Results of November 2017 Influenza Vaccination Coverage Surveys

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December 7, 2017

General Population: Children and Adults

National Early Season Influenza Vaccination Coverage, United States, November 2017

- Each year CDC posts a report on FluVaxView containing national-level early season influenza vaccination coverage estimates for the general population of children and adults in the United States.
- This year's report for the 2017-18 influenza season was posted online earlier today. These slides include tables and figures from the report.
- Estimates are of influenza vaccinations received from July 1st through mid-November 2017. More details of the methods are included in the report.
- Estimates for children 6 months–17 years were obtained from the National Immunization Survey-Flu (NIS-Flu), a telephone survey.
- Estimates for adults were obtained from the National Internet Flu Survey (NIFS), a probability-based Internet panel survey.

Table 1.

Influenza (Flu) vaccination coverage by age group, National Immunization Survey-Flu and National Internet Flu Survey, United States, early 2016–17 and 2017–18 flu seasons			
Age Group	**November 2016 %[†] ± 95% CI[‡]**	**November 2017 % ± 95% CI**	**Difference from November 2016 % ± 95% CI**
Overall (≥6 months)	39.8 ± 1.5	**38.6 ± 1.3**	-1.2 ± 2.0
Children (6 months–17 years)	37.3 ± 2.5	**38.8 ± 2.1**	1.5 ± 3.3
Adults (≥18 years)	40.6 ± 1.7	**38.5 ± 1.6**	-2.1 ± 2.3

[†] All percentages in the table are weighted to the U.S. population. [‡] CI=Confidence interval half-width.

Table 2.

Flu vaccination coverage among children by age group, National Immunization Survey-Flu, United States, early 2016–17 and 2017–18 flu seasons			
Age Group	**November 2016 %[†] ± 95% CI[‡]**	**November 2017 % ± 95% CI**	**Difference from November 2016 % ± 95% CI**
All children (6 months–17 years)	37.3 ± 2.5	**38.8 ± 2.1**	1.5 ± 3.3
6 months–4 years	45.0 ± 4.2	**49.2 ± 4.2**	4.2 ± 5.9
5–12 years	39.0 ± 3.8	**39.0 ± 3.1**	0.0 ± 4.9
13–17 years	28.7 ± 4.5	**29.8 ± 3.8**	1.1 ± 5.9

[†] All percentages in the table are weighted to the U.S. population. [‡] CI=Confidence interval half-width.

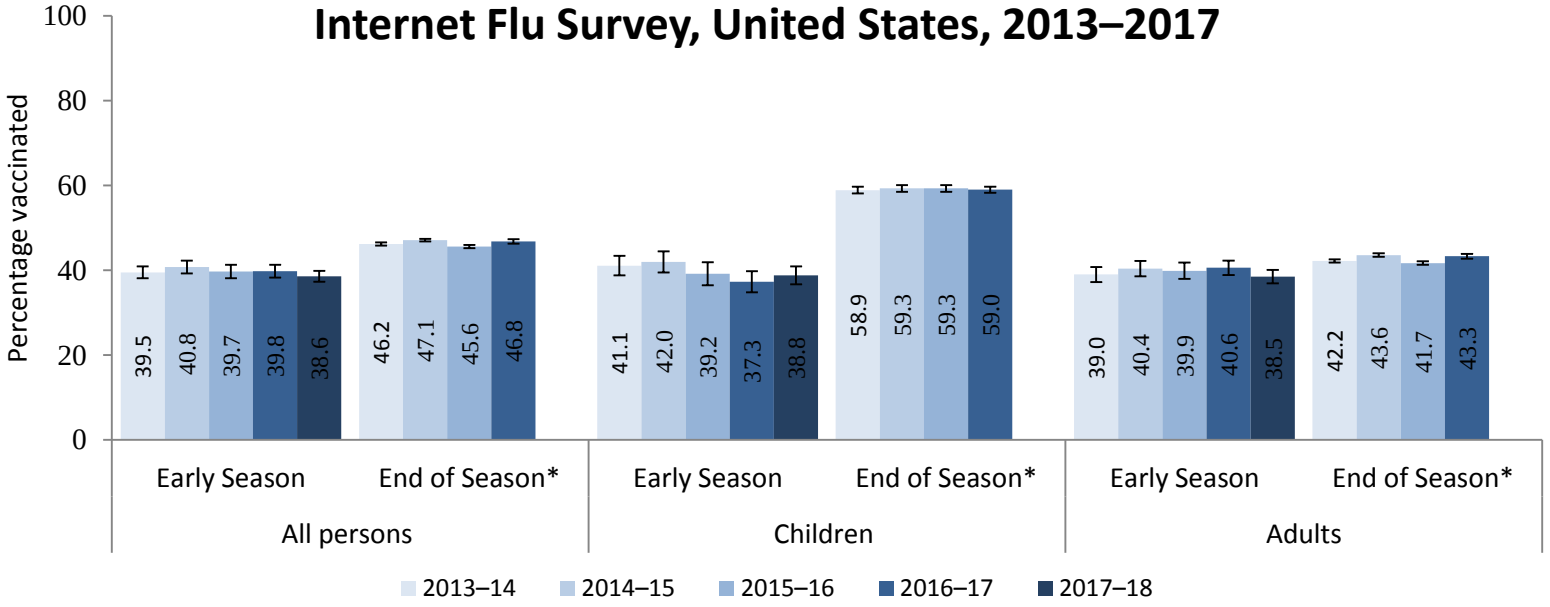
Table 3.

Flu vaccination coverage among adults by age group, National Internet Flu Survey, United States, early 2016–17 and 2017–18 flu seasons			
Age Group	**November 2016 %[†] ± 95% CI[‡]**	**November 2017 % ± 95% CI**	**Difference from November 2016 % ± 95% CI**
All adults (≥18 years)	40.6 ± 1.7	**38.5 ± 1.6**	-2.1 ± 2.3
18–49 years	34.3 ± 2.7	**30.6 ± 2.5**	-3.7 ± 3.7[§]
50–64 years	41.7 ± 2.9	**40.6 ± 2.8**	-1.1 ± 4.0
18–64 years	36.7 ± 2.0	**33.9 ± 1.9**	-2.8 ± 2.8[§]
18–64 years with high-risk conditions [‖]	43.5 ± 3.8	**40.4 ± 3.6**	-3.1 ± 5.2
18–64 years without high-risk conditions	34.0 ± 2.4	**31.3 ± 2.3**	-2.7 ± 3.3
≥65 years	56.6 ± 2.7	**56.6 ± 2.7**	0.0 ± 3.8

[†] All percentages in the table are weighted to the U.S. population. [‡] CI=Confidence interval half-width. [§] P<0.05 by t-test comparing November 2016 and November 2017 estimates [‖] Adults were considered as having a high-risk medical condition if they had ever been told by a doctor or other health professional that they had chronic asthma, a lung condition other than asthma, diabetes, heart disease (other than high blood pressure, heart murmur, or mitral valve prolapse), a kidney condition, a liver condition, obesity, sickle cell anemia or other anemia, a neurologic or neuromuscular condition that makes it difficult to cough, or a weakened immune system caused by chronic illness or by medicines such as chemotherapy, steroids, and transplant medicines taken for chronic illness such as cancer and HIV/AIDS.

Figure 1.

Early-season and end-of-season flu vaccination coverage estimates, National Immunization Survey-Flu and National Internet Flu Survey, United States, 2013–2017



* End-of-season estimates are from the National Immunization Survey-Flu for children (6 months through 17 years) and the Behavioral Risk Factor Surveillance System for adults (18 years and older) (Flu Vaccination Coverage, United States, 2016–17 Influenza Season, Flu Vaccination Coverage, United States, 2015–16 Influenza Season, Flu Vaccination Coverage, United States, 2014–15 Influenza Season, and Flu Vaccination Coverage, United States, 2013–14 Influenza Season). The 2017–18 end-of-season estimates will be available in September 2018.

Table 4.

