Case-control Study of Childhood Cancers in Dover Township (Ocean County), New Jersey

Volume III: Technical Report Tables and Figures

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Division of Epidemiology, Environmental and Occupational Health New Jersey Department of Health and Senior Services

in cooperation with

Agency for Toxic Substances and Disease Registry U.S. Department of Health and Human Services

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Volume III: Technical Report Tables and Figures

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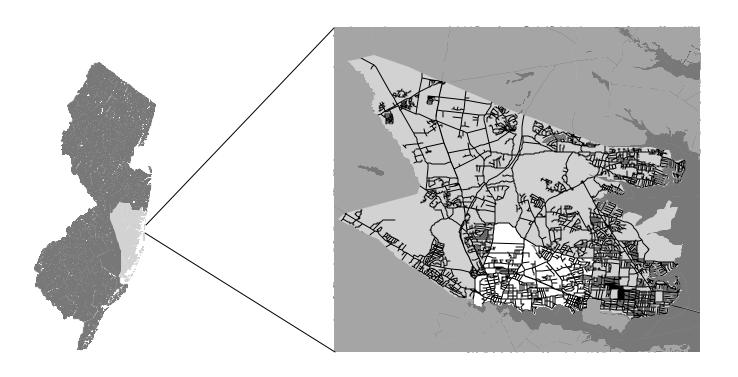




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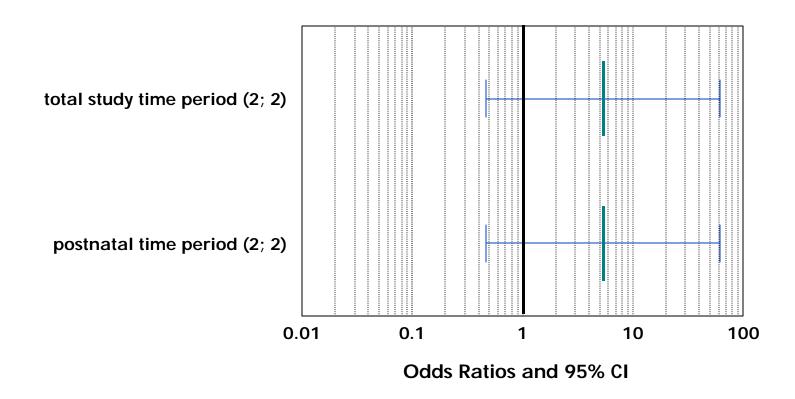


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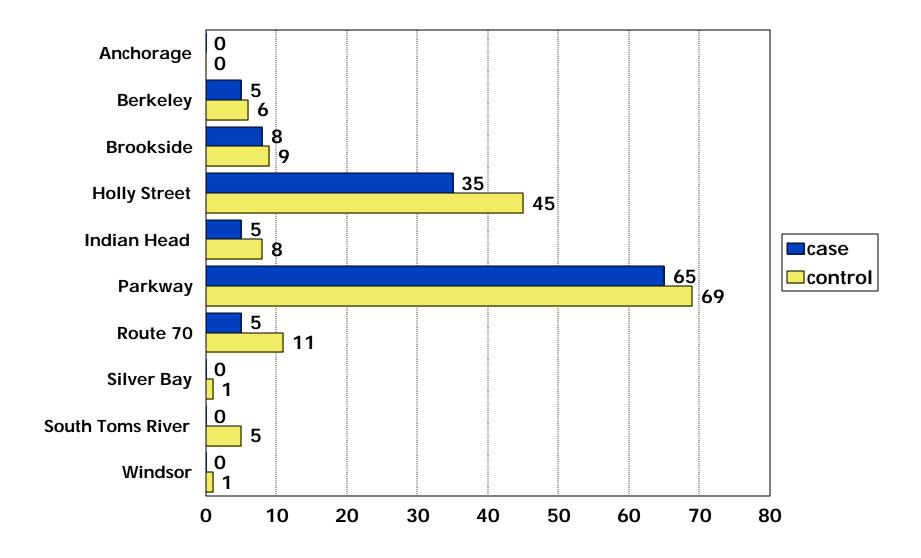


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Leukemia: Diagnosis Ages 0 to 19 (exposed cases; exposed controls)

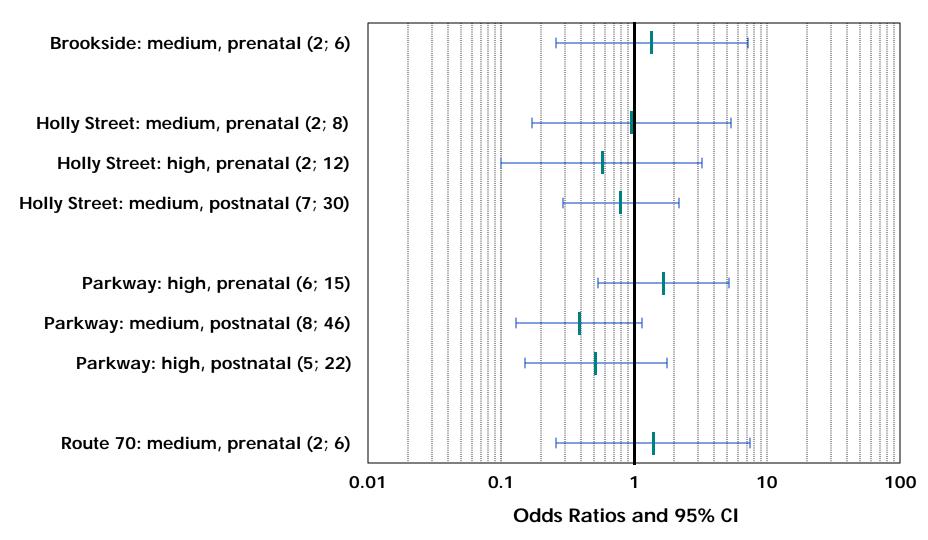


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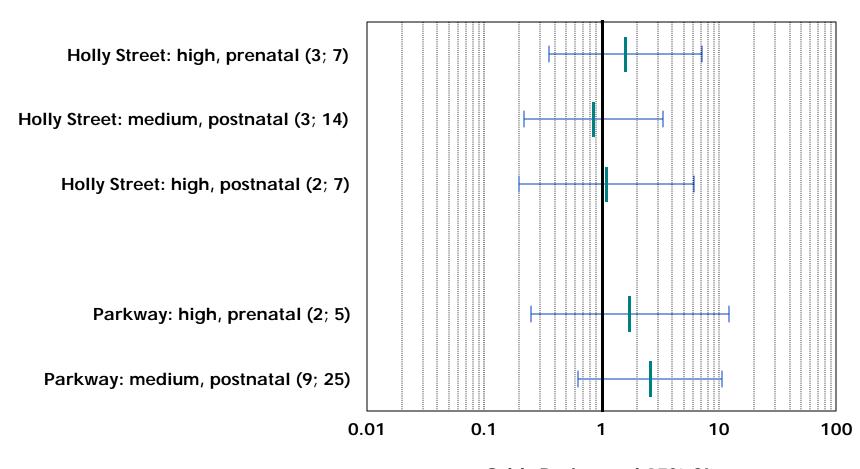


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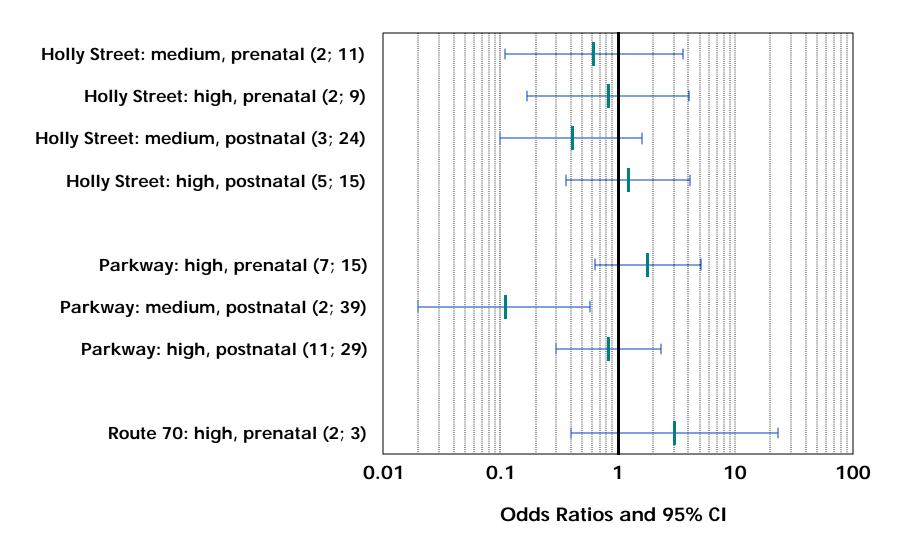


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Brain and Central Nervous System Cancers: Diagnosis Ages 0 to 19 (exposed cases; exposed controls)

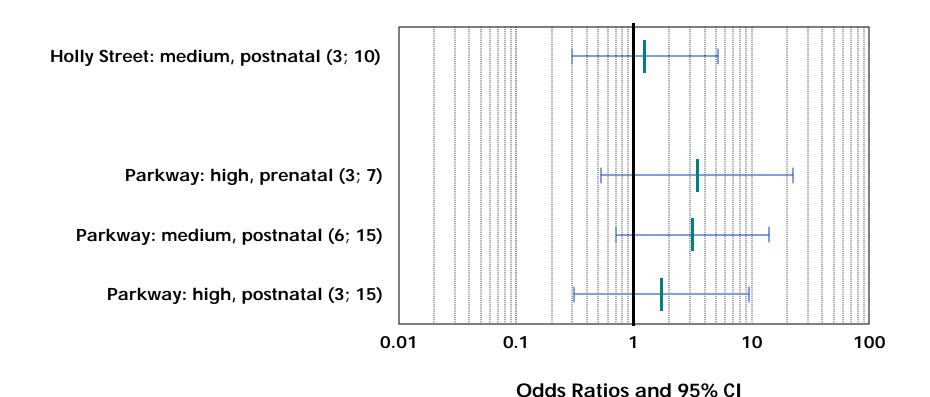


Figure 6a: Interview Study Summary of Parkway Well Field Prenatal Water Indices for Females

Leukemia: Diagnosis Ages 0 to 19 (exposed cases; exposed controls)

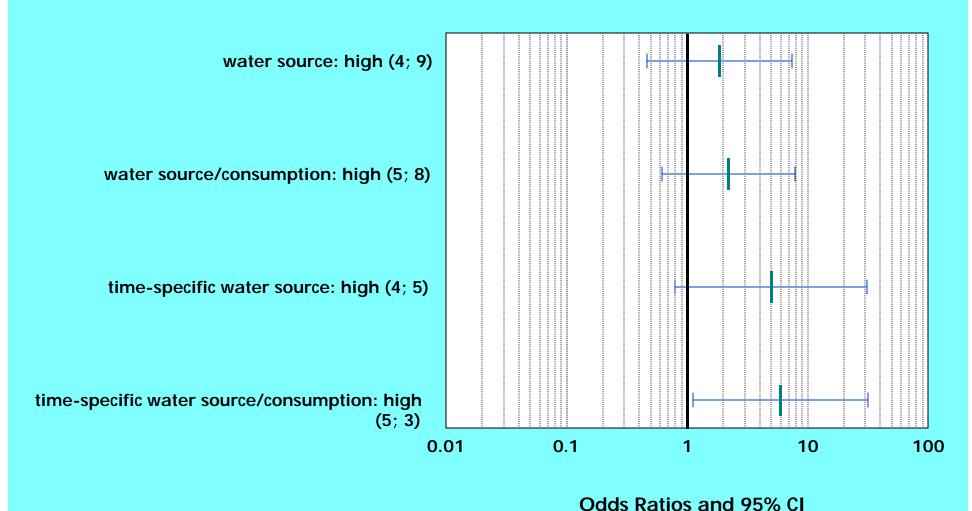


Figure 6b: Interview Study Summary of Parkway Well Field Postnatal Water Indices for Females

Leukemia: Diagnosis Ages 0 to 19 (exposed cases; exposed controls)

water source: medium (3; 25)

water source: high (4; 15)

water source/consumption: high (6; 17)

time-specific water source: med (2; 22)

time-specific water source: high (4; 11)

time-specific water source/consumption: high (5, 12)

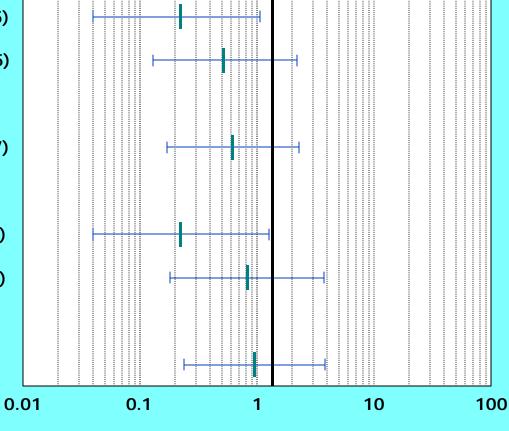
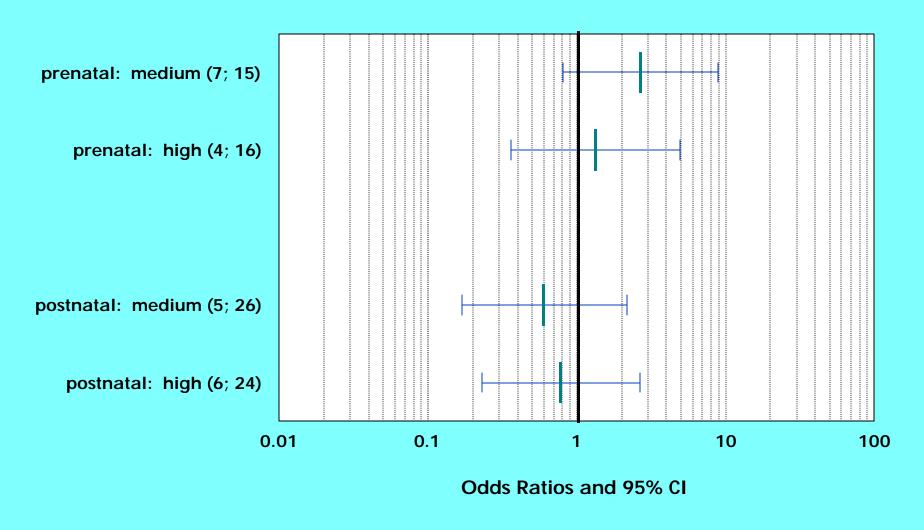


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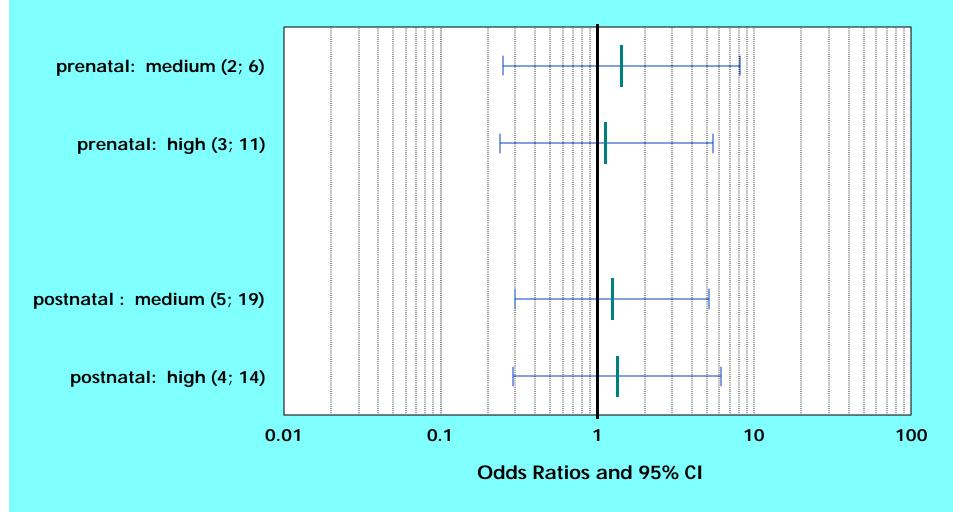
Leukemia: Diagnosis Ages 0 to 19, Prenatal and Postnatal Time Periods (exposed cases; exposed controls)



Data from Table 16b medium: 1.00 - 2.17 relative air impact units; high: >2.17 relative air impact units

Figure 7b: Interview Study Ciba-Geigy Airborne Air Exposure

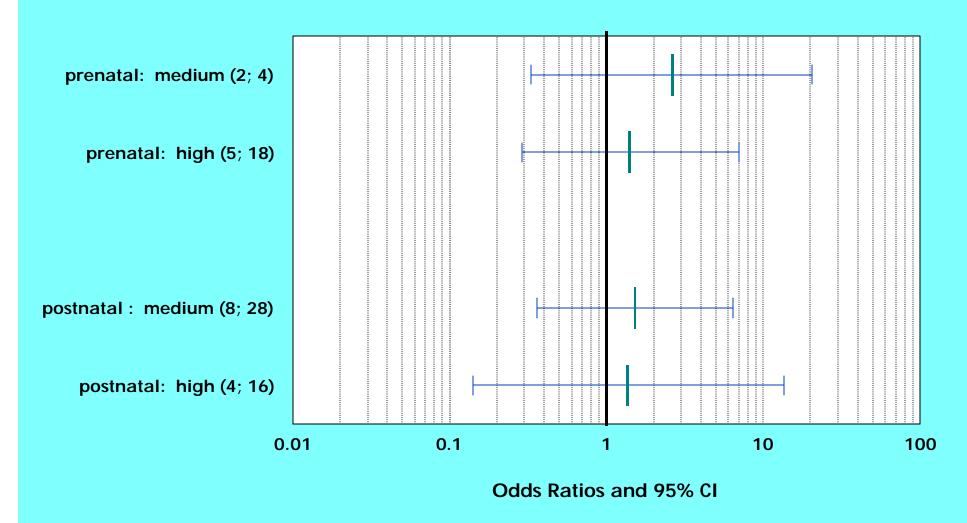
Brain and Central Nervous System Cancers:
Diagnosis Ages 0 to 19, Prenatal and Postnatal Time Periods
(exposed cases; exposed controls)



