

Table 1. Address geocoding success rate among all subjects.

	Number of Records			Percentage Of Records Geocoded
	Total	Geocoded	Not Geocoded	
Records for individuals				
Controls	51281	46204	5077	90.1
Cases	2489	2225	264	89.4
Records for individual – birth defect combinations (since one case individual can have two or more birth defects)				
Controls	51281	46204	5077	90.1
Cases	6307	5613	694	89.0
Cases: Tetralogy of Fallot	32	26	6	81.3
Cases: Ventricular septal defect (VSD)	502	450	52	89.6
Cases: Atrial septal defect (ASD)	1941	1728	213	89.0
Cases: Anomalies of the pulmonary valve	177	159	18	89.8
Cases: Anomalies of the tricuspid valve	863	759	104	88.0
Cases: Congenital insufficiency of the aortic valve	89	80	9	89.9
Cases: Mitral valve insufficiency	229	206	23	90.0
Cases: Patent ductus arteriosus	784	697	87	88.9
Cases: Other anomalies of the aorta	185	159	26	86.0
Cases: Anomalies of the pulmonary artery	1065	941	124	88.4
Cases: Pyloric stenosis	173	160	13	92.5
Cases: Atresia/stenosis of the large intestine	41	38	3	92.7
Cases: Obstructive genitourinary defects	165	152	13	92.1
Cases: Anomalies of the diaphragm	33	30	3	90.9
Cases: Gastroschisis	28	28	0	100.0

Table 2. Demographic characteristics (percentage distributions*) of subjects geocoded vs not geocoded.

	Geocoded N = 48429	Not Geocoded N = 5341
Maternal age (years)		
19 or younger	19.2	18.9
20 – 29	55.9	56.7
30 or older	24.9	24.4
Maternal race/ethnicity **		
White non-Hispanic	28.0	33.0
African American	3.6	2.0
Hispanic	66.8	63.7
Other	1.7	1.4
Maternal education **		
Less than high school	32.6	30.4
High school	34.5	38.3
More than high school	32.9	31.2
Maternal diabetes		
Yes	3.2	2.9
No	96.8	97.2
Infant sex **		
Male	51.1	49.5
Female	48.9	50.5
Residence county **		
Kleberg	7.0	12.9
Nueces	79.3	43.8
San Patricio	13.7	43.2
Year of delivery **		
1996	12.3	13.5
1997	12.8	13.4
1998	12.5	13.7
1999	12.9	12.3
2000	12.8	12.1
2001	12.7	12.0
2002	12.1	11.1
2003	11.9	11.9
Previous live births		
0	37.8	37.6
1	31.4	31.1
2	18.8	18.9
3 or more	12.1	12.5
Plurality		
Singleton	97.6	97.8
Twins, triplets, etc	2.4	2.2

* Percentages do not include subjects missing data for that variable.

** Distribution for geocoded and not geocoded significantly different at $p = 0.05$.

Table 3. Demographic characteristics (percentage distributions*) of cases vs controls, geocoded subjects only.

	Cases N = 2225	Controls N = 46204
Maternal age (years)		
19 or younger	19.5	19.1
20 – 29	54.0	56.0
30 or older	26.5	24.9
Maternal race/ethnicity **		
White non-Hispanic	27.8	28.0
African American	4.9	3.5
Hispanic	66.1	66.8
Other	1.2	1.7
Maternal education **		
Less than high school	36.3	32.5
High school	34.8	34.5
More than high school	28.9	33.1
Maternal diabetes **		
Yes	5.7	3.1
No	94.3	96.9
Infant sex **		
Male	56.0	50.9
Female	44.0	49.1
Residence county **		
Kleberg	5.3	7.1
Nueces	81.3	79.2
San Patricio	13.4	13.8
Year of delivery **		
1996	13.2	12.3
1997	13.9	12.7
1998	13.4	12.4
1999	12.0	12.9
2000	14.1	12.8
2001	10.8	12.8
2002	10.1	12.2
2003	12.5	11.9
Previous live births		
0	36.7	37.8
1	31.1	31.4
2	19.6	18.7
3 or more	12.6	12.1
Plurality **		
Singleton	95.2	97.7
Twins, triplets, etc	4.9	2.3

* Percentages do not include subjects missing data for that variable.

** Distribution for cases and controls significantly different at $p = 0.05$.

Table 4. Percentage of births in various demographic strata delivered to mothers who lived within the indicated distance of the nearest site of concern. Measured among geocoded controls only (n=46,204*).

	Landfills (1 mile)	Refineries and Chemical Manufacturing Plants (5 miles)	Military Airfields (1 mile)	Incinerator, Injection Well, Battery Recycling (1 mile)	Oso Creek (1 mile)
Overall	34.5	56.6	4.2	10.9	0.6
Maternal age (years)	**	**	**	**	**
19 or younger	34.9	63.9	3.1	15.6	0.2
20 – 29	35.6	57.7	4.0	11.3	0.6
30 or older	31.6	48.3	5.4	6.6	0.9
Maternal race/ethnicity	**	**	**	**	**
White non-Hispanic	31.7	41.8	6.0	1.6	0.9
African American	39.7	59.2	4.2	12.1	0.5
Hispanic	35.4	63.2	3.4	15.0	0.5
Other	33.9	33.5	5.9	2.8	1.2
Maternal education	**	**	**	**	**
Less than high school	33.8	67.5	2.8	18.9	0.2
High school	37.9	57.5	4.3	10.1	0.6
More than high school	31.6	45.0	5.4	4.0	1.1
Maternal diabetes		**		**	
Yes	35.5	62.0	3.7	16.2	0.3
No	34.5	56.4	4.2	10.8	0.6
Infant sex					
Male	34.3	56.2	4.2	10.8	0.6
Female	34.6	56.9	4.2	11.0	0.6
Residence county	**	**	**	**	**
Kleberg	0.0	91.9	0.0	0.0	0.0
Nueces	43.5	55.7	5.3	13.8	0.8
San Patricio	0.3	43.3	0.0	0.0	0.0
Year of delivery	**	**			**
1996	35.3	58.3	4.1	11.5	0.3
1997	34.9	58.5	4.2	11.7	0.5
1998	34.2	57.8	3.8	11.5	0.4
1999	34.4	55.4	4.3	10.7	0.6
2000	34.0	56.6	3.9	10.6	0.7
2001	35.9	55.6	4.4	10.5	0.8
2002	34.4	55.3	4.2	10.7	0.8
2003	32.7	54.9	4.5	10.2	0.8
Previous live births		**	**	**	
0	35.0	53.6	4.2	9.6	0.7
1	34.1	56.0	4.3	10.6	0.6
2	34.7	59.3	4.3	12.0	0.6
3 or more	33.4	64.3	3.2	14.6	0.5
Plurality					
Singleton	34.5	56.6	4.2	10.9	0.6
Twins, triplets, etc	32.1	56.1	4.3	10.6	0.4

* Percentages do not include subjects with missing information. These are row percentages, thus they will not add to 100%.

** Statistically significant different percentages ($p < 0.05$) between groups.

Table 5. Odds ratios for tetralogy of Fallot associated with maternal residential proximity to sites of concern. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	26	100.0	46204	100.0				
Landfills								
A. Less than or equal to ½ mile	5	19.2	6461	14.0	E 1.37	0.39 – 3.90	E S 1.41	0.40 – 4.01
B. Greater than ½ mile to 1 mile	4	15.4	9473	20.5	E 0.73	0.18 – 2.25	E S 0.73	0.18 – 2.25
C. Less than or equal to 1 mile (A+B)	9	34.6	15934	34.5	E 1.00	0.39 – 2.39	E S 0.98	0.39 – 2.34
D. Greater than 1 mile	17	65.4	30270	65.5	1.00	(referent)	1.00	(referent)
Refineries and Chemical Manufacturing Plants								
A. Less than or equal to 2½ miles	7	26.9	10275	22.2	1.05	0.42 – 2.64	1.05	0.82 – 1.34
B. Greater than 2½ miles to 5 miles	6	23.1	15860	34.3	0.58	0.22 – 1.54	0.91	0.72 – 1.14
C. Less than or equal to 5 miles (A+B)	13	50.0	26135	56.6	0.77	0.36 – 1.66	0.97	0.80 – 1.18
D. Greater than 5 miles	13	50.0	20069	43.4	1.00	(referent)	1.00	(referent)
Military Airfields								
A. Less than or equal to ½ mile	0	0.0	443	1.0	0.00	n/a *	0.00	n/a
B. Greater than ½ mile to 1 mile	0	0.0	1487	3.2	0.00	n/a	0.00	n/a
C. Less than or equal to 1 mile (A+B)	0	0.0	1930	4.2	0.00	n/a	0.00	n/a
D. Greater than 1 mile	26	100.0	44274	95.8	1.00	(referent)	1.00	(referent)
Incinerator, Injection Well, or Battery Recycling Site								
A. Less than or equal to ½ mile	0	0.0	1824	3.9	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	4	15.4	3224	7.0	2.32	0.80 – 6.74	1.15	0.82 – 1.62
C. Less than or equal to 1 mile (A+B)	4	15.4	5048	10.9	1.48	0.51 – 4.30	1.24	0.94 – 1.64
D. Greater than 1 mile	22	84.6	41156	89.1	1.00	(referent)	1.00	(referent)
Oso Creek								
A. Less than or equal to ½ mile	0	0.0	6	0.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	0	0.0	276	0.6	0.00	n/a	0.00	n/a
C. Less than or equal to 1 mile (A+B)	0	0.0	282	0.6	0.00	n/a	0.00	n/a
D. Greater than 1 mile	26	100.0	45922	99.4	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

