

Hand written notes from coauthor - in Sept 2002

Table 1: Preliminary Descriptive Statistics For Entire Sample *

	Category	Controls		Cases		OR	P-Value
		N	Percent	N	Percent		
Age 1996	3 - 5 yrs	679	34%	200	34%		> .20
	6 - 8 yrs	1021	51%	309	52%		
	9 - 10 yrs	287	14%	87	15%		
	Total	1987	100%	596	100%		
Sex	Male	391	20%	112	19%		> .20
	Female	1596	80%	484	81%		
	Total	1987	100%	596	100%		
Race	White	948	48%	320	54%	1.00	0.014
	Black	751	38%	238	40%	0.94	
	Other	188	9%	37	6%	0.55	
	Missing	100	5%	1	0%		
	Total	1987	100%	596	100%		
Co-Existing DD	CP	NA	NA	31	5%		
	MR	NA	NA	354	59%		
	VI	NA	NA	8	1%		
	HI	NA	NA	5	1%		
	Epilepsy	NA	NA	45	8%		
	Any DD	NA	NA	374	63%		
Age of MMR	0 - 11 mo	40	2%	9	2%		
	12 - 15 mo	950	48%	313	53%		
	16 - 18 mo	475	24%	139	23%		
	19 - 23 mo	186	9%	54	9%		
	24 - 35 mo	144	7%	43	7%		
	36+ mo	192	10%	38	6%		
	Total	1987	100%	596	100%		

* All subjects reported in table had age of MMR vaccination

* Cases are confirmed cases (N=45 unconfirmed cases with age of MMR vaccination)

* 3 Cases were listed as controls using variable "CASE"

Table 2: Preliminary Descriptive Statistics for Birth Certificate Variables

Variable	Category	Controls		Cases		OR	P-Value
		N	Percent	N	Percent		
Age in 1996	3 - 5 yrs	412	37%	148	36%		> .20
	6 - 8 yrs	571	51%	200	49%		
	9 - 10 yrs	130	12%	62	15%		
	Total	1113	100%	410	100%		
Sex	Male	221	20%	78	19%		> .20
	Female	892	80%	332	81%		
	Total	1113	100%	410	100%		
Race	White	598	54%	222	54%	1.00	> .20
	Black	448	40%	168	41%	1.03	
	Other	67	6%	20	5%	0.85	
	Total	1113	100%	410	100%		
Mothers Age	< 20 yrs	107	10%	19	5%	1.00	0.022
	20 - 34 yrs	880	79%	326	80%	1.98	
	35+ yrs	126	11%	65	16%	2.55	
	Total	1113	100%	410	100%		
Maternal Race	White	639	57%	234	57%	1.00	> .20
	Black	443	40%	165	40%	1.03	
	Other	30	3%	11	3%	0.98	
	Total	1112	100%	410	100%		
Maternal Educ	<= 12 yrs	523	47%	147	36%	1.00	0.004
	13 - 15 yrs	271	24%	124	30%	1.82	
	16+ yrs	319	29%	139	34%	1.40	
	Total	1113	100%	410	100%		
Birth Weight	0 - 1499 gms	11	1%	13	3%	1.86	0.008
	1500 - 2499 gms	58	5%	44	11%	2.06	
	2500 + gms	1044	94%	353	86%	1.00	
	Total	1113	100%	410	100%		
Multiplicity	Singleton	1080	97%	383	93%	1.00	0.048
	Twin +	33	3%	27	7%	1.89	
	Total	1113	100%	410	100%		
Parity	1st Born	495	45%	183	45%	1.00	> .20
	2nd or Higher	604	55%	225	55%	0.90	
	Total	1099	100%	408	100%		

* All subjects reported in table had age of MMR vaccination and GA state birth certificate

