Appendix to Evaluation of a city-wide school-located influenza vaccination program in Oakland, California with respect to vaccination coverage, school absences, and laboratory-confirmed influenza: a matched cohort study

## S5 Appendix. Quantitative bias analysis to assess misclassification of absence rates

Through conversations with each school district, we assumed the sensitivity and the false positive rate of absence classification followed beta distributions with the parameters in the table below. The false positive rate was defined as the number of student-days misclassified as absent when the child was present divided by the total number of student-days.

Table A. Assumed distributions of sensitivity and specificity in the probabilistic bias analysis

	All-cause absences	Illness-specific absences
Sensitivity of outcome classification		
Intervention	$\alpha$ = 14, $\beta$ = 1 (2011-2016)	$\alpha$ = 3, $\beta$ = 1.5
	$\alpha$ = 6, $\beta$ = 1 (2017-18)*	
Comparison	$\alpha$ = 6, $\beta$ = 1	$\alpha$ = 3, $\beta$ = 1.5
False positive rate		
Intervention	$\alpha$ = 2, $\beta$ = 19	$\alpha$ = 2, $\beta$ = 5
	Scaled by 300	Scaled by 300
Comparison	$\alpha$ = 2, $\beta$ = 5	$\alpha$ = 1.5, $\beta$ = 2
	Scaled by 300	Scaled by 400

<sup>\*</sup> Sensitivity distributions differ for the intervention district by year because the district informed us that classification had improved in 2017-18.