E Used exact logistic regression

S Adjusted only for maternal age, maternal race/ethnicity, and maternal education (short model)

Table 6. Odds ratios for ventricular septal defect associated with maternal residential proximity to sites of concern. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	450	100.0	46204	100.0				
Landfills								
A. Less than or equal to ½ mile	59	13.1	6461	14.0	0.99	0.75 – 1.32	1.02	0.76 – 1.35
B. Greater than ½ mile to 1 mile	113	25.1	9473	20.5	1.30	1.04 – 1.62	1.29	1.03 – 1.61
C. Less than or equal to 1 mile (A+B)	172	38.2	15934	34.5	1.18	0.97 – 1.42	1.18	0.97 – 1.43
D. Greater than 1 mile	278	61.8	30270	65.5	1.00	(referent)	1.00	(referent)
Refineries and Chemical Manufacturing Plants								
A. Less than or equal to 2½ miles	115	25.6	10275	22.2	1.17	0.93 – 1.48	1.05	0.82 – 1.34
B. Greater than 2½ miles to 5 miles	143	31.8	15860	34.3	0.94	0.76 – 1.17	0.91	0.72 – 1.14
C. Less than or equal to 5 miles (A+B)	258	57.3	26135	56.6	1.03	0.86 – 1.25	0.97	0.80 – 1.18
D. Greater than 5 miles	192	42.7	20069	43.4	1.00	(referent)	1.00	(referent)
Military Airfields								
A. Less than or equal to ½ mile	4	0.9	443	1.0	0.94	0.35 – 2.51	1.03	0.38 – 2.79
B. Greater than ½ mile to 1 mile	18	4.0	1487	3.2	1.25	0.78 – 2.01	1.34	0.83 – 2.16
C. Less than or equal to 1 mile (A+B)	22	4.9	1930	4.2	1.18	0.77 – 1.81	1.28	0.83 – 1.97
D. Greater than 1 mile	428	95.1	44274	95.8	1.00	(referent)	1.00	(referent)
Incinerator, Injection Well, or Battery Recycling Site								
A. Less than or equal to ½ mile	26	5.8	1824	3.9	1.52	1.02 – 2.27	1.40	0.93 – 2.10
B. Greater than ½ mile to 1 mile	38	8.4	3224	7.0	1.26	0.90 – 1.76	1.15	0.82 – 1.62
C. Less than or equal to 1 mile (A+B)	64	14.2	5048	10.9	1.35	1.04 – 1.76	1.24	0.94 – 1.64
D. Greater than 1 mile	386	85.8	41156	89.1	1.00	(referent)	1.00	(referent)
Oso Creek								
A. Less than or equal to ½ mile	0	0.0	6	0.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	2	0.4	276	0.6	E 0.92	0.11 – 3.78	n/a	n/a
C. Less than or equal to 1 mile (A+B)	2	0.4	282	0.6	E 0.65	0.08 – 2.59	n/a	n/a
D. Greater than 1 mile	448	99.6	45922	99.4	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

E Used exact logistic regression

Odds ratios in bold are statistically significant.

Table 7. Odds ratios for atrial septal defect associated with maternal residential proximity to sites of concern. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	1728	100.0	46204	100.0				
Landfills								
A. Less than or equal to ½ mile	250	14.5	6461	14.0	1.05	0.92 – 1.21	1.04	0.91 – 1.20
B. Greater than ½ mile to 1 mile	367	21.2	9473	20.5	1.06	0.93 – 1.19	1.05	0.93 – 1.19
C. Less than or equal to 1 mile (A+B)	617	35.7	15934	34.5	1.06	0.95 – 1.17	1.04	0.94 – 1.16
D. Greater than 1 mile	1111	64.3	30270	65.5	1.00	(referent)	1.00	(referent)
Refineries and Chemical Manufacturing Plants								
A. Less than or equal to 2½ miles	390	22.6	10275	22.2	1.02	0.90 – 1.15	0.97	0.85 – 1.10
B. Greater than 2½ miles to 5 miles	589	34.0	15860	34.3	1.00	0.89 – 1.11	0.96	0.86 – 1.08
C. Less than or equal to 5 miles (A+B)	979	56.7	26135	56.6	1.00	0.91 – 1.11	0.97	0.87 – 1.07
D. Greater than 5 miles	749	43.3	20069	43.4	1.00	(referent)	1.00	(referent)
Military Airfields								
A. Less than or equal to ½ mile	18	1.0	443	1.0	1.09	0.68 – 1.75	1.21	0.75 – 1.94
B. Greater than ½ mile to 1 mile	62	3.6	1487	3.2	1.12	0.87 – 1.45	1.12	0.86 – 1.46
C. Less than or equal to 1 mile (A+B)	80	4.6	1930	4.2	1.11	0.89 – 1.40	1.14	0.90 – 1.44
D. Greater than 1 mile	1648	95.4	44274	95.8	1.00	(referent)	1.00	(referent)
Incinerator, Injection Well, or Battery Recycling Site								
A. Less than or equal to ½ mile	77	4.5	1824	3.9	1.14	0.91 – 1.45	1.10	0.87 – 1.40
B. Greater than ½ mile to 1 mile	132	7.6	3224	7.0	1.11	0.93 – 1.33	1.04	0.86 – 1.25
C. Less than or equal to 1 mile (A+B)	209	12.1	5048	10.9	1.12	0.97 – 1.30	1.06	0.91 – 1.24
D. Greater than 1 mile	1519	87.9	41156	89.1	1.00	(referent)	1.00	(referent)
Oso Creek								
A. Less than or equal to ½ mile	0	0.0	6	0.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	11	0.6	276	0.6	1.07	0.58 – 1.95	1.22	0.66 – 2.23
C. Less than or equal to 1 mile (A+B)	11	0.6	282	0.6	1.04	0.57 – 1.91	1.19	0.65 – 2.17
D. Greater than 1 mile	1717	99.4	45922	99.4	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

Table 8. Odds ratios for anomalies of the pulmonary valve associated with maternal residential proximity to sites of concern. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	159	100.0	46204	100.0				
Landfills								
A. Less than or equal to ½ mile	18	11.3	6461	14.0	0.83	0.50 – 1.37	0.81	0.49 – 1.36
B. Greater than ½ mile to 1 mile	39	24.5	9473	20.5	1.22	0.84 – 1.77	1.29	0.89 – 1.87
C. Less than or equal to 1 mile (A+B)	57	35.9	15934	34.5	1.06	0.77 – 1.47	1.09	0.79 – 1.52
D. Greater than 1 mile	102	64.2	30270	65.5	1.00	(referent)	1.00	(referent)
Refineries and Chemical Manufacturing Plants								
A. Less than or equal to 2½ miles	37	23.3	10275	22.2	1.08	0.72 – 1.61	1.09	0.71 – 1.66
B. Greater than 2½ miles to 5 miles	55	34.6	15860	34.3	1.04	0.73 – 1.49	1.01	0.70 – 1.47
C. Less than or equal to 5 miles (A+B)	92	57.9	26135	56.6	1.05	0.77 – 1.45	1.03	0.74 – 1.44
D. Greater than 5 miles	67	42.1	20069	43.4	1.00	(referent)	1.00	(referent)
Military Airfields								
A. Less than or equal to ½ mile	1	0.6	443	1.0	E 0.78	0.02 – 4.69	n/a	n/a
B. Greater than ½ mile to 1 mile	10	6.3	1487	3.2	2.01	1.06 – 3.83	1.88	0.95 – 3.70
C. Less than or equal to 1 mile (A+B)	11	6.9	1930	4.2	1.71	0.92 – 3.15	1.61	0.84 – 3.07
D. Greater than 1 mile	148	93.1	44274	95.8	1.00	(referent)	1.00	(referent)
Incinerator, Injection Well, or Battery Recycling Site								
A. Less than or equal to ½ mile	4	2.5	1824	3.9	0.63	0.23 – 1.71	0.63	0.23 – 1.71
B. Greater than ½ mile to 1 mile	12	4.4	3224	7.0	1.07	0.59 – 1.93	1.07	0.59 – 1.95
C. Less than or equal to 1 mile (A+B)	16	10.1	5048	10.9	0.91	0.54 – 1.53	0.91	0.53 – 1.54
D. Greater than 1 mile	143	89.9	41156	89.1	1.00	(referent)	1.00	(referent)
Oso Creek								
A. Less than or equal to ½ mile	0	0.0	6	0.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	0	0.0	276	0.6	0.00	n/a	0.00	n/a
C. Less than or equal to 1 mile (A+B)	0	0.0	282	0.6	0.00	n/a	0.00	n/a
D. Greater than 1 mile	159	100.0	45922	99.4	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