Data from Table 16d medium: 1.00 - 2.17 relative air impact units; high: >2.17 relative air impact units

Figure 8a: Interview Study Oyster Creek Airborne Air Exposure

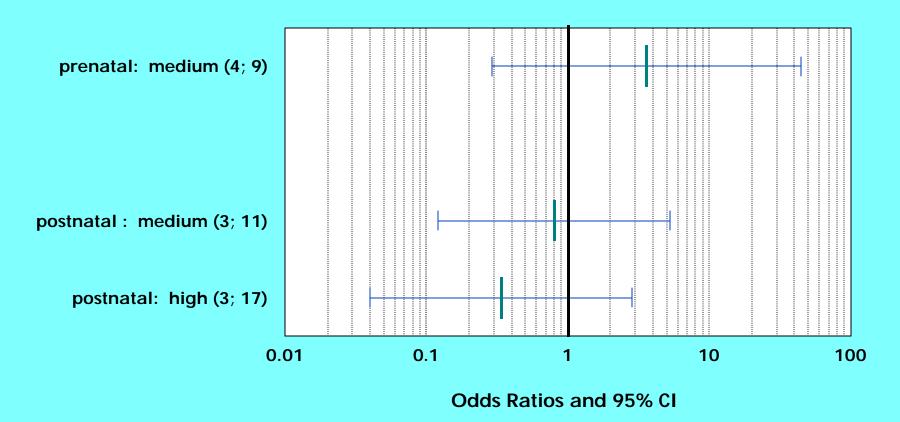
Leukemia: Diagnosis Ages 0 to 19, Prenatal and Postnatal Time Periods (exposed cases; exposed controls)



Data from Table 16b medium: $0.80 - 0.27 \, fCi/m^3$; high: $>0.27 \, fCi/m^3$

Figure 8b: Interview Study Oyster Creek Airborne Air Exposure

Brain and Central Nervous System Cancers:
Diagnosis Ages 0 to 19, Prenatal and Postnatal Time Periods
(exposed cases; exposed controls)



Data from Table 16d medium: 0.80 - 0.27 *fCi*/m³; high: >0.27 *fCi*/m³

Figure 9a: Interview Study Proximity to Sites of Concern

Leukemia: Diagnosis Ages 0 - 19, Prenatal Time Period (exposed cases; exposed controls)

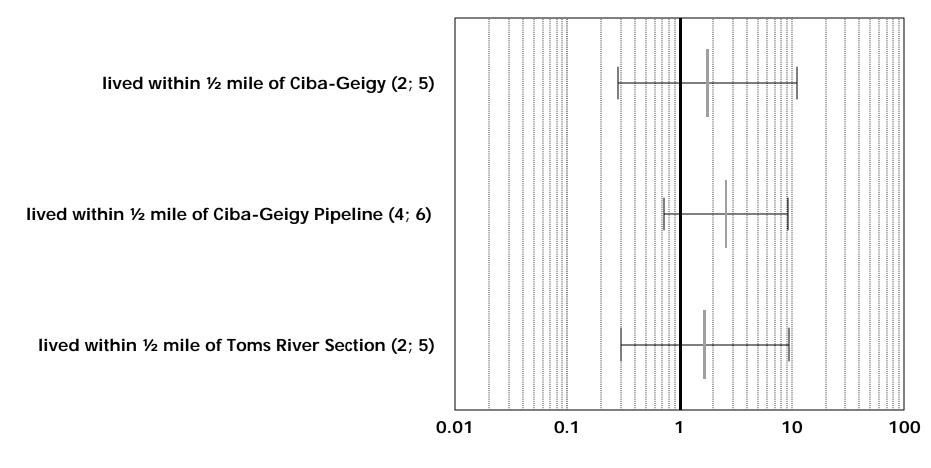


Figure 9b: Interview Study Proximity to Sites of Concern

Leukemia: Diagnosis Ages 0 - 19, Postnatal Time Period (exposed cases; exposed controls)

lived within ½ mile of Ciba-Geigy Pipeline (10; 23)

lived within ½ mile of a Ciba-Geigy Pipeline Break (4; 9)

lived within ½ mile of Toms River Section (2; 14)

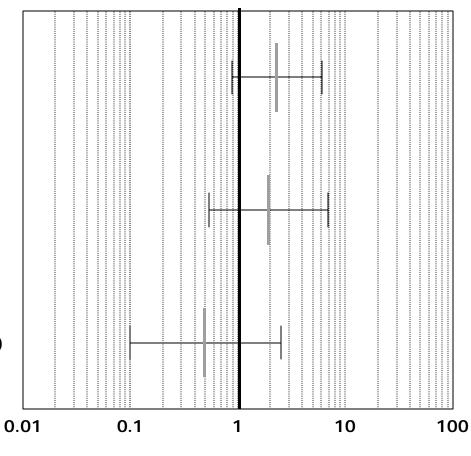


Figure 9c: Interview Study Proximity to Sites of Concern

Brain and Central Nervous System Cancers: Diagnosis Ages 0 - 19, Postnatal Time Period (exposed cases; exposed controls)

lived within ½ mile of Ciba-Geigy (3; 3)

lived within ½ mile of Ciba-Geigy Pipeline (2; 10)

lived within ½ mile of Toms River Section (2; 4)

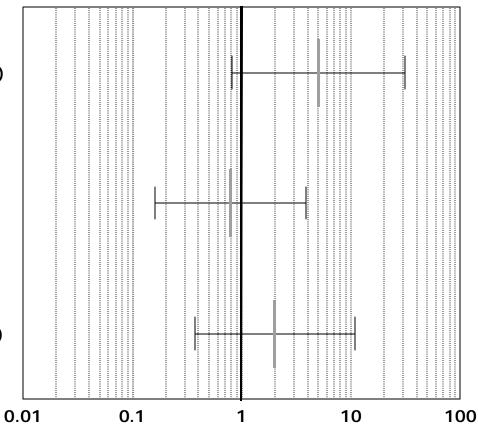
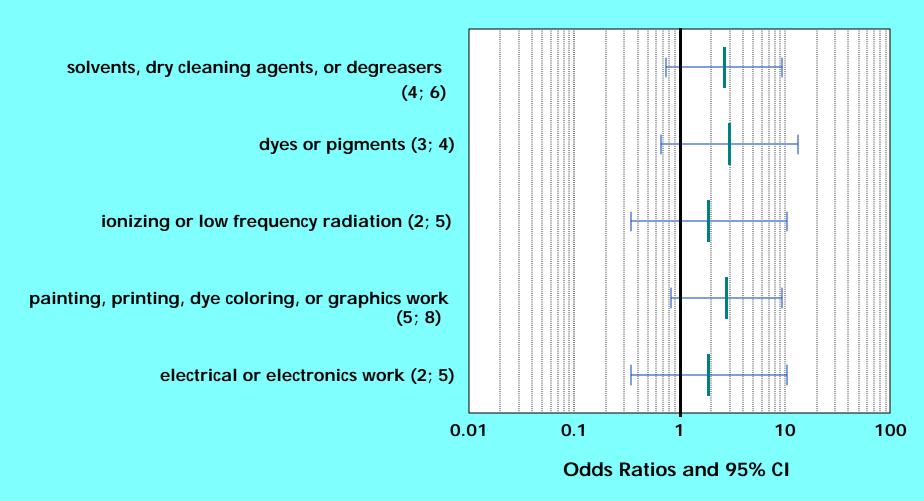


Figure 10a: Interview Study Maternal Occupation, IH Rating of Job Exposures and Activities

Leukemia: Diagnosis Ages 0 - 19, Prenatal Time Period (exposed cases; exposed controls)



Data from Table 26b

Figure 10b: Interview Study Maternal Occupation, IH Rating of Job Exposures and Activities

Leukemia: Diagnosis Ages 0 - 19, Postnatal Time Period (exposed cases; exposed controls)

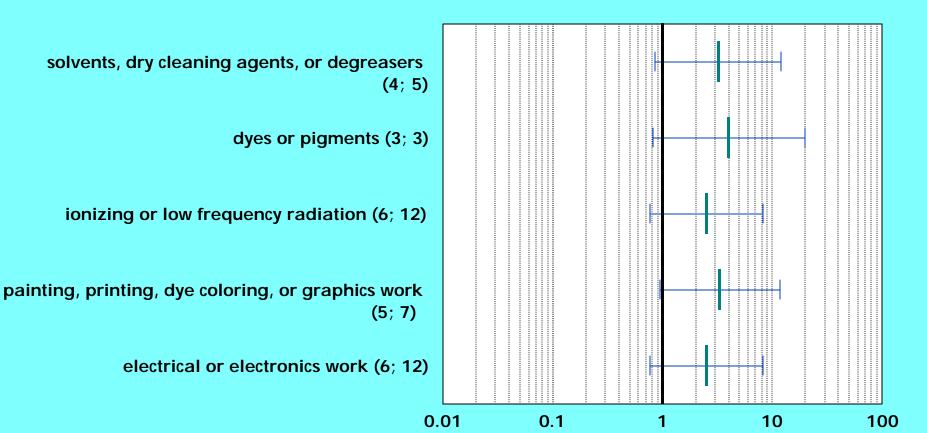


Figure 10c: Interview Study Maternal Occupation, IH Rating of Job Exposures and Activities

Brain and Central Nervous System Cancers: Diagnosis Ages 0 - 19, Prenatal Time Period (exposed cases; exposed controls)

plastics and resins (2; 5)

medical professions (2; 6)

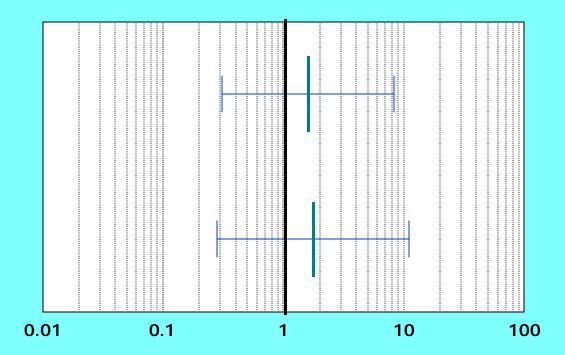


Figure 10d: Interview Study Maternal Occupation, IH Rating of Job Exposures and Activities

Brain and Central Nervous System Cancers: Diagnosis Ages 0 - 19, Postnatal Time Period (exposed cases; exposed controls)

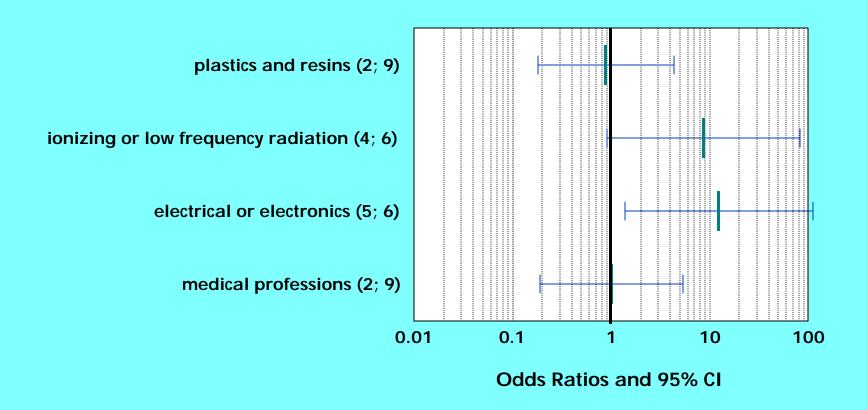


Figure 10e: Interview Study Paternal Occupation, IH Rating of Job Exposures and Activities

Leukemia: Diagnosis Ages 0 - 19, Prenatal Time Period (exposed cases; exposed controls)

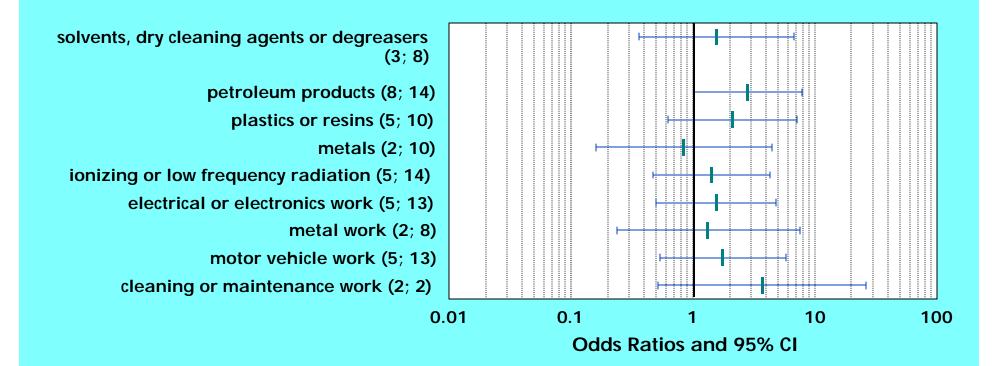


Figure 10f: Interview Study Paternal Occupation, IH Rating of Job Exposures and Activities

Leukemia: Diagnosis Ages 0 - 19, Postnatal Time Period (exposed cases; exposed controls)

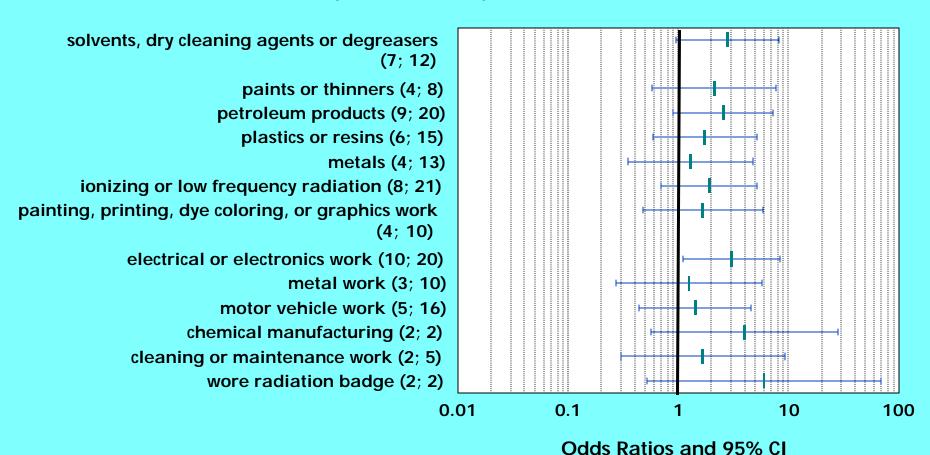


Figure 10g: Interview Study Paternal Occupation, IH Rating of Job Exposures and Activities

Brain and Central Nervous System Cancers: Diagnosis Ages 0 - 19, Prenatal Time Period (exposed cases; exposed controls)

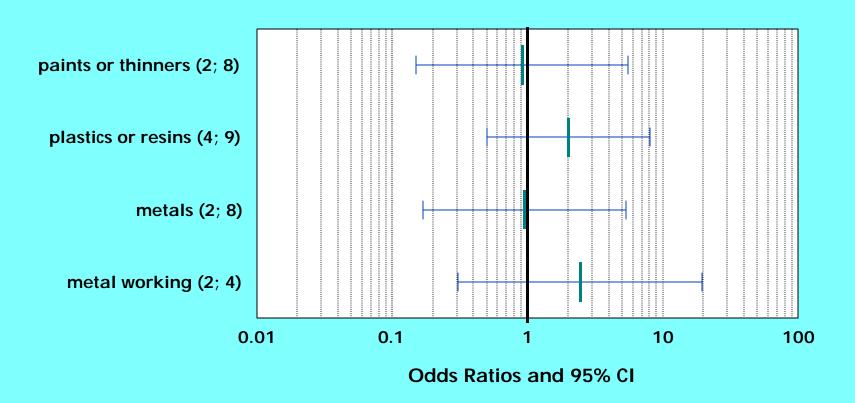


Figure 10h: Interview Study Paternal Occupation, IH Rating of Job Exposures and Activities

Brain and Central Nervous System Cancers: Diagnosis Ages 0 - 19, Postnatal Time Period (exposed cases; exposed controls)

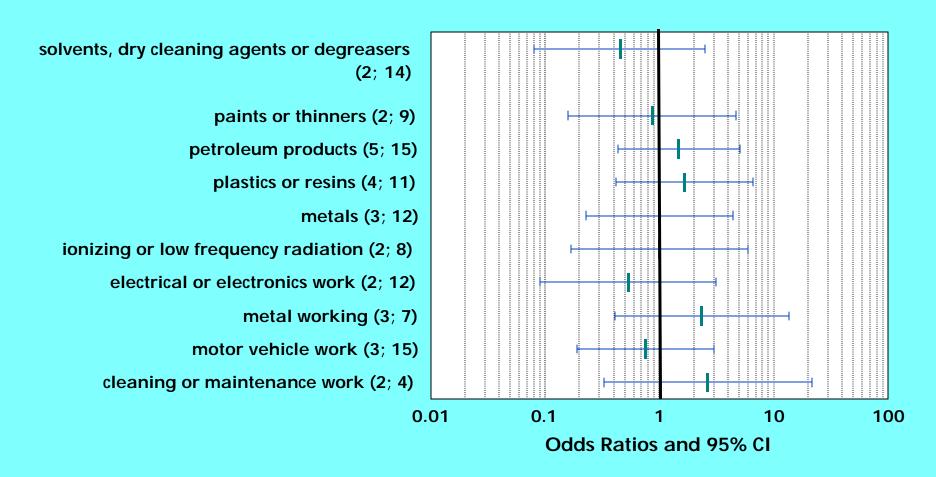


Figure 11a: Interview Study Demographic, Pregnancy, and Birth Characteristics

Leukemia: Diagnosis Ages 0 - 19 (exposed cases; exposed controls)

