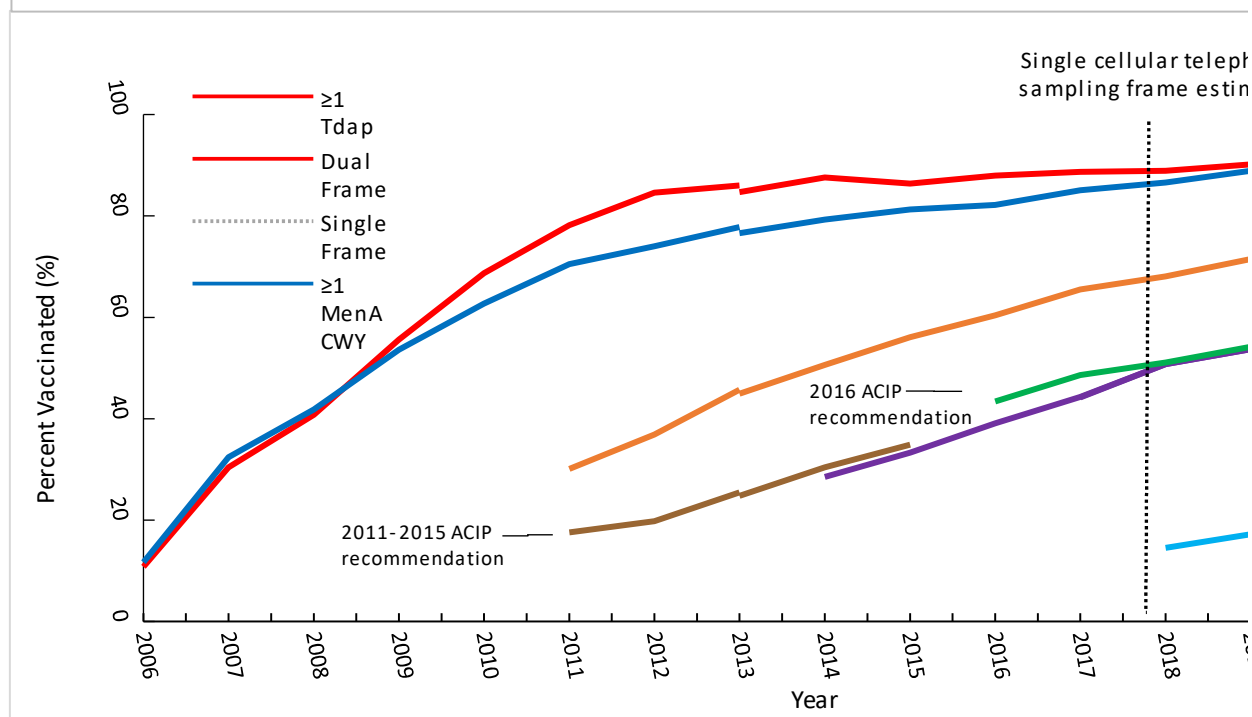


SUPPLEMENTARY FIGURE 1. Estimated vaccination coverage with selected vaccines and doses*, † among survey year — National Immunization Survey–Teen§, ¶, United States, 2006–2022



Abbreviations: ACIP = Advisory Committee on Immunization Practices; APD = adequate provider data definition; HPV = human papillomavirus; HPV UTD = HPV vaccination with adequate provider data definition; MenACWY = quadrivalent meningococcal conjugate vaccine; MenB = serogroup B meningococcal vaccine; Tdap = tetanus, diphtheria, and acellular pertussis vaccine.

calculated only among adolescents aged 17 years at time of interview. Does not include adolescents who received the HPV vaccine, nine-valent (9vHPV), quadrivalent (4vHPV) or bivalent (2vHPV). The routine ACIP recommendation for HPV vaccination was for females in 2006 and for males in 2011. Because HPV vaccination was recommended for boys in 2011, coverage for all adolescents aged 17 years is reported from 2011 forward. HPV UTD - Includes those with ≥3 doses, and those with 2 doses when the first HPV vaccine dose was initiated before the 16th birthday and the second dose was initiated within four days of the first dose.