E Used exact logistic regression

Odds ratios in bold are statistically significant.

Table 9. Odds ratios for anomalies of the tricuspid valve associated with maternal residential proximity to sites of concern. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	759	100.0	46204	100.0				
Landfills								
A. Less than or equal to ½ mile	92	12.1	6461	14.0	0.85	0.68 – 1.06	0.83	0.66 – 1.04
B. Greater than ½ mile to 1 mile	158	20.8	9473	20.5	0.99	0.83 – 1.19	0.99	0.82 – 1.18
C. Less than or equal to 1 mile (A+B)	250	32.9	15934	34.5	0.93	0.80 – 1.09	0.92	0.79 – 1.07
D. Greater than 1 mile	509	67.1	30270	65.5	1.00	(referent)	1.00	(referent)
Refineries and Chemical Manufacturing Plants								
A. Less than or equal to 2½ miles	166	21.9	10275	22.2	1.00	0.82 – 1.20	0.91	0.74 – 1.11
B. Greater than 2½ miles to 5 miles	267	35.2	15860	34.3	1.04	0.88 – 1.22	0.97	0.82 – 1.15
C. Less than or equal to 5 miles (A+B)	433	57.1	26135	56.6	1.02	0.88 – 1.18	0.95	0.82 – 1.11
D. Greater than 5 miles	326	43.0	20069	43.4	1.00	(referent)	1.00	(referent)
Military Airfields								
A. Less than or equal to ½ mile	6	0.8	443	1.0	0.82	0.37 – 1.85	0.94	0.42 – 2.12
B. Greater than ½ mile to 1 mile	23	3.0	1487	3.2	0.94	0.62 – 1.43	0.88	0.56 – 1.38
C. Less than or equal to 1 mile (A+B)	29	3.8	1930	4.2	0.91	0.63 – 1.33	0.89	0.60 – 1.33
D. Greater than 1 mile	730	96.2	44274	95.8	1.00	(referent)	1.00	(referent)
Incinerator, Injection Well, or Battery Recycling Site								
A. Less than or equal to ½ mile	31	4.1	1824	3.9	1.05	0.73 – 1.51	0.93	0.64 – 1.34
B. Greater than ½ mile to 1 mile	60	7.9	3224	7.0	1.15	0.88 – 1.50	1.03	0.78 – 1.35
C. Less than or equal to 1 mile (A+B)	91	12.0	5048	10.9	1.11	0.89 – 1.39	0.99	0.79 – 1.25
D. Greater than 1 mile	668	88.0	41156	89.1	1.00	(referent)	1.00	(referent)
Oso Creek								
A. Less than or equal to ½ mile	0	0.0	6	0.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	3	0.4	276	0.6	E 0.58	0.11 – 1.88	n/a	n/a
C. Less than or equal to 1 mile (A+B)	3	0.4	282	0.6	E 0.67	0.13 – 2.19	n/a	n/a
D. Greater than 1 mile	756	99.6	45922	99.4	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

E Used exact logistic regression

Table 10. Odds ratios for congenital insufficiency of the aortic valve associated with maternal residential proximity to sites of concern. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	80	100.0	46204	100.0				
Landfills								
A. Less than or equal to ½ mile	8	10.0	6461	14.0	0.74	0.35 – 1.55	0.73	0.35 – 1.55
B. Greater than ½ mile to 1 mile	21	26.3	9473	20.5	1.32	0.79 – 2.19	1.33	0.80 – 2.20
C. Less than or equal to 1 mile (A+B)	29	36.3	15934	34.5	1.08	0.68 – 1.71	1.09	0.69 – 1.72
D. Greater than 1 mile	51	63.8	30270	65.5	1.00	(referent)	1.00	(referent)
Refineries and Chemical Manufacturing Plants								
A. Less than or equal to 2½ miles	13	16.3	10275	22.2	0.69	0.37 – 1.29	0.72	0.37 – 1.40
B. Greater than 2½ miles to 5 miles	30	37.5	15860	34.3	1.03	0.63 – 1.66	1.00	0.61 – 1.63
C. Less than or equal to 5 miles (A+B)	43	53.8	26135	56.6	0.89	0.58 – 1.39	0.88	0.56 – 1.38
D. Greater than 5 miles	37	46.3	20069	43.4	1.00	(referent)	1.00	(referent)
Military Airfields								
A. Less than or equal to ½ mile	0	0.0	443	1.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	5	6.3	1487	3.2	1.99	0.80 – 4.92	2.01	0.81 – 4.98
C. Less than or equal to 1 mile (A+B)	5	6.3	1930	4.2	1.53	0.62 – 3.79	1.54	0.62 – 3.83
D. Greater than 1 mile	75	93.8	44274	95.8	1.00	(referent)	1.00	(referent)
Incinerator, Injection Well, or Battery Recycling Site								
A. Less than or equal to ½ mile	1	1.3	1824	3.9	E 0.27	0.01 – 1.55	E S 0.24	0.01 – 1.45
B. Greater than ½ mile to 1 mile	5	6.3	3224	7.0	0.86	0.35 – 2.14	0.82	0.33 – 2.06
C. Less than or equal to 1 mile (A+B)	6	7.5	5048	10.9	0.66	0.29 – 1.52	0.63	0.27 – 1.46
D. Greater than 1 mile	74	92.5	41156	89.1	1.00	(referent)	1.00	(referent)
Oso Creek								
A. Less than or equal to ½ mile	0	0.0	6	0.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	0	0.0	276	0.6	0.00	n/a	0.00	n/a
C. Less than or equal to 1 mile (A+B)	0	0.0	282	0.6	0.00	n/a	0.00	n/a
D. Greater than 1 mile	80	100.0	45922	99.4	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

E Used exact logistic regression

S Adjusted only for maternal age, maternal race/ethnicity, and maternal education (short model)

