

Tables A and B support the discussion in:

Scanlan JP. Study illustrates was in which the direction of a change in disparity turns on the measure chosen. *Pediatrics* Mar. 27, 2008, responding to Morita JY, Ramirez E, Trick WE. Effect of school-entry vaccination requirements on racial and ethnic disparities in Hepatitis B immunization coverage among public high school students. *Pediatrics* 2008;121:e547-e552: <http://pediatrics.aappublications.org/cgi/eletters/121/3/e547>

In the tables below, the columns are:

Grade = grade

Year = year

Program = whether year was before (pre) after (post) implementation of the vaccination requirement

WR = white vaccination rate

MR = minority vaccination rate (black in Table A, Hispanic in Table B)

WN = white rate of failing to receive vaccination

MN = minority rate of failing to receive vaccination

RelFav = relative difference in the favorable outcome ($1 - (MR/WR)$)

RelAdv = relative difference in the adverse outcome $((MR/WR)-1)$

AD = absolute difference between rates (in percentage points)

OR = Ratio of odds of white vaccination to odds of minority vaccination $((WR/WN))^1$

EES = estimated effect size (difference between means of hypothesized distribution of factors associated with the outcome derived from the white and minority rates)

¹ Odds ratios were added to these tables after they were first published for purposes illustrating some additional points in later discussions in other forums. They are not discussed in the text of the March 27, 2008 *Pediatrics* comment. The reader may note that the odds ratio differs from RelFav and Rel Adv in two respects. First, the latter two terms reflect the difference derived from rate ratio rather than the ratios themselves. Second, while RelFav and RelAdv are cast in terms of the degree to which the minority rates differ from the white rates, the odds ratio is cast in terms of the white odds over the minority odds. The reason for the first difference is simply that people are more used to seeing the odds ratio than the difference in odds (a factor that might also militate in favor of presenting the two rate ratios rather than the two relative differences). The reason for the second difference is that presenting the odds ratio as a positive number facilitates the contrasting of changes in the direction of the size of difference measured by the odds ratio with changes in the direction of size of the absolute difference (an end that could as well be achieved by presented in difference in odds rather than the odds ratio).

Table A: White and Black Vaccination Rates and Rates of not being Vaccinated Before and After Implementation of School-Entry Vaccination Requirement, with Relative and Absolute Differences, Odds Ratios, and Estimated Effect Size

Grade	Year	Program	WR	MR	WN	MN	RelFav	RelAdv	AD	OR	EES
5	1996	Pre	8%	3%	92%	97%	62.50%	5.43%	5	2.81	47
5	1997	Post	46%	33%	54%	67%	28.26%	24.07%	13	1.73	34
5	1998	Post	50%	39%	50%	61%	22.00%	22.00%	11	1.56	29
9	1996	Pre	46%	32%	54%	68%	30.43%	25.93%	14	1.81	37
9	1997	Post	89%	84%	11%	16%	5.62%	45.45%	5	1.54	24
9	1998	Post	93%	89%	7%	11%	4.30%	57.14%	4	1.64	26

Table B: White and Hispanic Vaccination Rates and Rates of not being Vaccinated Before and After Implementation of School-Entry Vaccination Requirement, with Relative and Absolute Differences, Odds Ratios, and Estimated Effect Size

Grade	Year	Program	WR	MR	WN	MN	RelFav	RelAdv	AD	OR	EES
5	1996	Pre	8%	4%	92%	96%	50.00%	4.35%	4	2.09	34
5	1997	Post	46%	42%	54%	58%	8.70%	7.41%	4	1.18	10
5	1998	Post	50%	51%	50%	49%	-2.00%	-2.00%	1	0.96	1
9	1996	Pre	46%	40%	54%	60%	13.04%	11.11%	6	1.28	15
9	1997	Post	89%	86%	11%	14%	3.37%	27.27%	3	1.32	15
9	1998	Post	93%	93%	7%	7%	0.00%	0.00%	0	1.00	1