Flu vaccination coverage among children by race and ethnicity, National Immunization Survey-Flu, United States, early 2016–17 and 2017–18 flu seasons			
Racial/Ethnic Group	**November 2016 %† ± 95% CI‡**	**November 2017 % ± 95% CI**	**Difference from November 2016 % ± 95% CI**
Children (6 months–17 years)	37.3 ± 2.5	**38.8 ± 2.1**	1.5 ± 3.3
Hispanic	39.9 ± 6.3	**41.3 ± 5.1**	1.4 ± 8.1
Non-Hispanic, white only	36.0 ± 3.2	**38.0 ± 2.8**	2.0 ± 4.3
Non-Hispanic, black only	36.8 ± 5.8	**34.6 ± 4.9**	-2.2 ± 7.6
Non-Hispanic, other/multiple races	40.1 ± 5.6	**42.7 ± 6.0**	2.6 ± 8.2

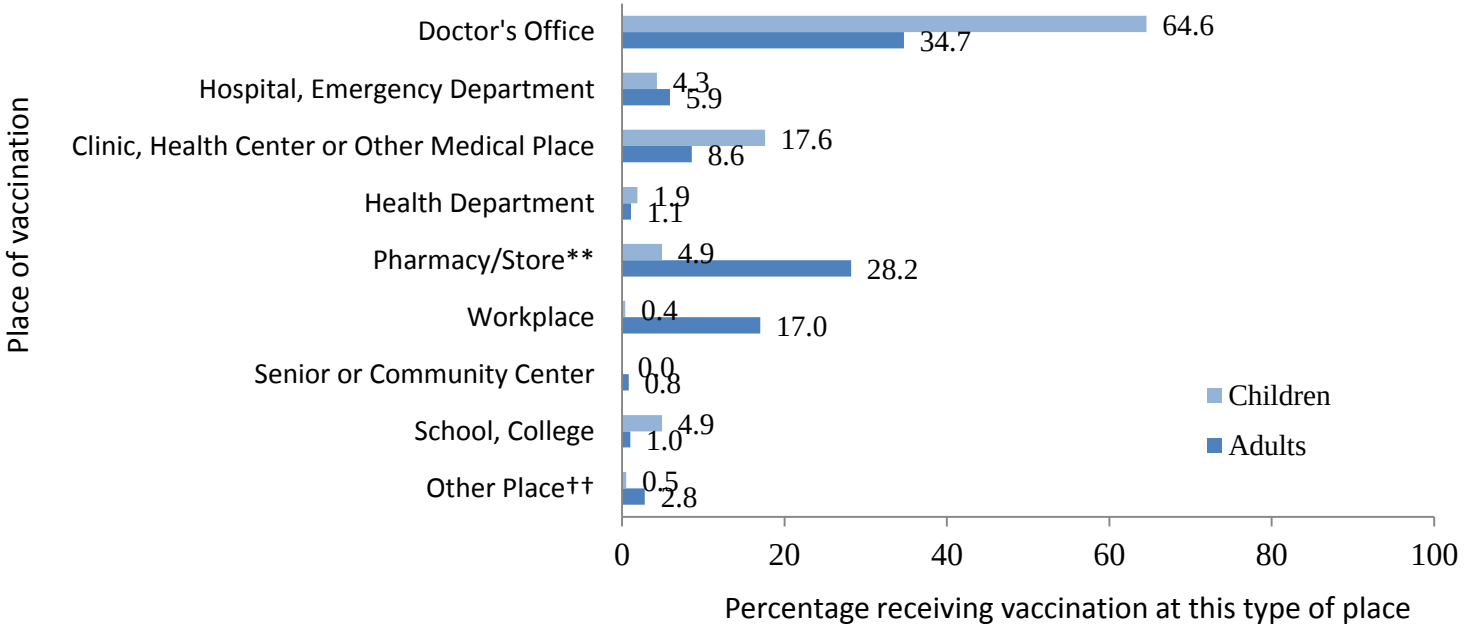
† All percentages in the table are weighted to the U.S. population. ‡ CI=Confidence interval half-width.

Table 5.

Flu vaccination coverage among adults by race and ethnicity, National Internet Flu Survey, United States, early 2016–17 and 2017–18 flu seasons			
Racial/Ethnic Group	**November 2016 %[†] ± 95% CI[‡]**	**November 2017 % ± 95% CI**	**Difference from November 2016 % ± 95% CI**
Adults (≥18 years)	40.6 ± 1.7	**38.5 ± 1.6**	-2.1 ± 2.3
Hispanic	43.5 ± 4.5	**35.8 ± 4.1**	-7.7 ± 6.1[§]
Non-Hispanic, white only	39.7 ± 2.2	**37.6 ± 2.1**	-2.1 ± 3.0
Non-Hispanic, black only	40.6 ± 4.4	**40.4 ± 4.3**	-0.2 ± 6.2
Non-Hispanic, other/multiple races	43.1 ± 5.5	**48.1 ± 5.4**	5.0 ± 7.7

[†] All percentages in the table are weighted to the U.S. population. [‡] CI=Confidence interval half-width. [§] P<0.05 by t-test comparing November 2016 and November 2017 estimates

Figure 2. Place of flu vaccination for children and adults, National Immunization Survey-Flu and National Internet Flu Survey, United States, early 2017–18 flu season



** "Pharmacy/Store" includes pharmacies or drugstores and local supermarkets or grocery stores.

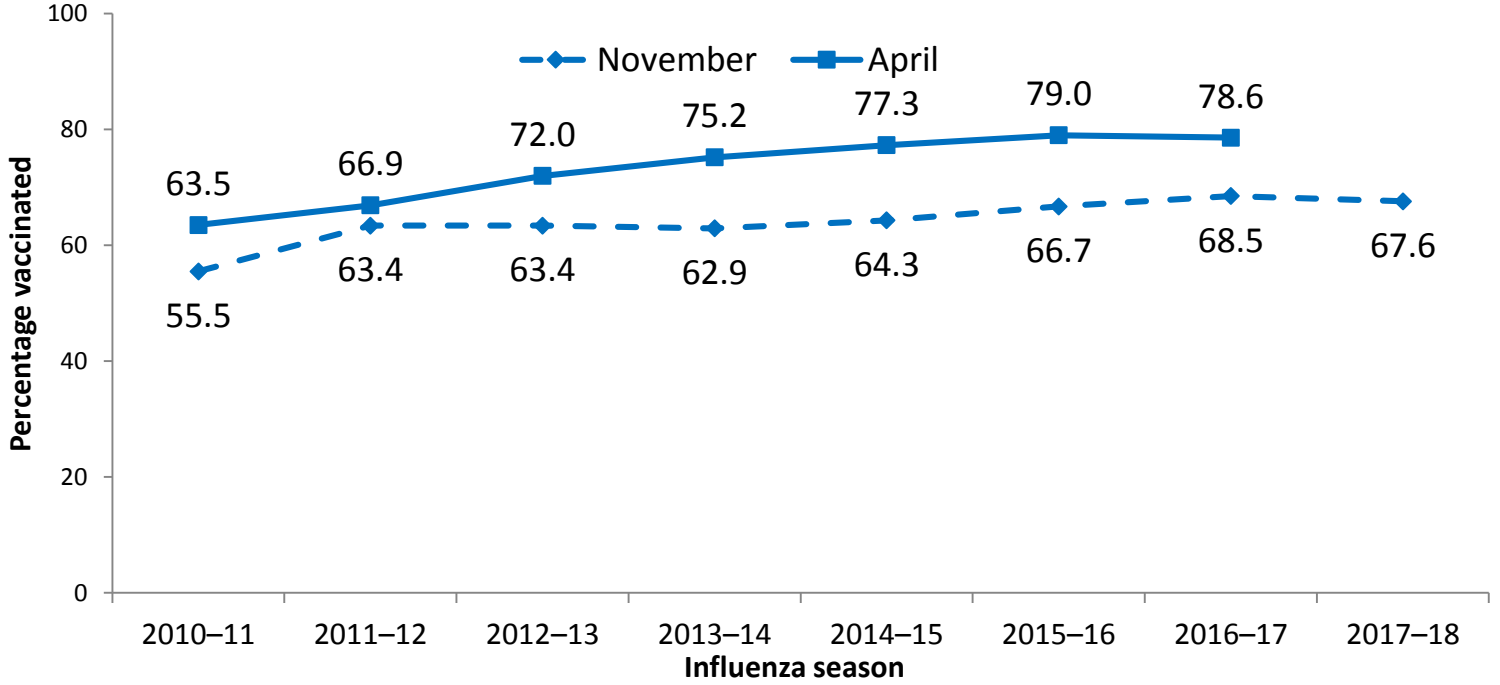
†† "Other Place" includes military-related places, other schools such as trade schools, residences, and other unspecified nonmedical places.