Table 11. Odds ratios for mitral valve insufficiency associated with maternal residential proximity to sites of concern. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	206	100.0	46204	100.0				
Landfills								
A. Less than or equal to ½ mile	25	12.1	6461	14.0	0.87	0.57 – 1.34	0.86	0.56 – 1.33
B. Greater than ½ mile to 1 mile	47	22.8	9473	20.5	1.12	0.80 – 1.56	1.09	0.77 – 1.53
C. Less than or equal to 1 mile (A+B)	72	35.0	15934	34.5	1.02	0.77 – 1.36	0.99	0.74 – 1.33
D. Greater than 1 mile	134	65.1	30270	65.5	1.00	(referent)	1.00	(referent)
Refineries and Chemical Manufacturing Plants								
A. Less than or equal to 2½ miles	48	23.3	10275	22.2	1.03	0.73 – 1.46	1.06	0.73 – 1.54
B. Greater than 2½ miles to 5 miles	67	32.5	15860	34.3	0.93	0.68 – 1.28	0.99	0.72 – 1.38
C. Less than or equal to 5 miles (A+B)	115	55.8	26135	56.6	0.97	0.74 – 1.28	1.02	0.76 – 1.36
D. Greater than 5 miles	91	44.2	20069	43.4	1.00	(referent)	1.00	(referent)
Military Airfields								
A. Less than or equal to ½ mile	1	0.5	443	1.0	E 0.50	0.01 – 2.95	n/a	
B. Greater than ½ mile to 1 mile	10	4.9	1487	3.2	1.53	0.81 – 2.89	1.38	0.71 – 2.71
C. Less than or equal to 1 mile (A+B)	11	5.3	1930	4.2	1.30	0.70 – 2.38	1.19	0.63 – 2.25
D. Greater than 1 mile	195	94.7	44274	95.8	1.00	(referent)	1.00	(referent)
Incinerator, Injection Well, or Battery Recycling Site								
A. Less than or equal to ½ mile	8	3.9	1824	3.9	1.01	0.50 – 2.05	1.06	0.52 – 2.18
B. Greater than ½ mile to 1 mile	19	9.2	3224	7.0	1.36	0.84 – 2.18	1.44	0.88 – 2.34
C. Less than or equal to 1 mile (A+B)	27	13.1	5048	10.9	1.23	0.82 – 1.85	1.30	0.85 – 1.98
D. Greater than 1 mile	179	86.9	41156	89.1	1.00	(referent)	1.00	(referent)
Oso Creek								
A. Less than or equal to ½ mile	0	0.0	6	0.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	1	0.5	276	0.6	E 0.72	0.02 – 4.34	n/a	n/a
C. Less than or equal to 1 mile (A+B)	1	0.5	282	0.6	E 0.79	0.02 – 4.50	n/a	n/a
D. Greater than 1 mile	205	99.5	45922	99.4	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

E Used exact logistic regression

Table 12. Odds ratios for patent ductus arteriosus associated with maternal residential proximity to sites of concern. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	697	100.0	46204	100.0				
Landfills								
A. Less than or equal to ½ mile	94	13.5	6461	14.0	1.00	0.80 – 1.25	1.01	0.81 – 1.27
B. Greater than ½ mile to 1 mile	163	23.4	9473	20.5	1.18	0.99 – 1.42	1.17	0.98 – 1.41
C. Less than or equal to 1 mile (A+B)	257	36.9	15934	34.5	1.11	0.95 – 1.30	1.11	0.95 – 1.30
D. Greater than 1 mile	440	63.1	30270	65.5	1.00	(referent)	1.00	(referent)
Refineries and Chemical Manufacturing Plants								
A. Less than or equal to 2½ miles	155	22.2	10275	22.2	0.96	0.79 – 1.17	0.91	0.74 – 1.12
B. Greater than 2½ miles to 5 miles	227	32.6	15860	34.3	0.91	0.77 – 1.08	0.87	0.73 – 1.04
C. Less than or equal to 5 miles (A+B)	382	54.8	26135	56.6	0.93	0.80 – 1.08	0.89	0.76 – 1.04
D. Greater than 5 miles	315	45.2	20069	43.4	1.00	(referent)	1.00	(referent)
Military Airfields								
A. Less than or equal to ½ mile	8	1.1	443	1.0	1.21	0.60 – 2.44	1.30	0.64 – 2.63
B. Greater than ½ mile to 1 mile	28	4.0	1487	3.2	1.26	0.86 – 1.85	1.32	0.90 – 1.93
C. Less than or equal to 1 mile (A+B)	36	5.2	1930	4.2	1.25	0.89 – 1.75	1.31	0.93 – 1.84
D. Greater than 1 mile	661	94.8	44274	95.8	1.00	(referent)	1.00	(referent)
Incinerator, Injection Well, or Battery Recycling Site								
A. Less than or equal to ½ mile	23	3.3	1824	3.9	0.84	0.55 -1.28	0.82	0.54 – 1.26
B. Greater than ½ mile to 1 mile	55	7.9	3224	7.0	1.13	0.86 – 1.50	1.07	0.80 – 1.42
C. Less than or equal to 1 mile (A+B)	78	11.2	5048	10.9	1.03	0.81 – 1.30	0.98	0.77 – 1.26
D. Greater than 1 mile	619	88.8	41156	89.1	1.00	(referent)	1.00	(referent)
Oso Creek								
A. Less than or equal to ½ mile	0	0.0	6	0.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	5	0.7	276	0.6	1.20	0.50 – 2.92	1.40	0.48 – 3.41
C. Less than or equal to 1 mile (A+B)	5	0.7	282	0.6	1.18	0.48 – 2.86	1.36	0.56 – 3.32
D. Greater than 1 mile	692	99.3	45922	99.4	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

Table 13. Odds ratios for other anomalies of the aorta associated with maternal residential proximity to sites of concern. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	159	100.0	46204	100.0				
Landfills								
A. Less than or equal to ½ mile	23	14.5	6461	14.0	0.96	0.61 – 1.51	1.01	0.64 – 1.59
B. Greater than ½ mile to 1 mile	24	15.1	9473	20.5	0.68	0.44 – 1.07	0.69	0.44 – 1.08
C. Less than or equal to 1 mile (A+B)	47	29.6	15934	34.5	0.80	0.57 – 1.12	0.82	0.56 – 1.16
D. Greater than 1 mile	112	70.4	30270	65.5	1.00	(referent)	1.00	(referent)
Refineries and Chemical Manufacturing Plants								
A. Less than or equal to 2½ miles	39	24.5	10275	22.2	1.07	0.73 – 1.59	1.10	0.73 – 1.66
B. Greater than 2½ miles to 5 miles	49	30.8	15860	34.3	0.87	0.61 – 1.26	n/a	n/a
C. Less than or equal to 5 miles (A+B)	88	55.4	26135	56.6	0.95	0.70 – 1.30	1.00	0.72 – 1.39
D. Greater than 5 miles	71	44.7	20069	43.4	1.00	(referent)	1.00	(referent)
Military Airfields								
A. Less than or equal to ½ mile	1	0.6	443	1.0	E 0.66	0.02 – 3.91	n/a	n/a
B. Greater than ½ mile to 1 mile	7	4.4	1487	3.2	1.38	0.65 – 2.95	1.45	0.68 – 3.11
C. Less than or equal to 1 mile (A+B)	8	5.0	1930	4.2	1.22	0.60 – 2.48	1.26	0.62 – 2.58
D. Greater than 1 mile	151	95.0	44274	95.8	1.00	(referent)	1.00	(referent)
Incinerator, Injection Well, or Battery Recycling Site								
A. Less than or equal to ½ mile	5	3.1	1824	3.9	0.80	0.32 – 1.96	0.78	0.32 – 1.93
B. Greater than ½ mile to 1 mile	13	8.2	3224	7.0	1.18	0.67 – 2.08	1.22	0.68 – 2.18
C. Less than or equal to 1 mile (A+B)	18	11.3	5048	10.9	1.04	0.64 – 1.70	1.06	0.64 – 1.77
D. Greater than 1 mile	141	88.7	41156	89.1	1.00	(referent)	1.00	(referent)
Oso Creek								
A. Less than or equal to ½ mile	0	0.0	6	0.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	1	0.6	276	0.6	E 1.24	0.03 – 7.76	n/a	n/a
C. Less than or equal to 1 mile (A+B)	1	0.6	282	0.6	E 1.02	0.02 – 6.26	n/a	n/a
D. Greater than 1 mile	158	99.4	45922	99.4	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

