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| **Table 1. Descriptive Data by Influenza Vaccination, 2019 BRFSS**a | | | | |
| **N (weighted %)**b | | | | |
| N= 302,537 | **Total** | **Percentage who Received Influenza Vaccine** | **Did not Receive Influenza Vaccine** | **P value** |
| **Age, median (IQR)** | 47 (32, 61) | 54 (36, 67) | 42 (30, 56) | **<0.001\*\*\*** |
| **Sex** |  |  |  | **<0.001\*\*\*** |
| Female | 161,330 (50.4) | 85,711 (46.5) | 75,619 (53.5) |  |
| Male | 141,207 (49.6) | 65,861 (39.5) | 75,346 (60.5) |  |
| **Race** |  |  |  | **<0.001\*\*\*** |
| NH-White | 237,658 (64.6) | 124,838 (46.5) | 112,820 (53.5) |  |
| NH-Black | 22,448 (11.3) | 9,578 (36.7) | 12,870 (63.3) |  |
| Hispanic | 22,195 (16.0) | 8,291 (33.9) | 13,904 (66.1) |  |
| Other race | 2,079 (0.5) | 873 (37.1) | 1,206 (62.9) |  |
| Asian | 6,082 (5.1) | 2,859 (44.1) | 3,223 (55.9) |  |
| American Indian / Alaska Native | 4,818 (1.0) | 2,110 (36.6) | 2,708 (63.4) |  |
| Multiracial | 6,224 (1.4) | 2,626 (39.7) | 3,598 (60.3) |  |
| Native Hawaiian / Other Pacific Islander | 1,033 (0.2) | 397 (37.9) | 636 (62.1) |  |
| **Education** |  |  |  | **<0.001\*\*\*** |
| Less than high school | 18,341 (11.6) | 7,246 (34.4) | 11,095 (65.6) |  |
| High school graduate | 76,264 (26.7) | 33,220 (37.1) | 43,044 (62.9) |  |
| Some college | 85,900 (31.7) | 40,824 (41.5) | 45,076 (58.5) |  |
| College graduate or more | 122,032 (30.7) | 70,282 (52.9) | 51,750 (47.1) |  |
| **Income** |  |  |  | **<0.001\*\*\*** |
| < $25,000 | 71,902 (24.6) | 31,911 (38.1) | 39,991 (61.9) |  |
| $25 – $49,999 | 72,650 (22.5) | 35,045 (40.4) | 37,605 (59.6) |  |
| $50 – $74,999 | 49,630 (15.2) | 25,257 (43.0) | 24,373 (57.0) |  |
| ≥ $75,000 | 108,355 (37.8) | 59,359 (47.8) | 48,996 (52.2) |  |
| **Divisions**c |  |  |  | **<0.001\*\*\*** |
| New England | 33,242 (4.6) | 18,530 (50.1) | 14,712 (49.9) |  |
| Middle Atlantic | 14,833 (9.9) | 7,557 (46.4) | 7,276 (53.6) |  |
| East North Central | 32,669 (15.6) | 15,967 (41.5) | 16,702 (58.5) |  |
| West North Central | 55,525 (7.0) | 29,133 (47.0) | 26,392 (53.0) |  |
| South Atlantic | 54,099 (20.1) | 27,201 (42.7) | 26,898 (57.3) |  |
| East South Central | 18,306 (5.8) | 8,652 (41.2) | 9,654 (58.8) |  |
| West South Central | 20,617 (12.0) | 10,108 (40.5) | 10,509 (59.5) |  |
| Mountain | 41,987 (7.8) | 19,802 (41.4) | 22,185 (58.6) |  |
| Pacific | 31,259 (17.2) | 14,622 (42.4) | 16,637 (57.7) |  |
| **Health Insurance** |  |  |  | **<0.001\*\*\*** |
| Yes | 278,556 (88.1) | 146,585 (46.3) | 131,971 (53.7) |  |
| No | 23,981 (11.9) | 4,987 (18.8) | 18,994 (81.2) |  |
| **Primary Care Doctor** |  |  |  | **<0.001\*\*\*** |
| Yes | 252,854 (77.6) | 139,119 (48.9) | 113,735 (51.1) |  |
| No | 49,683 (22.4) | 12,453 (22.7) | 37,230 (77.3) |  |
| **Delayed Care due to Cost** |  |  |  | **<0.001\*\*\*** |
| No | 270,869 (86.8) | 141,073 (45.2) | 129,796 (83.4) |  |
| Yes | 31,668 (13.2) | 10,499 (28.4) | 21,169 (16.6) |  |