Health Care Personnel

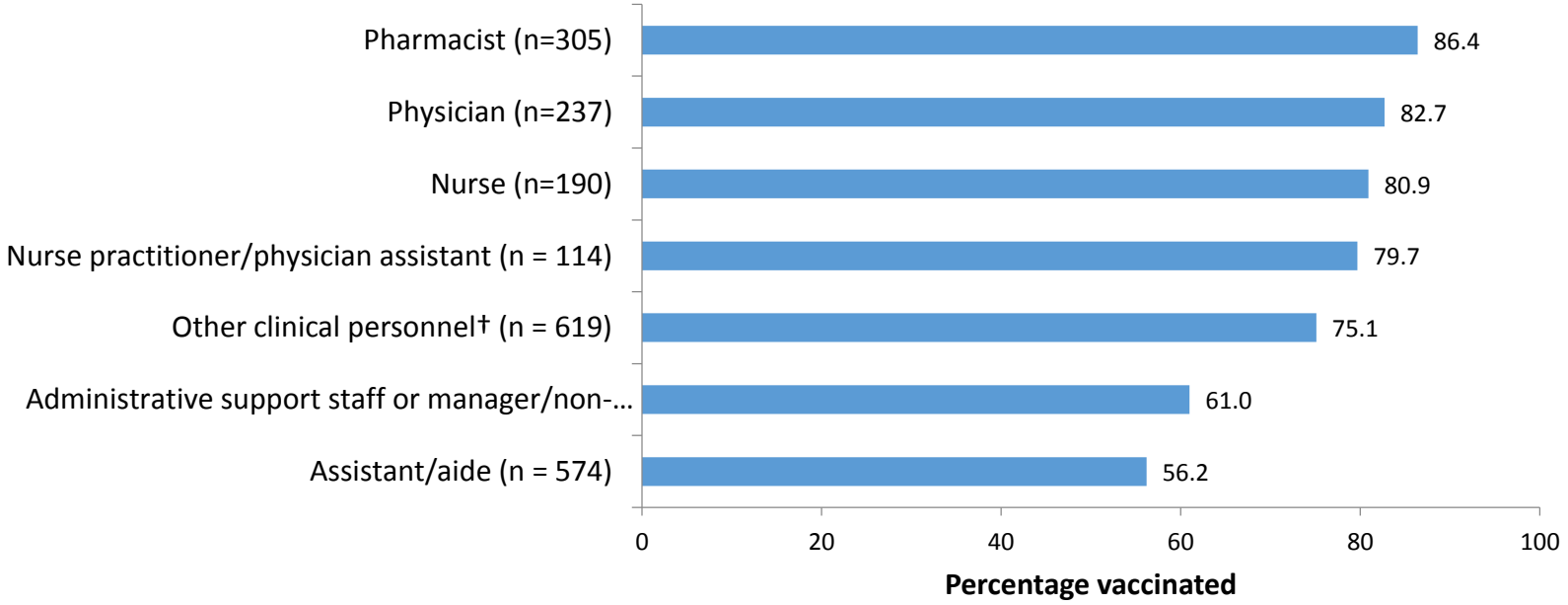
National Early Season Flu Vaccination Coverage among Health Care Personnel, United States, November 2017

- This presentation reports early estimates of national flu vaccination coverage among health care personnel (HCP).
- Data obtained from a non-probability Internet panel survey conducted among HCP from October 26 through November 10, 2017.
  - A total of 2,399 HCP were included in the survey.
  - Respondents were recruited from two sources:
    - Professional clinical personnel were recruited from the membership of Medscape
    - HCP in other occupations were recruited from a general-population Internet panel
- Final 2017–18 flu season HCP vaccination coverage estimates will be published in September 2018.

Flu vaccination coverage among health care personnel vaccinated by November and by April for 2010–11 through 2016–17 flu seasons, and by November for 2017–18 flu season, Internet panel survey, United States



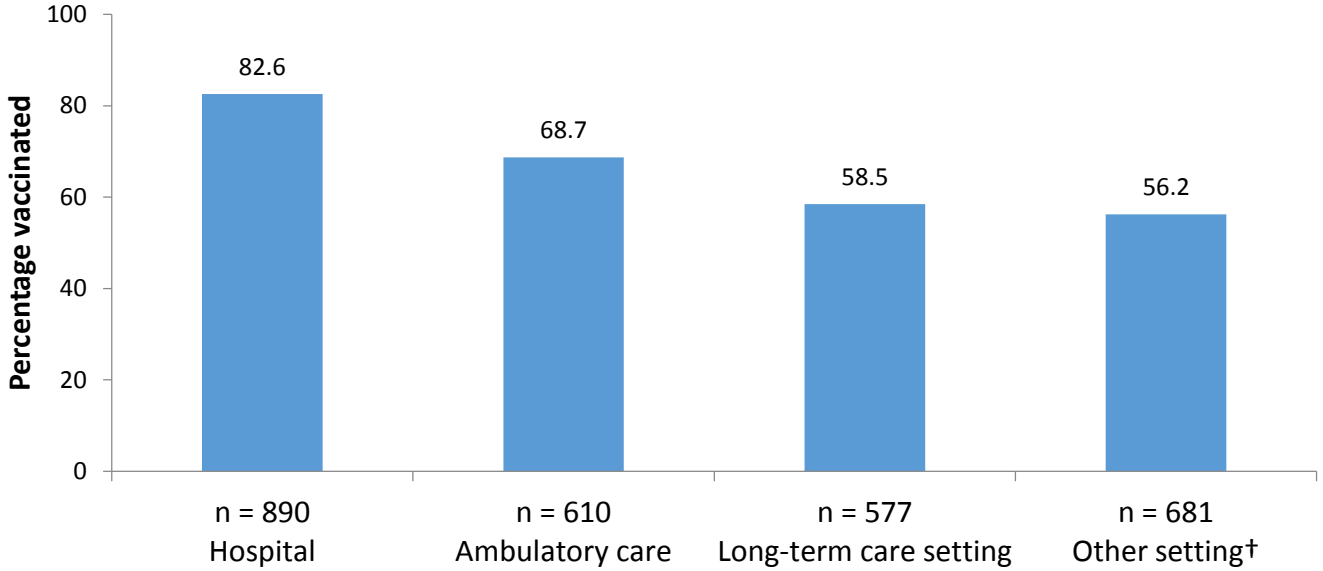
Flu vaccination coverage among health care personnel by occupation,* Internet panel survey, November 2017, United States



* 30 students are included in the overall HCP sample but are not included in any occupation category.

† Includes allied health professionals, dentists, technicians, technologists, emergency medical technicians, and paramedics.

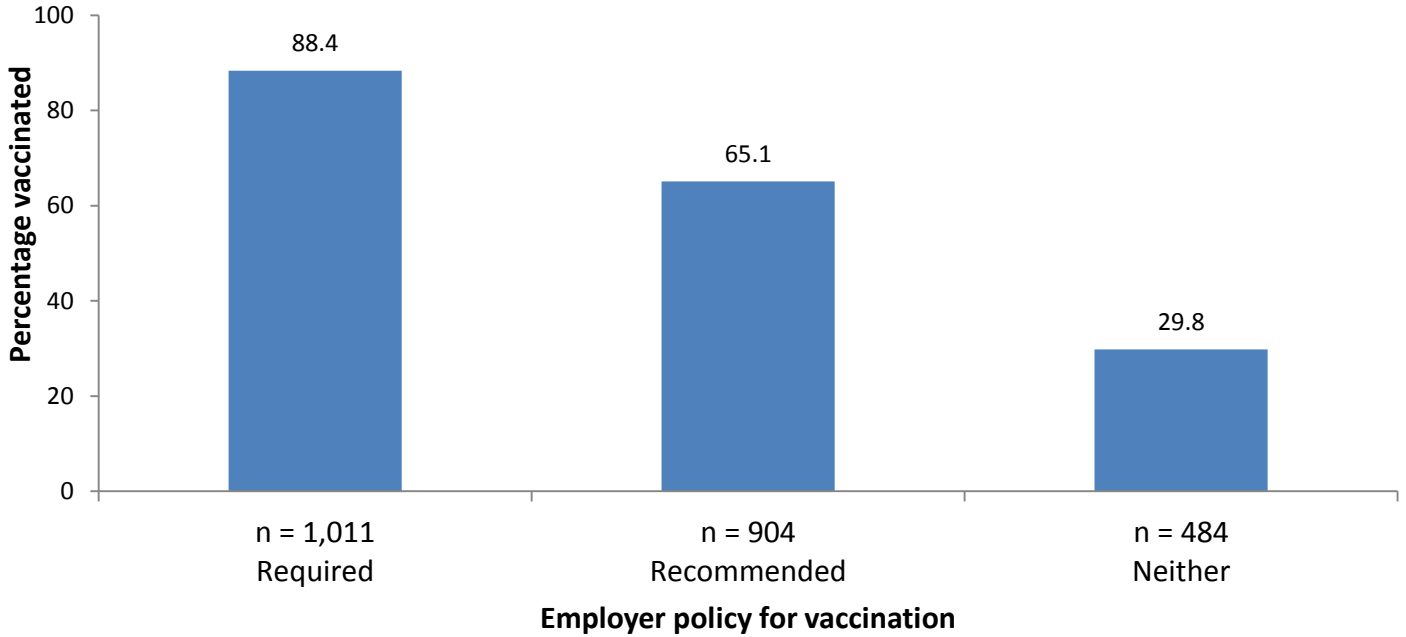
Flu vaccination coverage among health care personnel by work setting,* Internet panel survey, November 2017, United States



* Respondents could select more than one setting.