E Used exact logistic regression

Table 14. Odds ratios for anomalies of the pulmonary artery associated with maternal residential proximity to sites of concern. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	941	100.0	46204	100.0				
Landfills								
A. Less than or equal to ½ mile	139	14.8	6461	14.0	1.09	0.90 – 1.31	1.08	0.89 – 1.30
B. Greater than ½ mile to 1 mile	204	21.7	9473	20.5	1.09	0.93 – 1.28	1.08	0.92 – 1.27
C. Less than or equal to 1 mile (A+B)	343	36.5	15934	34.5	1.09	0.95 – 1.25	1.08	0.94 – 1.24
D. Greater than 1 mile	598	63.6	30270	65.5	1.00	(referent)	1.00	(referent)
Refineries and Chemical Manufacturing Plants								
A. Less than or equal to 2½ miles	226	24.0	10275	22.2	1.14	0.96 – 1.34	1.04	0.87 – 1.24
B. Greater than 2½ miles to 5 miles	327	34.8	15860	34.3	1.07	0.92 – 1.24	0.99	0.85 – 1.16
C. Less than or equal to 5 miles (A+B)	553	58.8	26135	56.6	1.09	0.96 – 1.25	1.03	0.90 – 1.18
D. Greater than 5 miles	388	41.2	20069	43.4	1.00	(referent)	1.00	(referent)
Military Airfields								
A. Less than or equal to ½ mile	6	0.6	443	1.0	0.67	0.30 – 1.51	0.76	0.34 – 1.71
B. Greater than ½ mile to 1 mile	40	4.3	1487	3.2	1.33	0.97 – 1.84	1.35	0.97 – 1.87
C. Less than or equal to 1 mile (A+B)	46	4.9	1930	4.2	1.18	0.87 – 1.59	1.22	0.90 – 1.66
D. Greater than 1 mile	895	95.1	44274	95.8	1.00	(referent)	1.00	(referent)
Incinerator, Injection Well, or Battery Recycling Site								
A. Less than or equal to ½ mile	41	4.4	1824	3.9	1.12	0.81 – 1.53	1.07	0.78 – 1.48
B. Greater than ½ mile to 1 mile	72	7.7	3224	7.0	1.11	0.87 – 1.42	1.03	0.80 – 1.33
C. Less than or equal to 1 mile (A+B)	113	12.0	5048	10.9	1.11	0.91 – 1.36	1.05	0.86 – 1.29
D. Greater than 1 mile	828	88.0	41156	89.1	1.00	(referent)	1.00	(referent)
Oso Creek								
A. Less than or equal to ½ mile	0	0.0	6	0.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	7	0.7	276	0.6	1.25	0.59 – 2.65	1.50	0.71 – 3.20
C. Less than or equal to 1 mile (A+B)	7	0.7	282	0.6	1.22	0.58 – 2.59	1.46	0.69 – 3.12
D. Greater than 1 mile	934	99.3	45922	99.4	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

Table 15. Odds ratios for pyloric stenosis associated with maternal residential proximity to sites of concern. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	160	100.0	46204	100.0				
Landfills								
A. Less than or equal to ½ mile	30	18.8	6461	14.0	1.38	0.92 – 2.07	1.40	0.93 – 2.10
B. Greater than ½ mile to 1 mile	28	17.5	9473	20.5	0.88	0.58 – 1.33	0.89	0.59 – 1.36
C. Less than or equal to 1 mile (A+B)	58	36.3	15934	34.5	1.08	0.78 – 1.49	1.10	0.79 – 1.52
D. Greater than 1 mile	102	63.8	30270	65.5	1.00	(referent)	1.00	(referent)
Refineries and Chemical Manufacturing Plants								
A. Less than or equal to 2½ miles	28	17.5	10275	22.2	0.76	0.49 – 1.18	0.73	0.46 – 1.14
B. Greater than 2½ miles to 5 miles	60	37.5	15860	34.3	1.05	0.75 – 1.49	0.99	0.70 – 1.41
C. Less than or equal to 5 miles (A+B)	88	55.0	26135	56.6	0.94	0.69 – 1.28	0.91	0.66 – 1.25
D. Greater than 5 miles	72	45.0	20069	43.4	1.00	(referent)	1.00	(referent)
Military Airfields								
A. Less than or equal to ½ mile	0	0.0	443	1.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	7	4.4	1487	3.2	1.36	0.64 – 2.91	1.42	0.66 – 3.05
C. Less than or equal to 1 mile (A+B)	7	4.4	1930	4.2	1.05	0.49 – 2.24	1.09	0.51 – 2.34
D. Greater than 1 mile	153	95.6	44274	95.8	1.00	(referent)	1.00	(referent)
Incinerator, Injection Well, or Battery Recycling Site								
A. Less than or equal to ½ mile	5	3.1	1824	3.9	0.76	0.31 – 1.86	0.70	0.29 – 1.73
B. Greater than ½ mile to 1 mile	7	4.4	3224	7.0	0.60	0.28 – 1.29	0.59	0.27 – 1.27
C. Less than or equal to 1 mile (A+B)	12	7.5	5048	10.9	0.66	0.37 – 1.19	0.63	0.35 – 1.15
D. Greater than 1 mile	148	92.5	41156	89.1	1.00	(referent)	1.00	(referent)
Oso Creek								
A. Less than or equal to ½ mile	0	0.0	6	0.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	0	0.0	276	0.6	0.00	n/a	0.00	n/a
C. Less than or equal to 1 mile (A+B)	0	0.0	282	0.6	0.00	n/a	0.00	n/a
D. Greater than 1 mile	160	100.0	45922	99.4	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

Table 16. Odds ratios for atresia/stenosis of the large intestine and anus associated with maternal residential proximity to sites of concern. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	38	100.0	46204	100.0				
Landfills								
A. Less than or equal to ½ mile	4	10.5	6461	14.0	E 0.83	0.29 – 2.42	E S 0.86	0.21 – 2.53
B. Greater than ½ mile to 1 mile	12	31.6	9473	20.5	1.74	0.86 – 3.52	S 1.75	0.87 – 3.54
C. Less than or equal to 1 mile (A+B)	16	42.1	15934	34.5	1.38	0.73 – 2.63	S 1.40	0.73 – 2.66
D. Greater than 1 mile	22	57.9	30270	65.5	1.00	(referent)	1.00	(referent)
Refineries and Chemical Manufacturing Plants								
A. Less than or equal to 2½ miles	8	21.1	10275	22.2	0.91	0.40 – 2.13	S 0.96	0.40 – 2.31
B. Greater than 2½ miles to 5 miles	13	34.2	15860	34.3	0.97	0.47 – 1.99	S 0.99	0.47 – 2.06
C. Less than or equal to 5 miles (A+B)	21	55.3	26135	56.6	0.95	0.50 – 1.80	S 0.96	0.50 – 1.85
D. Greater than 5 miles	17	44.7	20069	43.4	1.00	(referent)	1.00	(referent)
Military Airfields								
A. Less than or equal to ½ mile	1	2.6	443	1.0	E 2.79	0.07 – 17.43	E S 2.62	0.06 – 16.55
B. Greater than ½ mile to 1 mile	1	2.6	1487	3.2	E 0.85	0.02 – 5.15	E S 0.83	0.02 – 5.07
C. Less than or equal to 1 mile (A+B)	2	5.3	1930	4.2	E 1.30	0.15 – 5.12	E S 1.27	0.15 – 5.04
D. Greater than 1 mile	36	94.7	44274	95.8	1.00	(referent)	1.00	(referent)
Incinerator, Injection Well, or Battery Recycling Site								
A. Less than or equal to ½ mile	1	2.6	1824	3.9	E 0.65	0.02 – 3.92	E S 0.73	0.02 – 4.72
B. Greater than ½ mile to 1 mile	7	18.4	3224	7.0	2.98	1.31 – 6.79	S 3.28	1.38 – 7.81
C. Less than or equal to 1 mile (A+B)	8	21.1	5048	10.9	2.18	1.00 – 4.75	S 2.43	1.06 – 5.59
D. Greater than 1 mile	30	79.0	41156	89.1	1.00	(referent)	1.00	(referent)
Oso Creek								
A. Less than or equal to ½ mile	0	0.0	6	0.0	0.0	n/a	0.0	n/a
B. Greater than ½ mile to 1 mile	0	0.0	276	0.6	0.0	n/a	0.0	n/a
C. Less than or equal to 1 mile (A+B)	0	0.0	282	0.6	0.0	n/a	0.0	n/a
D. Greater than 1 mile	38	100.0	45922	99.4	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

E Used exact logistic regression

S Adjusted only for maternal age, maternal race/ethnicity, and maternal education (short model)

Odds ratios in bold are statistically significant.