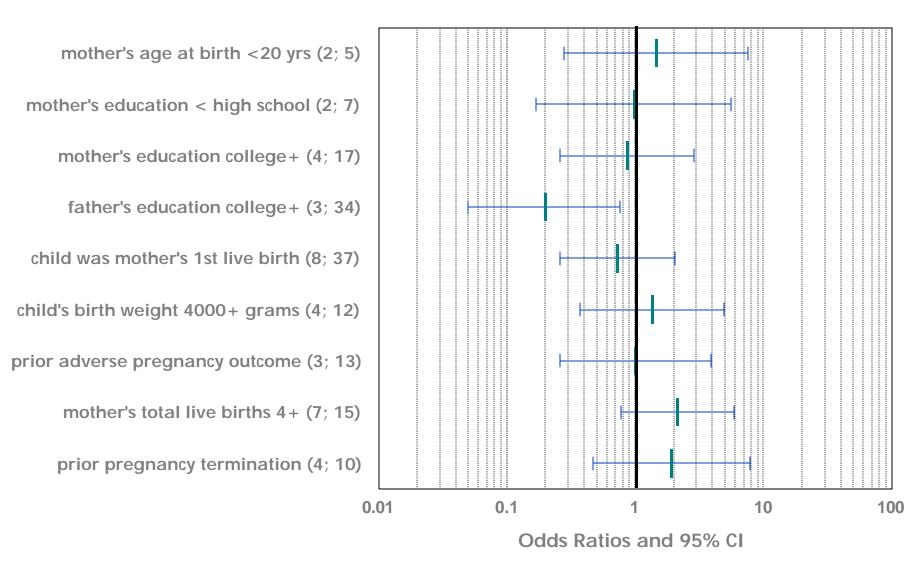


Figure 11b: Interview Study Demographic, Pregnancy, and Birth Characteristics

Brain and Central Nervous System Cancers: Diagnosis Ages 0 - 19 (exposed cases; exposed controls)

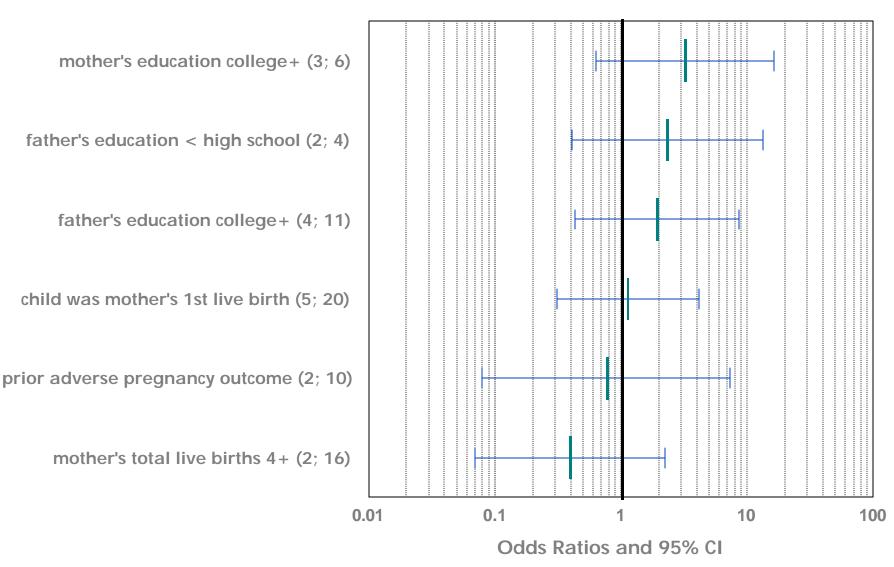


Figure 12a: Interview Study Family Medical History

Leukemia: Diagnosis Ages 0 - 19 (exposed cases; exposed controls)

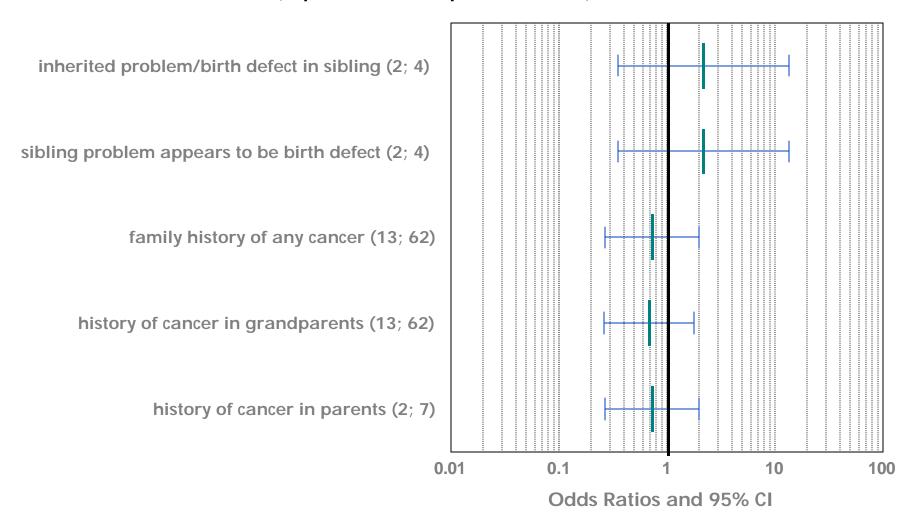
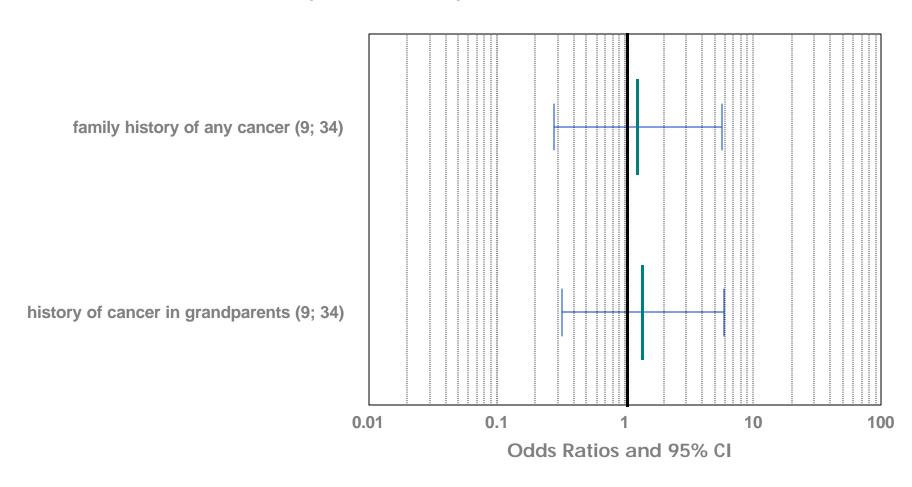


Figure 12b: Interview Study Family Medical History

Brain and Central Nervous System Cancers: Diagnosis Ages 0 - 19 (exposed cases; exposed controls)



