype e; Hif, *H. influenzae* serotype f

**Supplementary Table 2. *H. influenzae* serotype b Vaccine Type Received by Children Aged <5 Yearswith Hib Disease, by Race — Active Bacterial Core Surveillance, 2008–2017**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | *White* | *Black* | *AI/AN* | *Total* |
| Age-appropriately or Fully Vaccinateda (n=16) | **No.** | **%** | **No.** | **%** | **No.** | **%** | **No.** | **%** |
|  *PRP-OMP*  | 1 | 14 | 0 | 0 | 6 | 75 | 7 | 44 |
|  *PRP-T*  | 3 | 43 | 1 | 100 | 1 | 13 | 5 | 31 |
|  *PRP-CRM*  | 2 | 29 | 0 | 0 | 0 | 0 | 2 | 13 |
|  *Unknown*  | 1 | 14 | 0 | 0 | 1 | 13 | 2 | 13 |
|  |  |  |  |  |  |  |  |  |
| Under-vaccinatedb (n=7) | **No.** | **%** | **No.** | **%** | **No.** | **%** | **No.** | **%** |
| *PRP-OMP*  | 1 | 25 | 1 | 50 | 0 | 0 | 2 | 29 |
| *PRP-T*  | 3 | 75 | 0 | 0 | 0 | 0 | 3 | 43 |
| *PRP-CRM*  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Unknown*  | 0 | 0 | 1 | 50 | 1 | 100 | 2 | 29 |

aChildren were considered age-appropriately vaccinated or fully vaccinated if vaccinated according to the recommended schedule for age and vaccine product

bChildren were considered under-vaccinated if they had received at least one dose of Hib vaccine but not all recommended doses for their age and vaccine product

Abbreviations: Hib, *H. influenzae* serotype b; AI/AN, American Indian and Alaska Native; PRP-OMP, polyribosylribitol phosphate conjugated to meningococcal outer membrane protein; PRP-T, polyribosylribitol phosphate conjugated to tetanus toxoid; PRP-CRM, polyribosylribitol phosphate conjugated to mutant diphtheria toxin

**Supplementary Table 3. Estimated Average Annual Incidence of Invasive *H. influenzae* Disease among Adults Aged ≥65 years, by Serotype and Race — United States, 2008–2017**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | *White* | *Black* | *Asian/PI* | *AI/AN* | *Total* |
|  | **Incidencea** | **IRR** | **Incidencea** | **IRR****(95% CI)** | **Incidencea** | **IRR****(95% CI)** | **Incidencea** | **IRR****(95% CI)** | **Incidencea** |
| *NTHi* | 5.4 | Ref | 4.3 | 0.8(0.7–0.9) | 3.2 | 0.6(0.5–0.7) | 5.7 | 1.1(0.7–1.7) | 5.2 |
| *Hia* | 0.2 | Ref | 0.1 | 0.3(0.1–1.0) | <0.1 | 0.3(0.0–2.1) | 1.4 | 9.3(3.5–21.8) | 0.1 |
| *Hib* | 0.1 | Ref | <0.1 | 0.4(0.1–2.7) | <0.1 | 0.8(0.1–6.4) | 0.7 | 14.2(4.6–52.0) | 0.1 |
| *Hie* | 0.3 | Ref | 0.3 | 0.9(0.5–1.4) | 0.0 | N/A | 0.0 | N/A | 0.3 |
| *Hif* | 0.8 | Ref | 0.9 | 1.1(0.8–1.4) | 0.2 | 0.3(0.1–0.7) | 1.4 | 1.7(0.6–3.5) | 0.8 |
| *Total*  | 6.8 | Ref | 5.6 | 0.8(0.7–0.9) | 3.5 | 0.5(0.4–0.7) | 9.4 | 1.4(1.0–2.0) | 6.6 |

Note: Serotype incidences omitted due to small case counts for *H. influenzae* serotype c (n=0) and serotype d (n=3) in adults aged ≥65 years

aCases per 100,000 persons per year

Abbreviations: PI, Pacific Islander; AI/AN, American Indian and Alaska Native; IRR, Incidence Rate Ratio; CI, confidence interval; Ref, Reference category for IRR calculation; NTHi, nontypeable *H. influenzae*; Hia, *H. influenzae* serotype a; Hib, *H. influenzae* serotype b; Hie, *H. influenzae* serotype e; Hif, *H. influenzae* serotype f

**Supplementary Figure 1.** **Trends in Estimated Annual Incidence of Invasive *H. influenzae* serotype a Disease Among White and Black Children aged <5 years — United States, 2008–2017**



**Supplementary Figure 2. Vaccination Status of Children Aged <5 Yearswith *H. influenzae* serotype b Disease, by Race — Active Bacterial Core Surveillance, 2008–2017**

Note: No cases of *H. influenzae* serotype b disease were reported in Asian/Pacific Islander children aged <5 years.

Abbreviations: AI/AN, American Indian and Alaska Native