Table 17. Odds ratios for obstructive genitourinary defects associated with maternal residential proximity to sites of concern. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	152	100.0	46204	100.0				
Landfills								
A. Less than or equal to ½ mile	20	13.2	6461	14.0	0.94	0.58 – 1.52	0.88	0.53 – 1.46
B. Greater than ½ mile to 1 mile	32	21.1	9473	20.5	1.02	0.69 – 1.52	1.07	0.72 – 1.59
C. Less than or equal to 1 mile (A+B)	52	34.2	15934	34.5	0.99	0.71 – 1.38	0.99	0.70 – 1.39
D. Greater than 1 mile	100	65.8	30270	65.5	1.00	(referent)	1.00	(referent)
Refineries and Chemical Manufacturing Plants								
A. Less than or equal to 2½ miles	35	23.0	10275	22.2	1.01	0.67 – 1.51	1.10	0.72 – 1.70
B. Greater than 2½ miles to 5 miles	49	32.2	15860	34.3	0.91	0.63 – 1.32	0.95	0.65 – 1.39
C. Less than or equal to 5 miles (A+B)	84	55.3	26135	56.6	0.95	0.69 – 1.31	1.00	0.71 – 1.40
D. Greater than 5 miles	68	44.7	20069	43.4	1.00	(referent)	1.00	(referent)
Military Airfields								
A. Less than or equal to ½ mile	1	0.7	443	1.0	E 0.68	0.02 – 4.04	n/a	n/a
B. Greater than ½ mile to 1 mile	3	2.0	1487	3.2	E 0.61	0.12 – 1.86	n/a	n/a
C. Less than or equal to 1 mile (A+B)	4	2.6	1930	4.2	0.62	0.23 – 1.68	0.64	0.23 – 1.72
D. Greater than 1 mile	148	97.4	44274	95.8	1.00	(referent)	1.00	(referent)
Incinerator, Injection Well, or Battery Recycling Site								
A. Less than or equal to ½ mile	9	5.9	1824	3.9	1.61	0.82 – 3.18	1.69	0.84 – 3.38
B. Greater than ½ mile to 1 mile	17	11.2	3224	7.0	1.72	1.04 – 2.86	1.92	1.13 – 3.25
C. Less than or equal to 1 mile (A+B)	26	17.1	5048	10.9	1.68	1.10 – 2.57	1.86	1.19 – 2.91
D. Greater than 1 mile	126	82.9	41156	89.1	1.00	(referent)	1.00	(referent)
Oso Creek								
A. Less than or equal to ½ mile	0	0.0	6	0.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	1	0.7	276	0.6	E 1.21	0.03 – 7.52	n/a	n/a
C. Less than or equal to 1 mile (A+B)	1	0.7	282	0.6	E 1.17	0.03 – 7.20	n/a	n/a
D. Greater than 1 mile	151	99.3	45922	99.4	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

E Used exact logistic regression

Odds ratios in bold are statistically significant.

Table 18. Odds ratios for anomalies of the diaphragm associated with maternal residential proximity to sites of concern. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	30	100.0	46204	100.0				
Landfills								
A. Less than or equal to ½ mile	3	10.0	6461	14.0	E 0.67	0.13 – 2.24	E S 0.68	0.13 – 2.26
B. Greater than ½ mile to 1 mile	5	16.7	9473	20.5	0.73	0.28 – 1.92	0.73	0.28 – 1.93
C. Less than or equal to 1 mile (A+B)	8	26.7	15934	34.5	0.69	0.31 – 1.55	0.69	0.31 – 1.56
D. Greater than 1 mile	22	73.3	30270	65.5	1.00	(referent)	1.00	(referent)
Refineries and Chemical Manufacturing Plants								
A. Less than or equal to 2½ miles	9	30.0	10275	22.2	1.47	0.62 – 3.48	S 1.51	0.61 – 3.74
B. Greater than 2½ miles to 5 miles	9	30.0	15860	34.3	0.95	0.40 – 2.25	S 0.96	0.40 – 2.32
C. Less than or equal to 5 miles (A+B)	18	60.0	26135	56.6	1.15	0.56 – 2.39	S 1.18	0.56 – 2.50
D. Greater than 5 miles	12	40.0	20069	43.4	1.00	(referent)	1.00	(referent)
Military Airfields								
A. Less than or equal to ½ mile	2	6.7	443	1.0	E 6.96	0.78 – 29.10	E S 7.10	0.78 – 30.55
B. Greater than ½ mile to 1 mile	1	3.3	1487	3.2	E 1.16	0.03 – 7.17	E S 1.15	0.03 – 7.15
C. Less than or equal to 1 mile (A+B)	3	10.0	1930	4.2	E 2.44	0.47 – 8.06	E S 2.41	0.46 – 7.98
D. Greater than 1 mile	27	90.0	44274	95.8	1.00	(referent)	1.00	(referent)
Incinerator, Injection Well, or Battery Recycling Site								
A. Less than or equal to ½ mile	1	3.3	1824	3.9	E 0.86	0.02 – 5.29	E S 0.92	0.02 – 5.89
B. Greater than ½ mile to 1 mile	2	6.7	3224	7.0	E 0.87	0.10 – 3.50	E S 0.87	0.10 – 3.67
C. Less than or equal to 1 mile (A+B)	3	10.0	5048	10.9	E 0.87	0.17 – 2.85	E S 0.94	0.18 – 3.25
D. Greater than 1 mile	27	90.0	41156	89.1	1.00	(referent)	1.00	(referent)
Oso Creek								
A. Less than or equal to ½ mile	0	0.0	6	0.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	0	0.0	276	0.6	0.00	n/a	0.00	n/a
C. Less than or equal to 1 mile (A+B)	0	0.0	282	0.6	0.00	n/a	0.00	n/a
D. Greater than 1 mile	30	100.0	45922	99.4	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

E Used exact logistic regression

S Adjusted only for maternal age, maternal race/ethnicity, and maternal education (short model)

Table 19. Odds ratios for gastroschisis associated with maternal residential proximity to sites of concern. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	28	100.0	46204	100.0				
Landfills								
A. Less than or equal to ½ mile	6	21.4	6461	14.0	E 1.63	0.52 – 4.35	E S 1.53	0.49 – 4.13
B. Greater than ½ mile to 1 mile	5	17.9	9473	20.5	0.94	0.35 – 2.55	0.94	0.35 – 2.55
C. Less than or equal to 1 mile (A+B)	11	39.3	15934	34.5	1.23	0.58 – 2.63	1.22	0.57 – 2.60
D. Greater than 1 mile	17	60.7	30270	65.5	1.00	(referent)	1.00	(referent)
Refineries and Chemical Manufacturing Plants								
A. Less than or equal to 2½ miles	9	32.1	10275	22.2	E 1.56	0.57 – 4.14	E S 1.64	0.58 – 4.53
B. Greater than 2½ miles to 5 miles	8	28.6	15860	34.3	0.92	0.37 – 2.29	0.94	0.37 – 2.39
C. Less than or equal to 5 miles (A+B)	17	60.7	26135	56.6	1.19	0.56 – 2.53	1.20	0.55 – 2.62
D. Greater than 5 miles	11	39.3	20069	43.4	1.00	(referent)	1.00	(referent)
Military Airfields								
A. Less than or equal to ½ mile	0	0.0	443	1.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	0	0.0	1487	3.2	0.00	n/a	0.00	n/a
C. Less than or equal to 1 mile (A+B)	0	0.0	1930	4.2	0.00	n/a	0.00	n/a
D. Greater than 1 mile	28	100.0	44274	95.8	1.00	(referent)	1.00	(referent)
Incinerator, Injection Well, or Battery Recycling Site								
A. Less than or equal to ½ mile	0	0.0	1824	3.9	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	4	14.3	3224	7.0	2.13	0.74 – 6.14	2.27	0.75 – 6.86
C. Less than or equal to 1 mile (A+B)	4	14.3	5048	10.9	1.36	0.47 – 3.92	1.44	0.48 – 4.37
D. Greater than 1 mile	24	85.7	41156	89.1	1.00	(referent)	1.00	(referent)
Oso Creek								
A. Less than or equal to ½ mile	0	0.0	6	0.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	0	0.0	276	0.6	0.00	n/a	0.00	n/a
C. Less than or equal to 1 mile (A+B)	0	0.0	282	0.6	0.00	n/a	0.00	n/a
D. Greater than 1 mile	28	100.0	45922	99.4	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

E Used exact logistic regression

S Adjusted only for maternal age, maternal race/ethnicity, and maternal education (short model)

TABLES REGARDING THE ASSOCIATION BETWEEN FIVE SELECTED BIRTH DEFECTS AND MILITARY AIRFIELDS

Table 20. Odds ratios for anomalies of the pulmonary valve associated with maternal residential proximity to military airfields. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	159	100.0	46204	100.0				
Cabaniss								
A. Less than or equal to ½ mile	0	0.0	157	0.3	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	4	2.5	998	2.2	1.17	0.43 – 3.15	1.16	0.43 – 3.15
C. Less than or equal to 1 mile (A+B)	4	2.5	1155	2.5	1.00	0.37 – 2.72	1.00	0.40 – 2.72
D. Greater than 1 mile	155	97.5	45049	97.5	1.00	(referent)	1.00	(referent)
Cuddihy								
A. Less than or equal to ½ mile	0	0.0	0	0.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	0	0.0	1	0.0	0.00	n/a	0.00	n/a
C. Less than or equal to 1 mile (A+B)	0	0.0	1	0.0	0.00	n/a	0.00	n/a
D. Greater than 1 mile	159	100.0	46203	100.0	1.00	(referent)	1.00	(referent)
Waldron a.k.a. Roddfield								
A. Less than or equal to ½ mile	1	0.6	286	0.6	E 1.19	0.03 – 7.34	E S 1.29	0.03 – 8.06
B. Greater than ½ mile to 1 mile	6	3.8	488	1.1	3.68	1.61 – 8.35	4.04	1.76 – 9.30
C. Less than or equal to 1 mile (A+B)	7	4.4	774	1.7	2.70	1.26 – 5.79	2.94	1.36 – 6.39
D. Greater than 1 mile	152	95.6	45430	98.3	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

E Used exact logistic regression

S Adjusted only for maternal age, maternal race/ethnicity, and maternal education (short model)

Odds ratios in bold are statistically significant.