Data from Table 30d

Figure 13a: Interview Study Health, Medical Conditions and Medical Procedures

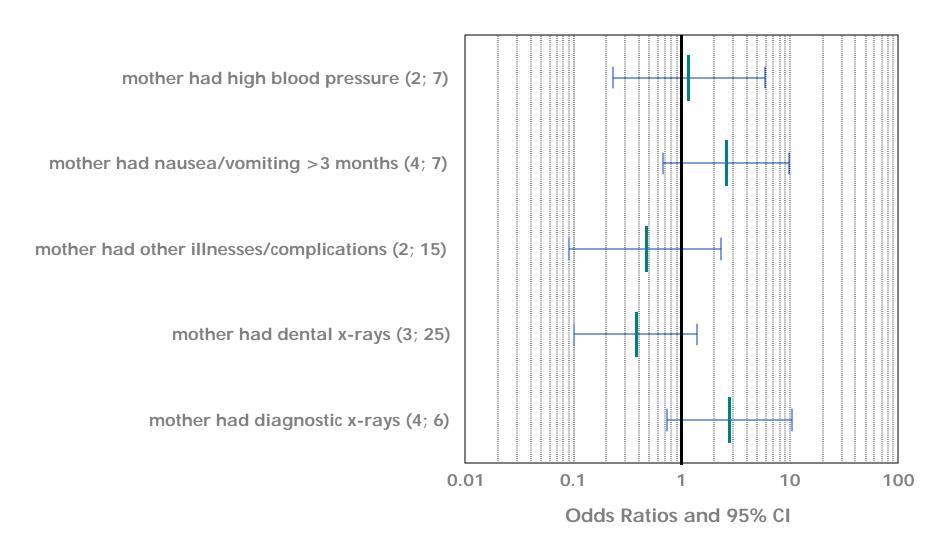


Figure 13b: Interview Study Health, Medical Conditions and Medical Procedures

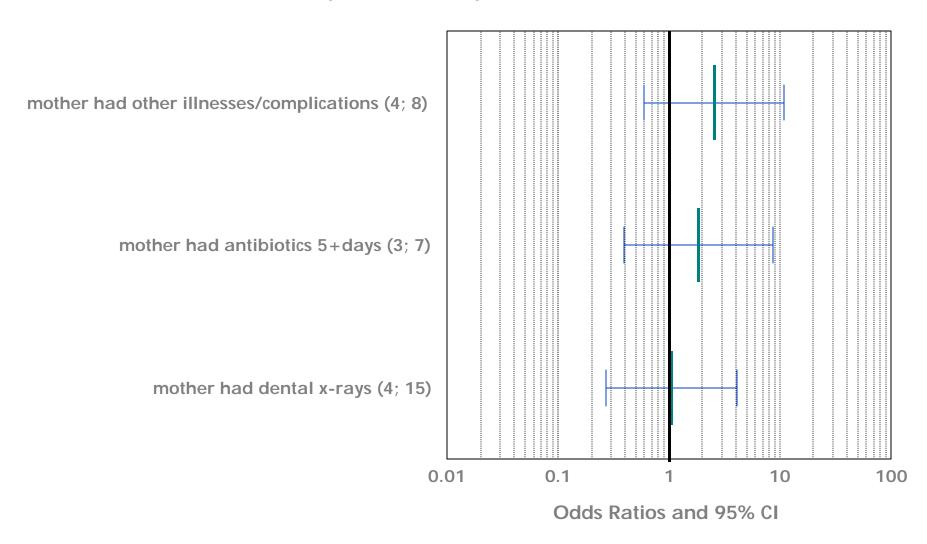


Figure 13c: Interview Study Health, Medical Conditions and Medical Procedures

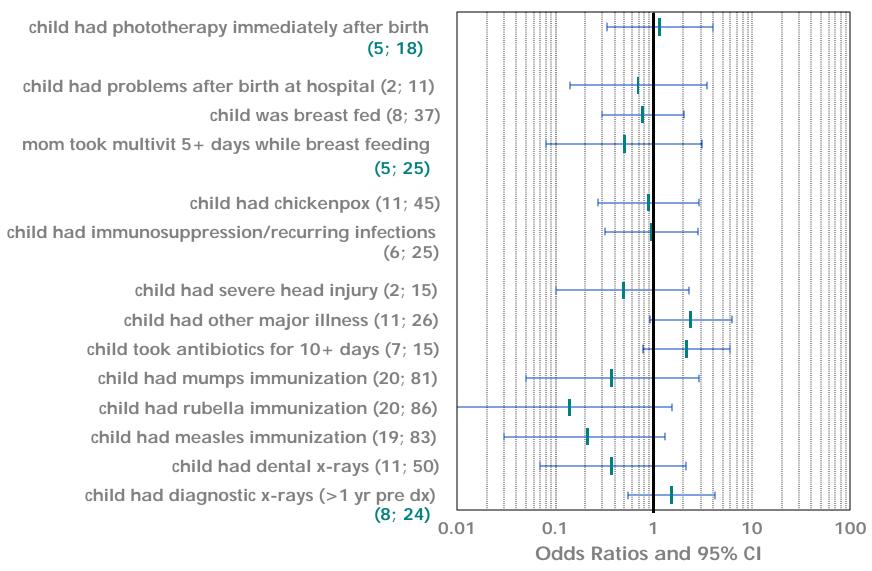


Figure 13d: Interview Study Health, Medical Conditions and Medical Procedures

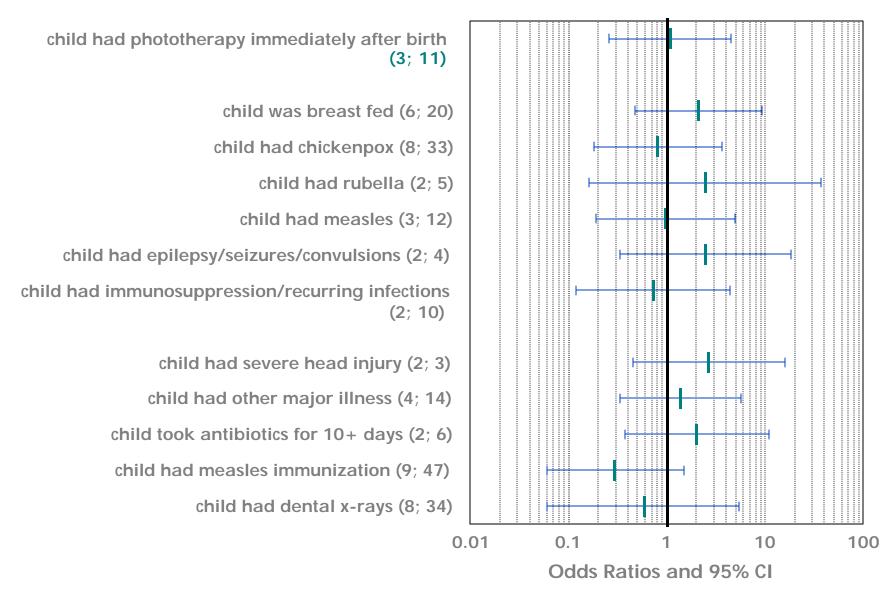


Figure 14a: Interview Study Prenatal Dietary Factors

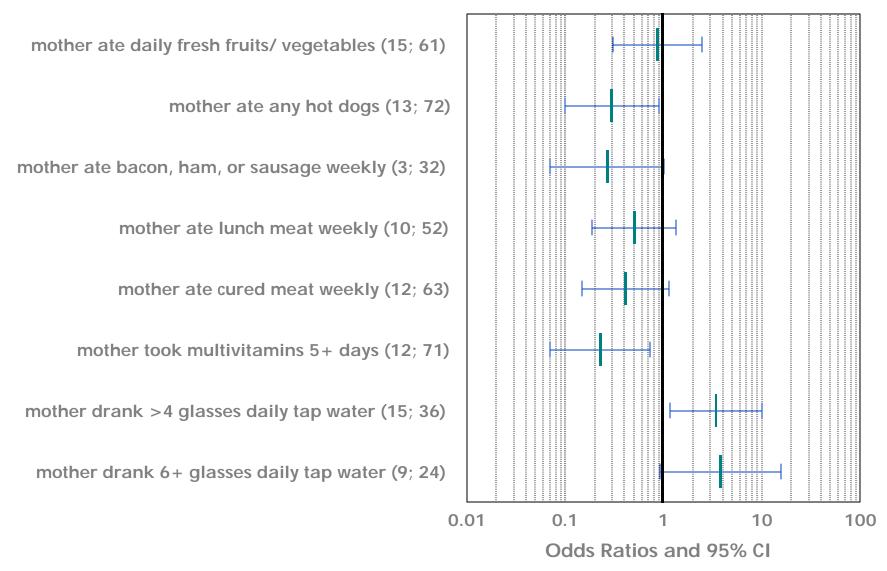


Figure 14b: Interview Study Prenatal Dietary Factors

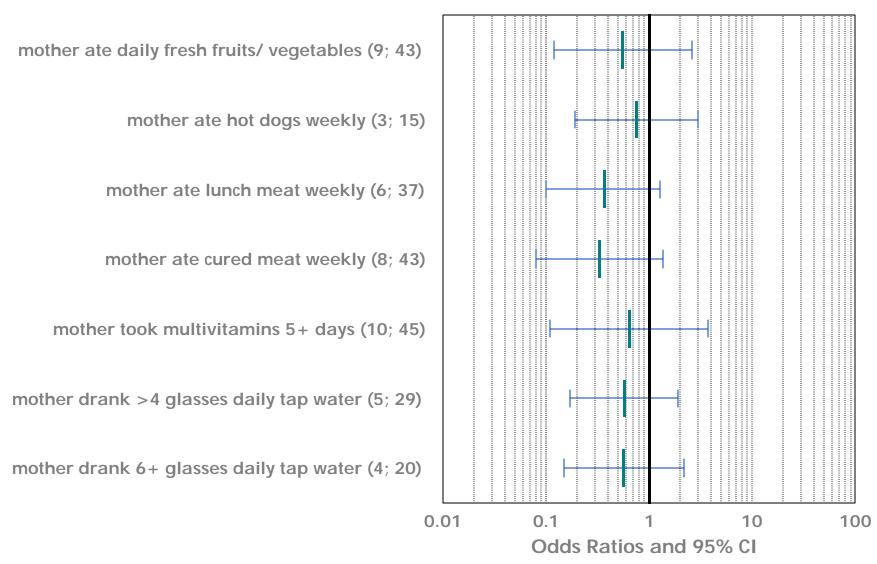


Figure 14c: Interview Study Postnatal Dietary Factors

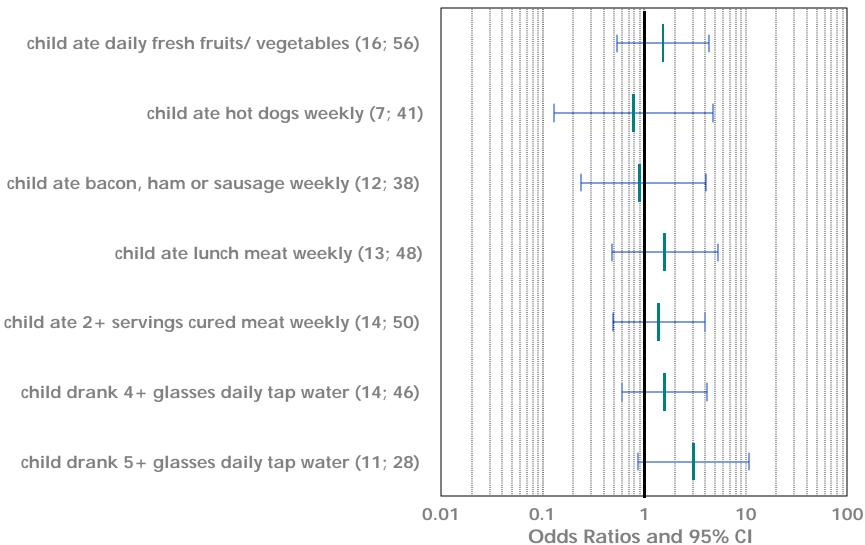


Figure 14d: Interview Study Postnatal Dietary Factors

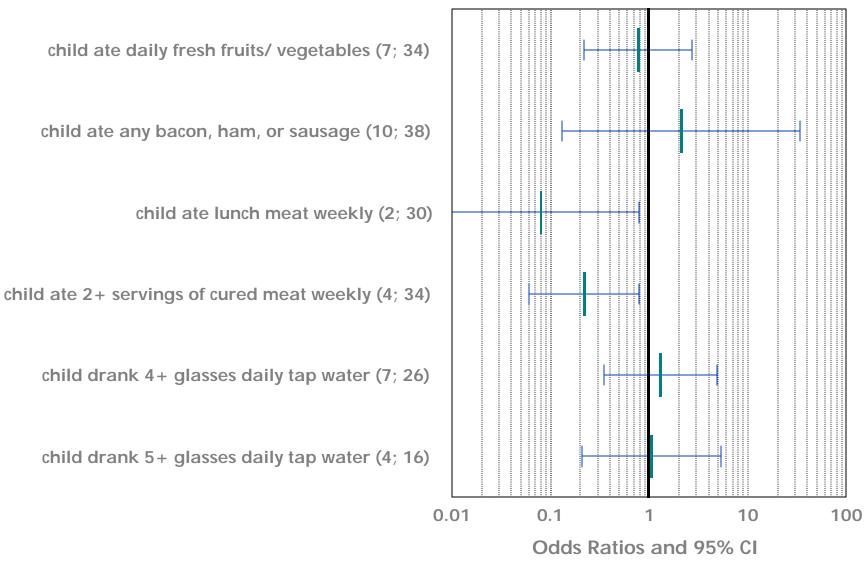


Figure 15a: Interview Study Exposure to Tobacco Smoke and Alcohol

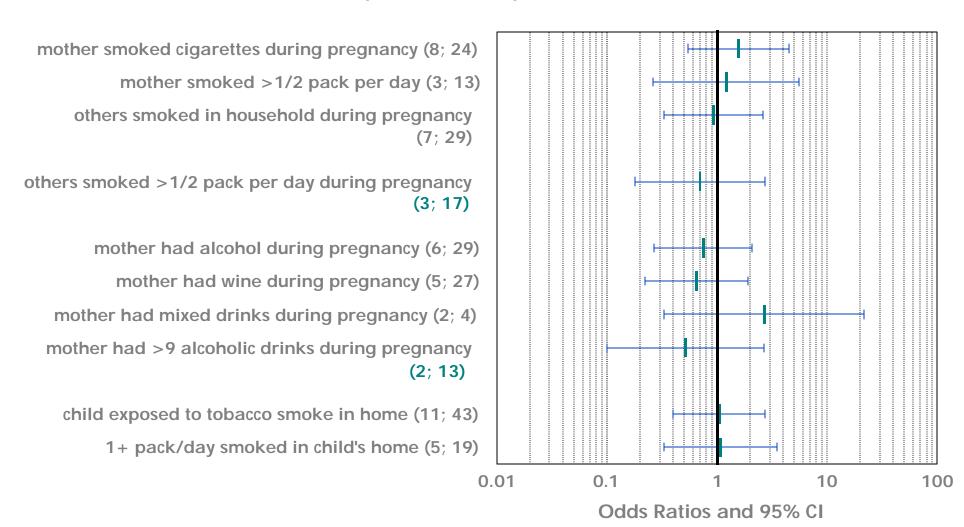


Figure 15b: Interview Study Exposure to Tobacco Smoke and Alcohol

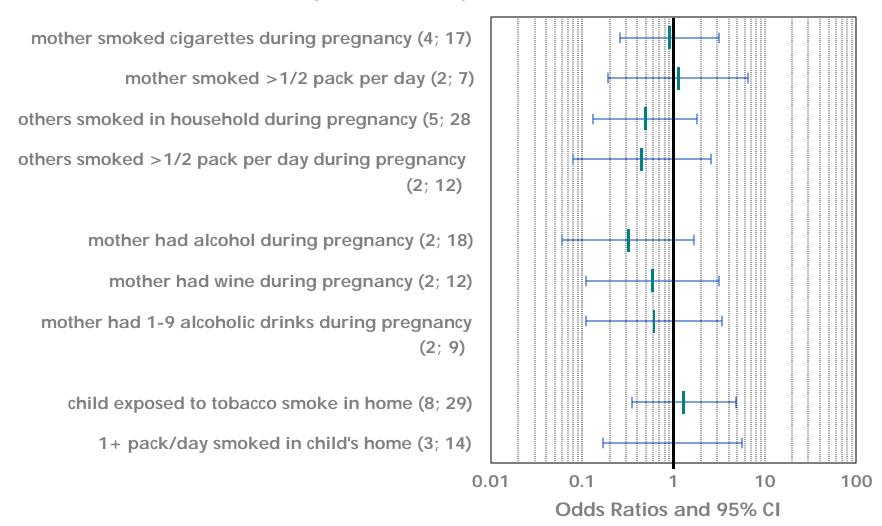


Figure 16a: Interview Study Prenatal Household-related Exposures: Chemicals, Animals, and EMFs

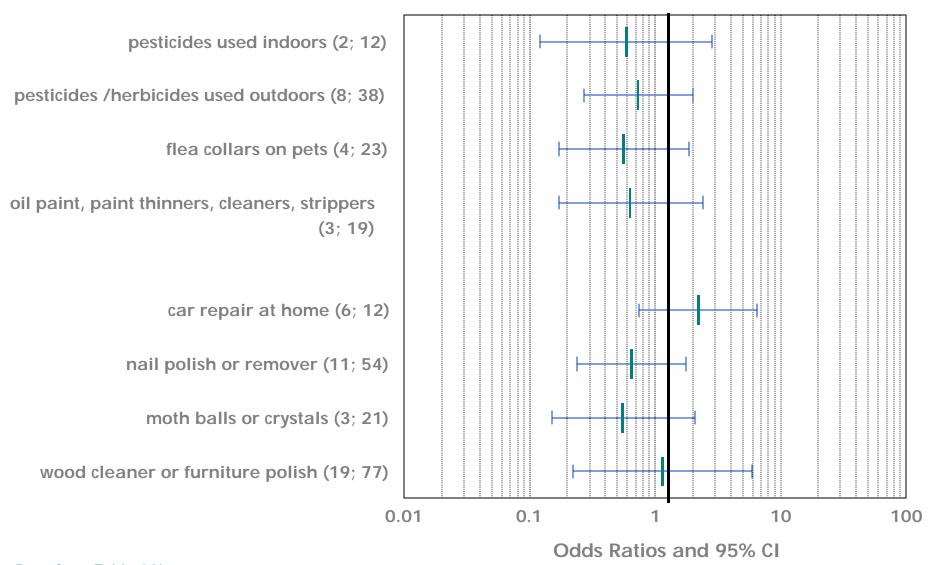


Figure 16b: Interview Study Prenatal Household-related Exposures: Chemicals, Animals, and EMFs

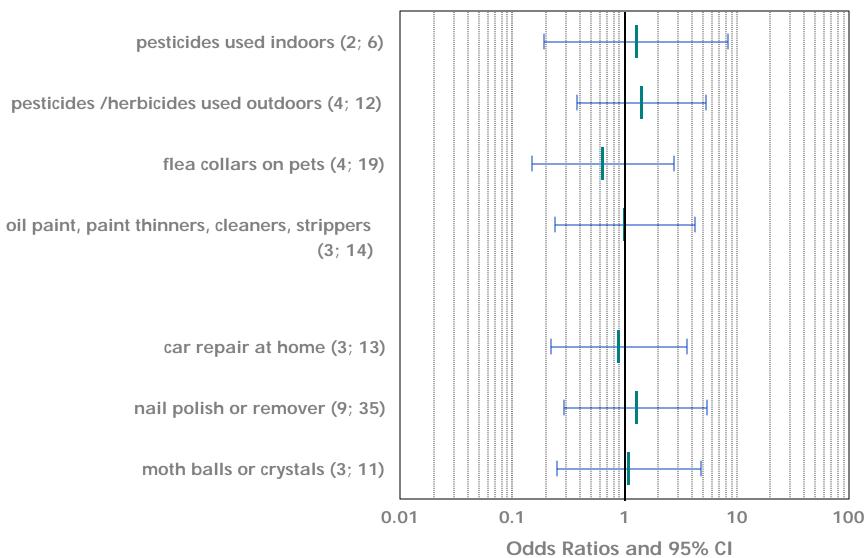


Figure 16c: Interview Study Postnatal Household-related Exposures: Chemicals, Animals, and EMFs

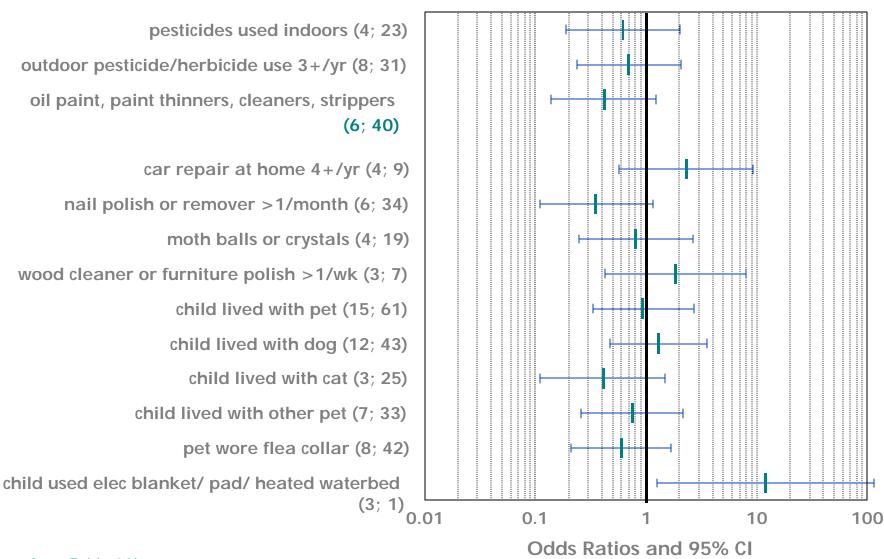


Figure 16d: Interview Study Postnatal Household-related Exposures: Chemicals, Animals, and EMFs

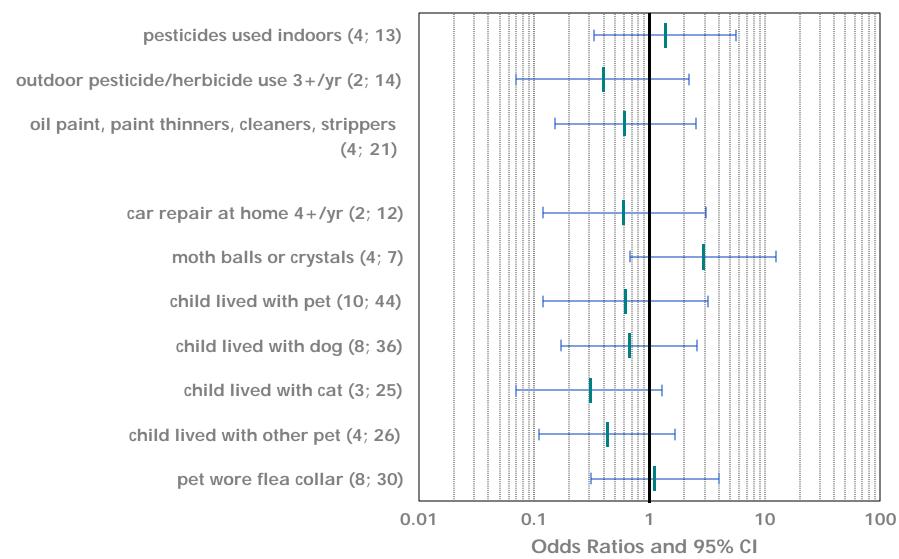


Figure 17: Percent of Birth Records Study Homes with Greater than Ten Percent Water from a Specific Public Well Field Source by Case Status

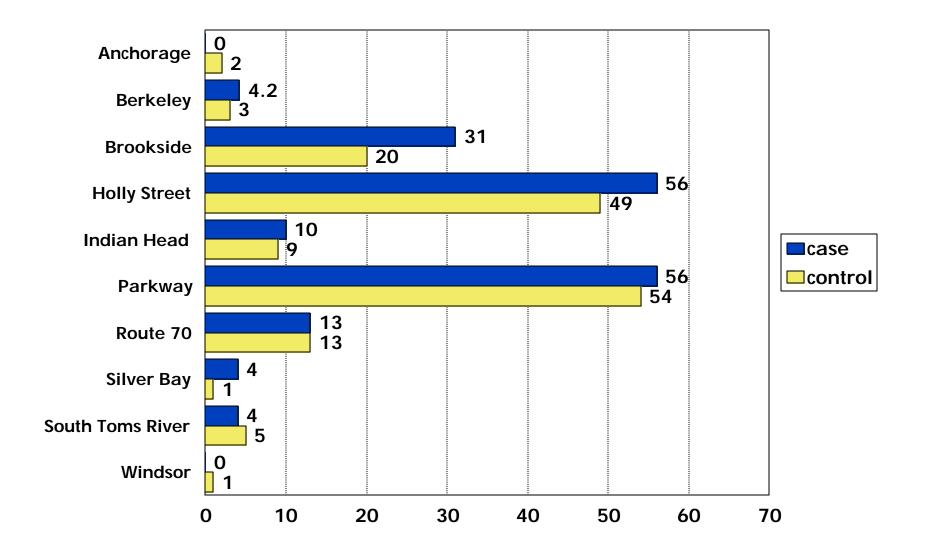
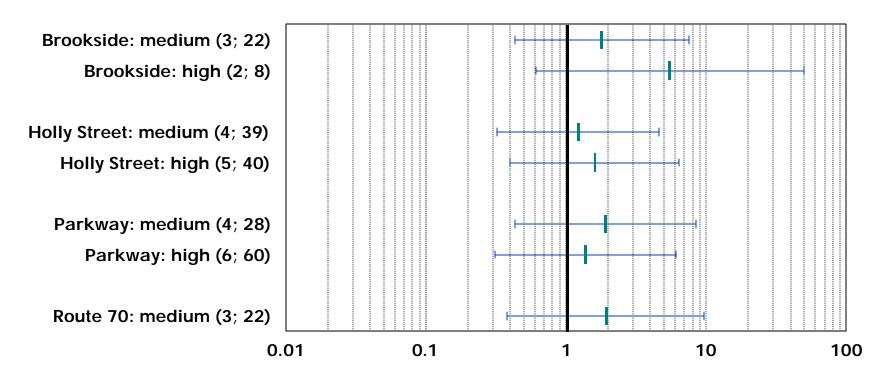


Figure 18a: Birth Records Study, Average Percent of Water from Select Public Well Field Sources

Leukemia: Diagnosis Ages 0 to 19 (exposed cases; exposed controls)



Odds Ratios and 95% CI

Figure 18b: Birth Records Study, Average Percent of Water from Select Public Well Field Sources

