

Spatial relative risk of Autism Spectrum Disorder in Utah

Electronic Supplemental Materials

Table 1. Characteristics of URADD ASD cases and controls broken down by birth cohort and age at surveillance ( $n=28,631$ ).

Characteristic	1994-8 $n(\%)$			1998-8 $n(\%)$		
	Control ( $n=2,640$ )	ASD case ( $n=132$ )	Chi-square $p$ -value	Control ( $n=3,560$ )	ASD case ( $n=182$ )	Chi-square $p$ -value
Gender			1			.9
Male	2300(87.1)	115(87.1)		3000(84.3)	154(84.6)	
Female	340(12.9)	17(12.9)		560(15.7)	28(15.4)	
Race/ethnicity			.38			.03
White non-Hispanic	2245(85.0)	120(90.9)		2866(80.5)	163(89.6)	
Hispanic	244(9.2)	9(6.8)		494(13.9)	14(7.7)	
Other	98(3.7)	3(2.3)		114(3.2)	4(2.2)	
Missing	53(2.0)	0(0.0)		86(2.4)	1(0.6)	
Maternal age (years)			.19			.48
<21 years	373(14.1)	16(12.1)		497(14.0)	27(14.8)	
21-33 years	1928(73.0)	92(69.7)		2597(73.0)	126(69.2)	
34+ years	338(12.8)	24(18.2)		466(13.1)	29(15.9)	
Missing	1(0.04)	0(0.0)		0(0.0)	0(0.0)	
Paternal age (years)			.85			.66
<21 years	119(4.5)	5(3.8)		156(4.4)	10(5.5)	
21-33 years	1770(67.1)	88(66.7)		2316(65.1)	119(65.4)	
34+ years	555(21.0)	30(22.7)		759(21.3)	35(19.2)	
Missing	196(7.4)	9(6.8)		329(9.2)	18(9.9)	
Maternal education (years)			.06			.71
<12 years	298(11.3)	15(11.4)		502(14.1)	22(12.1)	
12 or 13 years	1151(43.6)	44(33.3)		1441(40.5)	73(40.1)	
14+ years	1164(44.1)	71(53.8)		1584(44.5)	85(46.7)	
Missing	27(1.0)	2(1.5)		33(0.9)	2(1.1)	
Paternal education (years)			.84			.58
<12 years	177(6.7)	11(8.3)		331(9.3)	13(7.1)	
12 or 13 years	826(31.3)	36(27.3)		1086(30.5)	59(32.4)	
14+ years	1400(53.0)	74(56.1)		1757(49.4)	89(48.9)	
Missing	237(9.0)	11(8.3)		386(10.8)	21(11.5)	

Table 1 continued.

Characteristic	2000-6 <i>n</i> (%)			2000-8 <i>n</i> (%)		
	Control ( <i>n</i> =4,460)	ASD case ( <i>n</i> =223)	Chi-square <i>p</i> -value	Control ( <i>n</i> =5,900)	ASD case ( <i>n</i> =295)	Chi-square <i>p</i> -value
Gender			1			1
Male	3500(78.5)	175(78.5)		4740(80.3)	237(80.3)	
Female	960(21.5)	48(21.5)		1160(19.7)	58(19.7)	
Race/ethnicity			.01			.01
White non-Hispanic	3424(76.8)	189(84.8)		4545(77.0)	248(84.1)	
Hispanic	763(17.1)	24(10.8)		984(16.7)	33(11.2)	
Other	154(3.5)	4(1.8)		207(3.5)	6(2.0)	
Missing	119(2.7)	5(2.2)		164(2.8)	8(2.7)	
Maternal age (years)			.06			.06
<21 years	566(12.7)	21(9.4)		755(12.8)	30(10.2)	
21-33 years	3378(75.7)	166(74.4)		4430(75.1)	217(73.6)	
34+ years	516(11.6)	36(16.1)		715(12.1)	48(16.3)	
Missing	0(0.0)	0(0.0)		0(0.0)	0(0.0)	
Paternal age (years)			.08			.23
<21 years	188(4.2)	3(1.4)		268(4.5)	8(2.7)	
21-33 years	3106(69.6)	154(69.1)		4075(69.1)	198(67.1)	
34+ years	869(19.5)	49(22.0)		1207(20.5)	67(22.7)	
Missing	297(6.7)	17(7.6)		350(5.9)	22(7.5)	
Maternal education (years)			.04			.05
<12 years	668(15.0)	21(9.4)		852(14.4)	31(10.5)	
12 or 13 years	1726(38.7)	100(44.8)		2349(39.8)	135(45.8)	
14+ years	2001(44.9)	99(44.4)		2620(44.4)	124(42.0)	
Missing	65(1.5)	3(1.4)		79(1.3)	5(1.7)	
Paternal education (years)			.03			.002
<12 years	446(10.0)	11(4.9)		593(10.1)	13(4.4)	
12 or 13 years	1326(29.7)	76(34.1)		1831(31.0)	107(36.3)	
14+ years	2209(49.5)	110(49.3)		2886(48.9)	134(45.4)	
Missing	479(10.7)	26(11.7)		590(10.0)	41(13.9)	

