



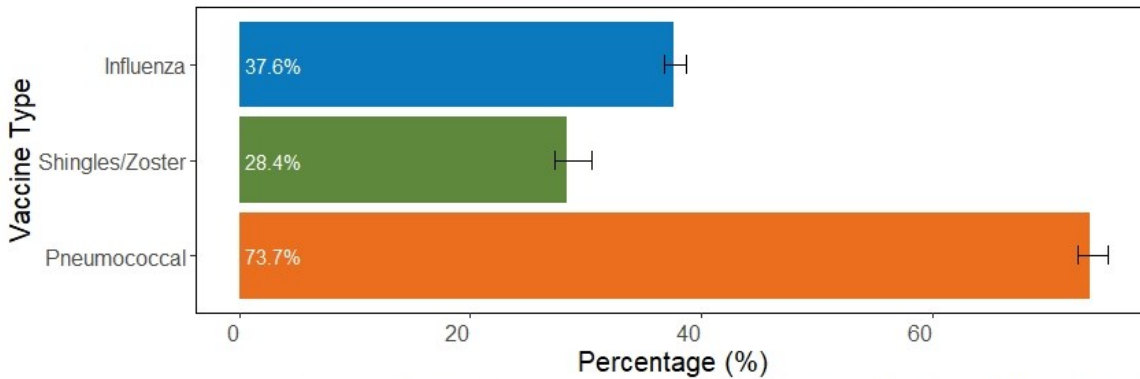
SNAPSHOT

Snapshot is a publication that demonstrates the uses of Behavioral Risk Factor Surveillance System (BRFSS) data to illustrate various health behaviors among adult Californians. BRFSS is the largest, ongoing, telephone health survey in the world. The California BRFSS is an annual effort by the California Department of Public Health (CDPH), Chronic Disease Surveillance and Research Branch, in collaboration with the U.S. Centers for Disease Control and Prevention (CDC), to assess the prevalence of and trends in health-related behaviors and to monitor preventable risk factors for chronic diseases and other leading causes of death in the California adult population.

IMMUNIZATIONS AMONG ADULTS, CALIFORNIA 2015—2019

Vaccine immunizations are one of the most effective tools to protect against diseases that cause chronic illness, hospitalizations, and even death¹. Based on findings from the California Behavioral Risk Factor Surveillance System (CA BRFSS) data from 2015-2019, 37.6 out of every 100 adults aged 18 years or older received an Influenza vaccination, 28.4 out of every 100 adults age 50 years or older received a Shingles or Zoster Vaccination over the past year, and 73.7 out of 100 adults aged 65 years or older received a Pneumococcal Vaccination. [Figure 1]

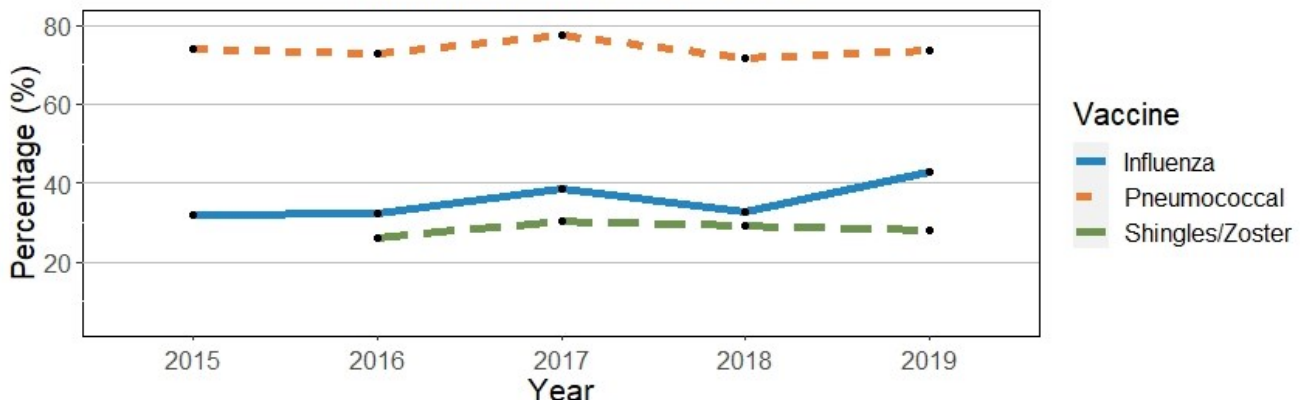
Figure 1. Immunizations among California Adults, 2015-2019



