

# Adult Vaccination: Analysis of Consumer Attitudes, Perceptions, Beliefs, and Barriers

Aparna Ramakrishnan<sup>†</sup>, Judith Weiner<sup>†</sup>, Allison Fisher<sup>‡</sup>, Michelle Basket<sup>‡</sup>, Carla Black<sup>‡</sup>, Anup Srivastav<sup>§</sup>, Xin Yue<sup>§</sup>

<sup>†</sup>Northrop Grumman, <sup>‡</sup>Centers for Disease Control and Prevention, <sup>§</sup>Leidos Inc.

## BACKGROUND

- A number of vaccines are recommended for adults to help protect against serious diseases, but vaccination rates are not optimal.
- Improving rates requires addressing practice and systems challenges, as well as increasing consumer demand and acceptance.
- In order to understand how best to encourage vaccination among adults, CDC has included questions in Porter Novelli Fall Styles national surveys to assess factors related to consumer vaccination decision-making and behavior, including awareness, beliefs, perceived norms, barriers, and facilitators.

## METHODS

- *ConsumerStyles* is an annual series of self-administered, online market research surveys.
- KnowledgePanel<sup>®</sup> (formerly Knowledge Networks) collects all data for Styles surveys through online surveys using a probability-based sample of panelists.
- *FallStyles* (fielded in September-October)
  - Sent to a random sample of households that returned *SpringStyles* surveys to ensure a minimum of 3500 completed surveys
  - CDC included questions 2012 – 2015
- Data are weighted to previous year's Current Population Survey of the U.S. Census for gender, age, race/ethnicity, household income, household size.
- Weighted % and corresponding confidence intervals were calculated for each group of interest..

## LIMITATIONS

- Although the Internet panel was probability-based, the estimates may not represent all adults in the United States, and bias may remain after the weighting adjustments.
- Since the survey asked respondents to recall healthcare encounters and self-report desired behaviors, there may be some recall bias and social desirability bias in responses.

## RESULTS

### Beliefs & Perceived Norms (2015)

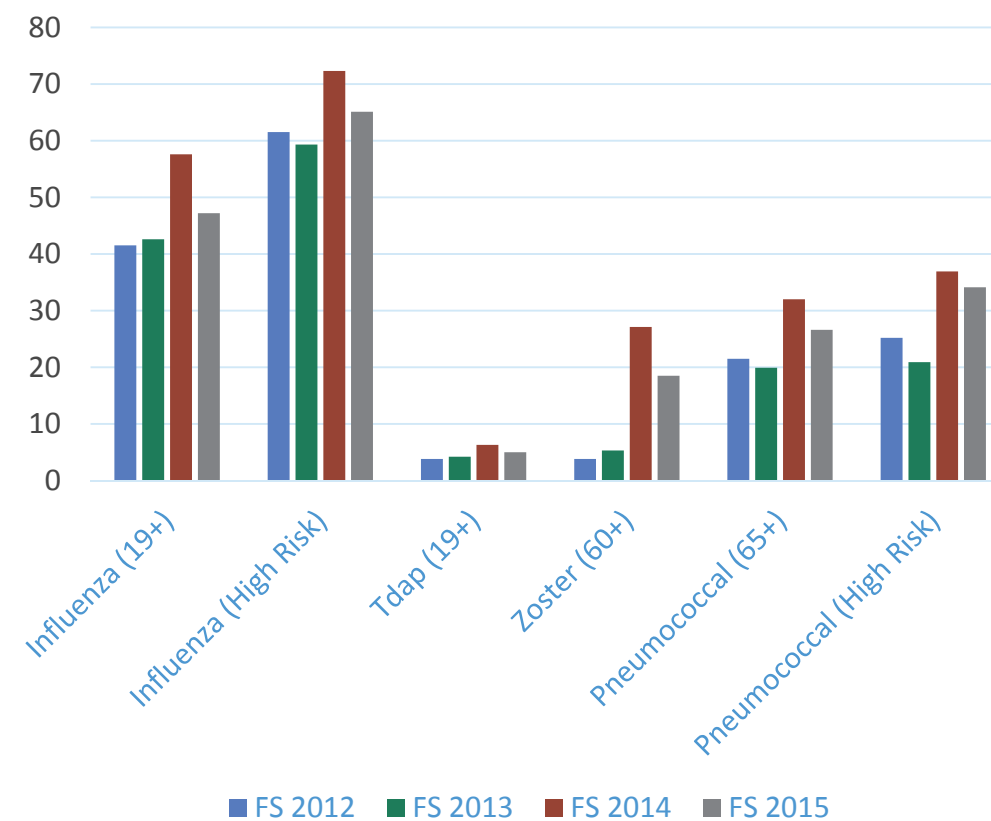
Many adults believe vaccines are important for:

- Family and loved ones' health (70%)
- Own health (67%)
- Community health (64%)

Many adults perceive vaccination to be a social norm.