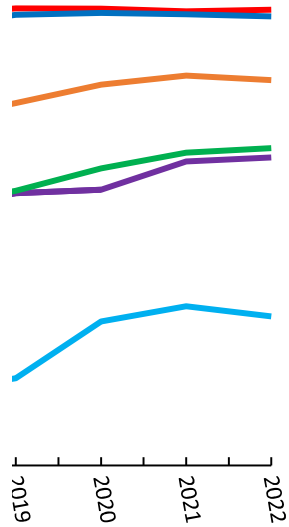
† ACIP revised the recommended HPV vaccination schedule in late 2016. The schedule changed from a 3-dose to 2-dose schedule for immunocompetent adolescents initiating the series before the 15th birthday. Three-dose schedule for adolescents initiating the series between the ages of 15 and 26 years. Because of the change in definition, the graph includes estimated HPV UTD for 2016 - 2022. Because HPV vaccination was recommended for boys in 2011, coverage for all adolescents aged 17 years is reported from 2011 forward.

§ NIS-Teen implemented a revised adequate provider data definition (APD) in 2014, and retrospectively applied the revised APD to data from 2006 to 2013. Using different APD definitions may not be directly comparable.

¶ NIS-Teen moved to a single-sample frame in 2018.

ong adolescents aged 13--17 years,

one
nates



= human papillomavirus; HPV UTD = up to date
l vaccine; Tdap = tetanus toxoid, reduced

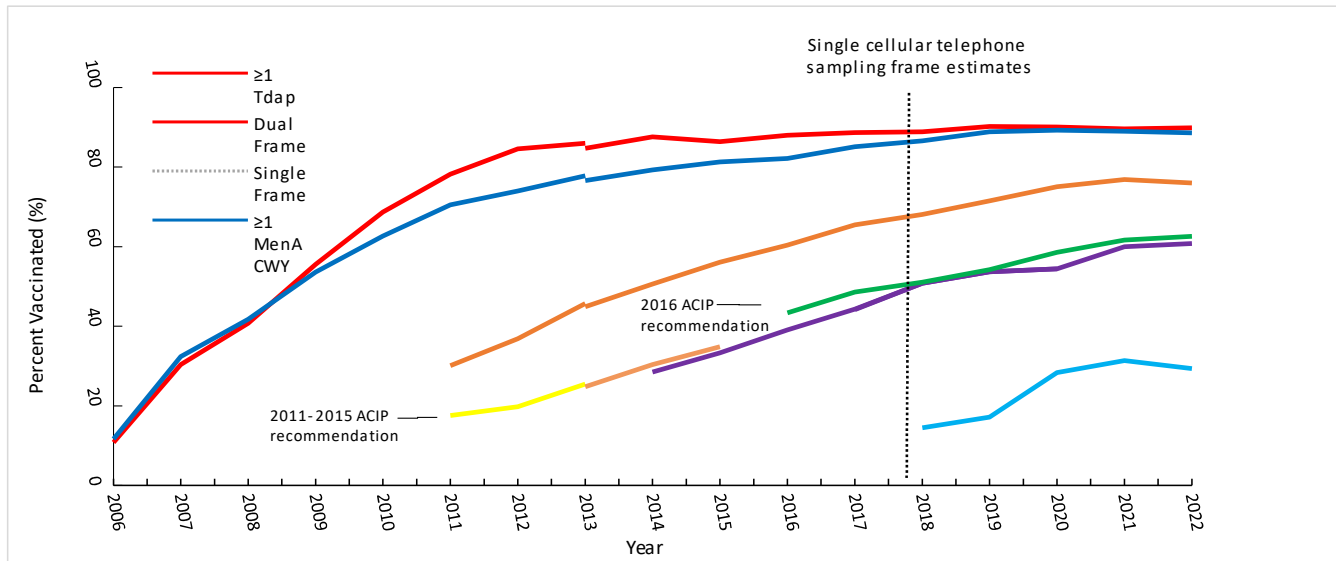
ir first and only dose of MenACWY at or after
mendation for HPV vaccination was made for
adolescents was not measured before that
efore age 15 years and at least five months

e series with appropriate spacing between
e doses are still recommended for adolescents
ates for ≥3 doses HPV from 2011 to 2015 and
adolescents was not measured before that

ised APD definition to 2013 data. Estimates

Figure 1. Estimated vaccination coverage with selected vaccines and doses among adolescents aged 13-17 years, by survey year — National Immunization Survey-Teen, United States, 2006–2022

