Supplemental Table 1. Overall, H3N2, and B-lineage specific fully adjusted vaccine effectiveness (all vaccine types).

|  |  |  |
| --- | --- | --- |
|  | **Any Influenza** | **H3N2** |
| All ages |  |  |
| Vaccinated | 50 (44, 55) | 40 (31, 48) |
| Unvaccinated | Referent | Referent |
| 6 mos-8 years |  |  |
| Vaccinated | 55 (42, 65) | 47 (26, 62) |
| Unvaccinated | Referent | Referent |
| 9-17 years |  |  |
| Vaccinated | 39 (17, 54) | 24 (-13, 49) |
| Unvaccinated | Referent | Referent |
| 18-49 years |  |  |
| Vaccinated | 40 (26, 51) | 34 (16, 48) |
| Unvaccinated | Referent | Referent |
| 50-64 years |  |  |
| Vaccinated | 65 (54, 74) | 54 (35, 67) |
| Unvaccinated | Referent | Referent |
| ≥65 years |  |  |
| Vaccinated | 31 (-5, 55) | 17 (-36, 49) |
| Unvaccinated | Referent | Referent |
|  | **B/Yamagata (vaccine strain)** | **B/Victoria (non-vaccine strain)** |
| All ages |  |  |
| Vaccinated | 66 (57, 72) | 52 (36, 64) |
| Unvaccinated | Referent | Referent |
| 6 mos-17 years |  |  |
| Vaccinated | 66 (55, 75) | NR |
| Unvaccinated | Referent | Referent |
| ≥18 years |  |  |
| Vaccinated | 65 (52, 74) | 59 (35, 74) |
| Unvaccinated | Referent | Referent |

aAdjusted for network site, subject age, sex, race/ethnicity, presence of high-risk health conditions, self-rated health status, interval (days) between illness onset and specimen collection, and calendar time (2 week intervals).

Supplemental Table 2. Percentage vaccinated by influenza case/control status with unadjusted and adjusted vaccine effectiveness estimates against any influenza using 3 different definitions of influenza vaccination status.

|  | Influenza Positive (Cases) | Influenza Negative (Controls) | Unadjusted | Full Modela | Simple Modelb |
| --- | --- | --- | --- | --- | --- |
| Vaccination status determined by | No. Vaccinated/Total | % Vaccinated | No. Vaccinated/Total | % Vaccinated | VE %(95% CI) | VE %(95% CI) | VE %(95% CI) |
| **Any seasonal vaccine, all ages** |
| Medical record/registry documentationc | 795/2307 | 35 | 2082/4145 | 50 | 48 (42, 53) | 50 (44, 55) | 49 (43, 55) |
| Medical record/registry documentation and/or self-reportedd | 845/2307 | 37 | 2194/4145 | 53 | 49 (43, 54) | 51 (44, 56) | 50 (44, 55) |
| Self-reported onlye | 923/2259 | 41 | 2381/4084 | 58 | 51 (45, 55) | 51 (44, 56) | 50 (44, 56) |
| **Any seasonal vaccine, ages 6 months – 17 years** |
| Medical record/registry documentationc | 284/975 | 29 | 718/1515 | 47 | 54 (46, 62) | 48 (37, 57) | 49 (38, 58) |
| Medical record/registry documentation and/or self-reportedd | 289/975 | 30 | 731/1515 | 48 | 55 (46, 62) | 49 (38, 58) | 50 (40, 59) |
| Self-reported onlye | 326/936 | 35 | 783/1469 | 53 | 53 (45, 60) | 45 (34, 54) | 46 (35, 55) |
| **Any seasonal vaccine, ages ≥ 18 years** |
| Medical record/registry documentationc | 511/1332 | 38 | 1364/2630 | 52 | 42 (34, 49) | 48 (39, 55) | 47 (38, 54) |
| Medical record/registry documentation and/or self-reportedd | 556/1332 | 42 | 1463/2630 | 56 | 43 (35, 50) | 49 (40, 56) | 47 (39, 55) |
| Self-reported onlye | 597/1323 | 45 | 1598/2615 | 61 | 48 (40, 54) | 51 (43, 58) | 51 (43, 57) |

aAdjusted for network site, subject age in months, sex, race/ethnicity, presence of high-risk health conditions, self-rated health status, interval (days) between illness onset and specimen collection, and calendar time (2 week intervals).

bAdjusted for network site, subject age in months, presence of high-risk health conditions, and calendar time (2 week intervals).

cSubjects were considered vaccinated if they had documented medical record or immunization registry evidence of receipt of at least 1 dose of influenza vaccine for the current season ≥ 14 days before illness onset. Partially vaccinated enrollees aged 6 months – 8 years were excluded.

dSubjects were considered vaccinated if they had documented medical record or immunization registry evidence and/or self-reported evidence of receipt (with date and location noted) of at least 1 dose of influenza vaccine for the current season ≥14 days before illness onset

eSubjects were considered vaccinated if they self-reported receipt of at least 1 dose of influenza vaccine for the current season ≥14 days before illness onset (those with unknown self-report vaccination status were excluded).