Notes: Boldface indicates statistical significance (\**p*<0.05, \*\**p*<0.01, \*\*\**p*<0.001).

a Includes data from the 2019 BRFSS annual survey. Analysis excludes US territories.

b Data represents N (weighted percentage) unless otherwise noted.

c West North Central division includes: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota. New England division includes: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. Middle Atlantic includes: New Jersey, New York, and Pennsylvania. South Atlantic division includes: Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia. Mountain division includes: Arizona, Colorado, Idaho, New Mexico, Montana, Utah, Nevada, and Wyoming. Pacific division includes: Alaska, California, Hawaii, Oregon, and Washington. East North Central division includes: Indiana, Illinois, Michigan, Ohio, and Wisconsin. East South Central division includes: Alabama, Kentucky, Mississippi, and Tennessee. West South Central division includes: Arkansas, Louisiana, Oklahoma, and Texas.

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| **Table 2. Odds Ratios from Weighted Logistic Regression Predicting Influenza Vaccination,**  **2019 BRFSS** a | | |
| **Odds Ratio (95% CI)** b | | |
| N= 302,537 | **Odds Ratio (95% CI)** | **P value** |
| **Age** | 1.02 (1.02, 1.02) | **<0.001\*\*\*** |
| **Sex** |  | **<0.001\*\*\*** |
| Female | 1.00 |  |
| Male | 0.81 (0.79, 0.84) |  |
| **Race** |  | **<0.001\*\*\*** |
| NH-White | 1.00 |  |
| NH-Black | 0.77 (0.73 0.81) |  |
| Hispanic | 1.00 (0.95, 1.07) |  |
| Other race | 0.77 (0.63, 0.93) |  |
| Asian | 1.04 (0.93, 1.15) |  |
| American Indian / Alaska Native | 0.80 (0.70, 0.92) |  |
| Multiracial | 0.94 (0.85, 1.04) |  |
| Native Hawaiian / Other Pacific Islander | 0.88 (0.67, 1.17) |  |
| **Education** |  | **<0.001\*\*\*** |
| Less than high school | 0.61 (0.57, 0.66) |  |
| High school graduate | 0.60 (0.58, 0.63) |  |
| Some college | 0.69 (0.66, 0.72) |  |
| College graduate or more | 1.00 |  |
| **Income** |  | <0.05\* |
| < $25,000 | 1.00 (0.96, 1.05) |  |
| $25 – $49,999 | 0.96 (0.92, 1.01) |  |
| $50 – $74,999 | 0.94 (0.90, 0.99) |  |
| ≥ $75,000 | 1.00 |  |
| **Divisions** c |  | **<0.001\*\*\*** |
| New England | 1.00 |  |
| Middle Atlantic | 0.95 (0.89, 1.01) |  |
| East North Central | 0.79 (0.75, 0.83) |  |
| West North Central | 1.02 (0.97, 1.07) |  |
| South Atlantic | 0.88 (0.84, 0.93) |  |
| East South Central | 0.86 (0.81, 0.92) |  |
| West South Central | 0.91 (0.84, 0.98) |  |
| Mountain | 0.84 (0.80, 0.89) |  |
| Pacific | 0.85 (0.80, 0.90) |  |
| **Health Insurance** |  | **<0.001\*\*\*** |
| Yes | 1.00 |  |
| No | 0.51 (0.47, 0.55) |  |
| **Primary Care Doctor** |  | **<0.001\*\*\*** |
| Yes | 1.00 |  |
| No | 0.50 (0.48, 0.52) |  |
| **Delayed Care due to Cost** |  |  |
| No | 1.00 | **<0.001\*\*\*** |
| Yes | 0.75 (0.71, 0.79) |  |