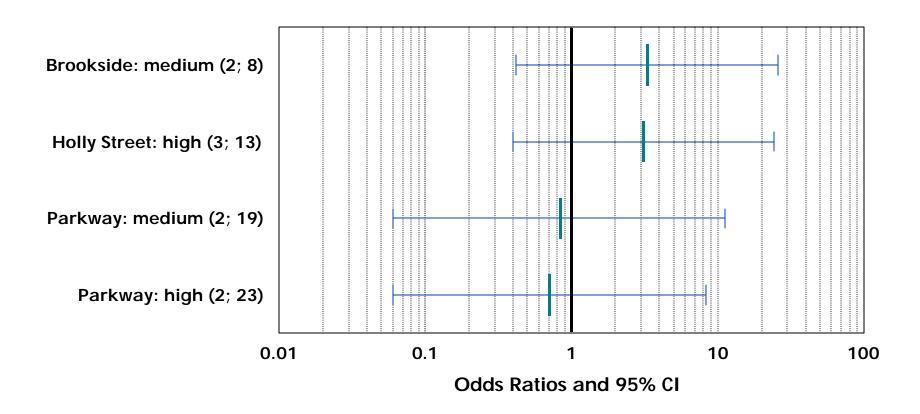


Figure 19: Birth Records Study Point Source Air Pollution, Toms River Ciba-Geigy Chemical Plant

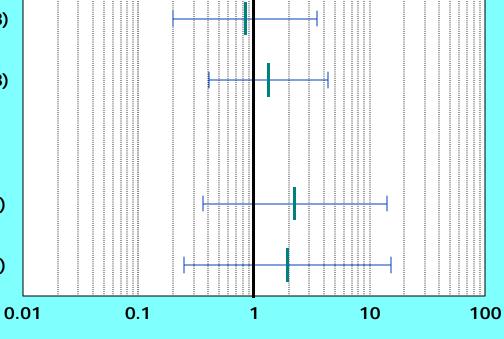
Leukemia, and Brain and Central Nervous System (CNS) Cancers:
Diagnosis Ages 0 to 19
(exposed cases; exposed controls)

Leukemia: medium (3; 38)

Leukemia: high (6; 48)

Brain and CNS Cancers: medium (3; 21)

Brain and CNS Cancers: high (2; 17)

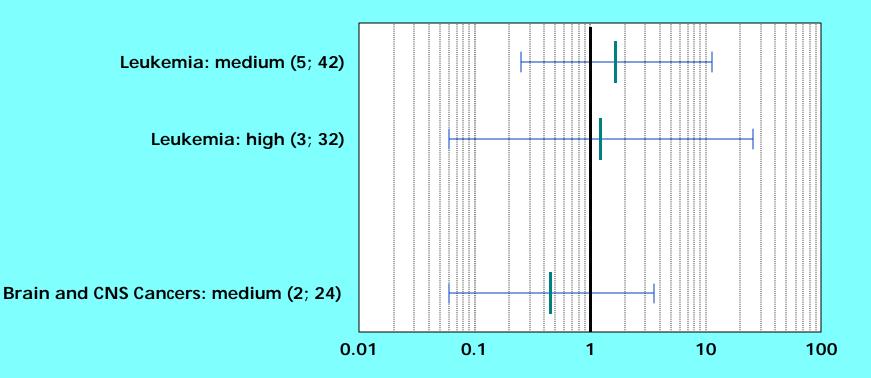


Odds Ratios and 95% CI

Data from Table 51b and 51d medium: 1.50 - 3.04 relative impact units; high: >3.04 relative impact units

Figure 20: Birth Records Study Point Source Air Pollution, Oyster Creek Nuclear Generating Station

Leukemia, and Brain and Central Nervous System (CNS) Cancers:
Diagnosis Ages 0 to 19
(exposed cases; exposed controls)



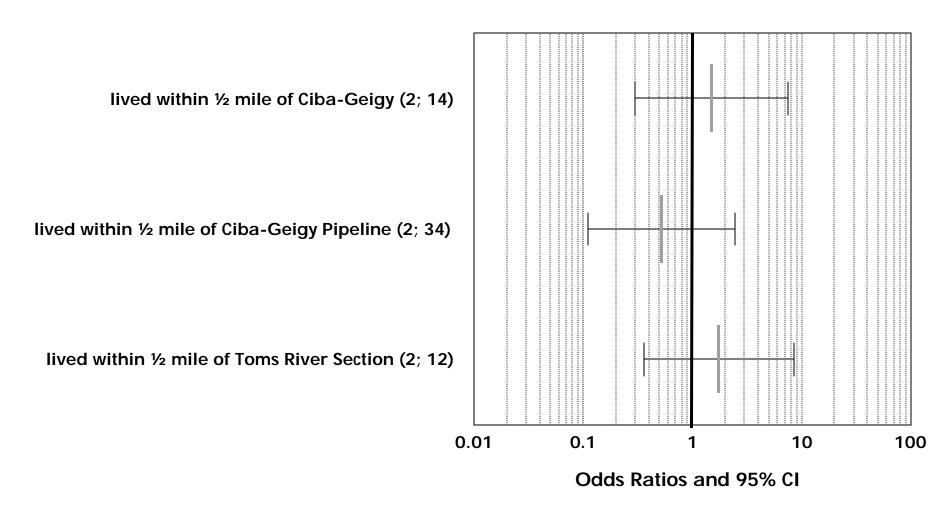
Odds Ratios and 95% CI

medium: $0.065 - 0.44 \, fCi/m^3$; high: $>0.44 \, fCi/m^3$

Data from Table 51

Figure 21: Birth Record Study Proximity to Sites of Concern

Leukemia: Diagnosis Ages 0 - 19 (exposed cases; exposed controls)



Data from Table 54b

Figure 22a: Birth Records Study Demographic, Pregnancy and Birth Characteristics

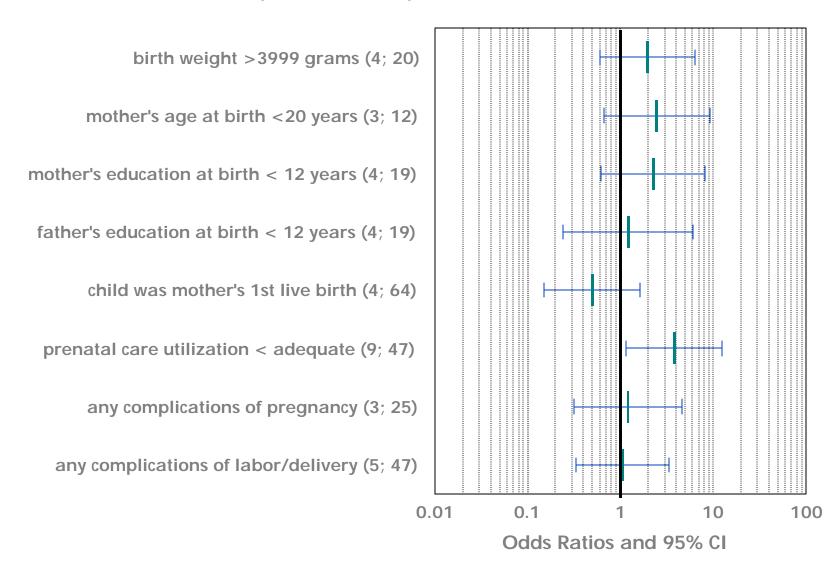
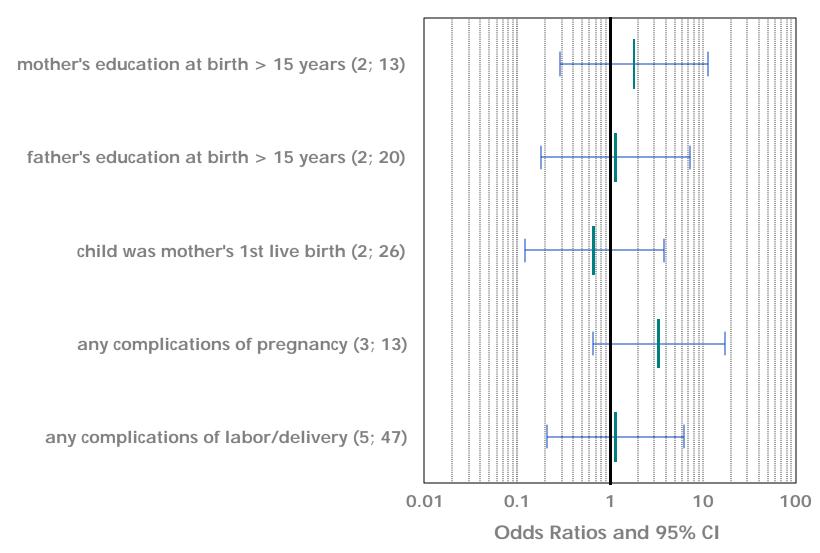


Figure 22b: Birth Records Study Demographic, Pregnancy and Birth Characteristics



Tables

 Table 1. Interview Study Summary of Participant Recruitment

Status	Cases	Controls		
Total number of recruitment attempts	42	238		
Ineligible for participation: Did not meet case definition Matched case not eligible Did not meet control definition	meet case definition 2 d case not eligible - 8 meet control definition - 3			
Total number of potentially eligible subjects	40	198		
Outcome of potentially eligible subjects: Total number of participating subjects Parent refusal Subject refusal No response after repeated attempts to contact Unable to locate Deceased/disabled parents	40 0 0 0 0 0	159 19 0 12 7 1		
Participation rate*	100%	80.3%		
Overall study participation rate*	83	.6%		
Number of the Initially Selected Controls per Case Interviewed	Number	of Cases		
4	18			
3	16			
2	6			
1	0			
0		0		

*Participation Rate = _	Interviewed				
•	Total number of potentially eligible subjects				

Table 2. Interview Study Number of Cases by Diagnosis Age and Cancer Type

		Age at	5	Total Cases	Percent of All Studied	
Cancer Type	0 - 4	5 - 9	10 - 14	15 - 19	by Type	Cancers
Leukemia	9	5	3	5	22	55.0
Sympathetic nervous system cancer	5	0	0	0	5	12.5
Brain and central nervous system cancer	4	3	3	3	13	32.5
Total	18	8	6	8	40	

Table 3. Interview Study Characteristics of the Interview

	Cases (n	=40)	Controls (n=159)		
Characteristic	Number	Percent	Number	Percent	
Number of interviews conducted by interviewer: A B C	20 20 0	50.0 50.0 0	91 67 1	57.2 42.1 0.6	
Who was interviewed for mother's section: Birth mother Birth father Adoptive/custodial parent	38	95.0	148	93.1	
	1	2.5	7	4.4	
	1	2.5	4	2.5	
Who was interviewed for father's section: Birth mother Birth father Adoptive/custodial parent	13	32.5	63	39.6	
	25	62.5	92	57.9	
	2	5.0	4	2.5	
Type of Interview: Telephone In-person	39	97.5	159	100	
	1	2.5	0	0	

Table 4. Interview Study Residence with a Private Well in a Groundwater Region

Residence with a Private Well in a	Cases (Cases (n=40)		Controls (n=159)		
Groundwater Region during Total Time Period	Number	Percent	Number	Percent		
A. Pleasant Plains Zone 1 Ever Never Unknown	0	0.0	1	0.6		
	39	97.5	156	98.1		
	1	2.5	2	1.3		
B. Reich Farm Plume Ever Never Unknown	0	0.0	0	0.0		
	39	97.5	157	98.7		
	1	2.5	2	1.3		
C. Ciba-Geigy Groundwater Plume Ever Never Unknown	0	0.0	0	0.0		
	39	97.5	157	98.7		
	1	2.5	2	1.3		
D. Silverton Wells Ever Never Unknown	0	0.0	0	0.0		
	39	97.5	157	98.7		
	1	2.5	2	1.3		
E. Silverton Road Ever Never Unknown	0	0.0	0	0.0		
	39	97.5	157	98.7		
	1	2.5	2	1.3		
F. North Gilford Park Ever Never Unknown	0	0.0	1	0.6		
	39	97.5	154	96.9		
	1	2.5	4	2.5		
G. Shelter Cove Ever Never Unknown	0	0.0	1	0.6		
	39	97.5	156	98.1		
	1	2.5	2	1.3		

Residence with a Private Well in a	Cases ((n=40)	Controls (n=159)		
Groundwater Region during Total Time Period	Number	Percent	Number	Percent	
H. Breton Harbors Ever Never Unknown	1	2.5	0	0.0	
	38	95.0	157	98.7	
	1	2.5	2	1.3	
I. North Maple Avenue Ever Never Unknown	0	0.0	0	0.0	
	39	97.5	157	98.7	
	1	2.5	2	1.3	
J. Beachwood and Veeder Ever Never Unknown	0	0.0	1	0.6	
	39	97.5	156	98.1	
	1	2.5	2	1.3	
K. Miscellaneous Street Segments Ever Never Unknown	1	2.5	0	0.0	
	38	95.0	157	98.7	
	1	2.5	2	1.3	

Table 5a. Interview Study Analysis of Private Well Use in Any Groundwater Region: Leukemia and Nervous System Cancers

Cancer Type	Diagnosis Age	Private Well in Any Groundwater Region	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval	
		Total Tim	e Exposure				
Leukemia and	0 through 19	Never Ever	37 2	151 4	1.0 2.05	- 0.33 - 12.7	
Nervous System	0 through 4	Never Ever	17 1	67 2	1.0 1.81	- 0.16 - 20.1	
		Prenata	I Exposure				
Leukemia and	0 through 19	Never Ever	38 2	156 1	1.0 8.00	- 0.73 - 88.2	
Nervous System	0 through 4	Never Ever	17 1	70 0	1.0 -	-	
	Postnatal Exposure						
Leukemia and	0 through 19	Never Ever	37 2	151 4	1.0 2.05	- 0.33 - 12.7	
Nervous System	0 through 4	Never Ever	17 1	67 2	1.0 1.81	- 0.16 - 20.1	

Table 5: page 1 of 4

Table 5b. Interview Study Analysis of Private Well Use in Any Groundwater Region: Leukemia

Cancer Type	Diagnosis Age	Private Well in Any Groundwater Region	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval		
	Total Time Exposure							
	0 through 19	Never Ever	19 2	84 2	1.0 5.40	- 0.47 - 62.1		
Leukemia	0 through 4	Never Ever	8 1	33 1	1.0 3.46	- 0.22 - 55.8		
		Prenata	l Exposure					
Loukomio	0 through 19	Never Ever	20 2	87 0	1.0 -	-		
Leukemia	0 through 4	Never Ever	8 1	35 0	1.0 -	-		
	Postnatal Exposure							
	0 through 19	Never Ever	19 2	84 2	1.0 5.40	- 0.47 - 62.1		
Leukemia	0 through 4	Never Ever	8 1	33 1	1.0 3.46	- 0.22 - 55.8		

Table 5: page 2 of 4

Table 5c. Interview Study Analysis of Private Well Use in Any Groundwater Region: Nervous System Cancers

Cancer Type	Diagnosis Age	Private Well in Any Groundwater Region	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval	
		Total Tim	e Exposure				
	0 through 19	Never Ever	18 0	67 2	1.0 0	-	
Nervous System	0 through 4	Never Ever	9 0	34 1	1.0 0	-	
		Prenata	l Exposure				
	0 through 19	Never Ever	18 0	69 1	1.0 0	-	
Nervous System	0 through 4	Never Ever	9 0	35 0	1.0 -	-	
Postnatal Exposure							
	0 through 19	Never Ever	18 0	67 2	1.0 0	-	
Nervous System	0 through 4	Never Ever	9 0	34 1	1.0 0	- -	

Table 5: page 3 of 4

Table 5d. Interview Study Analysis of Private Well Use in Any Groundwater Region: Brain and Central Nervous System Cancers

Cancer Type	Diagnosis Age	Private Well in Any Groundwater Region	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval		
		Total Tin	ne Exposure					
Brain & Central	0 through 19	Never Ever	13 0	49 1	1.0 0	-		
Nervous System	0 through 4	Never Ever	4 0	16 0	1.0 -	-		
		Prenata	I Exposure					
Brain & Central	0 through 19	Never Ever	13 0	50 1	1.0 0	-		
Nervous System	0 through 4	Never Ever	4 0	16 0	1.0 -	-		
	Postnatal Exposure							
Brain & Central	0 through 19	Never Ever	13 0	49 1	1.0 0	-		
Nervous System	0 through 4	Never Ever	4 0	16 0	1.0 -	- -		

Table 5: page 4 of 4

Table 6. Interview Study Percent of Public Water Delivered by Source to Study Residences

	Cases (n	= 40)	Controls (n = 159)		
Well Field	Number	Percent	Number	Percent	
Anchorage <10% 10% - 49.9% 50% + Unknown	40 0 0 0	100.0 0.0 0.0 0.0	158 0 0 1	99.4 0.0 0.0 0.6	
Berkeley <10% 10% - 49.9% 50% + Unknown	38 2 0 0	95.0 5.0 0.0 0.0	148 10 0 1	93.1 6.3 0.0 0.6	
Brookside <10% 10% - 49.9% 50% + Unknown	37 3 0 0	92.5 7.5 0.0 0.0	144 13 1	90.6 8.2 0.6 0.6	
Holly Street < 10% 10% - 49.9% 50% + Unknown	26 11 3 0	65.0 27.5 7.5 0.0	87 53 18 1	54.7 33.3 11.3 0.6	
Indian Head <10% 10% - 49.9% 50% + Unknown	38 2 0 0	95.0 5.0 0.0 0.0	146 12 0 1	91.8 7.6 0.0 0.6	
Parkway <10% 10% - 49.9% 50% + Unknown	14 19 7 0	35.0 47.5 17.5 0.0	49 81 28 1	30.8 50.9 17.6 0.6	

	Cases (n	= 40)	Controls (n = 159)		
Well Field	Number	Percent	Number	Percent	
Route 70					
<10%	38	95.0	140	88.1	
10% - 49.9%	1	2.5	13	8.2	
50% +	1	2.5	5	3.1	
Unknown	0	0.0	1	0.6	
Silver Bay					
<10%	40	100.0	157	98.7	
10% - 49.9%	0	0.0	1	0.6	
50%+	0	0.0	0	0.0	
Unknown	0	0.0	1	0.6	
South Toms River					
<10%	40	100.0	150	94.3	
10% - 49.9%	0	0.0	8	5.0	
50%+	0	0.0	0	0.0	
Unknown	0	0.0	1	0.6	
Windsor					
<10%	40	100.0	156	98.1	
10% - 49.9%	0	0.0	2	1.3	
50%+	0	0.0	0	0.0	
Unknown	0	0.0	1	0.6	