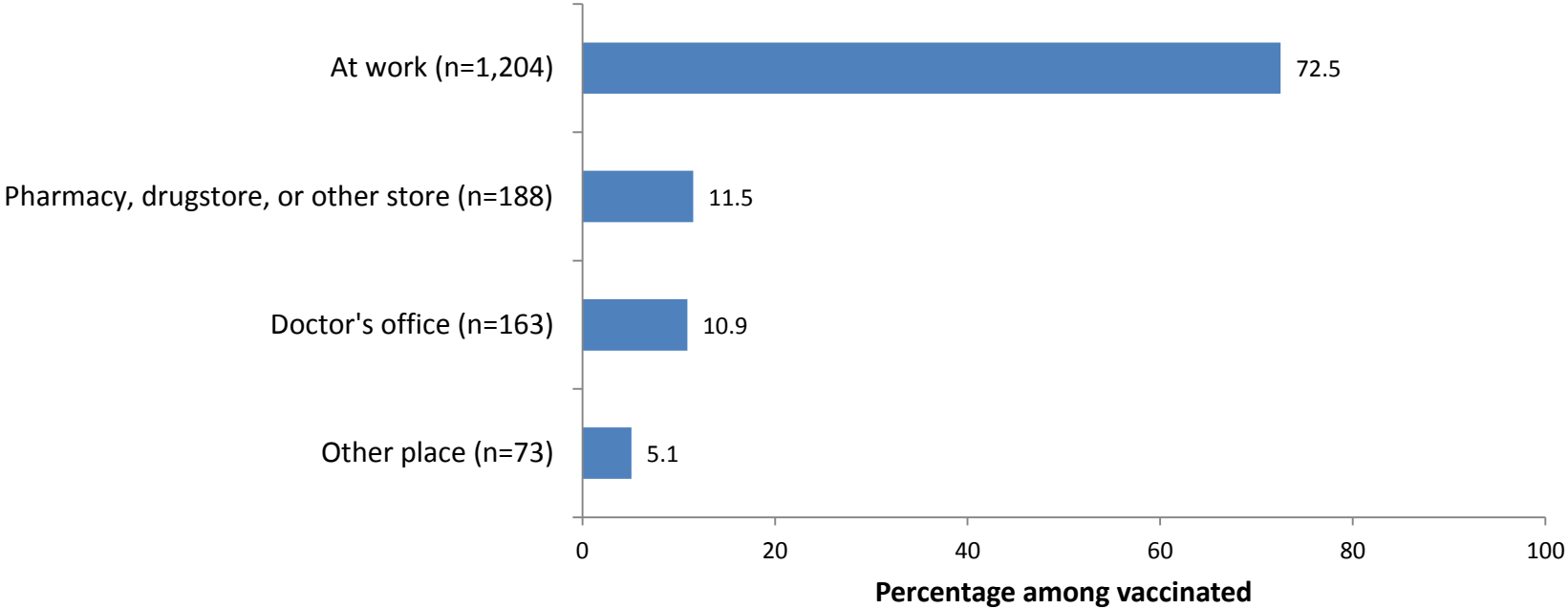
† Includes dental offices, pharmacies, emergency medical service locations, and other health care settings.

Flu vaccination coverage among health care personnel by vaccination requirement status, Internet panel survey, November 2017, United States

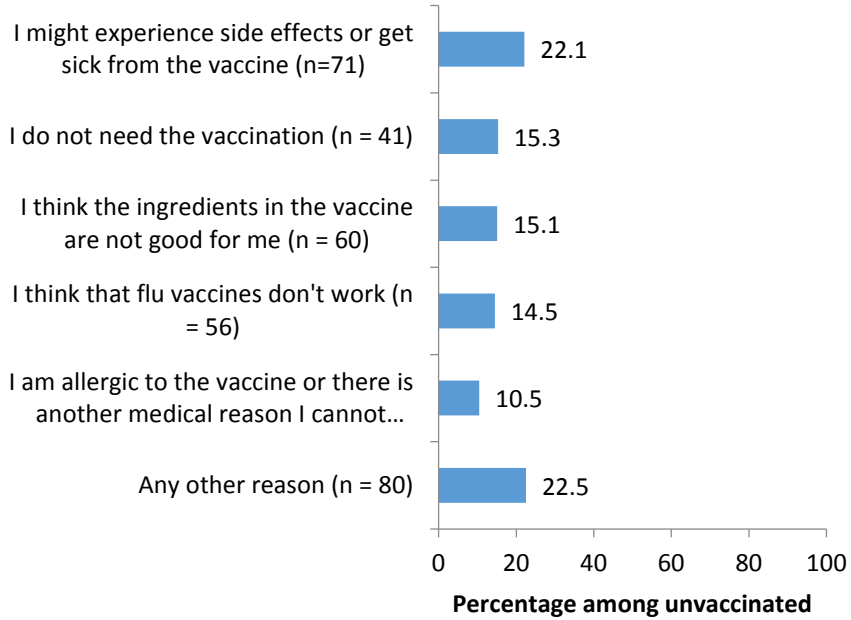


HCP working in hospitals were more likely to report an employer requirement for vaccination (66.9%) than HCP working in ambulatory care (41.7%), long-term care (28.4%), and other settings (22.4%).

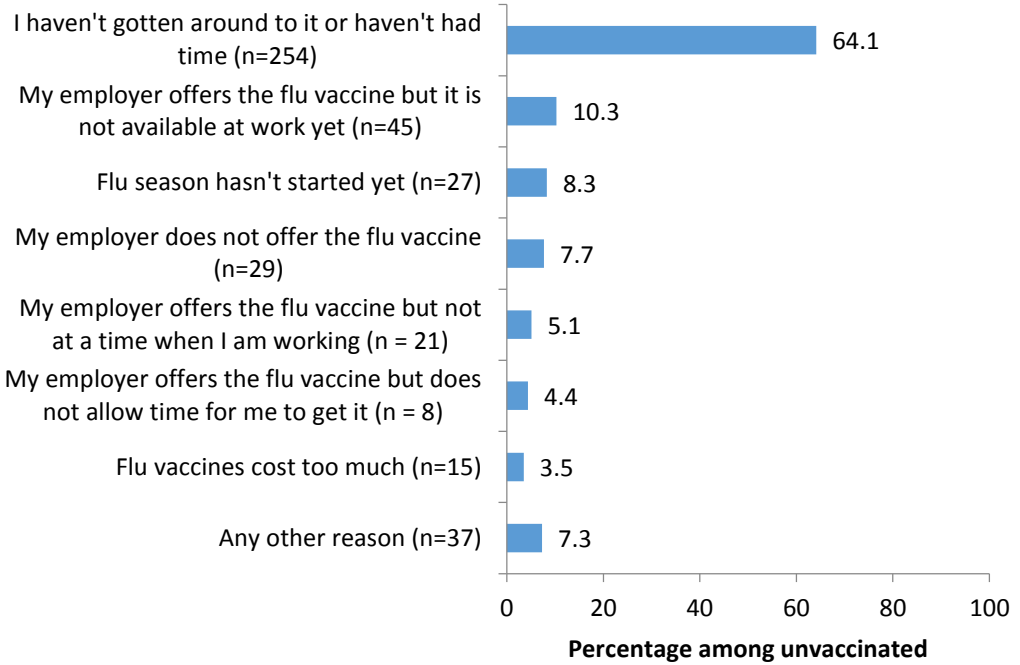
Reported place that health care personnel received flu vaccinations (n=1,664), Internet panel survey, November 2017, United States



Main reason* reported for not receiving flu vaccination among health care personnel who do not plan to get vaccinated† during the 2017–18 flu season (n=348), Internet panel survey, November 2017, United States



Reported reasons‡ for not having received flu vaccination yet among health care personnel who plan to get vaccinated§ during the 2017–18 flu season (n=387), Internet panel survey, November 2017, United States



* Single main reason.

† Includes respondents who have not received the flu vaccine since July 2017 and who reported that they probably or definitely will not be vaccinated in the 2017–18 flu season.

‡ Respondents could select more than one reason.

§ Includes respondents who have not received the flu vaccine since July 2017 and who reported that they probably or definitely will be vaccinated in the 2017–18 flu season.

Pregnant Women

National Early Season Flu Vaccination Coverage among Pregnant Women, United States, November 2017

- This presentation reports early estimates of national flu vaccination coverage among women pregnant any time since August 1, 2017.
- Data obtained from a non-probability Internet panel survey conducted November 1–8, 2017.
  - Sample included 2,254 women pregnant at the time of the survey or who had a pregnancy that ended between August 1, 2017 and the time of the survey.
  - Respondents were recruited from SurveySpot, a general-population Internet panel.
- Final 2017–18 flu season HCP vaccination coverage estimates will be published in September 2018.