Notes: Boldface indicates statistical significance (\**p*<0.05, \*\**p*<0.01, \*\*\**p*<0.001).

a Includes data from the 2019 BRFSS annual survey. Analysis excludes US territories.

b Data represent odds ratios (95% confidence intervals).

c  New England division includes: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. Middle Atlantic includes: New Jersey, New York, and Pennsylvania. East North Central division includes: Indiana, Illinois, Michigan, Ohio, and Wisconsin. West North Central division includes: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota. South Atlantic division includes: Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia. East South Central division includes: Alabama, Kentucky, Mississippi, and Tennessee. West South Central division includes: Arkansas, Louisiana, Oklahoma, and Texas. Mountain division includes: Arizona, Colorado, Idaho, New Mexico, Montana, Utah, Nevada, and Wyoming. Pacific division includes: Alaska, California, Hawaii, Oregon, and Washington.

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| **Table 3. Odds Ratios from Weighted Logistic Regression Predicting Influenza Vaccination for Non-Hispanic White Participants, 2019 BRFSSa** | | |
| **Odds Ratio (95% CI)b** | | |
| N= 237,658 | **Odds Ratio (95% CI)** | **P value** |
| **Age** | 1.02 (1.02, 1.02) | **<0.001\*\*\*** |
| **Sex** |  | **<0.001\*\*\*** |
| Female | 1.00 |  |
| Male | 0.82 (0.79, 0.84) |  |
| **Education** |  | **<0.001\*\*\*** |
| Less than high school | 0.46 (0.42, 0.50) |  |
| High school graduate | 0.56 (0.53, 0.58) |  |
| Some college | 0.66 (0.63, 0.68) |  |
| College graduate or more | 1.00 |  |
| **Income** |  | **<0.05\*** |
| < $25,000 | 0.95 (0.91, 0.99) |  |
| $25 – $49,999 | 0.95 (0.91, 0.99) |  |
| $50 – $74,999 | 0.95 (0.90, 0.99) |  |
| ≥ $75,000 | 1.00 |  |
| **Divisionsc** |  | **<0.001\*\*\*** |
| New England | 1.00 |  |
| Middle Atlantic | 0.95 (0.88, 1.01) |  |
| East North Central | 0.81 (0.77, 0.85) |  |
| West North Central | 1.03 (0.98, 1.08) |  |
| South Atlantic | 0.94 (0.89, 0.99) |  |
| East South Central | 0.89 (0.83, 0.95) |  |
| West South Central | 0.89 (0.82, 0.96) |  |
| Mountain | 0.83 (0.79, 0.88) |  |
| Pacific | 0.85 (0.79, 0.91) |  |
| **Health Insurance** |  | **<0.001\*\*\*** |
| Yes | 1.00 |  |
| No | 0.40 (0.37, 0.43) |  |
| **Primary Care Doctor** |  | **<0.001\*\*\*** |
| Yes | 1.00 |  |
| No | 0.46 (0.44, 0.49) |  |
| **Delayed Care due to Cost** |  | **<0.001\*\*\*** |
| No | 1.00 |  |
| Yes | 0.77 (0.72, 0.81) |  |

Notes: Boldface indicates statistical significance (\**p*<0.05, \*\**p*<0.01, \*\*\**p*<0.001).

a Includes data from the 2019 BRFSS annual survey. Analysis excludes US territories.

b Data represent odds ratios (95% confidence intervals) for Non-Hispanic White participants.

c New England division includes: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. Middle Atlantic includes: New Jersey, New York, and Pennsylvania. East North Central division includes: Indiana, Illinois, Michigan, Ohio, and Wisconsin. West North Central division includes: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota. South Atlantic division includes: Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia. East South Central division includes: Alabama, Kentucky, Mississippi, and Tennessee. West South Central division includes: Arkansas, Louisiana, Oklahoma, and Texas. Mountain division includes: Arizona, Colorado, Idaho, New Mexico, Montana, Utah, Nevada, and Wyoming. Pacific division includes: Alaska, California, Hawaii, Oregon, and Washington.