Table 21. Odds ratios for congenital insufficiency of the aortic valve associated with maternal residential proximity to military airfields. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	80	100.0	46204	100.0				
Cabaniss								
A. Less than or equal to ½ mile	0	0.0	157	0.3	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	4	5.0	998	2.2	2.38	0.87 – 6.51	2.37	0.86 – 6.53
C. Less than or equal to 1 mile (A+B)	4	5.0	1155	2.5	2.06	0.75 – 5.62	2.05	0.75 – 5.63
D. Greater than 1 mile	76	95.0	45049	97.5	1.00	(referent)	1.00	(referent)
Cuddihy								
A. Less than or equal to ½ mile	0	0.0	0	0.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	0	0.0	1	0.0	0.00	n/a	0.00	n/a
C. Less than or equal to 1 mile (A+B)	0	0.0	1	0.0	0.00	n/a	0.00	n/a
D. Greater than 1 mile	80	100.0	46203	100.0	1.00	(referent)	1.00	(referent)
Waldron a.k.a. Roddfield								
A. Less than or equal to ½ mile	0	0.0	286	0.6	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	1	1.3	488	1.1	E 1.22	0.03 – 7.36	E S 1.21	0.03 – 7.41
C. Less than or equal to 1 mile (A+B)	1	1.3	774	1.7	E 0.78	0.02 – 4.62	E S 0.82	0.02 – 4.92
D. Greater than 1 mile	79	98.8	45430	98.3	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

E Used exact logistic regression

S Adjusted only for maternal age, maternal race/ethnicity, and maternal education (short model)

Table 22. Odds ratios for mitral valve insufficiency associated with maternal residential proximity to military airfields. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	206	100.0	46204	100.0				
Cabaniss								
A. Less than or equal to ½ mile	1	0.5	157	0.3	E 1.17	0.03 – 7.43	n/a	n/a
B. Greater than ½ mile to 1 mile	4	1.9	998	2.2	0.90	0.33 – 2.42	0.90	0.33 – 2.43
C. Less than or equal to 1 mile (A+B)	5	2.4	1155	2.5	0.97	0.40 – 2.36	0.98	0.40 – 2.38
D. Greater than 1 mile	201	97.6	45049	97.5	1.00	(referent)	1.00	(referent)
Cuddihy								
A. Less than or equal to ½ mile	0	0.0	0	0.0	n/a	n/a	n/a	n/a
B. Greater than ½ mile to 1 mile	0	0.0	1	0.0	0.00	n/a	0.00	n/a
C. Less than or equal to 1 mile (A+B)	0	0.0	1	0.0	0.00	n/a	0.00	n/a
D. Greater than 1 mile	206	100.0	46203	100.0	1.00	(referent)	1.00	(referent)
Waldron a.k.a. Roddfield								
A. Less than or equal to ½ mile	0	0.0	286	0.6	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	6	2.9	488	1.1	2.79	1.23 – 6.32	2.74	1.20 – 6.25
C. Less than or equal to 1 mile (A+B)	6	2.9	774	1.7	1.76	0.78 – 3.98	1.72	0.76 – 3.93
D. Greater than 1 mile	200	97.1	45430	98.3	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

E Used exact logistic regression

S Adjusted only for maternal age, maternal race/ethnicity, and maternal education (short model)

Odds ratios in bold are statistically significant.

Table 23. Odds ratios for atresia/stenosis of the large intestine or anus associated with maternal residential proximity to military airfields. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates			
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI		
Total	38	100.0	46204	100.0						
Cabaniss										
A. Less than or equal to ½ mile	1	2.6	157	0.3	E	9.14	0.21 – 63.93	E S	9.21	0.21 – 66.25
B. Greater than ½ mile to 1 mile	0	0.0	998	2.2		0.00	n/a		0.00	n/a
C. Less than or equal to 1 mile (A+B)	1	2.6	1155	2.5	E	1.15	0.03 – 7.01	E S	1.13	0.03 – 6.88
D. Greater than 1 mile	37	97.4	45049	97.5		1.00	(referent)		1.00	(referent)
Cuddihy										
A. Less than or equal to ½ mile	0	0.0	0	0.0		0.00	n/a		0.00	n/a
B. Greater than ½ mile to 1 mile	0	0.0	1	0.0		0.00	n/a		0.00	n/a
C. Less than or equal to 1 mile (A+B)	0	0.0	1	0.0		0.00	n/a		0.00	n/a
D. Greater than 1 mile	38	100.0	46203	100.0		1.00	(referent)		1.00	(referent)
Waldron a.k.a. Roddfield										
A. Less than or equal to ½ mile	0	0.0	286	0.6		0.00	n/a		0.00	n/a
B. Greater than ½ mile to 1 mile	1	2.6	488	1.1	E	2.73	0.07 – 16.98	E S	2.68	0.06 – 17.20
C. Less than or equal to 1 mile (A+B)	1	2.6	774	1.7	E	1.46	0.04 – 8.89	E S	1.40	0.03 – 8.83
D. Greater than 1 mile	37	97.4	45430	98.3		1.00	(referent)		1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

E Used exact logistic regression

S Adjusted only for maternal age, maternal race/ethnicity, and maternal education (short model)

Table 24. Odds ratios for anomalies of the diaphragm associated with maternal residential proximity to military airfields. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	30	100.0	46204	100.0				
Cabaniss								
A. Less than or equal to ½ mile	1	3.3	157	0.3	E 9.81	0.23 – 67.57	E S 10.12	0.23 – 71.39
B. Greater than ½ mile to 1 mile	1	3.3	998	2.2	E 1.71	0.04 – 10.58	E S 1.69	0.04 – 10.56
C. Less than or equal to 1 mile (A+B)	2	6.7	1155	2.5	E 3.09	0.35 – 12.54	E S 3.02	0.34 – 12.46
D. Greater than 1 mile	28	93.3	45049	97.5	1.00	(referent)	1.00	(referent)
Cuddihy								
A. Less than or equal to ½ mile	0	0.0	0	0.0	n/a	n/a	n/a	n/a
B. Greater than ½ mile to 1 mile	0	0.0	1	0.0	0.00	n/a	0.00	n/a
C. Less than or equal to 1 mile (A+B)	0	0.0	1	0.0	0.00	n/a	0.00	n/a
D. Greater than 1 mile	30	100.0	46203	100.0	1.00	(referent)	1.00	(referent)
Waldron a.k.a. Roddfield								
A. Less than or equal to ½ mile	1	3.3	286	0.6	E 4.63	0.11 – 29.74	E S 4.63	0.11 – 31.51
B. Greater than ½ mile to 1 mile	0	0.0	488	1.1	0.00	n/a	0.00	n/a
C. Less than or equal to 1 mile (A+B)	1	3.3	774	1.7	E 2.19	0.05 – 13.60	E S 2.06	0.05 – 13.55
D. Greater than 1 mile	29	96.7	45430	98.3	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

E Used exact logistic regression

S Adjusted only for maternal age, maternal race/ethnicity, and maternal education (short model)