* Cases are confirmed cases

Table 3: Associations Between Age of MMR Vaccination and Autism - Total Sample

Sample	Cases	Univariate		Full Model	
		OR	L95CI	OR	L95CI
Total	596	1.14	0.92	1.40	0.89
MMR < 36		1.61	1.10	2.34	1.08
MMR Categories					
0 - 11 mo		1.16	0.51	2.65	1.23
12 - 15 mo		1.74	1.18	2.56	1.70
16 - 18 mo		1.42	0.94	2.15	1.41
19 - 23 mo		1.55	0.96	2.49	1.56
24 - 35 mo		1.61	0.97	2.68	1.61
36+ mo		1.00	1.00	1.00	1.00
Isolated	222	1.12	0.78	1.61	0.72
MMR < 36		2.48	1.16	5.31	2.20
MMR Categories					
0 - 11 mo		1.01	0.19	5.43	0.92
12 - 15 mo		2.61	1.20	5.64	2.31
16 - 18 mo		2.34	1.05	5.25	2.06
19 - 23 mo		2.13	0.85	5.35	2.03
24 - 35 mo		3.09	1.20	7.99	2.92
36+ mo		1.00	1.00	1.00	1.00
Non-Isolated	374	1.14	0.87	1.49	0.88
MMR < 36		1.35	0.87	2.09	1.41
MMR Categories					
0 - 11 mo		1.25	0.48	3.24	1.37
12 - 15 mo		1.49	0.95	2.35	1.55
16 - 18 mo		1.16	0.71	1.89	1.22
19 - 23 mo		1.39	0.80	2.44	1.46
24 - 35 mo		1.20	0.64	2.23	1.16
36+ mo		1.00	1.00	1.00	1.00

Table 4: Descriptive Race Data

Sample	Variable	N	Cases	Percent
Total	Cases	2583	596	23%
	Race - Black	2523	1005	40%
	Vac < 36 Months	2628	2395	91%

Race	Vac < 36 Months	N	Cases	Percent
White/Other	No	110	24	22%
White/Other	Yes	1383	333	24%
*Black	No	106	14	13%
Black	Yes	883	224	25%

Sample	Variable	N	Cases	Percent
Birth Cert	Cases	1523	410	27%
	Race - Black	1523	616	40%
	Vac < 36 Months	1523	1421	93%

Race	Vac < 36 Months	N	Cases	Percent
White/Other	No	41	11	27%
White/Other	Yes	866	231	27%
Black	No	61	13	21%
Black	Yes	555	155	28%

Table 5: Race Interactions for Total Sample

Sample	Cases Variable	Matched Analyses						Unmatched Analyses						
		All Subjects			White Model			Black Model			Other Model			
		OR	L95CI	U95CI	OR	L95CI	U95CI	OR	L95CI	U95CI	OR	L95CI	U95CI	
Total	596	MMR < 18	1.14	0.92	1.40	0.96	0.71	1.29	1.23	0.91	1.67	1.41	0.63	3.13
		MMR < 36	1.61	1.10	2.34	0.89	0.52	1.52	2.25	1.25	4.03	1.97	0.64	6.09
		MMR Categories												
		0 - 11 mo	1.16	0.51	2.65	1.08	0.37	3.16	1.42	0.36	5.59	NA	NA	NA
		12 - 15 mo	1.74	1.18	2.56	0.99	0.58	1.70	2.17	1.18	4.00	2.33	0.72	7.57
		16 - 18 mo	1.42	0.94	2.15	0.69	0.39	1.24	2.68	1.43	5.05	1.71	0.46	6.35
		19 - 23 mo	1.55	0.96	2.49	0.83	0.41	1.67	2.02	1.00	4.10	3.00	0.63	14.17
		24 - 35 mo	1.61	0.97	2.68	0.96	0.45	2.08	2.03	0.99	4.14	1.11	0.11	11.43
		36+ mo	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Isolated	222	MMR < 18	1.12	0.78	1.61	1.01	0.67	1.52	1.35	0.77	2.36	NA	NA	NA
		MMR < 36	2.48	1.16	5.31	1.26	0.56	2.84	3.85	0.92	16.09	NA	NA	NA
		MMR Categories												
		0 - 11 mo	1.01	0.19	5.43	0.51	0.06	4.46	3.30	0.28	39.16	NA	NA	NA
		12 - 15 mo	2.61	1.20	5.64	1.31	0.58	2.98	4.12	0.96	17.65	NA	NA	NA
		16 - 18 mo	2.34	1.05	5.25	1.20	0.51	2.83	3.86	0.86	17.41	NA	NA	NA
		19 - 23 mo	2.13	0.85	5.35	0.86	0.29	2.53	4.15	0.87	19.83	NA	NA	NA
		24 - 35 mo	3.09	1.20	7.99	1.99	0.71	5.59	2.68	0.51	14.23	NA	NA	NA
		36+ mo	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Non-Isolated	374	MMR < 18	1.14	0.87	1.49	0.91	0.62	1.35	1.21	0.86	1.69	NA	NA	NA
		MMR < 36	1.35	0.87	2.09	0.70	0.37	1.31	1.99	1.06	3.73	NA	NA	NA
		MMR Categories												
		0 - 11 mo	1.25	0.48	3.24	1.43	0.44	4.66	1.12	0.23	5.55	NA	NA	NA
		12 - 15 mo	1.49	0.95	2.35	0.82	0.43	1.57	1.85	0.96	3.58	NA	NA	NA
		16 - 18 mo	1.16	0.71	1.89	0.42	0.20	0.86	2.51	1.28	4.95	NA	NA	NA
		19 - 23 mo	1.39	0.80	2.44	0.81	0.35	1.86	1.66	0.76	3.64	NA	NA	NA
		24 - 35 mo	1.20	0.64	2.23	0.45	0.15	1.38	1.91	0.89	4.13	NA	NA	NA
		36+ mo	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Table 6: Associations Between Age of MMR Vaccination and Autism - Birth Certificate Sample