Table 7a. Interview Study Analysis of Public Water Indices: Leukemia and Nervous System Cancers

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Total Time Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 19					
Brookside	<10	37	144	1.0	-
	10 - 49.9	3	13	0.83	0.19 - 3.55
	50+	0	1	0	-
Holly Street	<10	26	87	1.0	-
	10 - 49.9	11	53	0.70	0.32 - 1.52
	50+	3	18	0.56	0.15 - 2.05
Indian Head	<10	38	146	1.0	-
	10 - 49.9	2	12	0.67	0.15 - 2.98
	50+	0	0	-	-
Parkway	<10	14	49	1.0	-
	10 - 49.9	19	81	0.83	0.38 - 1.82
	50+	7	28	0.88	0.32 - 2.45
Route 70	<10	38	140	1.0	-
	10 - 49.9	1	13	0.28	0.04 - 2.25
	50+	1	5	0.71	0.08 - 6.15

Table 7: page 1 of 24

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal Exposure	e: Leukemia and Nerve	ous System C	ancer Diagno	osis Ages	0 through 19
Brookside	<10	36	145	1.0	-
	10 - 49.9	4	11	1.50	0.40 - 5.56
	50+	0	1	0	-
Holly Street	<10	31	116	1.0	-
	10 - 49.9	4	19	0.77	0.23 - 2.57
	50+	5	22	0.85	0.29 - 2.48
Indian Head	<10	39	152	1.0	-
	10 - 49.9	1	5	0.80	0.09 - 6.85
	50+	0	0	-	-
Parkway	<10	26	110	1.0	-
	10 - 49.9	5	24	0.89	0.27 - 2.88
	50+	9	23	1.68	0.67 - 4.23
Route 70	<10	36	147	1.0	-
	10 - 49.9	3	7	1.82	0.44 - 7.47
	50+	1	3	1.53	0.13 - 17.8

Table 7: page 2 of 24

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Postnatal Exposur	e: Leukemia and Nerv	ous System (Cancer Diagn	osis Ages	0 through 19
Brookside	<10	38	144	1.0	-
	10 - 49.9	2	13	0.56	0.12 - 2.71
	50+	0	1	0	-
Holly Street	<10	24	86	1.0	-
	10 - 49.9	12	51	0.85	0.40 - 1.81
	50+	4	21	0.67	0.20 - 2.20
Indian Head	<10	39	145	1.0	-
	10 - 49.9	1	13	0.30	0.04 - 2.32
	50+	0	0	-	-
Parkway	<10	14	46	1.0	-
	10 - 49.9	19	80	0.79	0.36 - 1.74
	50+	7	32	0.72	0.26 - 1.99
Route 70	<10	39	137	1.0	-
	10 - 49.9	0	15	0	-
	50+	1	6	0.55	0.06 - 4.82

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Total Time Exposu	re: Leukemia and Ner	vous System	Cancer Diag	nosis Age	es 0 through 4
Brookside	<10	17	67	1.0	-
	10 - 49.9	1	3	1.15	0.04 - 32.1
	50+	0	0	-	-
Holly Street	<10	11	39	1.0	-
	10 - 49.9	5	22	0.81	0.24 - 2.70
	50+	2	9	0.81	0.15 - 4.26
Indian Head	<10	17	67	1.0	-
	10 - 49.9	1	3	1.33	0.14 - 12.8
	50+	0	0	-	-
Parkway	<10	6	23	1.0	-
	10 - 49.9	8	33	0.94	0.28 - 3.24
	50+	4	14	1.10	0.27 - 4.45
Route 70	<10	16	61	1.0	-
	10 - 49.9	1	7	0.59	0.07 - 4.99
	50+	1	2	1.85	0.16 - 20.8

Table 7: page 4 of 24

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal Exposur	e: Leukemia and Nerv	ous System (Cancer Diagn	osis Ages	0 through 4
Brookside	<10	16	65	1.0	-
	10 - 49.9	2	5	1.78	0.20 - 15.8
	50+	0	0	-	-
Holly Street	<10	13	48	1.0	-
	10 - 49.9	3	12	0.91	0.22 - 3.80
	50+	2	10	0.74	0.15 - 3.78
Indian Head	<10	17	67	1.0	-
	10 - 49.9	1	3	1.33	0.14 - 12.8
	50+	0	0	-	-
Parkway	<10	8	38	1.0	-
	10 - 49.9	4	21	0.88	0.22 - 3.50
	50+	6	11	2.51	0.72 - 8.76
Route 70	<10	16	61	1.0	-
	10 - 49.9	1	6	0.66	0.07 - 5.91
	50+	1	3	1.33	0.11 - 16.1

Table 7: page 5 of 24

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Postnatal Exposu	re: Leukemia and Ner	vous System	Cancer Diagr	nosis Age	s 0 through 4
Brookside	<10 10 - 49.9 50+	18 0 0	67 3 0	1.0 0 -	
Holly Street	<10	9	38	1.0	-
	10 - 49.9	6	22	1.22	0.36 - 4.10
	50+	3	10	1.32	0.29 - 6.09
Indian Head	<10	18	66	1.0	-
	10 - 49.9	0	4	0	-
	50+	0	0	-	-
Parkway	<10	6	23	1.0	-
	10 - 49.9	8	30	1.05	0.31 - 3.63
	50+	4	17	0.92	0.23 - 3.71
Route 70	<10	17	59	1.0	-
	10 - 49.9	0	9	0	-
	50+	1	2	1.42	0.13 - 16.0

Table 7: page 6 of 24

Table 7b. Interview Study Analysis of Public Water Indices: Leukemia

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Tota	al Time Exposure: Leuk	emia Diagno	sis Ages 0 th	rough 19	
Brookside	<10	21	81	1.0	-
	10 - 49.9	1	5	0.79	0.08 - 7.28
	50+	0	1	0	-
Holly Street	<10	16	48	1.0	-
	10 - 49.9	6	31	0.58	0.21 - 1.59
	50+	0	8	0	-
Indian Head	<10 10 - 49.9 50+	22 0 0	79 8 0	1.0 0 -	
Parkway	<10	9	22	1.0	-
	10 - 49.9	8	47	0.44	0.15 - 1.26
	50+	5	18	0.73	0.21 - 2.56
Route 70	<10	21	72	1.0	-
	10 - 49.9	0	10	0	-
	50+	1	5	0.66	0.08 - 5.75

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Pre	enatal Exposure: Leuke	mia Diagnos	sis Ages 0 thr	ough 19	
Brookside	<10	20	80	1.0	-
	10 - 49.9	2	6	1.36	0.26 - 7.20
	50+	0	1	0	-
Holly Street	<10	18	67	1.0	-
	10 - 49.9	2	8	0.95	0.17 - 5.37
	50+	2	12	0.58	0.10 - 3.26
Indian Head	<10	22	83	1.0	-
	10 - 49.9	0	4	0	-
	50+	0	0	-	-
Parkway	<10	15	62	1.0	-
	10 - 49.9	1	10	0.40	0.04 - 3.56
	50+	6	15	1.65	0.53 - 5.12
Route 70	<10	19	78	1.0	-
	10 - 49.9	2	6	1.40	0.26 - 7.49
	50+	1	3	1.47	0.13 - 17.2

Table 7: page 8 of 24

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Pos	tnatal Exposure: Leuke	emia Diagno	sis Ages 0 thr	ough 19	
Brookside	<10	21	81	1.0	-
	10 - 49.9	1	5	0.79	0.08 - 7.28
	50+	0	1	0	-
Holly Street	<10	14	48	1.0	-
	10 - 49.9	7	30	0.79	0.29 - 2.19
	50+	1	9	0.37	0.04 - 3.29
Indian Head	<10	22	79	1.0	-
	10 - 49.9	0	8	0	-
	50+	0	0	-	-
Parkway	<10	9	19	1.0	-
	10 - 49.9	8	46	0.39	0.13 - 1.14
	50+	5	22	0.51	0.15 - 1.78
Route 70	<10	21	70	1.0	-
	10 - 49.9	0	11	0	-
	50+	1	6	0.55	0.06 - 4.82

Table 7: page 9 of 24

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Tota	al Time Exposure: Leuk	kemia Diagn	osis Ages 0 th	rough 4	
Brookside	<10	9	34	1.0	-
	10 - 49.9	0	1	0	-
	50+	0	0	-	-
Holly Street	<10	8	20	1.0	-
	10 - 49.9	1	12	0.22	0.03 - 1.95
	50+	0	3	0	-
Indian Head	<10	9	33	1.0	-
	10 - 49.9	0	2	0	-
	50+	0	0	-	-
Parkway	<10	4	11	1.0	-
	10 - 49.9	2	16	0.38	0.06 - 2.32
	50+	3	8	1.02	0.19 - 5.52
Route 70	<10	8	27	1.0	-
	10 - 49.9	0	6	0	-
	50+	1	2	1.56	0.14 - 17.8

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Pr	enatal Exposure: Leuk	emia Diagno	sis Ages 0 thr	ough 4	
Brookside	<10	8	33	1.0	-
	10 - 49.9	1	2	2.45	0.14 - 42.6
	50+	0	0	-	-
Holly Street	<10	8	27	1.0	-
	10 - 49.9	1	4	0.76	0.07 - 7.91
	50+	0	4	0	-
Indian Head	<10	9	33	1.0	-
	10 - 49.9	0	2	0	-
	50+	0	0	-	-
Parkway	<10	5	20	1.0	-
	10 - 49.9	0	9	0	-
	50+	4	6	2.55	0.52 - 12.5
Route 70	<10	8	27	1.0	-
	10 - 49.9	0	5	0	-
	50+	1	3	1.19	0.09 - 14.9

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Po	stnatal Exposure: Leuk	emia Diagno	osis Ages 0 th	rough 4	
Brookside	<10	9	34	1.0	-
	10 - 49.9	0	1	0	-
	50+	0	0	-	-
Holly Street	<10	6	20	1.0	-
	10 - 49.9	2	12	0.49	0.07 - 3.56
	50+	1	3	1.12	0.11 - 11.1
Indian Head	<10	9	33	1.0	-
	10 - 49.9	0	2	0	-
	50+	0	0	-	-
Parkway	<10	4	10	1.0	-
	10 - 49.9	2	14	0.37	0.05 - 2.53
	50+	3	11	0.64	0.11 - 3.71
Route 70	<10	8	26	1.0	-
	10 - 49.9	0	7	0	-
	50+	1	2	1.42	0.13 - 16.0

Table 7c. Interview Study Analysis of Public Water Indices: Nervous System Cancers

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Total Time	Exposure: Nervous Sys	stem Cancer	Diagnosis Ag	es 0 thro	ugh 19
Brookside	<10 10 - 49.9 50+	16 2 0	63 8 0	1.0 0.87 -	- 0.13 - 5.97 -
Holly Street	<10 10 - 49.9 50+	10 5 3	39 22 10	1.0 0.88 1.18	- 0.27 - 2.86 0.28 - 4.97
Indian Head	<10 10 - 49.9 50+	16 2 0	67 4 0	1.0 2.00	- 0.37 - 10.9 -
Parkway	<10 10 - 49.9 50+	5 11 2	27 34 10	1.0 1.85 1.06	- 0.54 - 6.26 0.17 - 6.52
Route 70	<10 10 - 49.9 50+	17 1 0	68 3 0	1.0 1.33	- 0.14 - 12.8 -

Source Well Field Average Percent of Water		Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal I	Exposure: Nervous Syst	tem Cancer D	Diagnosis Age	s 0 throu	ıgh 19
Brookside	<10	16	65	1.0	-
	10 - 49.9	2	5	1.78	0.20 - 15.8
	50+	0	0	-	-
Holly Street	<10	13	49	1.0	-
	10 - 49.9	2	11	0.68	0.13 - 3.63
	50+	3	10	1.10	0.28 - 4.40
Indian Head	<10	17	69	1.0	-
	10 - 49.9	1	1	4.00	0.25 - 64.0
	50+	0	0	-	-
Parkway	<10	11	48	1.0	-
	10 - 49.9	4	14	1.48	0.30 - 7.30
	50+	3	8	1.83	0.37 - 9.17
Route 70	<10	17	69	1.0	-
	10 - 49.9	1	1	4.00	0.25 - 64.0
	50+	0	0	-	-

Source Well Field	Average Percent of Water		Number of Controls	Odds Ratio	95% Confidence Interval
Postnatal	Exposure: Nervous Sys	tem Cancer I	Diagnosis Age	es 0 throu	ugh 19
Brookside	<10	17	63	1.0	-
	10 - 49.9	1	8	0.43	0.05 - 3.92
	50+	0	0	-	-
Holly Street	<10	10	38	1.0	-
	10 - 49.9	5	21	0.91	0.29 - 2.86
	50+	3	12	0.94	0.22 - 4.06
Indian Head	<10	17	66	1.0	-
	10 - 49.9	1	5	0.79	0.08 - 7.28
	50+	0	0	-	-
Parkway	<10	5	27	1.0	-
	10 - 49.9	11	34	1.79	0.54 - 5.92
	50+	2	10	1.06	0.18 - 6.28
Route 70	<10 10 - 49.9 50+	18 0 0	67 4 0	1.0 0 -	-

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Total Time	e Exposure: Nervous Sy	stem Cancer	Diagnosis Ag	ges 0 thro	ough 4
Brookside	<10 10 - 49.9 50+	8 1 0	33 2 0	1.0 - -	
Holly Street	<10	3	19	1.0	-
	10 - 49.9	4	10	2.59	0.48 - 14.0
	50+	2	6	2.24	0.30 - 16.5
Indian Head	<10	8	34	1.0	-
	10 - 49.9	1	1	4.00	0.25 - 64.0
	50+	0	0	-	-
Parkway	<10	2	12	1.0	-
	10 - 49.9	6	17	2.44	0.37 - 16.0
	50+	1	6	0.93	0.07 - 11.8
Route 70	<10	8	34	1.0	-
	10 - 49.9	1	1	4.00	0.25 - 64.0
	50+	0	0	-	-

Source Well Field Average Percent of Water		Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal	Exposure: Nervous Sys	tem Cancer I	Diagnosis Age	es 0 throu	ugh 4
Brookside	<10	8	32	1.0	-
	10 - 49.9	1	3	1.15	0.04 - 32.1
	50+	0	0	-	-
Holly Street	<10	5	21	1.0	-
	10 - 49.9	2	8	1.06	0.17 - 6.64
	50+	2	6	1.36	0.21 - 8.63
Indian Head	<10	8	34	1.0	-
	10 - 49.9	1	1	4.00	0.25 - 64.0
	50+	0	0	-	-
Parkway	<10	3	18	1.0	-
	10 - 49.9	4	12	2.33	0.34 - 15.9
	50+	2	5	2.61	0.31 - 21.9
Route 70	<10	8	34	1.0	-
	10 - 49.9	1	1	4.00	0.25 - 64.0
	50+	0	0	-	-

Source Well Field Average Percent of Water		Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Postnatal	Exposure: Nervous Sys	stem Cancer	Diagnosis Ag	es 0 thro	ugh 4
Brookside	<10 10 - 49.9 50+	9 0 0	33 2 0	1.0 0 -	
Holly Street	<10	3	18	1.0	-
	10 - 49.9	4	10	2.29	0.46 - 11.4
	50+	2	7	1.88	0.24 - 14.9
Indian Head	<10	9	33	1.0	-
	10 - 49.9	0	2	0	-
	50+	0	0	-	-
Parkway	<10	2	13	1.0	-
	10 - 49.9	6	16	2.78	0.42 - 18.3
	50+	1	6	1.01	0.08 - 12.5
Route 70	<10	9	33	1.0	-
	10 - 49.9	0	2	0	-
	50+	0	0	-	-

Table 7d. Interview Study Analysis of Public Water Indices: Brain and Central Nervous System Cancers

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Total Time Exposure	e: Brain and Central Ne	ervous Syster	n Cancer Dia	gnosis Ag	jes 0 through 19
Brookside	<10	12	46	1.0	-
	10 - 49.9	1	6	0.60	0.06 - 6.23
	50+	0	0	-	-
Holly Street	<10	8	31	1.0	-
	10 - 49.9	3	13	0.90	0.22 - 3.69
	50+	2	8	0.98	0.18 - 5.40
Indian Head	<10	12	48	1.0	-
	10 - 49.9	1	4	1.00	0.11 - 8.95
	50+	0	0	-	-
Parkway	<10	4	23	1.0	-
	10 - 49.9	8	23	1.95	0.52 - 7.30
	50+	1	6	0.99	0.09 - 11.5
Route 70	<10	13	49	1.0	-
	10 - 49.9	0	3	0	-
	50+	0	0	-	-

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Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval	
Prenatal Exposure:	Brain and Central Nei	rvous System	Cancer Diag	nosis Age	es 0 through 19	
Brookside	<10	12	49	1.0	-	
	10 - 49.9	1	2	2.45	0.14 - 42.6	
	50+	0	0	-	-	
Holly Street	<10	10	39	1.0	-	
	10 - 49.9	0	5	0	-	
	50+	3	7	1.59	0.36 - 7.10	
Indian Head	<10 10 - 49.9 50+	13 0 0	50 1 0	1.0 0 -		
Parkway	<10	10	41	1.0	-	
	10 - 49.9	1	5	0.95	0.08 - 11.1	
	50+	2	5	1.74	0.25 - 12.2	
Route 70	<10	13	50	1.0	-	
	10 - 49.9	0	1	0	-	
	50+	0	0	-	-	

