Table 1. Adjusted odds ratios of pertussis vaccination coverage for the first four recommended vaccines, National Immunization Survey, 2010-2011.

	Vaccine #1	Vaccine #2	Vaccine #3	Vaccine #4
Characteristic	aOR (95%CI)	aOR (95%CI)	aOR (95%CI)	aOR (95%CI)
Child's age	, ,	, , ,		,
19-23 months	Ref.	Ref.	Ref.	Ref.
24-29 months	1.06 (0.65-1.72)	1.37 (0.95-1.97)	1.43 (1.09-1.87)**	1.83 (1.56-2.13)**
30-35 months	0.77 (0.50-1.18)	1.08 (0.77-1.52)	1.26 (0.96-1.66)	2.02 (1.73-2.37)**
Race/ethnicity	()	, ,	((() () () () () ()	
Non-Hispanic White	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	1.05 (0.61-1.81)	0.74 (0.50-1.10)	0.81 (0.59-1.10)	1.03 (0.85-1.24)
Hispanic	0.72 (0.45-1.17)	0.90 (0.60-1.34)	1.06 (0.78-1.45)	1.18 (0.97-1.42)
Non-Hispanic Other	0.79 (0.42-1.47)	0.69 (0.44-1.09)	0.77 (0.53-1.10)	1.15 (0.93-1.41)
Sex	**** (****	(****	*** (**** ****)	()
Female	Ref.	Ref.	Ref.	Ref.
Male	0.91 (0.62-1.33)	0.87 (0.65-1.17)	0.84 (0.67-1.05)	0.94 (0.83-1.07)
First Born	*** (**** -***)	0.0. (0.00/)	(0.0)	0.5 1 (0.00 -101)
No	Ref.	Ref.	Ref.	Ref.
Yes	0.98 (0.62-1.53)	1.09 (0.76-1.55)	1.13 (0.83-1.54)	1.18 (0.98-1.42)
Poverty level	0.50 (0.02 1.00)	1105 (0170 1100)	1110 (0.00 1.0 1)	1110 (0190 1112)
Below	Ref.	Ref.	Ref.	Ref.
Above, ≤\$75K	1.51 (0.95-2.41)	1.28 (0.88-1.86)	1.20 (0.90-1.59)	1.21 (1.02-1.43)**
Above, >\$75K	1.56 (0.81-3.03)	1.80 (1.07-3.00)**	1.64 (1.11-2.43)**	1.31 (1.04-1.65)**
Number of children in HH	1.30 (0.01 3.03)	1.00 (1.07 3.00)	1.04 (1.11 2.43)	1.31 (1.04 1.03)
1	Ref.	Ref.	Ref.	Ref.
2-3	1.16 (0.66-2.01)	1.03 (0.64-1.65)	0.93 (0.62-1.40)	0.93 (0.74-1.16)
2 3 ≥4	1.02 (0.47-2.19)	0.71 (0.39-1.28)	0.61 (0.37-1.00)**	0.58 (0.44-0.78)**
Mother's age	1.02 (0.47-2.17)	0.71 (0.57-1.20)	0.01 (0.57-1.00)	0.56 (0.44-0.76)
≤19 years	Ref.	Ref.	Ref.	Ref.
20-29 years	1.66 (0.47-5.78)	0.90 (0.27-2.93)	0.65 (0.25-1.73)	0.92 (0.62-1.38)
≥30 years	2.05 (0.57-7.31)	1.13 (0.34-3.74)	0.90 (0.34-2.41)	1.20 (0.80-1.82)
Mother's marital status	2.03 (0.37-7.31)	1.13 (0.34-3.74)	0.90 (0.34-2.41)	1.20 (0.60-1.62)
Not married	Ref.	Ref.	Ref.	Ref.
Married	0.92 (0.57-1.50)	0.84 (0.60-1.18)	0.88 (0.68-1.13)	0.95 (0.80-1.13)
Mother's education	0.92 (0.37-1.30)	0.04 (0.00-1.10)	0.00 (0.00-1.13)	0.93 (0.60-1.13)
≤12 years	Ref.	Ref.	Ref.	Ref.
>12 years, not grad	0.80 (0.52-1.24)	0.94 (0.65-1.34)	1.13 (0.67-1.05)	1.01 (0.85-1.18)
College graduate	0.80 (0.32-1.24)	0.94 (0.03-1.54)	1.02 (0.72-1.45)	1.23 (1.01-1.48)**
Provider type	0.62 (0.40-1.43)	0.97 (0.39-1.37)	1.02 (0.72-1.43)	1.23 (1.01-1.40)
All public	Ref.	Ref.	Ref.	Ref.
All hospitals	0.24 (0.14-0.43)**	0.42 (0.27-0.65)**	0.62 (0.44-0.88)**	1.00 (0.79-1.27)
All private	2.02 (1.02-3.99)**	1.44 (0.93-2.21)	1.61 (1.19-2.19)**	1.56 (1.27-1.92)**
Other/mixed	0.58 (0.31-1.07)	0.86 (0.54-1.36)	1.11 (0.79-1.57)	1.37 (1.07-1.76)**
	0.30 (0.31-1.07)	0.00 (0.34-1.30)	1.11 (0.79-1.37)	1.37 (1.07-1.70)***
Mobility status Did not move	Ref.	Ref.	Ref.	Ref.
			0.58 (0.41-0.82)**	
Moved from different state	1.66 (1.01-2.73)**	1.00 (0.60-1.66)	0.38 (0.41-0.82)**	0.57 (0.45-0.73)**
Insurance Uninsured	Pof	Dof	Ref.	Ref.
Has health insurance	Ref. 1.83 (1.05-3.20)**	Ref. 1.56 (1.00-2.45)**	1.90 (1.36-2.67)**	1.85 (1.45-2.36)**
Significant 95% confidence in	· · ·	1.30 (1.00-2.43)*	1.90 (1.30-2.07)	1.03 (1.43-2.30)***