*Prepared by the California Department of Public Health, Chronic Disease Surveillance and Research Branch
Error bars represent 95 percent Confidence Intervals

Examining CA BRFSS yearly trend data from 2015-2019, adult Influenza vaccination coverage increased 10.8 percentage points (31.2 percent to 42.0 percent). Among adults age 50 years or older, Shingles or Zoster vaccination coverage increased 2.0 percentage points (26.2 percent to 28.2 percent). For adults 65 years or older, Pneumococcal vaccination coverage held at a stable rate (73.7 percent). [Figure 2]

Figure 2. Vaccination Yearly Trend among California Adults, 2015-2019



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Table 1. Demographics of Vaccinated Population, California, 2015 -2019*

| | Influenza Vaccinated [†] (n = 51,333) | | Shingles or Zoster Vaccinated [‡] (n = 8,847) | | Pneumococcal Vaccinated [§] (n = 12,473) | |
|------------------------------------|---|---------------|---|---------------|--|---------------|
| | Percent (%) | 95% CI | Percent (%) | 95% CI | Percent (%) | 95% CI |
| Gender | | | | | | |
| Men | 34.9 | (34.3 - 35.6) | 26.1 | (24.7 - 27.5) | 70.2 | (68.9 - 71.5) |
| Women | 40.3 | (39.6 - 40.9) | 31.2 | (29.8 - 32.5) | 76.4 | (75.4 - 77.4) |
| Race/Ethnicity | | | | | | |
| White | 43.0 | (42.4 - 43.7) | 36.0 | (34.7 - 37.3) | 77.0 | (76.0 - 77.9) |
| Hispanic or Latino | 30.5 | (29.7 - 31.2) | 14.0 | (12.4 - 15.5) | 59.8 | (57.5 - 62.1) |
| Asian/Pacific Islander | 39.5 | (37.9 - 41.0) | 25.6 | (21.3 - 29.9) | 67.2 | (62.7 - 71.8) |
| Black | 34.2 | (32.2 - 36.1) | 20.2 | (16.2 - 24.2) | 65.2 | (61.0 - 69.4) |
| Other [¶] | 34.8 | (32.8 - 36.8) | 20.8 | (16.7 - 25.0) | 80.0 | (76.2 - 83.8) |
| Age Group | | | | | | |
| 18-24 years | 26.3 | (25.0 - 27.6) | ~ | - | ~ | - |
| 25-34 years | 28.4 | (27.4 - 29.4) | ~ | - | ~ | - |
| 35-44 years | 32.3 | (31.3 - 33.4) | ~ | - | ~ | - |
| 45-54 years | 37.0 | (35.9 - 38.1) | 6.1 | (4.8 - 7.4) | ~ | - |
| 55-64 years | 43.2 | (42.2 - 44.2) | 19.1 | (17.7 - 20.5) | ~ | - |
| ≥ 65 years | 60.9 | (60.0 - 61.8) | 52.5 | (51.0 - 54.0) | 73.7 | (72.9 - 74.5) |
| Annual Household Income | | | | | | |
| < \$25,000 | 32.2 | (31.4 - 33.1) | 19.7 | (18.0 - 21.5) | 62.8 | (60.9 - 64.7) |
| \$25,000 - \$49,999 | 34.4 | (33.4 - 35.4) | 27.8 | (25.5 - 30.1) | 75.4 | (73.5 - 77.2) |
| \$50,000 - \$74,999 | 37.3 | (36.0 - 38.6) | 34.4 | (31.5 - 37.3) | 76.1 | (73.9 - 78.3) |
| \$75,000 - \$99,999 | 38.3 | (37.1 - 39.6) | 33.1 | (30.3 - 35.9) | 78.2 | (76.0 - 80.5) |
| \$100,000 - \$124,999 | 42.8 | (41.0 - 44.6) | 37.4 | (33.4 - 41.3) | 77.0 | (73.8 - 80.1) |
| ≥ \$125,000 | 46.0 | (44.8 - 47.2) | 29.4 | (27.0 - 31.8) | 76.4 | (74.1 - 78.8) |