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds 95% Confidence Ratio Interval		
Postnatal Exposure	Brain and Central Ne	rvous System	n Cancer Diag	nosis Ag	es 0 through 19	
Brookside	<10	12	46	1.0	-	
	10 - 49.9	1	6	0.60	0.06 - 6.23	
	50+	0	0	-	-	
Holly Street	<10	8	31	1.0	-	
	10 - 49.9	3	14	0.85	0.22 - 3.33	
	50+	2	7	1.11	0.20 - 6.17	
Indian Head	<10	12	47	1.0	-	
	10 - 49.9	1	5	0.79	0.08 - 7.28	
	50+	0	0	-	-	
Parkway	<10	3	22	1.0	-	
	10 - 49.9	9	25	2.59	0.63 - 10.7	
	50+	1	5	1.59	0.13 - 20.0	
Route 70	<10	13	49	1.0	-	
	10 - 49.9	0	3	0	-	
	50+	0	0	-	-	

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio		
Total Time Exposure	: Brain and Central N	ervous Syste	m Cancer Dia	gnosis A	ges 0 through 4	
Brookside	<10 10 - 49.9 50+	4 0 0	16 0 0	1.0 - -		
Holly Street	<10	1	11	1.0	-	
	10 - 49.9	2	1	12.9	0.72 - 232	
	50+	1	4	2.99	0.17 - 53.5	
Indian Head	<10	4	15	1.0	-	
	10 - 49.9	0	1	0	-	
	50+	0	0	-	-	
Parkway	<10	1	8	1.0	-	
	10 - 49.9	3	6	2.96	0.29 - 29.9	
	50+	0	2	0	-	
Route 70	<10	4	15	1.0	-	
	10 - 49.9	0	1	0	-	
	50+	0	0	-	-	

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio		
Prenatal Exposure:	Brain and Central Ne	rvous System	n Cancer Diag	jnosis Ag	es 0 through 4	
Brookside	<10 10 - 49.9 50+	4 0 0	16 0 0	1.0 - -		
Holly Street	<10	2	11	1.0	-	
	10 - 49.9	0	2	0	-	
	50+	2	3	3.37	0.27 - 42.3	
Indian Head	<10	4	15	1.0	-	
	10 - 49.9	0	1	0	-	
	50+	0	0	-	-	
Parkway	<10	2	11	1.0	-	
	10 - 49.9	1	3	2.43	0.10 - 56.7	
	50+	1	2	3.42	0.16 - 73.8	
Route 70	<10	4	15	1.0	-	
	10 - 49.9	0	1	0	-	
	50+	0	0	-	-	

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Postnatal Exposure	Brain and Central Ne	ervous Syster	n Cancer Dia	gnosis Ag	jes 0 through 4
Brookside	<10	4	16	1.0	-
	10 - 49.9	0	0	-	-
	50+	0	0	-	-
Holly Street	<10	1	11	1.0	-
	10 - 49.9	2	3	5.11	0.44 - 58.9
	50+	1	2	5.37	0.20 - 142
Indian Head	<10	4	14	1.0	-
	10 - 49.9	0	2	0	-
	50+	0	0	-	-
Parkway	<10	0	8	-	-
	10 - 49.9	4	7	-	-
	50+	0	1	-	-
Route 70	<10	4	15	1.0	-
	10 - 49.9	0	1	0	-
	50+	0	0	-	-

Table 8a. Interview Study Analysis of Public Water Indices by Sex: Leukemia and Nervous System Cancers

Source	Average Percent of		N	lale		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Tota	I Time Exposu	re: Leuk	emia and I	Vervous	System Cance	er Diagn	osis Ages (0 throug	h 19
Brookside	<10 10 - 49.9 50+	19 1 0	68 10 1	1.0 0.24 0	- 0.02 - 2.44 -	18 2 0	76 3 0	1.0 2.67	- 0.45 - 16.0 -
Holly Street	<10	13	46	1.0	-	13	41	1.0	-
	10 - 49.9	5	24	0.75	0.25 - 2.23	6	29	0.65	0.22 - 1.95
	50+	2	9	0.79	0.15 - 4.22	1	9	0.36	0.04 - 3.05
Indian Head	<10	19	72	1.0	-	19	74	1.0	-
	10 - 49.9	1	7	0.57	0.07 - 4.64	1	5	0.80	0.09 - 6.85
	50+	0	0	-	-	0	0	-	-
Parkway	<10	7	28	1.0	-	7	21	1.0	-
	10 - 49.9	12	38	1.30	0.43 - 3.91	7	43	0.48	0.15 - 1.56
	50+	1	13	0.29	0.03 - 2.64	6	15	1.25	0.36 - 4.29
Route 70	<10	20	70	1.0	-	18	70	1.0	-
	10 - 49.9	0	6	0	-	1	7	0.55	0.07 - 4.71
	50+	0	3	0	-	1	2	2.00	0.18 - 22.1

Source	Average Percent of		IV	lale		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Pre	natal Exposur	e: Leuke	mia and N	ervous S	System Cance	r Diagno	sis Ages 0	through	19
Brookside	<10	18	70	1.0	-	18	75	1.0	-
	10 - 49.9	2	7	1.05	0.16 - 6.89	2	4	2.17	0.35 - 13.5
	50+	0	1	0	-	0	0	-	-
Holly Street	<10	16	60	1.0	-	15	56	1.0	-
	10 - 49.9	1	8	0.48	0.06 - 3.99	3	11	1.03	0.22 - 4.88
	50+	3	10	1.16	0.25 - 5.32	2	12	0.65	0.14 - 3.13
Indian Head	<10 10 - 49.9 50+	20 0 0	77 1 0	1.0 0 -	- - -	19 1 0	75 4 0	1.0 1.00	- 0.11 - 8.95 -
Parkway	<10	15	59	1.0	-	11	51	1.0	-
	10 - 49.9	3	9	1.36	0.24 - 7.56	2	15	0.61	0.11 - 3.28
	50+	2	10	0.80	0.14 - 4.49	7	13	2.39	0.77 - 7.40
Route 70	<10	19	73	1.0	-	17	74	1.0	-
	10 - 49.9	1	3	1.11	0.10 - 12.8	2	4	2.00	0.37 - 10.9
	50+	0	2	0	-	1	1	4.00	0.25 - 64.0

Source	Average Percent of		IV	lale		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Pos	tnatal Exposu	re: Leuke	emia and N	lervous	System Cance	r Diagno	osis Ages C	througl	h 19
Brookside	<10	20	68	1.0	-	18	76	1.0	-
	10 - 49.9	0	10	0	-	2	3	2.67	0.45 - 16.0
	50+	0	1	0	-	0	0	-	-
Holly Street	<10	12	46	1.0	-	12	40	1.0	-
	10 - 49.9	6	24	0.96	0.33 - 2.80	6	27	0.74	0.25 - 2.18
	50+	2	9	0.84	0.16 - 4.34	2	12	0.53	0.09 - 2.93
Indian Head	<10	19	72	1.0	-	20	73	1.0	-
	10 - 49.9	1	7	0.57	0.07 - 4.64	0	6	0	-
	50+	0	0	-	-	0	0	-	-
Parkway	<10	7	26	1.0	-	7	20	1.0	-
	10 - 49.9	12	38	1.16	0.39 - 3.40	7	42	0.47	0.15 - 1.54
	50+	1	15	0.24	0.03 - 2.17	6	17	1.05	0.30 - 3.67
Route 70	<10	20	69	1.0	-	19	68	1.0	-
	10 - 49.9	0	6	0	-	0	9	0	-
	50+	0	4	0	-	1	2	1.81	0.16 - 20.1

Source	Average Percent of		IV	lale		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Tota	al Time Expos	ure: Leuk	emia and	Nervous	System Cand	er Diagr	nosis Ages	0 throu	gh 4
Brookside	<10	5	21	1.0	-	12	46	1.0	-
	10 - 49.9	1	2	-	-	0	1	0	-
	50+	0	0	-	-	0	0	-	-
Holly Street	<10	3	15	1.0	-	8	24	1.0	-
	10 - 49.9	2	6	1.65	0.22 - 12.6	3	16	0.54	0.11 - 2.62
	50+	1	2	3.11	0.14 - 67.1	1	7	0.44	0.05 - 4.01
Indian Head	<10 10 - 49.9 50+	6 0 0	22 1 0	1.0 0 -	- - -	11 1 0	45 2 0	1.0 2.00	- 0.18 - 22.1 -
Parkway	<10	1	8	0	-	5	15	1.0	-
	10 - 49.9	4	10	4.09	0.28 - 59.4	4	23	0.52	0.11 - 2.38
	50+	1	5	1.51	0.08 - 28.7	3	9	1.00	0.21 - 4.71
Route 70	<10	6	19	1.0	-	10	42	1.0	-
	10 - 49.9	0	3	0	-	1	4	1.00	0.11 - 8.95
	50+	0	1	0	-	1	1	4.00	0.25 - 64.0

Source	Average Percent of		IV	lale		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Pre	enatal Exposu	re: Leuke	emia and N	Vervous	System Cance	er Diagn	osis Ages (throug	h 4
Brookside	<10	4	21	1.0	-	12	44	1.0	-
	10 - 49.9	2	2	-	-	0	3	0	-
	50+	0	0	-	-	0	0	-	-
Holly Street	<10	4	16	1.0	-	9	32	1.0	-
	10 - 49.9	1	4	1.00	0.10 - 9.76	2	8	0.85	0.13 - 5.43
	50+	1	3	1.27	0.10 - 16.3	1	7	0.53	0.06 - 4.80
Indian Head	<10 10 - 49.9 50+	6 0 0	22 1 0	1.0 0 -	- - -	11 1 0	45 2 0	1.0 2.00	- 0.18 - 22.1 -
Parkway	<10	2	11	1.0	-	6	27	1.0	-
	10 - 49.9	3	8	1.96	0.27 - 14.0	1	13	0.33	0.03 - 3.14
	50+	1	4	1.33	0.08 - 23.1	5	7	2.80	0.68 - 11.5
Route 70	<10	6	18	1.0	-	10	43	1.0	-
	10 - 49.9	0	3	0	-	1	3	1.33	0.14 - 12.8
	50+	0	2	0	-	1	1	4.00	0.25 - 64.0

Source	Average Percent of		IV	lale		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Pos	stnatal Exposu	ıre: Leuk	emia and l	Nervous	System Cance	er Diagn	osis Ages	0 throug	h 4
Brookside	<10	6	21	1.0	-	12	46	1.0	-
	10 - 49.9	0	2	0	-	0	1	0	-
	50+	0	0	-	-	0	0	-	-
Holly Street	<10	2	15	1.0	-	7	23	1.0	-
	10 - 49.9	3	6	5.26	0.48 - 58.2	3	16	0.62	0.13 - 2.94
	50+	1	2	4.50	0.23 - 88.8	2	8	0.80	0.12 - 5.28
Indian Head	<10 10 - 49.9 50+	6 0 0	22 1 0	1.0 0 -	- - -	12 0 0	44 3 0	1.0 0 -	
Parkway	<10	1	8	1.0	-	5	15	1.0	-
	10 - 49.9	4	8	5.02	0.33 - 75.9	4	22	0.55	0.12 - 2.50
	50+	1	7	1.29	0.07 - 22.9	3	10	0.89	0.18 - 4.41
Route 70	<10	6	18	1.0	-	11	41	1.0	-
	10 - 49.9	0	4	0	-	0	5	0	-
	50+	0	1	0	-	1	1	3.46	0.22 - 55.8

Table 8b. Interview Study Analysis of Public Water Indices by Sex: Leukemia

Source	Average Percent of		N	/lale		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	To	tal Time I	Exposure: l	_eukemia	Diagnosis A	ges 0 th	rough 19		
Brookside	<10 10 - 49.9 50+	9 0 0	33 2 1	1.0 0 0	- - -	12 1 0	48 3 0	1.0 1.33	- 0.14 - 12.8 -
Holly Street	<10	7	20	0	-	9	28	1.0	-
	10 - 49.9	2	13	0.42	0.08 - 2.25	4	18	0.70	0.19 - 2.54
	50+	0	3	0	-	0	5	0	-
Indian Head	<10	9	32	1.0	-	13	47	1.0	-
	10 - 49.9	0	4	0	-	0	4	0	-
	50+	0	0	-	-	0	0	-	-
Parkway	<10	3	9	1.0	-	6	13	1.0	-
	10 - 49.9	5	21	0.73	0.15 - 3.49	3	26	0.26	0.06 - 1.18
	50+	1	6	0.47	0.03 - 6.55	4	12	0.78	0.19 - 3.15
Route 70	<10	9	28	1.0	-	12	44	1.0	-
	10 - 49.9	0	5	0	-	0	5	0	-
	50+	0	3	0	-	1	2	2.00	0.18 - 22.1

Source	Average Percent of		N	/lale		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Pr	enatal E	xposure: Le	eukemia	Diagnosis Ag	es 0 thro	ough 19		
Brookside	<10	8	32	1.0	-	12	48	1.0	-
	10 - 49.9	1	3	1.33	0.14 - 12.8	1	3	1.40	0.12 - 16.4
	50+	0	1	0	-	0	0	-	-
Holly Street	<10	8	29	1.0	-	10	38	1.0	-
	10 - 49.9	0	3	0	-	2	5	1.81	0.22 - 14.8
	50+	1	4	1.00	0.03 - 32.0	1	8	0.52	0.06 - 4.44
Indian Head	<10	9	35	1.0	-	13	48	1.0	-
	10 - 49.9	0	1	0	-	0	3	0	-
	50+	0	0	-	-	0	0	-	-
Parkway	<10	7	28	1.0	-	8	34	1.0	-
	10 - 49.9	0	2	0	-	1	8	0.51	0.05 - 4.93
	50+	2	6	1.31	0.18 - 9.58	4	9	1.85	0.46 - 7.45
Route 70	<10	8	31	1.0	-	11	47	1.0	-
	10 - 49.9	1	3	1.11	0.10 - 12.8	1	3	1.33	0.14 - 12.8
	50+	0	2	0	-	1	1	4.00	0.25 - 64.0

Source	Average Percent of		N	l ale		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Po	stnatal E	xposure: L	eukemia	Diagnosis Aç	ges 0 thr	ough 19		
Brookside	<10	9	33	1.0	-	12	48	1.0	-
	10 - 49.9	0	2	0	-	1	3	1.33	0.14 - 12.8
	50+	0	1	0	-	0	0	-	-
Holly Street	<10	6	19	1.0	-	8	29	1.0	-
	10 - 49.9	3	14	0.63	0.13 - 2.97	4	16	0.93	0.24 - 3.49
	50+	0	3	0	-	1	6	0.63	0.07 - 5.94
Indian Head	<10	9	32	1.0	-	13	47	1.0	-
	10 - 49.9	0	4	0	-	0	4	0	-
	50+	0	0	-	-	0	0	-	-
Parkway	<10	3	8	1.0	-	6	11	1.0	-
	10 - 49.9	5	21	0.65	0.14 - 3.09	3	25	0.22	0.04 - 1.05
	50+	1	7	0.35	0.03 - 4.76	4	15	0.52	0.13 - 2.20
Route 70	<10	9	28	1.0	-	12	42	1.0	-
	10 - 49.9	0	4	0	-	0	7	0	-
	50+	0	4	0	-	1	2	1.81	0.16 - 20.1

Source	Average Percent of		N	/lale			Fe	emale	
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	To	otal Time	Exposure:	Leukemi	a Diagnosis A	ges 0 th	rough 4		
Brookside	<10 10 - 49.9 50+	2 0 0	8 0 0	1.0 - -		7 0 0	26 1 0	1.0 0 -	- - -
Holly Street	<10 10 - 49.9 50+	2 0 0	6 2 0	1.0 0 -		6 1 0	14 10 3	1.0 0.26 0	- 0.03 - 2.43 -
Indian Head	<10 10 - 49.9 50+	2 0 0	7 1 0	1.0 0 -		7 0 0	26 1 0	1.0 0 -	
Parkway	<10 10 - 49.9 50+	0 1 1	2 4 2	1.0 - -	- - -	4 1 2	9 12 6	1.0 0.20 0.76	- 0.02 - 2.05 0.13 - 4.30
Route 70	<10 10 - 49.9 50+	2 0 0	4 3 1	1.0 0 0		6 0 1	23 3 1	1.0 0 4.00	- - 0.25 - 64.0

Source	Average Percent of		N	/lale		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Р	renatal E	xposure: L	.eukemia	Diagnosis Aç	ges 0 thr	ough 4		
Brookside	<10 10 - 49.9 50+	1 1 0	8 0 0	1.0 - -		7 0 0	25 2 0	1.0 0 -	- - -
Holly Street	<10 10 - 49.9 50+	2 0 0	7 1 0	1.0 0 -		6 1 0	20 3 4	1.0 1.00 0	- 0.08 - 11.9 -
Indian Head	<10 10 - 49.9 50+	2 0 0	7 1 0	1.0 0 -		7 0 0	26 1 0	1.0 0 -	
Parkway	<10 10 - 49.9 50+	1 0 1	4 2 2	1.0 0 -	- - -	4 0 3	16 7 4	1.0 0 2.35	- - 0.45 - 12.2
Route 70	<10 10 - 49.9 50+	2 0 0	3 3 2	1.0 0 0	- - -	6 0 1	24 2 1	1.0 0 4.00	- - 0.25 - 64.0

