Table S1: Descriptive statistics

Survey Wave 1 variable	Survey Wave 1		Survey Wave 2		Survey Wave 3	
	Invitees completing in September 2011 (*N*=357)	Invitees not completing in September 2011 (*N*=224)[a]	Survey Wave 1 participants completing (*N*=338)	Survey Wave 1 participants not completing (*N*=19)	Survey Wave 1 participants completing (*N*=216)	Survey Wave 1 participants not completing (*N*=141)
Mean (SD) age	49.45 (15.41)	43.87*** (15.44)	49.79 (15.27)	43.42^{+} (17.04)	53.27 (13.26)	43.60*** (16.64)
Percent (N) female	50.98% (182)	54.46% (122)	50.59% (171)	57.89% (11)	51.85% (112)	49.65% (70)
Percent (N) with college education	45.66% (163)	35.71%* (80)	45.56% (154)	47.37% (9)	50.46% (109)	38.30%* (54)
Percent (N) white	88.52% (316)	79.46%** (178)	88.17% (298)	94.74% (18)	89.81% (194)	86.52% (122)
Mean (SD) reported social circle vaccine coverage (0-100%)	36.59% (26.42)	37.77% (28.44)	36.87% (26.69)	31.45% (20.79)	36.47% (25.69)	36.77% (27.58)
Mean (SD) perceived flu risk without vaccination (0-100%)	32.54% (25.69)	30.44% (23.72)	32.49% (25.64)	32.90% (26.78)	31.87% (24.94)	33.58% (26.85)
Mean (SD) perceived flu risk with vaccination (0-100%)	19.65% (22.54)	22.77% (22.57)	19.22% (21.98)	27.42% (30.61)	19.17% (22.33)	20.40% (22.91)
Mean (SD) perceived vaccine safety (1-7)	4.22 (2.39)	3.78^{+} (2.44)	4.24 (2.38)	4.24 (2.38)	4.18 (2.41)	4.28 (2.37)
Percent (N) who reported vaccinating in 2010-11 flu season	42.86% (153)	35.12%$^{+}$ (59)	43.79% (148)	26.32% (5)	44.91% (97)	39.72% (56)
Percent (N) who reported vaccinating in 2009-10 flu season	42.58% (152)	29.81%** (48)	42.90% (145)	36.84% (7)	43.06% (93)	41.84% (59)

[a]Number of participants who had missing data varied across the variables.

Note: Differences between groups were tested by *t*-tests for reported means, and by chi-square tests for reported percentages. $^{+}$ $p<.10$; * $p<.05$; ** $p<.01$; *** $p<.001$

Table S2: Logistic regressions predicting reported vaccination behavior for the 2010-11 flu season (Odds Ratio; 95% confidence interval)

Predictor and control variables	Model 1A	Model 1B	Model 2A	Model 2B
Social circle vaccine coverage in 2010-11 flu season (0-100%)	1.05*** (1.03, 1.06)	1.04*** (1.02, 1.06)	1.03*** (1.01, 1.05)	1.03** (1.01, 1.05)
Perceived flu risk without vaccination (0-100%)		1.04***[a] (1.03, 1.06)	-	1.04***[a] (1.02, 1.06)
Perceived flu risk with vaccination (0-100%)		.97** (.95, .99)	-	.98 (.96, 1.01)
Perceived vaccine safety (1-7)		1.24**[b] (1.06, 1.44)	-	1.10 (.90, 1.34)
Age	1.06*** (1.03, 1.08)	1.06*** (1.03, 1.09)	1.05*** (1.01, 1.09)	1.05* (1.01, 1.09)
Female	1.52 (.78, 2.95)	1.21 (.56, 2.59)	1.41 (.59, 3.38)	1.03 (.40, 2.68)
College Education	2.24* (1.14, 4.37)	2.45* (1.10, 5.45)	1.02 (.41, 2.52)	1.02 (.37, 2.83)
White	.65 (.22, 1.93)	.38 (.11, 1.32)	1.05 (.24, 4.60)	.83 (.15, 4.45)
Past vaccination behavior in 2009-10 flu season			31.60*** (12.90, 77.40)	25.86*** (9.68, 69.10)
Nagelkerke R^2	.38	.53	.67	.71

+ $p<.10$; * $p<.05$; ** $p<.01$; *** $p<.001$

[a] Mediated the relationship between perceived 2010-11 social circle vaccine coverage and predicted vaccination behavior ($p<.05$)

[b] Mediated the relationship between perceived 2010-11 social circle vaccine coverage and predicted vaccination behavior ($p<.10$)

Note: Analyses repeat those from Table 2, while limiting the sample to those 215 participants who completed all survey waves, as well as Survey Wave 1 in September 2011. All dependent and independent variables were reported in Survey Wave 1 in September 2011 before vaccine uptake among US adults took off for the 2011-12 flu season (Centers for Disease Control and Prevention, 2013)..

Table S3: Sobel *z*-test for mediation

	2010-11 Vaccination Behavior		2011-12 Vaccination Behavior			2015-16 Vaccination Behavior			
Predictor variable	Figure S1A	Figure S1B	Figure S2A	Figure 2B	Figure S2C	Figure S3A	Figure S3B	Figure S3C	Figure S3D
Perceived flu risk without vaccination (0-100%)	3.81***	2.16*	3.79***	2.30*	1.82+	2.55*	1.65+	.97	.73
Perceived flu risk with vaccination (0-100%)	-.47	-.67	-.52	-.66	-.60	-1.12	-.89	-.69	-.62
Perceived vaccine safety (1-7)	2.55*	1.18	1.84+	.52	.16	1.49	.40	.25	.24

+ $p<.10$; * $p<.05$; ** $p<.01$; *** $p<.001$

Note: Mediation models correspond to Figures S1-S3. We computed Sobel tests to assess the significance of mediation patterns, because Sobel tests can handle the inclusion of linear regressions on the continuous mediator variables and logistic regressions on the dichotomous outcome variable (Herr, 2006). Sobel test results were replicated in bootstrapping mediation models with 5,000 bootstrap samples, which relied on linear regression estimates for both the continuous mediator variables and the dichotomous outcome variables (Hayes, 2018).