Abbreviations: CI = Confidence Interval

* Respondents with demographic of "Unknown" category were excluded from analysis

† Respondents composed of adults ≥ 18 years who reported they "Had a seasonal Flu Shot or spray in the past 12 months"

‡ Respondents composed of adults of ≥ 50 years who reported "yes" when asked "Have you ever had the Shingles or Zoster Vaccine?"

§ Respondents composed of adults ≥ 65 years who reported they had received the "Pneumonia Shot ever"

|| Race/Ethnicity was categorized as: (White, Non-Hispanic), (Black, Non-Hispanic), (Hispanic), (Asian, Non-Hispanic), and

¶ 'Other' includes (American Indian/Alaska Native, Non-Hispanic) and (Multiple Races, Non-Hispanic)

- Analysis of the immunization rates adjusted within their subcategories are presented in Table 1. The table shows:
- For Influenza, Shingles/Zoster, and Pneumonia, women were more likely than men to have received vaccination.
 - Hispanic or Latino persons had the lowest rate of vaccinations for Influenza, Shingles/Zoster, and Pneumonia compared to five other race groups [Figure 3].
 - Younger age groups had relatively lower vaccination rates compared to older age groups.
 - Persons who identified with low annual household incomes had relatively fewer Influenza and Shingles or Zoster Vaccinations [Figure 4].
 - Moreover respondents with health insurance were more likely to have received an Influenza vaccination among all age groups and genders [Figures 5-6].

Groups with low coverage may be associated with barriers that affect equitable access for patients within these communities². Some barriers include availability of health services, awareness of vaccines, and costs of vaccine storage, delivery, and reimbursements. Collecting information on immunizations is essential to better understanding how communities are disproportionately impacted by under-vaccination, assisting with public health intervention plans, customizing outreach to groups with low vaccine coverage, and working towards equitable health solutions.

Figure 3. Immunizations among California Adults by Race/Ethnicity, 2015-2019

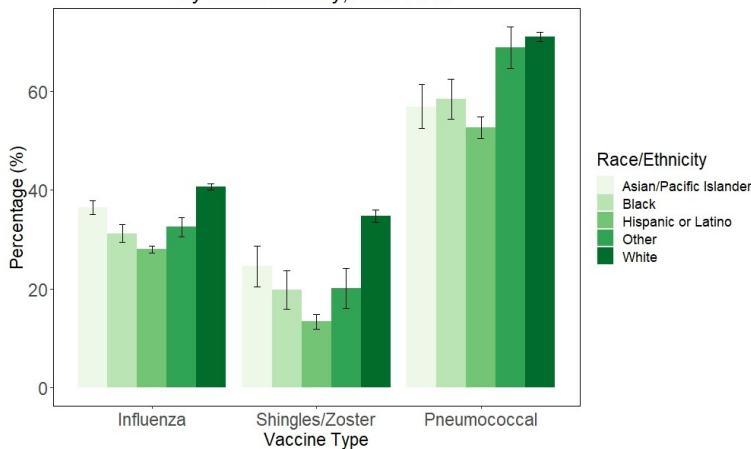


Figure 4. Immunizations among California Adults by Household Income Range, 2015-2019