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| **Table 4. Odds Ratios from Weighted Logistic Regression Predicting Influenza Vaccination for Non-Hispanic Black Participants, 2019 BRFSSa** | | |
| **Odds Ratio (95% CI)b** | | |
| N= 22,448 | **Odds Ratio (95% CI)** | **P value** |
| **Age** | 1.02 (1.02, 1.03) | **<0.001\*\*\*** |
| **Sex** |  | **<0.001\*\*\*** |
| Female | 1.00 |  |
| Male | 0.87 (0.79, 0.97) |  |
| **Education** |  | **<0.001\*\*\*** |
| Less than high school | 0.77 (0.63, 0.95) |  |
| High school graduate | 0.73 (0.62, 0.84) |  |
| Some college | 0.81 (0.71, 0.93) |  |
| College graduate or more | 1.00 |  |
| **Income** |  | 0.17 |
| < $25,000 | 1.08 (0.92, 1.27) |  |
| $25 – $49,999 | 1.10 (0.95, 1.28) |  |
| $50 – $74,999 | 0.92 (0.78, 1.10) |  |
| ≥ $75,000 | 1.00 |  |
| **Divisionsc** |  | **<0.001\*\*\*** |
| New England | 1.00 |  |
| Middle Atlantic | 0.90 (0.71, 1.15) |  |
| East North Central | 0.60 (0.48, 0.75) |  |
| West North Central | 0.91 (0.71, 1.16) |  |
| South Atlantic | 0.77 (0.62, 0.95) |  |
| East South Central | 0.75 (0.60, 0.93) |  |
| West South Central | 0.81 (0.62, 1.06) |  |
| Mountain | 0.78 (0.58, 1.06) |  |
| Pacific | 0.71 (0.53, 0.95) |  |
| **Health Insurance** |  | **<0.001\*\*\*** |
| Yes | 1.00 |  |
| No | 0.59 (0.48, 0.73) |  |
| **Primary Care Doctor** |  | **<0.001\*\*\*** |
| Yes | 1.00 |  |
| No | 0.52 (0.45, 0.61) |  |
| **Delayed Care due to Cost** |  | 0.05 |
| No | 1.00 |  |
| Yes | 0.87 (0.75, 1.00) |  |

Notes: Boldface indicates statistical significance (\**p*<0.05, \*\**p*<0.01, \*\*\**p*<0.001).

a Includes data from the 2019 BRFSS annual survey. Analysis excludes US territories.

b Data represent odds ratios (95% confidence intervals) for Non-Hispanic Black participants.

c New England division includes: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. Middle Atlantic includes: New Jersey, New York, and Pennsylvania. East North Central division includes: Indiana, Illinois, Michigan, Ohio, and Wisconsin. West North Central division includes: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota. South Atlantic division includes: Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia. East South Central division includes: Alabama, Kentucky, Mississippi, and Tennessee. West South Central division includes: Arkansas, Louisiana, Oklahoma, and Texas. Mountain division includes: Arizona, Colorado, Idaho, New Mexico, Montana, Utah, Nevada, and Wyoming. Pacific division includes: Alaska, California, Hawaii, Oregon, and Washington.