Table 1 continued.

Characteristic	2002-4 <i>n</i> (%)			2002-6 <i>n</i> (%)			2004-4 <i>n</i> (%)		
	Control ( <i>n</i> =3,320)	ASD case ( <i>n</i> =166)	Chi-square <i>p</i> -value	Control ( <i>n</i> =5,780)	ASD case ( <i>n</i> =289)	Chi-square <i>p</i> -value	Control ( <i>n</i> =3,720)	ASD case ( <i>n</i> =186)	Chi-square <i>p</i> -value
Gender			1			1			1
Male	2680(80.7)	134(80.7)		4660 (80.6)	233(80.6)		2960(79.6)	148(79.6)	
Female	640(19.3)	32(19.3)		1120(19.4)	56(19.4)		760(20.4)	38(20.4)	
Race/ethnicity			.7			.67			.08
White non-Hispanic	2486(74.9)	128(78.1)		4293(74.3)	219(75.8)		2764(74.3)	144(77.4)	
Hispanic	614(18.5)	30(18.3)		1051(18.2)	54(18.7)		680(18.3)	36(19.4)	
Other	165(5.0)	6(3.66)		329(5.7)	13(4.5)		197(5.3)	3(1.6)	
Missing	55(1.7)	0(0.0)		107(1.9)	3(1.0)		79(2.1)	3(1.6)	
Maternal age (years)			.26			.5			.37
<21 years	376(11.3)	14(8.54)		648(11.2)	30(10.4)		343(9.2)	12(6.5)	
21-33 years	2556(77.0)	127(77.4)		4405(76.2)	216(74.7)		2944(79.1)	149(80.1)	
34+ years	388(11.7)	25(15.2)		727(12.6)	43(14.9)		433(11.6)	25(13.4)	
Missing	0(0.0)	0(0.0)		0(0.0)	0(0.0)		0(0.0)	0(0.0)	
Paternal age (years)			.61			.64			.71
<21 years	129(3.9)	5(3.1)		233(4.0)	9(3.1)		96(2.6)	5(2.7)	
21-33 years	2348(70.7)	120(73.2)		3953(68.4)	197(68.2)		2634(70.8)	130(69.9)	
34+ years	658(19.8)	28(17.1)		1248(21.6)	56(19.4)		731(19.7)	42(22.6)	
Missing	185(5.6)	11(6.7)		346(6.0)	27(9.3)		259(7.0)	9(4.8)	
Maternal education (years)			.22			.01			.002
<12 years	483(14.6)	16(9.8)		820(14.2)	29(10.0)		500(13.4)	9(4.8)	
12 or 13 years	1323(39.9)	70(42.7)		2227(38.5)	134(46.4)		1389(37.3)	82(44.1)	
14+ years	1476(44.5)	78(47.6)		2675(46.3)	123(42.6)		1768(47.5)	93(50.0)	
Missing	38(1.1)	2(1.2)		58(1.0)	3(1.0)		63(1.7)	2(1.1)	

Paternal education  
(years)

			.05			.13			.05
<12 years	374(11.3)	10(6.1)		587(10.2)	24(8.3)		368(9.9)	9(4.8)	
12 or 13 years	1003(30.2)	59(36.0)		1747(30.2)	99(34.3)		1082(29.1)	63(33.9)	
14+ years	1645(49.6)	76(46.3)		2922(50.6)	129(44.6)		1898(51.0)	97(52.2)	
Missing	298(9.0)	21(12.8)		524(9.1)	37(12.8)		372(10.0)	17(9.1)	

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