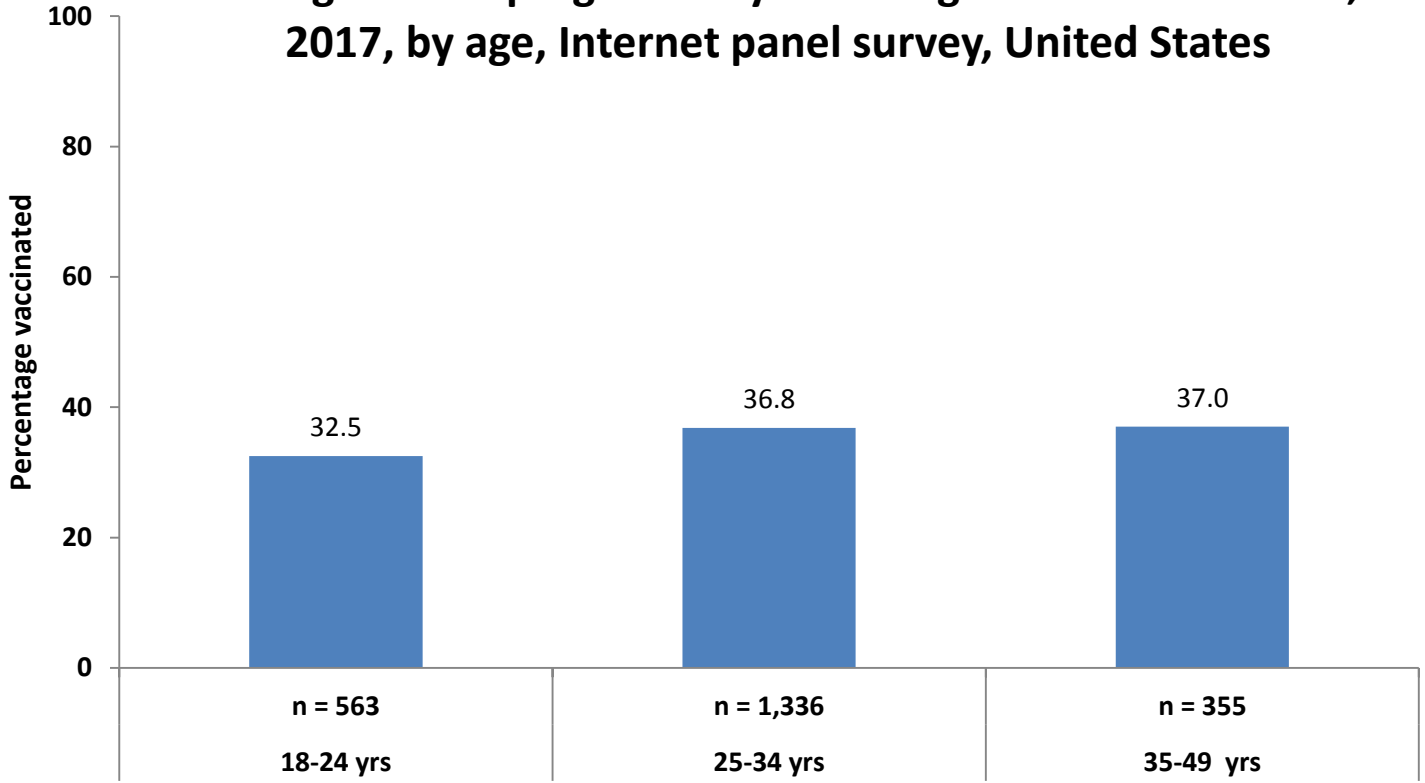
National Early Season Flu Vaccination Coverage among Pregnant Women, United States, November 2017

- Due to a change in survey methodology, comparisons of vaccination coverage from November 2017 to previous survey years cannot be made.
  - The proportion of survey respondents using a smartphone or other handheld device to participate in the survey shifted from less than 20% in 2016 to 73% in 2017.
  - Might explain the shifting of the sample to pregnant women of younger age, less education, and with public insurance compared with the last year's survey.
    - These factors have been associated with lower vaccination coverage.

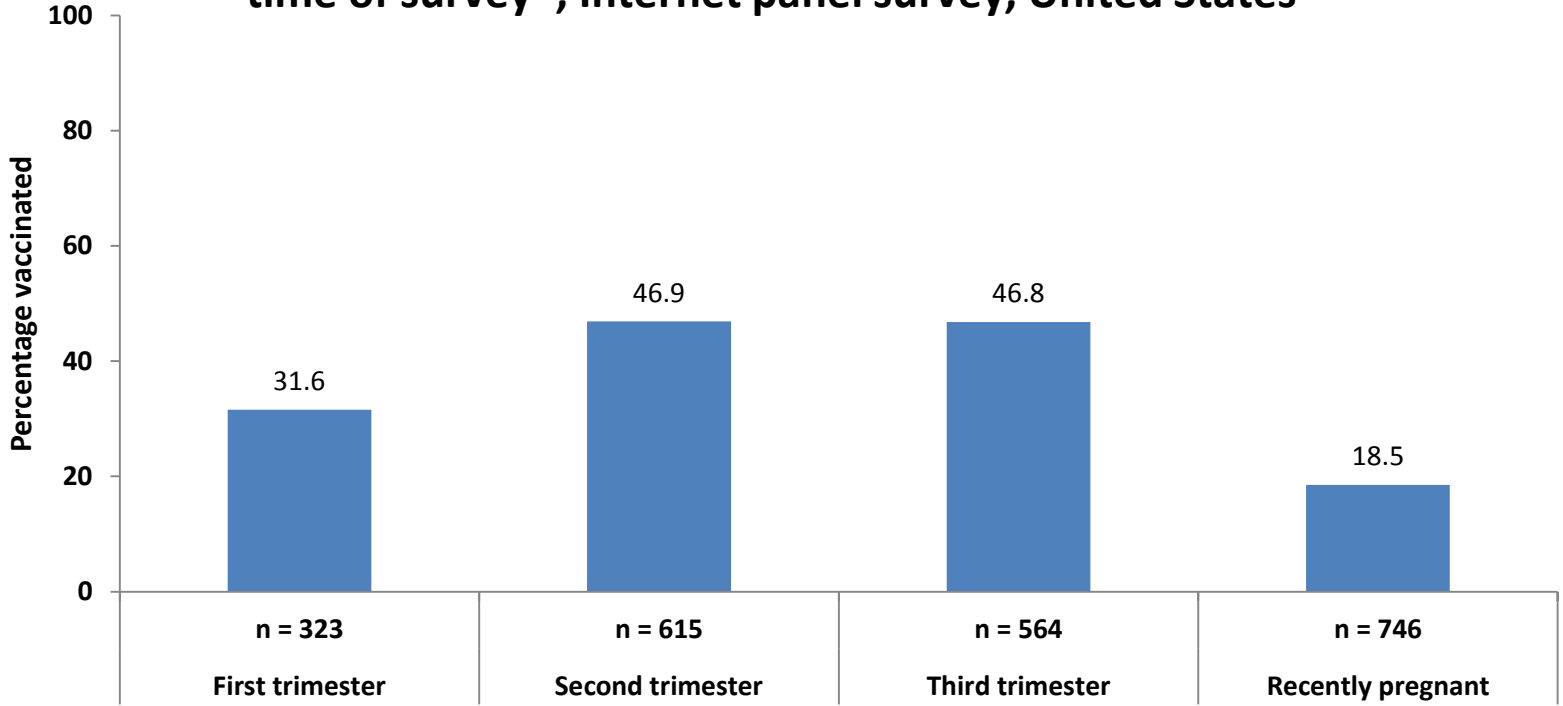
National Early Season Flu Vaccination Coverage among Pregnant Women, United States, November 2017

- **As of early November 2017, flu vaccination coverage among pregnant women was 35.6%.**
  - Includes vaccinations given before and during pregnancy since July 1, 2017.
  - Coverage has typically increased about 7-10 percentage points between November and the end of season survey in April.

Flu vaccination coverage before and during pregnancy among women pregnant any time August 1 – November 8, 2017, by age, Internet panel survey, United States