TABLES REGARDING THE ASSOCIATION BETWEEN FIVE SELECTED BIRTH DEFECTS AND OTHER SITES OF POTENTIAL CONCERN

Table 25. Odds ratios for tetralogy of Fallot associated with maternal residential proximity to the old city incinerator, injection well, or battery recycling plant. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	26	100.0	46204	100.0				
Old City Incinerator								
A. Less than or equal to ½ mile	0	0.0	1013	2.2	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	3	11.5	2650	5.7	E 2.13	0.41 – 7.11	E S 1.94	0.36 – 6.78
C. Less than or equal to 1 mile (A+B)	3	11.5	3663	7.9	E 1.51	0.29 – 5.02	E S 1.37	0.25 – 4.83
D. Greater than 1 mile	23	88.5	42541	92.1	1.00	(referent)	1.00	(referent)
Injection Well								
A. Less than or equal to ½ mile	0	0.0	0	0.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	0	0.0	95	0.2	0.00	n/a	0.00	n/a
C. Less than or equal to 1 mile (A+B)	0	0.0	95	0.2	0.00	n/a	0.00	n/a
D. Greater than 1 mile	26	100.0	46109	99.8	1.00	(referent)	1.00	(referent)
Battery Recycling Site								
A. Less than or equal to ½ mile	0	0.0	985	2.2	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	2	7.7	2200	4.8	E 1.60	0.18 – 6.50	E S 1.62	0.18 – 6.95
C. Less than or equal to 1 mile (A+B)	2	7.7	3185	6.9	E 1.11	0.13 – 4.51	E S 1.01	0.11 – 4.27
D. Greater than 1 mile	24	92.3	43019	93.1	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

E Used exact logistic regression

S Adjusted only for maternal age, maternal race/ethnicity, and maternal education (short model)

Table 26. Odds ratios for ventricular septal defect associated with maternal residential proximity to the old city incinerator, injection well, or battery recycling plant. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	450	100.0	46204	100.0				
Old City Incinerator								
A. Less than or equal to ½ mile	12	2.7	1013	2.2	1.24	0.70 – 2.22	1.14	0.63 – 2.04
B. Greater than ½ mile to 1 mile	33	7.3	2650	5.7	1.31	0.92 – 1.87	1.17	0.82 – 1.69
C. Less than or equal to 1 mile (A+B)	45	10.0	3663	7.9	1.29	0.95 – 1.76	1.17	0.85 – 1.60
D. Greater than 1 mile	405	90.0	42541	92.1	1.00	(referent)	1.00	(referent)
Injection Well								
A. Less than or equal to ½ mile	0	0.0	0	0.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	3	0.7	95	0.2	E 2.36	0.43 – 8.62	n/a	n/a
C. Less than or equal to 1 mile (A+B)	3	0.7	95	0.2	E 2.71	0.50 – 10.60	n/a	n/a
D. Greater than 1 mile	447	99.3	46109	99.8	1.00	(referent)	1.00	(referent)
Battery Recycling Site								
A. Less than or equal to ½ mile	15	3.3	985	2.2	1.58	0.94 – 2.66	1.42	0.84 – 2.40
B. Greater than ½ mile to 1 mile	21	4.7	2200	4.8	0.99	0.64 – 1.54	0.89	0.57 – 1.39
C. Less than or equal to 1 mile (A+B)	36	8.0	3185	6.9	1.18	0.83 – 1.65	1.06	0.75 – 1.50
D. Greater than 1 mile	414	92.0	43019	93.1	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

E Used exact logistic regression

S Adjusted only for maternal age, maternal race/ethnicity, and maternal education (short model)

Table 27. Odds ratios for atresia/stenosis of the large intestine or anus associated with maternal residential proximity to the old city incinerator, injection well, or battery recycling plant. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	38	100.0	46204	100.0				
Old City Incinerator								
A. Less than or equal to ½ mile	1	2.6	1013	2.2	E 1.38	0.03 – 8.47	E S 1.59	0.04 – 10.60
B. Greater than ½ mile to 1 mile	6	15.8	2650	5.7	E 3.10	1.05 – 7.64	E S 3.48	1.13 – 9.13
C. Less than or equal to 1 mile (A+B)	7	18.4	3663	7.9	E 2.63	0.97 – 6.14	E S 3.02	1.05 – 7.65
D. Greater than 1 mile	31	81.6	42541	92.1	1.00	(referent)	1.00	(referent)
Injection Well								
A. Less than or equal to ½ mile	0	0.0	0	0.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	0	0.0	95	0.2	0.00	n/a	0.00	n/a
C. Less than or equal to 1 mile (A+B)	0	0.0	95	0.2	0.00	n/a	0.00	n/a
D. Greater than 1 mile	38	100.0	46109	99.8	1.00	(referent)	1.00	(referent)
Battery Recycling Site								
A. Less than or equal to ½ mile	0	0.0	985	2.2	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	4	10.5	2200	4.8	E 2.28	0.58 – 6.47	E S 2.39	0.59 – 7.12
C. Less than or equal to 1 mile (A+B)	4	10.5	3185	6.9	E 1.62	0.41 – 4.58	E S 1.71	0.42 – 5.08
D. Greater than 1 mile	34	89.5	43019	93.1	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

E Used exact logistic regression

S Adjusted only for maternal age, maternal race/ethnicity, and maternal education (short model)

Odds ratios in bold are statistically significant.

Table 28. Odds ratios for obstructive genitourinary defects associated with maternal residential proximity to the old city incinerator, injection well, or battery recycling plant. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	152	100.0	46204	100.0				
Old City Incinerator								
A. Less than or equal to ½ mile	5	3.3	1013	2.2	1.56	0.64 – 3.81	1.64	0.66 – 4.07
B. Greater than ½ mile to 1 mile	12	7.9	2650	5.7	1.43	0.79 – 2.58	1.56	0.85 – 2.87
C. Less than or equal to 1 mile (A+B)	17	11.2	3663	7.9	1.46	0.88 – 2.43	1.59	0.94 – 2.70
D. Greater than 1 mile	135	88.8	42541	92.1	1.00	(referent)	1.00	(referent)
Injection Well								
A. Less than or equal to ½ mile	0	0.0	0	0.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	0	0.0	95	0.2	0.00	n/a	0.00	n/a
C. Less than or equal to 1 mile (A+B)	0	0.0	95	0.2	0.00	n/a	0.00	n/a
D. Greater than 1 mile	152	100.0	46109	99.8	1.00	(referent)	1.00	(referent)
Battery Recycling Site								
A. Less than or equal to ½ mile	5	3.3	985	2.2	1.58	0.65 – 3.87	1.62	0.65 – 4.01
B. Greater than ½ mile to 1 mile	9	5.9	2200	4.8	1.28	0.65 – 2.51	1.38	0.70 – 2.76
C. Less than or equal to 1 mile (A+B)	14	9.2	3185	6.9	1.37	0.79 – 2.38	1.46	0.83 – 2.58
D. Greater than 1 mile	138	90.8	43019	93.1	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

E Used exact logistic regression

S Adjusted only for maternal age, maternal race/ethnicity, and maternal education (short model)

Table 29. Odds ratios for gastroschisis associated with maternal residential proximity to the old city incinerator, injection well, or battery recycling plant. Based on subjects with geocoded addresses.

Proximity to Site of Concern	Cases		Controls		Crude Analysis		Adjusted For Covariates	
	Number	%	Number	%	Odds Ratio	95 % CI	Odds Ratio	95% CI
Total	28	100.0	46204	100.0				
Old City Incinerator								
A. Less than or equal to ½ mile	0	0.0	1013	2.2	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	3	10.7	2650	5.7	E 1.93	0.37 – 6.40	E S 2.14	0.39 – 7.59
C. Less than or equal to 1 mile (A+B)	3	10.7	3663	7.9	E 1.25	0.24 – 4.12	E S 1.84	0.25 – 4.76
D. Greater than 1 mile	25	89.3	42541	92.1	1.00	(referent)	1.00	(referent)
Injection Well								
A. Less than or equal to ½ mile	0	0.0	0	0.0	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	0	0.0	95	0.2	0.00	n/a	0.00	n/a
C. Less than or equal to 1 mile (A+B)	0	0.0	95	0.2	0.00	n/a	0.00	n/a
D. Greater than 1 mile	28	100.0	46109	99.8	1.00	(referent)	1.00	(referent)
Battery Recycling Site								
A. Less than or equal to ½ mile	0	0.0	985	2.2	0.00	n/a	0.00	n/a
B. Greater than ½ mile to 1 mile	3	10.7	2200	4.8	E 2.08	0.40 – 6.89	E S 2.27	0.42 – 8.14
C. Less than or equal to 1 mile (A+B)	3	10.7	3185	6.9	E 1.56	0.30 – 5.16	E S 1.70	0.31 – 6.14
D. Greater than 1 mile	25	89.3	43019	93.1	1.00	(referent)	1.00	(referent)

n/a Not available (Logistic regression model did not converge or provided questionable results, or software exceeded computer memory or time available.)

E Used exact logistic regression

S Adjusted only for maternal age, maternal race/ethnicity, and maternal education (short model)