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| **Table 5. Odds Ratios from Weighted Logistic Regression Predicting Influenza Vaccination for Hispanic Participants, 2019 BRFSSa** | | |
| **Odds Ratio (95% CI)b** | | |
| N= 22,195 | **Odds Ratio (95% CI)** | **P value** |
| **Age** | 1.01 (1.01, 1.02) | **<0.001\*\*\*** |
| **Sex** |  | **<0.001\*\*\*** |
| Female | 1.00 |  |
| Male | 0.77 (0.69, 0.86) |  |
| **Education** |  | **<0.001\*\*\*** |
| Less than high school | 0.82 (0.69, 0.97) |  |
| High school graduate | 0.70 (0.60, 0.82) |  |
| Some college | 0.80 (0.68, 0.93) |  |
| College graduate or more | 1.00 |  |
| **Income** |  | 0.07 |
| < $25,000 | 1.24 (1.05, 1.47) |  |
| $25 – $49,999 | 1.10 (0.93, 1.30) |  |
| $50 – $74,999 | 1.11 (0.90, 1.35) |  |
| ≥ $75,000 | 1.00 |  |
| **Divisionsc** |  | **<0.001\*\*\*** |
| New England | 1.00 |  |
| Middle Atlantic | 0.98 (0.79, 1.21) |  |
| East North Central | 0.73 (0.59, 0.89) |  |
| West North Central | 0.95 (0.77, 1.16) |  |
| South Atlantic | 0.65 (0.53, 0.81) |  |
| East South Central | 1.23 (0.84, 1.79) |  |
| West South Central | 0.95 (0.75, 1.18) |  |
| Mountain | 0.79 (0.66, 0.95) |  |
| Pacific | 0.77 (0.64, 0.91) |  |
| **Health Insurance** |  | **<0.001\*\*\*** |
| Yes | 1.00 |  |
| No | 0.57 (0.49, 0.66) |  |
| **Primary Care Doctor** |  | **<0.001\*\*\*** |
| Yes | 1.00 |  |
| No | 0.54 (0.48, 0.62) |  |
| **Delayed Care due to Cost** |  | **<0.001\*\*\*** |
| No | 1.00 |  |
| Yes | 0.68 (0.59, 0.78) |  |

Notes: Boldface indicates statistical significance (\**p*<0.05, \*\**p*<0.01, \*\*\**p*<0.001).

a Includes data from the 2019 BRFSS annual survey. Analysis excludes US territories.

b Data represent odds ratios (95% confidence intervals) for Hispanic participants.

c New England division includes: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. Middle Atlantic includes: New Jersey, New York, and Pennsylvania. East North Central division includes: Indiana, Illinois, Michigan, Ohio, and Wisconsin. West North Central division includes: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota. South Atlantic division includes: Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia. East South Central division includes: Alabama, Kentucky, Mississippi, and Tennessee. West South Central division includes: Arkansas, Louisiana, Oklahoma, and Texas. Mountain division includes: Arizona, Colorado, Idaho, New Mexico, Montana, Utah, Nevada, and Wyoming. Pacific division includes: Alaska, California, Hawaii, Oregon, and Washington.

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| **Table 6. Odds Ratios from Weighted Logistic Regression Predicting Influenza Vaccination for Asian Participants, 2019 BRFSSa** | | |
| **Odds Ratio (95% CI)b** | | |
| N= 6,082 | **Odds Ratio (95% CI)** | **P value** |
| **Age** | 1.02 (1.01, 1.02) | **<0.001\*\*\*** |
| **Sex** |  | 0.25 |
| Female | 1.00 |  |
| Male | 0.89 (0.72, 1.09) |  |
| **Education** |  | 0.21 |
| Less than high school | 1.30 (0.64, 2.65) |  |
| High school graduate | 0.73 (0.59, 1.08) |  |
| Some college | 0.81 (0.61, 1.08) |  |
| College graduate or more | 1.00 |  |
| **Income** |  | 0.34 |
| < $25,000 | 0.85 (0.63, 1.14) |  |
| $25 – $49,999 | 0.77 (0.57, 1.05) |  |
| $50 – $74,999 | 0.83 (0.61, 1.13) |  |
| ≥ $75,000 | 1.00 |  |
| **Divisionsc** |  | 0.85 |
| New England | 1.00 |  |
| Middle Atlantic | 0.89 (0.61, 1.32) |  |
| East North Central | 1.18 (0.81, 1.74) |  |
| West North Central | 1.14 (0.78, 1.66) |  |
| South Atlantic | 1.09 (0.74, 1.61) |  |
| East South Central | 0.83 (0.36, 1.91) |  |
| West South Central | 0.89 (0.54, 1.46) |  |
| Mountain | 1.00 (0.64, 1.55) |  |
| Pacific | 1.08 (0.78, 1.49) |  |
| **Health Insurance** |  | **<0.05\*** |
| Yes | 1.00 |  |
| No | 0.61 (0.40, 0.93) |  |
| **Primary Care Doctor** |  | **<0.001\*\*\*** |
| Yes | 1.00 |  |
| No | 0.53 (0.41, 0.69) |  |
| **Delayed Care due to Cost** |  | 0.07 |
| No | 1.00 |  |
| Yes | 0.73 (0.52, 1.03) |  |