^{**}Significant 95% confidence interval.

Predictors of pertussis vaccination among children aged 19-35 months in the United States, 2010-2011

Richard W. DeClue, MPH Sarah Patrick, PhD, MPH Jing Wang, PhD

Contact: rdeclue2@slu.edu



References

- 1. Centers for Disease Control and Prevention (CDC). (2013). Pertussis (Whooping Cough): Surveillance & Reporting. Retrieved from http://www.cdc.gov/pertussis/surv-reporting.html.
- 2. Centers for Disease Control and Prevention (CDC). (2013). Pertussis (Whooping Cough): Pertussis Cases by Year (1922-2012). Retrieved from http://www.cdc.gov/pertussis/surv-reporting/cases-by-year.html.
- 3. Broder, K.R., et al., Preventing tetanus, diphtheria, and pertussis among adolescents: use of tetanus toxoid, reduced diphtheria toxoid and acellular pertussis vaccines recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR Recomm Rep, 2006. 55(RR-3): p. 1-34.
- 4. Centers for Disease Control and Prevention (CDC). Pertussis vaccination: use of acellular pertussis vaccines among infants and young children. Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR Recomm Rep, 1997. 46(RR-7): p. 1-25
- 5. U.S. Department of Health and Human Services (DHHS). National Center for Health Statistics. The 2010 National Immunization Survey, Hyattsville, MD: Centers for Disease Control and Prevention, 2011.
- 6. U.S. Department of Health and Human Services (DHHS). National Center for Health Statistics. The 2011 National Immunization Survey, Hyattsville, MD: Centers for Disease Control and Prevention, 2012.
- 7. Byrd, K.K., T.A. Santibanez, and S.S. Chaves, Predictors of hepatitis A vaccination among young children in the United States. Vaccine, 2011. 29(17): p. 3254-9.
- 8. Centers for Disease Control and Prevention (CDC). National, state, and local area vaccination coverage among children aged 19-35 months--United States, 2011. MMWR Morb Mortal Wkly Rep, 2012. 61: p. 689-96.