- 63% agree most people important to them have gotten all of their recommended vaccines.
- 66% agree most people important to them think they should get all recommended vaccines.
- 66% agree it is expected of them to be up to date on their vaccinations.

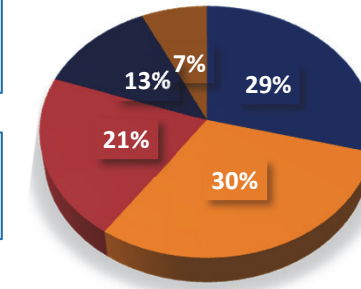
### Respondents Who Reported Receiving Vaccine Recommendations from their Medical Provider



### Vaccine Decision-Making

53% of 19+ are **not aware** they need Tdap vaccine.  
22% of 65+ are **not aware** they need pneumococcal vaccine.  
19% of 60+ are **not aware** they need zoster vaccine.

14% of 19+ have decided **not** to get Tdap vaccine.  
11% of 65+ have decided **not** to get pneumococcal vaccine.  
19% of 60+ have decided **not** to get zoster vaccine.



- Make sure they are up to date with recommended vaccines
- Not aware they need any vaccines besides flu
- Aware but haven't thought about it, made decision, or gotten it
- They have gotten vaccinated against disease other than flu
- Decided not to get vaccine other than flu

### Barriers to Vaccination (2015)

- 47% reported that **none** of the common barriers we asked about have impacted their ability to get vaccinated. *This was significantly less for Hispanics [39%].*
- Very few reported having **access** issues:
  - Couldn't afford vaccine 5.8% (*significantly lower than 10% in 2012*)
  - Not knowing where to get vaccines 1.7%
  - Unable to take off from work for appointment 1.4%
  - Lack of transportation to appointment 0.7%
  - Couldn't get appointment 0.5%
- **Awareness** is still an issue for some:
  - 9% were not aware adults needed vaccines
  - 10% didn't know which vaccines to get (*significantly lower than 15% in 2012*)
  - 17% were not aware a vaccine was recommended for them (*significantly lower in 2014 [12%]*)
- 10% felt they were healthy and didn't need vaccines, although this was significantly lower for adults 65+, with a high-risk condition, and good/fair/poor self-reported health status.
- 12% were not worried about the diseases, although only 1% felt the diseases are not serious.

## CONCLUSIONS

- Many adults believe immunization is important and a social norm, but this could be further strengthened.
- Most adults don't cite cost and access as barriers to vaccination, although there are issues for certain populations or specific vaccines.
- Some adults still may not know which vaccines they need, and they continue to report not receiving many vaccine recommendations from their providers.
- Some adults have made decisions not to get vaccinated, although this varies by vaccine.

## IMPLICATIONS

Even if adults are aware of the vaccines they need and feel that generally vaccine-preventable diseases are serious, they need to understand personal susceptibility and severity.

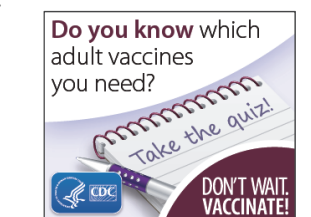
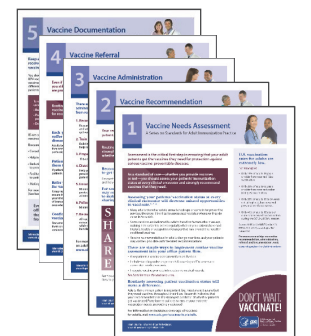
NAIIS Partners can:

Support HCPs in routinely assessing vaccine needs and making strong recommendations for all eligible adult patients.

[www.cdc.gov/vaccines/AdultStandards](http://www.cdc.gov/vaccines/AdultStandards)

Educate adults about the vaccines they need with tailored reasons why they are relevant and necessary to protect their health and their loved ones.

[www.cdc.gov/vaccines/AdultPatientEd](http://www.cdc.gov/vaccines/AdultPatientEd)



## CONTACT INFO

Aparna Ramakrishnan  
Email: [WLQ1@cdc.gov](mailto:WLQ1@cdc.gov)  
Phone: 404-831-6626

National Center for Immunization and Respiratory Diseases  
Office of Health Communication Science (HCSO)