Notes: Boldface indicates statistical significance (\**p*<0.05, \*\**p*<0.01, \*\*\**p*<0.001).

a Includes data from the 2019 BRFSS annual survey. Analysis excludes US territories.

b Data represent odds ratios (95% confidence intervals) for Asian participants.

c New England division includes: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. Middle Atlantic includes: New Jersey, New York, and Pennsylvania. East North Central division includes: Indiana, Illinois, Michigan, Ohio, and Wisconsin. West North Central division includes: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota. South Atlantic division includes: Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia. East South Central division includes: Alabama, Kentucky, Mississippi, and Tennessee. West South Central division includes: Arkansas, Louisiana, Oklahoma, and Texas. Mountain division includes: Arizona, Colorado, Idaho, New Mexico, Montana, Utah, Nevada, and Wyoming. Pacific division includes: Alaska, California, Hawaii, Oregon, and Washington.

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| **Table 7. Odds Ratios from Weighted Logistic Regression Predicting Influenza Vaccination for American Indian and Alaska Native Participants, 2019 BRFSSa** | | |
| **Odds Ratio (95% CI)b** | | |
| N= 4,818 | **Odds Ratio (95% CI)** | **P value** |
| **Age** | 1.02 (1.01, 1.02) | **<0.001\*\*\*** |
| **Sex** |  | **<0.05\*** |
| Female | 1.00 |  |
| Male | 0.72 (0.55, 0.93) |  |
| **Education** |  | 0.06 |
| Less than high school | 0.77 (0.47, 1.24) |  |
| High school graduate | 0.60 (0.40, 0.90) |  |
| Some college | 0.64 (0.44, 0.92) |  |
| College graduate or more | 1.00 |  |
| **Income** |  | 0.65 |
| < $25,000 | 1.25 (0.88, 1.76) |  |
| $25 – $49,999 | 1.14 (0.75, 1.72) |  |
| $50 – $74,999 | 1.16 (0.69, 1.97) |  |
| ≥ $75,000 | 1.00 |  |
| **Divisionsc** |  | **<0.01\*\*** |
| New England | 1.00 |  |
| Middle Atlantic | 1.20 (0.53, 2.74) |  |
| East North Central | 1.11 (0.52, 2.35) |  |
| West North Central | 1.68 (0.90, 3.13) |  |
| South Atlantic | 1.10 (0.58, 2.08) |  |
| East South Central | 1.04 (0.52, 2.09) |  |
| West South Central | 1.48 (0.74, 2.97) |  |
| Mountain | 2.06 (1.12, 3.79) |  |
| Pacific | 1.31 (0.67, 2.58) |  |
| **Health Insurance** |  | **<0.001\*\*\*** |
| Yes | 1.00 |  |
| No | 0.46 (0.30, 0.71) |  |
| **Primary Care Doctor** |  | **<0.001\*\*\*** |
| Yes | 1.00 |  |
| No | 0.56 (0.42, 0.73) |  |
| **Delayed Care due to Cost** |  | 0.21 |
| No | 1.00 |  |
| Yes | 0.81 (0.59, 1.12) |  |