Sample	Cases	Variable	Univariate			Full Model			Reduced Model		
			OR	L95CI	U95CI	OR	L95CI	U95CI	OR	L95CI	U95CI
Birth Cert Matched	410	MMR < 18	0.95	0.70	1.30						
		MMR < 36	1.37	0.76	2.48	1.24	0.67	2.31	1.25	0.68	2.30
	MMR Categories										
		0 - 11 mo	0.89	0.21	3.77						
		12 - 15 mo	1.42	0.77	2.60						
		16 - 18 mo	1.21	0.64	2.29						
		19 - 23 mo	1.42	0.70	2.86						
		24 - 35 mo	1.61	0.74	3.51						
		36+ mo	1.00	1.00	1.00						
	Birth Cert Unmatched	410	MMR < 18	0.94	0.73	1.21					
MMR < 36			1.23	0.77	1.98	1.17	0.72	1.91	1.20	0.74	1.94
MMR Categories											
		0 - 11 mo	1.02	0.30	3.44						
		12 - 15 mo	1.26	0.77	2.04						
		16 - 18 mo	1.14	0.69	1.91						
		19 - 23 mo	1.15	0.64	2.07						
		24 - 35 mo	1.53	0.82	2.83						
		36+ mo	1.00	1.00	1.00						
Birth Cert Unmatched Blacks		168	MMR < 36	1.46	0.77	2.78	1.58	0.81	3.07	1.62	0.84

Table 7: Four Group Race Comparison

Race	Vaccination	OR	L95% CI	U95% CI	P-Value
White	< 36 Months	2.28	1.18	4.40	0.01
Black	< 36 Months	2.56	1.36	4.81	0.00
White	>= 36 Months	1.95	0.88	4.34	0.10
Black	>= 36 Months	1.00	ref	ref	ref
White	< 36 Months	1.00	ref	ref	ref
Black	< 36 Months	1.12	0.86	1.47	0.40
White	>= 36 Months	0.85	0.52	1.40	0.53
Black	>= 36 Months	0.44	0.23	0.84	0.01

Table 8: Descriptive Data for Blacks

Variable	Black Controls			Black Controls			Black Cases			Black Cases					
	Sample	Mean	Freq	Vaccinated Late	Sample	Mean	Freq	Vaccinated Late	Sample	Mean	Freq	Vaccinated Overtime	Sample	Mean	Freq
Case	92	0.00	0	0.00	659	0.00	0	1.00	14	1.00	14	1.00	224	1.00	224
Vac < 36 mo	92	0.00	0	1.00	659	1.00	659	0.00	14	0.00	0	1.00	224	1.00	224
Age	92	6.83	628	6.40	659	6.40	4219	7.86	14	7.86	110	6.44	224	6.44	1443
Sex - Male	92	0.75	69	0.78	659	0.78	512	0.64	14	0.64	9	0.83	224	0.83	185
M_AGEC11	48	0.81	39	0.78	400	0.78	311	0.85	13	0.85	11	0.82	155	0.82	127
M_AGEC12	48	0.02	1	0.06	400	0.06	24	0.08	13	0.08	1	0.10	155	0.10	16
M_EDUC11	48	0.27	13	0.26	400	0.26	103	0.54	13	0.54	7	0.32	155	0.32	49
M_EDUC12	48	0.15	7	0.14	400	0.14	56	0.15	13	0.15	2	0.18	155	0.18	28
B_WGTC11	48	0.02	1	0.01	400	0.01	5	0.08	13	0.08	1	0.03	155	0.03	5
B_WGTC12	48	0.10	5	0.07	400	0.07	27	0.15	13	0.15	2	0.14	155	0.14	22
B_MULTB	48	0.02	1	0.03	400	0.03	11	0.08	13	0.08	1	0.07	155	0.07	10