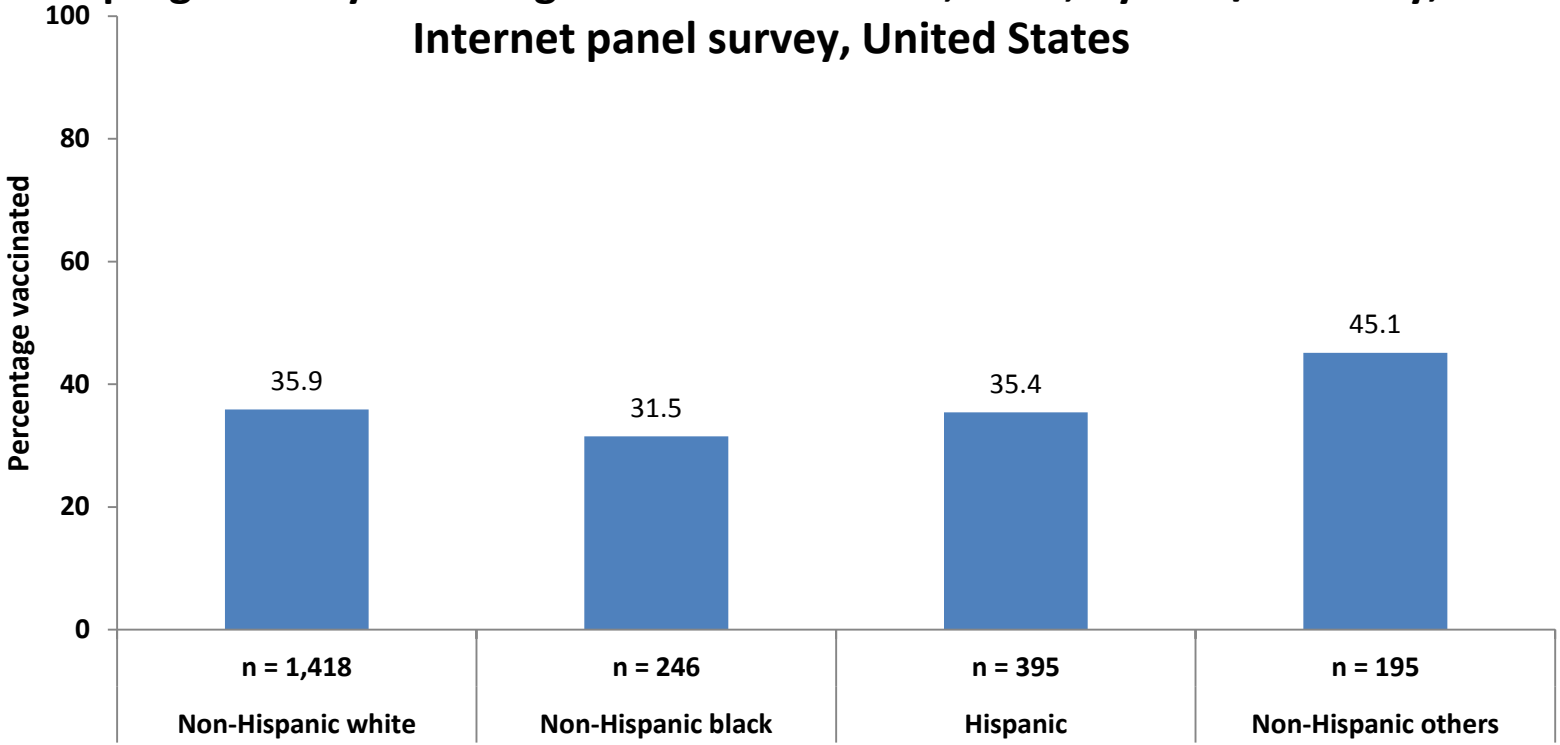


Flu vaccination coverage before and during pregnancy among women pregnant any time August 1 – November 8, 2017, by pregnancy status at time of survey*, Internet panel survey, United States

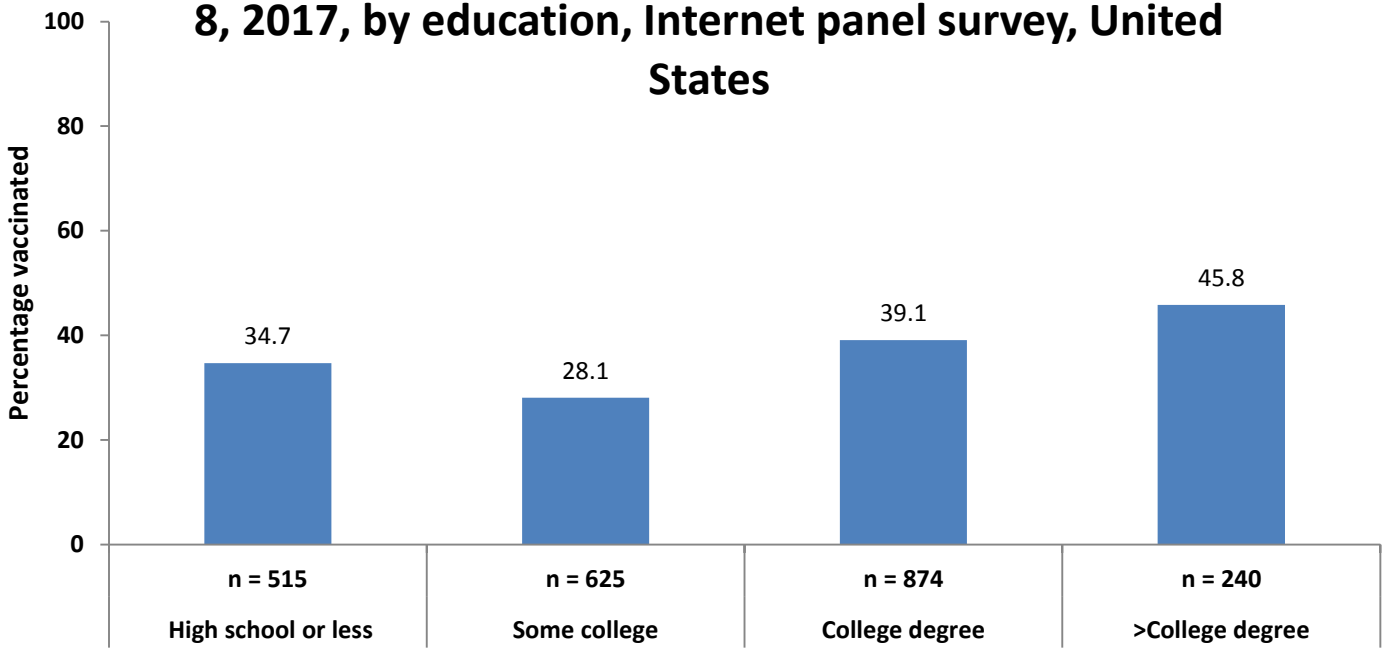


*Excludes 6 currently pregnant women with unknown trimester of pregnancy.

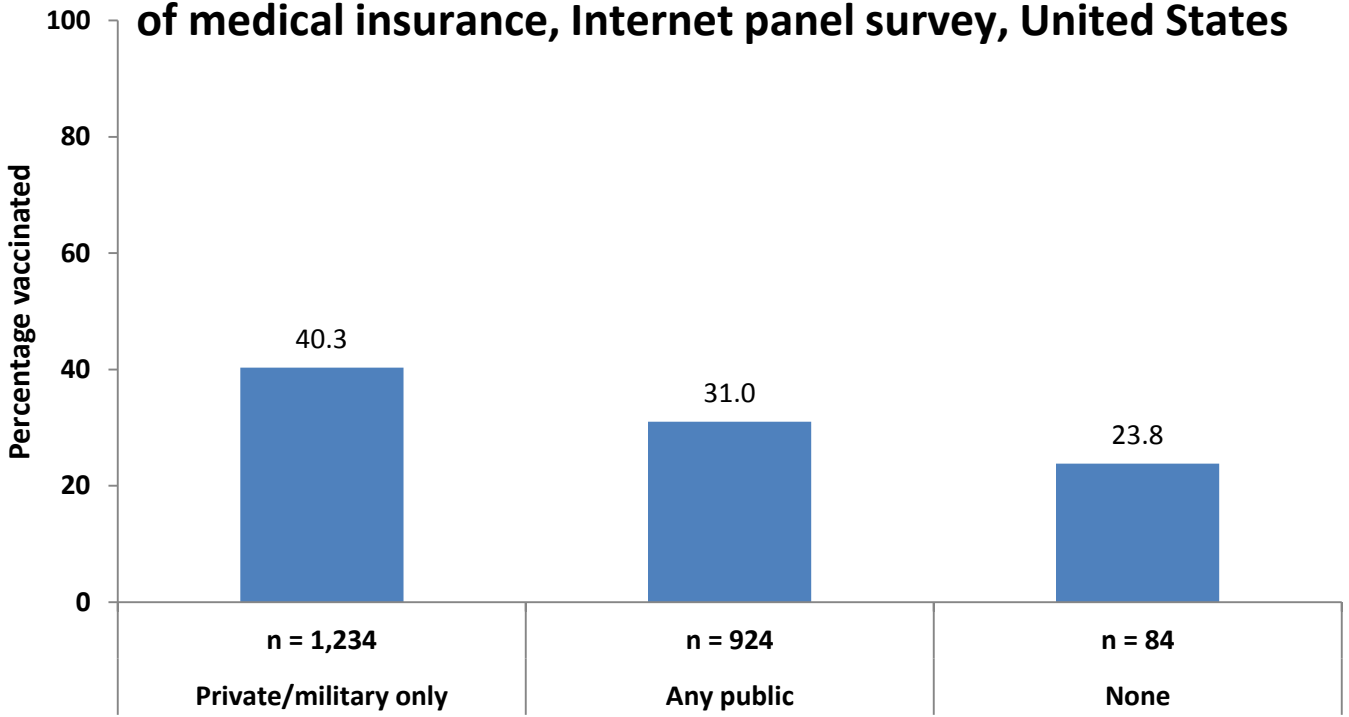
Flu vaccination coverage before and during pregnancy among women pregnant any time August 1 – November 8, 2017, by race/ethnicity, Internet panel survey, United States