Survey Year	≥1 Tdap	Dual Frame	Single Frame	≥1 MenACWY	Dual Frame	Single Frame	≥2 MenACWY	Dual Frame	Single Frame	≥1 HPV	Dual Frame
2006	10.8			11.7							
2007	30.4			32.4							
2008	40.8			41.8							
2009	55.6			53.6							
2010	68.7			62.7							
2011	78.2			70.5						30.1	
2012	84.6			74.0						36.9	
2013	86.0	84.7		77.8	76.6					45.7	44.9
2014		87.6			79.3				28.5		50.6
2015		86.4			81.3				33.3		56.1
2016		88			82.2				39.1		60.4
2017		88.7			85.1	85.3			44.3	44.2	65.5
2018		88.9			86.6	86.6			50.8	50.8	68.1
2019		90.2			88.9	88.9			53.7	53.7	71.5
2020		90.1			89.3	89.3			54.4	54.4	75.1
2021		89.6			89	89.0				60.0	76.9
2022		89.9			88.6	88.6				60.8	76



Abbreviations: Tdap = tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis Immunization Practices.

* ≥ 1 dose Tdap at or after age 10 years; ≥ 1 dose MenACWY or meningococcal-unknown time of interview. Does not include adolescents who received their first and only dose before the time of interview. ACIP recommendation for HPV vaccination was made for females in 2006 and for males in 2011. HPV UTD - Includes those with ≥ 3 doses, and those with 2 doses when the first dose was received before the time of interview.

† NIS-Teen implemented a revised adequate provider data definition (APD) in 2014, which is comparable to the APD used in NIS-Teen 2008-2013.

§ NIS-Teen moved to a single-sample frame in 2018 and retrospectively applied to 2013-2017.

¶ The Advisory Committee on Immunization Practices (ACIP) revised the recommendation for receipt of the 1st and 2nd dose for immunocompetent adolescents initiating the series in 2013. Because of the change in definition, the graph includes estimates for ≥ 3 doses for all adolescents was not measured before that year.

Single Frame	≥3 HPV	Dual Frame	HPV UTD	Single Frame	≥ 1 MenB
	17.6				
	19.8				
	25.5	24.8			
		30.4			
		34.9			
			43.4		
66.4			48.6		
68.1			51.1		14.5
71.5			54.2		17.2
75.1			58.6		28.4
76.9			61.7		31.4
76			62.6		29.4

MenACWY = quadrivalent meningococcal conjugate vaccine; HPV = human papillomavirus; ACIP = Advisory Committee on Immunization Practices

n type vaccine; ≥2 doses MenACWY or meningococcal-unknown type vaccine, calculated only among adolescents aged 17 years at
e of MenACWY at or after 16 years of age; HPV vaccine, nine-valent (9vHPV), quadrivalent (4vHPV) or bivalent (2vHPV). The routine
es in 2011. Because HPV vaccination was recommended for boys in 2011, coverage for all adolescents was not measured before that
HPV vaccine dose was initiated before age 15 years and at least five months minus four days elapsed between the first and second

nd retrospectively applied the revised APD definition to 2013 data. Estimates using different APD definitions may not be directly

17 data.

d HPV vaccination schedule in late 2016. The schedule changed from a 3-dose to 2-dose series with appropriate spacing between
before the 15th birthday. Three doses are still recommended for adolescents initiating the series between the ages of 15 and 26
-HPV from 2011 to 2015 and the HPV UTD estimate for 2016 - 2018. Because HPV vaccination was recommended for boys in 2011,