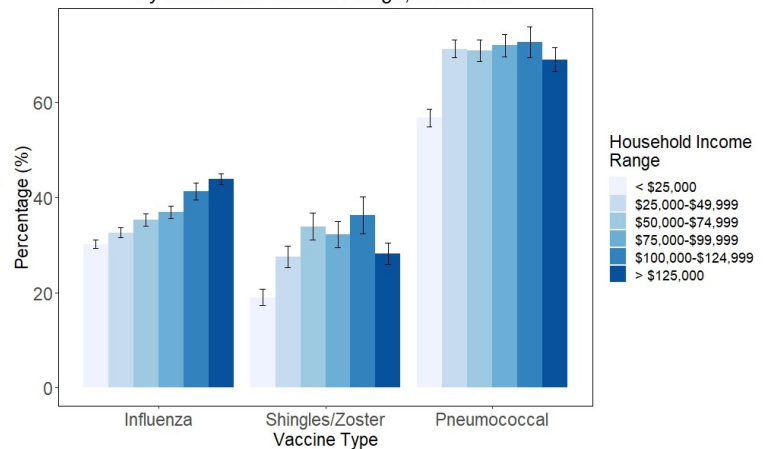


Figure 5. Influenza Vaccination among California Adults by Insurance Status & Age Group, 2015-2019

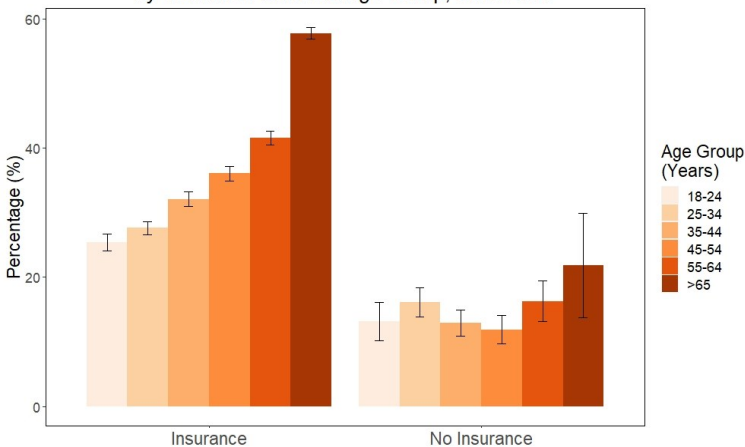
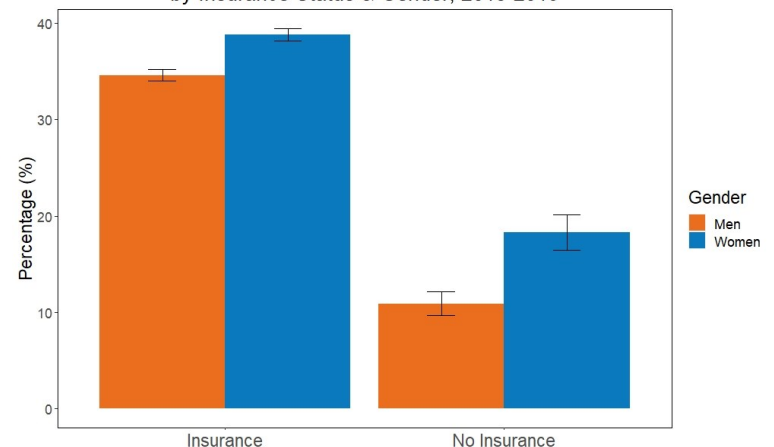


Figure 6. Influenza Vaccination among California Adults by Insurance Status & Gender, 2015-2019



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Error bars represent 95 percent Confidence Intervals

¹ Andre F, Booy R, Bock HL, Clemens J. *Vaccination greatly reduces disease, disability, death, and inequity worldwide*. March 2008. Bulletin of the World Health Organization. 86(2): 140-6.

² Schiller JS, Euler GL. *Vaccination coverage estimates from the National Health Interview Survey: United States, 2008*.

FOR ADDITIONAL INFORMATION
 California Department of Public Health
 Center for Healthy Communities
 Chronic Disease Surveillance and Research Branch
 1631 Alhambra Boulevard, Suite 200, Sacramento, CA 95816
 E-mail ✉: cdsrb@cdph.ca.gov | Web 🌐: <https://www.csus.edu/center/public-health-survey-research/project-brfss.html>