Notes: Boldface indicates statistical significance (\**p*<0.05, \*\**p*<0.01, \*\*\**p*<0.001).

a Includes data from the 2019 BRFSS annual survey. Analysis excludes US territories.

b Data represent odds ratios (95% confidence intervals) for American Indian and Alaska Native participants.

c New England division includes: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. Middle Atlantic includes: New Jersey, New York, and Pennsylvania. East North Central division includes: Indiana, Illinois, Michigan, Ohio, and Wisconsin. West North Central division includes: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota. South Atlantic division includes: Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia. East South Central division includes: Alabama, Kentucky, Mississippi, and Tennessee. West South Central division includes: Arkansas, Louisiana, Oklahoma, and Texas. Mountain division includes: Arizona, Colorado, Idaho, New Mexico, Montana, Utah, Nevada, and Wyoming. Pacific division includes: Alaska, California, Hawaii, Oregon, and Washington.

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| **Table 8. Odds Ratios from Weighted Logistic Regression Predicting Influenza Vaccination for Native Hawaiian or Other Pacific Islander Participants, 2019 BRFSSa** | | |
| **Odds Ratio (95% CI)b** | | |
| N= 1,033 | **Odds Ratio (95% CI)** | **P value** |
| **Age** | 1.01 (0.99, 1.02) | 0.37 |
| **Sex** |  | 0.06 |
| Female | 1.00 |  |
| Male | 0.62 (0.38, 1.03) |  |
| **Education** |  | 0.81 |
| Less than high school | 0.88 (0.28, 2.72) |  |
| High school graduate | 1.14 (0.53, 2.45) |  |
| Some college | 0.86 (0.42, 1.75) |  |
| College graduate or more | 1.00 |  |
| **Income** |  | 0.84 |
| < $25,000 | 0.98 (0.50, 1.93) |  |
| $25 – $49,999 | 1.24 (0.63, 2.42) |  |
| $50 – $74,999 | 1.31 (0.53, 3.24) |  |
| ≥ $75,000 | 1.00 |  |
| **Divisionsc** |  | 0.25 |
| New England | 1.00 |  |
| Middle Atlantic | 0.42 (0.10, 1.69) |  |
| East North Central | 0.53 (0.11, 2.65) |  |
| West North Central | 2.64 (0.66, 10.61) |  |
| South Atlantic | 0.95 (0.27, 3.33) |  |
| East South Central | 0.61 (0.16, 2.28) |  |
| West South Central | 0.91 (0.21, 4.03) |  |
| Mountain | 0.40 (0.13, 1.24) |  |
| Pacific | 0.80 (0.32, 2.01) |  |
| **Health Insurance** |  | 0.08 |
| Yes | 1.00 |  |
| No | 0.45 (0.18, 1.09) |  |
| **Primary Care Doctor** |  | **<0.001\*\*\*** |
| Yes | 1.00 |  |
| No | 0.23 (0.12, 0.45) |  |
| **Delayed Care due to Cost** |  | 0.21 |
| No | 1.00 |  |
| Yes | 1.68 (0.75, 3.78) |  |

Notes: Boldface indicates statistical significance (\**p*<0.05, \*\**p*<0.01, \*\*\**p*<0.001).

a Includes data from the 2019 BRFSS annual survey. Analysis excludes US territories.

b Data represent odds ratios (95% confidence intervals) for Native Hawaiian or Other Pacific Islander participants.

c New England division includes: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. Middle Atlantic includes: New Jersey, New York, and Pennsylvania. East North Central division includes: Indiana, Illinois, Michigan, Ohio, and Wisconsin. West North Central division includes: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota. South Atlantic division includes: Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia. East South Central division includes: Alabama, Kentucky, Mississippi, and Tennessee. West South Central division includes: Arkansas, Louisiana, Oklahoma, and Texas. Mountain division includes: Arizona, Colorado, Idaho, New Mexico, Montana, Utah, Nevada, and Wyoming. Pacific division includes: Alaska, California, Hawaii, Oregon, and Washington.

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