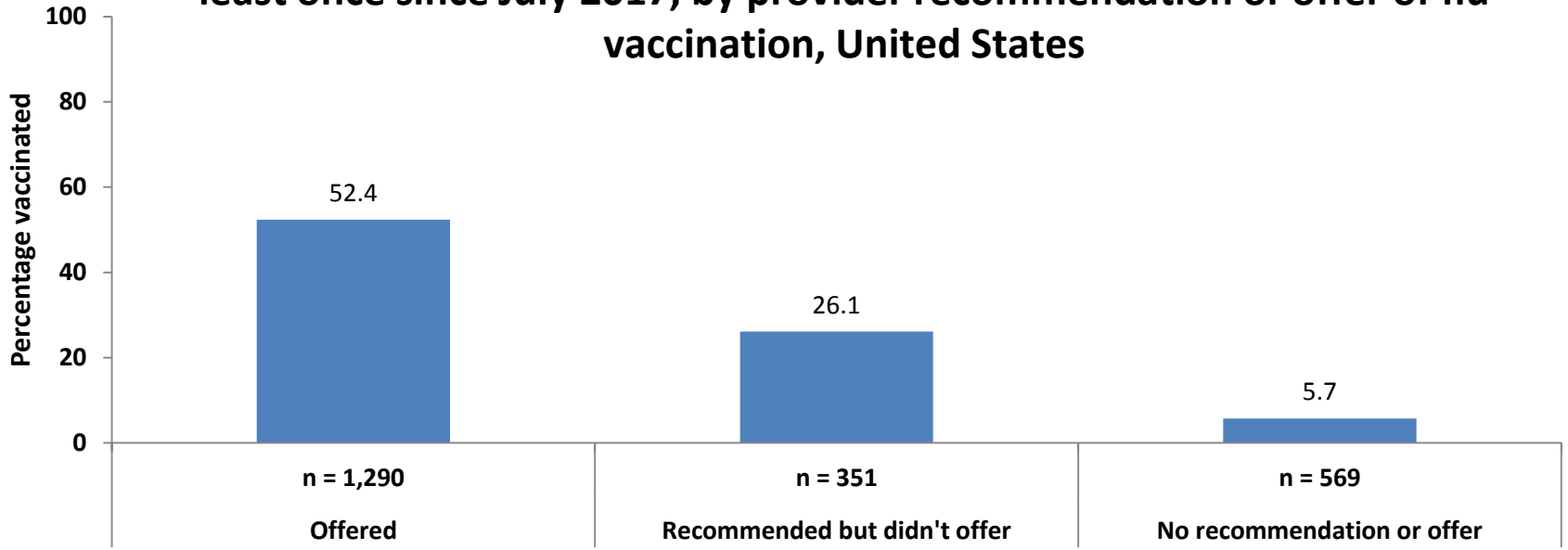
Flu vaccination coverage before and during pregnancy among women pregnant any time August 1 – November 8, 2017, by education, Internet panel survey, United States



Flu vaccination coverage before and during pregnancy among women pregnant any time August 1 – November 8, 2017, by type of medical insurance, Internet panel survey, United States

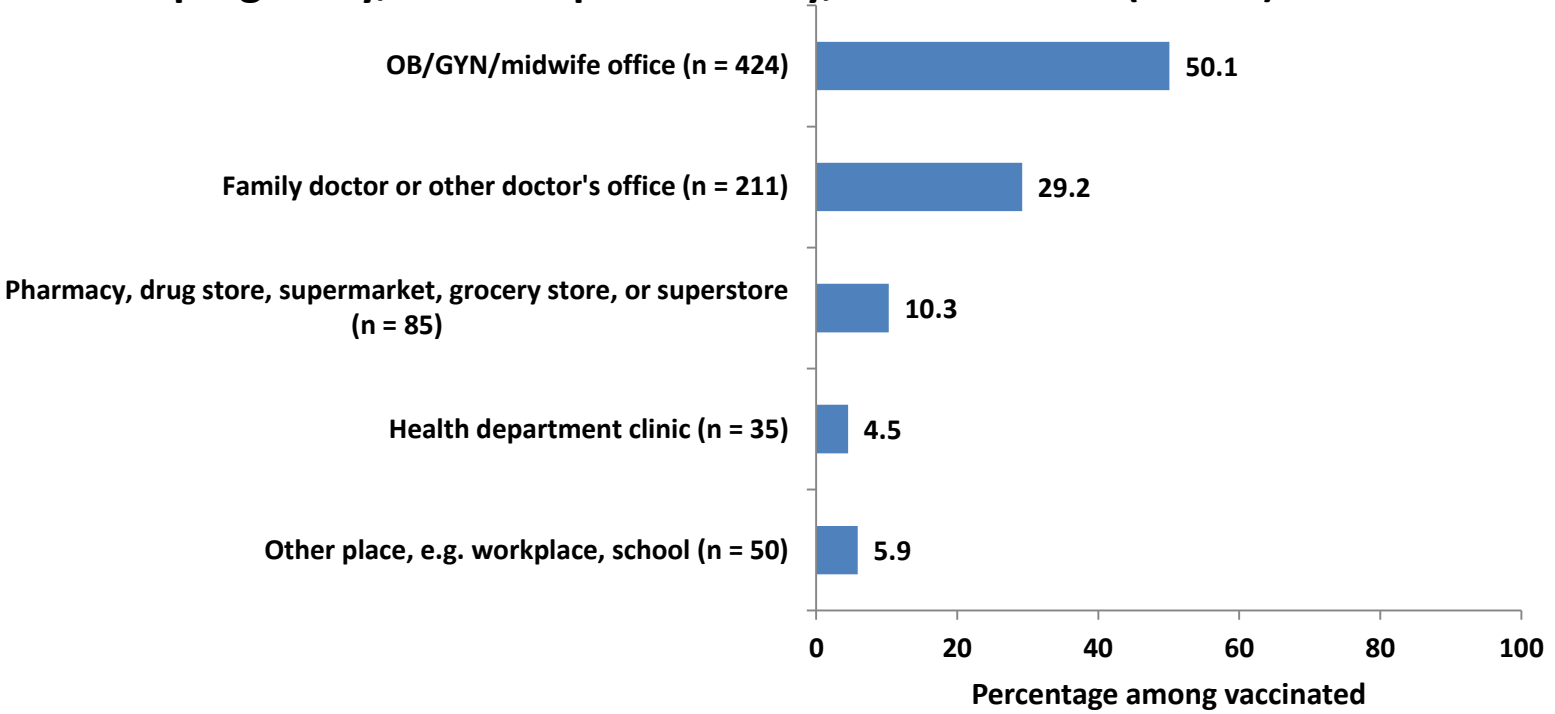


Flu vaccination coverage before and during pregnancy among women pregnant any time August 1 – November 8, 2017, and who visited a health care provider at least once since July 2017, by provider recommendation or offer of flu vaccination, United States

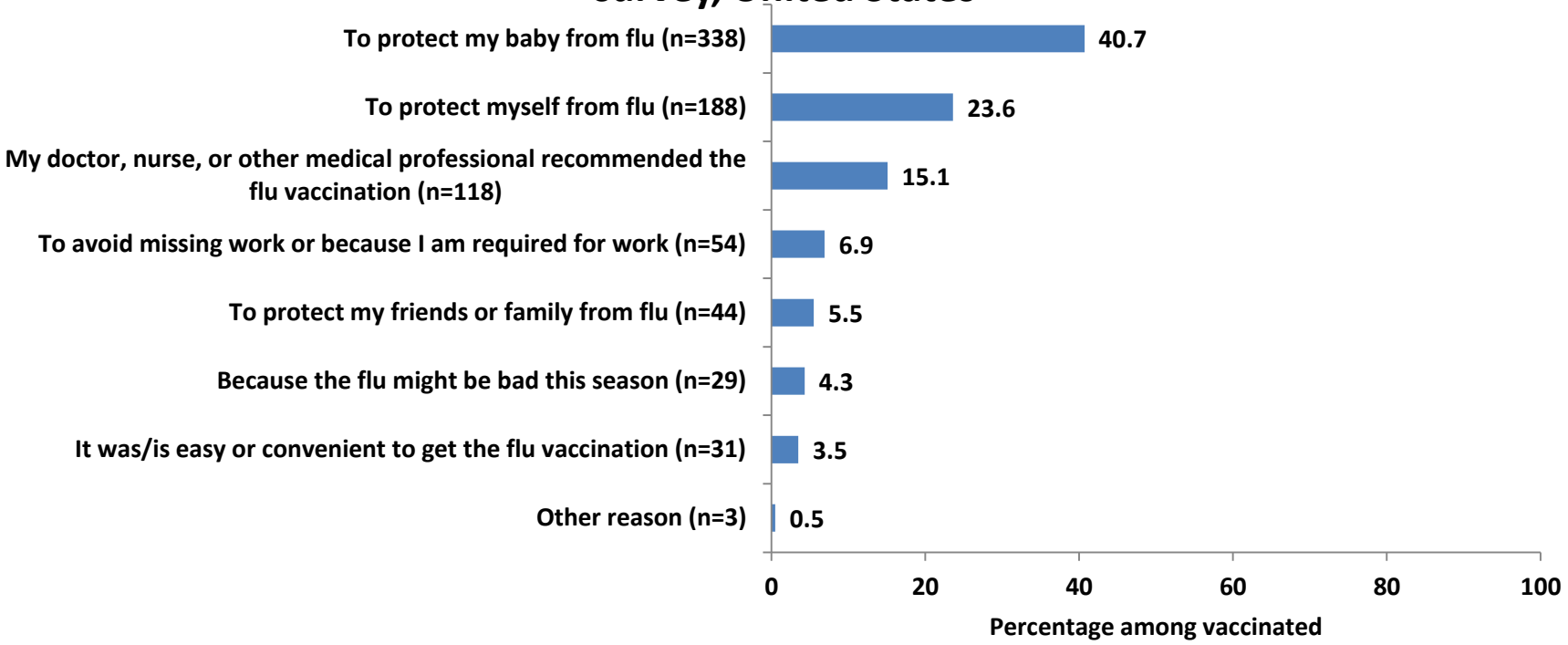


58.7% of pregnant women reported receiving a recommendation for and offer of flu vaccination from a doctor or other medical professional, 15.9% received a recommendation but were not offered the vaccine, and 25.7% did not receive a recommendation for or offer of flu vaccination.

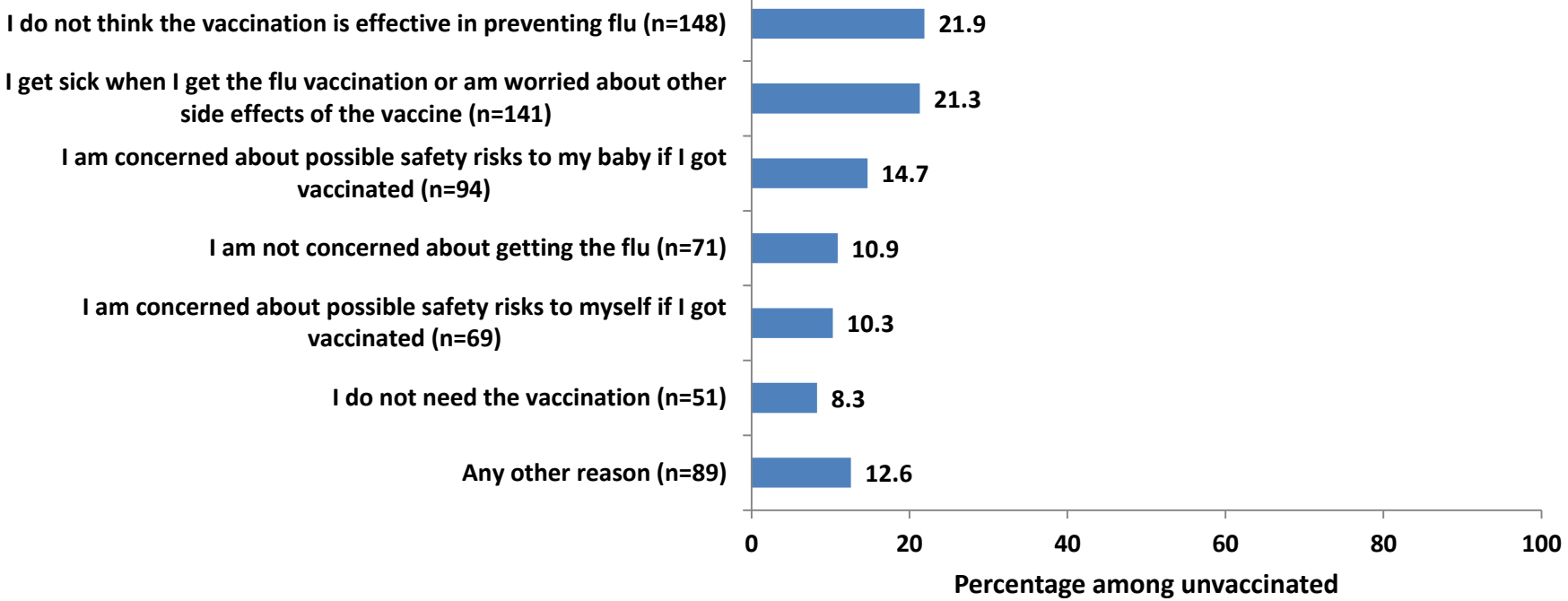
Reported place where women pregnant any time August 1–November 8, 2017, received flu vaccination before and during pregnancy, Internet panel survey, United States (n=805)



Reported main reason for receiving flu vaccination among women pregnant any time August 1 – November 8, 2017, who were vaccinated before or during pregnancy (n=805), Internet panel survey, United States

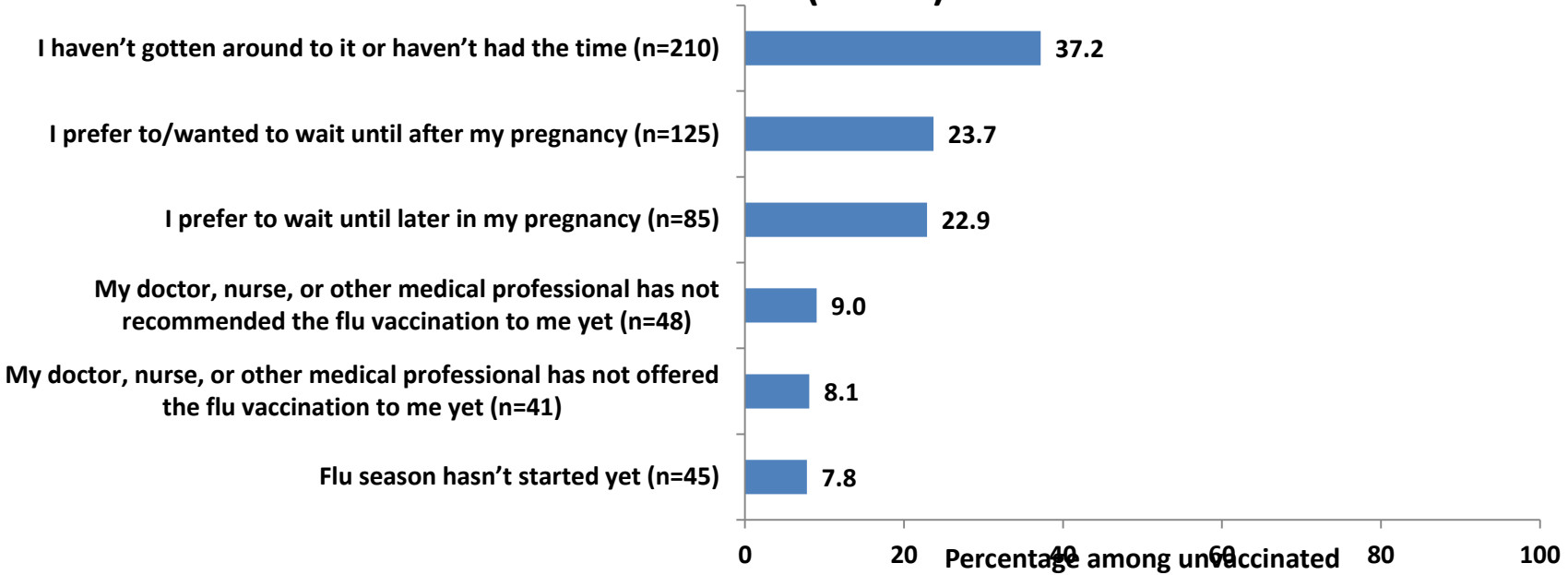


Reported main reason for not receiving flu vaccination among women pregnant any time August 1 – November 8, 2017, who do not intend* to receive flu vaccination for the rest of the flu season, Internet panel survey, United States (n=663)



*Includes unvaccinated respondents who reported that they probably or definitely do not intend to be vaccinated before the end of the flu season.

Reported reasons for not receiving flu vaccination* among women pregnant any time August 1 – November 8, 2017, who intend† to receive flu vaccination this season, Internet panel survey, United States (n=537)



* Respondents could select more than one reason.

† Unvaccinated respondents who reported that they probably or definitely intend to be vaccinated before the end of the flu season.

The full reports as well as more details about the surveys and the limitations can be found at:

https://www.cdc.gov/flu/fluvaxview/nifs-estimates-nov2017.htm

https://www.cdc.gov/flu/fluvaxview/hcp-ips-nov2017.htm

https://www.cdc.gov/flu/fluvaxview/pregnant-women-nov2017.htm

Thank you

For more information, contact CDC
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TTY: 1-888-232-6348 www.cdc.gov