Source	Average Percent of		N	/lale		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	P	ostnatal	Exposure: I	Leukemia	a Diagnosis A	ges 0 th	rough 4		
Brookside	<10	2	8	1.0	-	7	26	1.0	-
	10 - 49.9	0	0	-	-	0	1	0	-
	50+	0	0	-	-	0	0	-	-
Holly Street	<10	1	5	1.0	-	5	15	1.0	-
	10 - 49.9	1	3	-	-	1	9	0.31	0.03 - 3.57
	50+	0	0	-	-	1	3	1.04	0.11 - 10.2
Indian Head	<10	2	7	1.0	-	7	26	1.0	-
	10 - 49.9	0	1	0	-	0	1	0	-
	50+	0	0	-	-	0	0	-	-
Parkway	<10	0	2	O	-	4	8	1.0	-
	10 - 49.9	1	3	-	-	1	11	0.17	0.01 - 2.04
	50+	1	3	-	-	2	8	0.46	0.07 - 3.22
Route 70	<10	2	4	1.0	-	6	22	1.0	-
	10 - 49.9	0	3	0	-	0	4	0	-
	50+	0	1	0	-	1	1	3.46	0.22 - 55.8

Table 8c. Interview Study Analysis of Public Water Indices by Sex: Nervous System Cancers

Source	Average Percent of		N	/lale		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Total Tim	e Exposu	re: Nervou	s System	Cancer Diagr	nosis Ag	es 0 throug	gh 19	
Brookside	<10 10 - 49.9 50+	10 1 0	35 8 0	1.0 0.30 -	- 0.03 - 3.38 -	6 1 0	28 0 0	1.0 - -	- - -
Holly Street	<10 10 - 49.9 50+	6 3 2	26 11 6	1.0 1.13 1.45	- 0.27 - 4.79 0.24 - 8.78	4 2 1	13 11 4	1.0 0.55 0.77	- 0.07 - 4.16 0.07 - 9.00
Indian Head	<10 10 - 49.9 50+	10 1 0	40 3 0	1.0 1.33	- 0.14 - 12.8 -	6 1 0	27 1 0	1.0 4.00	- 0.25 - 64.0 -
Parkway	<10 10 - 49.9 50+	4 7 0	19 17 7	1.0 2.38 0	- 0.51 - 11.0 -	1 4 2	8 17 3	1.0 1.89 6.97	- 0.18 - 20.0 0.31 - 159
Route 70	<10 10 - 49.9 50+	11 0 0	42 1 0	1.0 0 -	- - -	6 1 0	26 2 0	1.0 2.00	- 0.18 - 22.1 -

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Source	Average Percent of		N	/lale		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Prenatal	Exposur	e: Nervous	System (Cancer Diagn	osis Age	s 0 througl	h 19	
Brookside	<10	10	38	1.0	-	6	27	1.0	-
	10 - 49.9	1	4	0.71	0.04 - 13.8	1	1	4.00	0.25 - 64.0
	50+	0	0	-	-	0	0	-	-
Holly Street	<10	8	31	1.0	-	5	18	1.0	-
	10 - 49.9	1	5	0.78	0.08 - 7.47	1	6	0.55	0.05 - 6.66
	50+	2	6	1.26	0.23- 6.85	1	4	0.84	0.08 - 9.26
Indian Head	<10 10 - 49.9 50+	11 0 0	42 0 0	1.0 - -	- - -	6 1 0	27 1 0	1.0 4.00	- 0.25 - 64.0 -
Parkway	<10	8	31	1.0	-	3	17	1.0	-
	10 - 49.9	3	7	1.71	0.24 - 11.9	1	7	0.87	0.06 - 12.6
	50+	0	4	0	-	3	4	4.01	0.56 - 28.8
Route 70	<10	11	42	1.0	-	6	27	1.0	-
	10 - 49.9	0	0	-	-	1	1	4.00	0.25 - 64.0
	50+	0	0	-	-	0	0	-	-

Source	Average Percent of		N	/lale			Fe	emale	
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Postnata	l Exposur	e: Nervous	s System	Cancer Diagn	osis Age	es 0 throug	h 19	
Brookside	<10	11	35	1.0	-	6	28	1.0	-
	10 - 49.9	0	8	0	-	1	0	-	-
	50+	0	0	-	-	0	0	-	-
Holly Street	<10	6	27	1.0	-	4	11	1.0	-
	10 - 49.9	3	10	1.28	0.31 - 5.40	2	11	0.48	0.07 - 3.18
	50+	2	6	1.41	0.25 - 7.99	1	6	0.36	0.02 - 5.46
Indian Head	<10	10	40	1.0	-	7	26	1.0	-
	10 - 49.9	1	3	1.33	0.14 - 12.8	0	2	0	-
	50+	0	0	-	-	0	0	-	-
Parkway	<10	4	18	1.0	-	1	9	1.0	-
	10 - 49.9	7	17	2.06	0.46 - 9.26	4	17	2.11	0.21 - 21.2
	50+	0	8	0	-	2	2	10.8	0.46 - 255
Route 70	<10	11	41	1.0	-	7	26	1.0	-
	10 - 49.9	0	2	0	-	0	2	0	-
	50+	0	0	-	-	0	0	-	-

Source	Average Percent of		N	/lale			Fe	emale	
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Total Tim	ne Exposu	ıre: Nervou	us System	Cancer Diag	nosis Aç	jes 0 throu	gh 4	
Brookside	<10 10 - 49.9 50+	3 1 0	13 2 0	1.0 - -	- - -	5 0 0	20 0 0	1.0 - -	
Holly Street	<10 10 - 49.9 50+	1 2 1	9 4 2	1.0 3.66 5.14	- 0.30 - 45.1 0.17 - 155	2 2 1	10 6 4	1.0 1.93 1.36	- 0.16 - 22.6 0.10 - 18.6
Indian Head	<10 10 - 49.9 50+	4 0 0	15 0 0	1.0 - -	- - -	4 1 0	19 1 0	1.0 4.00	- 0.25 - 64.0 -
Parkway	<10 10 - 49.9 50+	1 3 0	6 6 3	1.0 - 0	- - -	1 3 1	6 11 3	1.0 1.64 2.14	- 0.14 - 19.2 0.07 - 61.2
Route 70	<10 10 - 49.9 50+	4 0 0	15 0 0	1.0 - -	- - -	4 1 0	19 1 0	1.0 4.00 -	- 0.25 - 64.0 -

Source	Average Percent of		N	/lale		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Prenata	I Exposur	e: Nervous	s System	Cancer Diagr	osis Age	es 0 throug	h 4	
Brookside	<10	3	13	1.0	-	5	19	1.0	-
	10 - 49.9	1	2	-	-	0	1	0	-
	50+	0	0	-	-	0	0	-	-
Holly Street	<10	2	9	1.0	-	3	12	1.0	-
	10 - 49.9	1	3	1.37	0.12 - 15.5	1	5	0.79	0.05 - 11.6
	50+	1	3	1.42	0.10 - 19.4	1	3	1.29	0.09 - 17.7
Indian Head	<10 10 - 49.9 50+	4 0 0	15 0 0	1.0 - -	- - -	4 1 0	19 1 0	1.0 4.00	- 0.25 - 64.0 -
Parkway	<10	1	7	-	-	2	11	1.0	-
	10 - 49.9	3	6	3.25	0.28 - 37.2	1	6	1.14	0.06 - 23.5
	50+	0	2	0	-	2	3	4.53	0.28 - 72.2
Route 70	<10	4	15	1.0	-	4	19	1.0	-
	10 - 49.9	0	0	-	-	1	1	4.00	0.25 - 64.0
	50+	0	0	-	-	0	0	-	-

Source	Average Percent of		N	/lale		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Postnata	al Exposu	re: Nervou	s System	Cancer Diagi	nosis Ag	es 0 throuç	gh 4	
Brookside	<10	4	13	1.0	-	5	20	1.0	-
	10 - 49.9	0	2	0	-	0	0	-	-
	50+	0	0	-	-	0	0	-	-
Holly Street	<10	1	10	1.0	-	2	8	1.0	-
	10 - 49.9	2	3	4.89	0.42 - 57.2	2	7	1.08	0.12 - 10.2
	50+	1	2	4.27	0.22 - 84.6	1	5	0.77	0.04 - 15.2
Indian Head	<10	4	15	1.0	-	5	18	1.0	-
	10 - 49.9	0	0	-	-	0	2	0	-
	50+	0	0	-	-	0	0	-	-
Parkway	<10	1	6	1.0	-	1	7	1.0	-
	10 - 49.9	3	5	-	-	3	11	1.87	0.17 - 20.9
	50+	0	4	0	-	1	2	3.80	0.12 - 118
Route 70	<10	4	14	1.0	-	5	19	1.0	-
	10 - 49.9	0	1	0	-	0	1	0	-
	50+	0	0	-	-	0	0	-	-

Table 8d. Interview Study Analysis of Public Water Indices by Sex: Brain and Central Nervous System Cancers

Source	Average Percent of		IV	lale		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Total	Time Exposur	e: Brain	and Centra	al Nervo	us System Ca	ncer Dia	gnosis Age	es 0 thro	ugh 19
Brookside	<10	8	26	1.0	-	4	20	1.0	-
	10 - 49.9	0	6	0	-	1	0	-	-
	50+	0	0	-	-	0	0	-	-
Holly Street	<10	5	19	1.0	-	3	12	1.0	-
	10 - 49.9	1	8	0.51	0.06 - 4.58	2	5	1.69	0.22 - 13.2
	50+	2	5	1.53	0.24 - 9.93	0	3	0	-
Indian Head	<10 10 - 49.9 50+	7 1 0	29 3 0	1.0 1.33 -	- 0.14 - 12.8 -	5 0 0	19 1 0	1.0 0 -	
Parkway	<10	3	16	1.0	-	1	7	1.0	-
	10 - 49.9	5	12	2.12	0.43 - 10.4	3	11	1.87	0.18 - 19.8
	50+	0	4	0	-	1	2	3.96	0.12 - 125
Route 70	<10	8	31	1.0	-	5	18	1.0	-
	10 - 49.9	0	1	0	-	0	2	0	-
	50+	0	0	-	-	0	0	-	-

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Source	Average Percent of		IV	lale		Female						
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI			
Pren	Prenatal Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 19											
Brookside	<10	8	29	1.0	-	4	20	1.0	-			
	10 - 49.9	0	2	0	-	1	0	-	-			
	50+	0	0	-	-	0	0	-	-			
Holly Street	<10	6	24	1.0	-	4	15	1.0	-			
	10 - 49.9	0	3	0	-	0	2	0	-			
	50+	2	4	2.00	0.31 - 12.8	1	3	1.09	0.09 - 13.3			
Indian Head	<10	8	31	1.0	-	5	19	1.0	-			
	10 - 49.9	0	0	-	-	0	1	0	-			
	50+	0	0	-	-	0	0	-	-			
Parkway	<10	7	27	1.0	-	3	14	1.0	-			
	10 - 49.9	1	2	1.73	0.11 - 27.9	0	3	0	-			
	50+	0	2	0	-	2	3	2.34	0.28 - 19.4			
Route 70	<10	8	31	1.0	-	5	19	1.0	-			
	10 - 49.9	0	0	-	-	0	1	0	-			
	50+	0	0	-	-	0	0	-	-			

Source	Average Percent of		IV	lale		Female						
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI			
Postr	Postnatal Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 19											
Brookside	<10	8	26	1.0	-	4	20	1.0	-			
	10 - 49.9	0	6	0	-	1	0	-	-			
	50+	0	0	-	-	0	0	-	-			
Holly Street	<10	5	20	1.0	-	3	11	1.0	-			
	10 - 49.9	1	8	0.53	0.06 - 4.73	2	6	1.16	0.19 - 7.23			
	50+	2	4	1.91	0.30 - 12.1	0	3	0	-			
Indian Head	<10	7	29	1.0	-	5	18	1.0	-			
	10 - 49.9	1	3	1.33	0.14 - 12.8	0	2	0	-			
	50+	0	0	-	-	0	0	-	-			
Parkway	<10	3	15	1.0	-	0	7	0	-			
	10 - 49.9	5	13	1.82	0.38 - 8.65	4	12	-	-			
	50+	0	4	0	-	1	1	-	-			
Route 70	<10	8	31	1.0	-	5	18	1.0	-			
	10 - 49.9	0	1	0	-	0	2	0	-			
	50+	0	0	-	-	0	0	-	-			

Source	Average Percent of		N	lale			Fe	emale				
Well Field Water	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI			
Tota	Total Time Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 4											
Brookside	<10	1	4	1.0	-	3	12	1.0	-			
	10 - 49.9	0	0	-	-	0	0	-	-			
	50+	0	0	-	-	0	0	-	-			
Holly Street	<10	0	2	0	-	1	9	1.0	-			
	10 - 49.9	0	1	-	-	2	0	-	-			
	50+	1	1	-	-	0	3	0	-			
Indian Head	<10	1	4	1.0	-	3	11	1.0	-			
	10 - 49.9	0	0	-	-	0	1	0	-			
	50+	0	0	-	-	0	0	-	-			
Parkway	<10	0	3	0	-	1	5	1.0	-			
	10 - 49.9	1	1	-	-	2	5	1.64	0.14 - 19.2			
	50+	0	0	-	-	0	2	0	-			
Route 70	<10	1	4	1.0	-	3	11	1.0	-			
	10 - 49.9	0	0	-	-	0	1	0	-			
	50+	0	0	-	-	0	0	-	-			

Source	Average Percent of		IV	lale			Fe	emale				
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI			
Prei	Prenatal Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 4											
Brookside	<10 10 - 49.9 50+	1 0 0	4 0 0	1.0 - -	- - -	3 0 0	12 0 0	1.0 - -				
Holly Street	<10	0	2	0	-	2	9	1.0	-			
	10 - 49.9	0	1	-	-	0	1	0	-			
	50+	1	1	-	-	1	2	2.00	0.11 - 37.8			
Indian Head	<10	1	4	1.0	-	3	11	1.0	-			
	10 - 49.9	0	0	-	-	0	1	0	-			
	50+	0	0	-	-	0	0	-	-			
Parkway	<10	0	3	0	-	2	8	1.0	-			
	10 - 49.9	1	1	-	-	0	2	0	-			
	50+	0	0	-	-	1	2	1.41	0.06 - 33.2			
Route 70	<10	1	4	1.0	-	3	11	1.0	-			
	10 - 49.9	0	0	-	-	0	1	0	-			
	50+	0	0	-	-	0	0	-	-			

Source	Average Percent of		N	lale		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Post	natal Exposu	e: Brain	and Centra	al Nervo	us System Ca	ncer Dia	gnosis Age	es 0 thro	ugh 4
Brookside	<10 10 - 49.9 50+	1 0 0	4 0 0	1.0 - -	- - -	3 0 0	12 0 0	1.0 - -	
Holly Street	<10 10 - 49.9 50+	0 0 1	3 1 0	0 - -		1 2 0	8 2 2	1.0 4.70 0	- 0.41 - 54.4 -
Indian Head	<10 10 - 49.9 50+	1 0 0	4 0 0	1.0 - -		3 0 0	10 2 0	1.0 0 -	- - -
Parkway	<10 10 - 49.9 50+	0 1 0	3 1 0	0 - -		0 3 0	5 6 1	0 - -	- - -
Route 70	<10 10 - 49.9 50+	1 0 0	4 0 0	1.0 - -	- - -	3 0 0	11 1 0	1.0 0 -	- - -

Table 9a. Interview Study Analysis of Time-specific Public Water Indices: Leukemia and Nervous System Cancers

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Total Time Period Exposi	ure: Leukemia and	Nervous Syste	em Cancer Dia	gnosis A	ges 0 through 19
Parkway (1982 and later)	<10	21	73	1.0	-
	10 - 49.9	13	68	0.60	0.24 - 1.45
	50+	6	18	1.11	0.34 - 3.58
Holly Street (prior to 1976)	<10	37	143	1.0	-
	10 - 49.9	3	15	0.71	0.17 - 3.05
	50+	0	1	0	-
Prenatal Exposure:	Leukemia and Nerv	ous System C	ancer Diagnos	sis Ages (through 19
Parkway (1982 and later)	<10	31	124	1.0	-
	10 - 49.9	4	21	0.76	0.21 - 2.83
	50+	5	13	1.59	0.46 - 5.47
Holly Street (prior to 1976)	<10	38	148	1.0	-
	10 - 49.9	1	0	-	-
	50+	1	10	0.55	0.07 - 4.71
Postnatal Exposure:	Leukemia and Ner	vous System C	ancer Diagno	sis Ages	0 through 19
Parkway (1982 and later)	<10	21	72	1.0	-
	10 - 49.9	13	65	0.61	0.25 - 1.49
	50+	6	22	0.84	0.27 - 2.63
Holly Street (prior to 1976)	<10	37	144	1.0	-
	10 - 49.9	3	14	0.80	0.20 - 3.24
	50+	0	1	0	-

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval					
Total Time Period Expos	ure: Leukemia and	Nervous Syst	em Cancer Dia	agnosis A	ges 0 through 4					
Parkway (1982 and later)	<10	8	26	1.0	-					
	10 - 49.9	6	33	0.55	0.14 - 2.07					
	50+	4	12	1.08	0.25 - 4.65					
Holly Street (prior to 1976)	<10 10 - 49.9 50+	18 0 0	71 0 0	1.0 - -						
Prenatal Exposure:	Prenatal Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 4									
Parkway (1982 and later)	<10	11	42	1.0	-					
	10 - 49.9	3	20	0.57	0.13 - 2.50					
	50+	4	8	1.87	0.46 - 7.66					
Holly Street (prior to 1976)	<10	18	71	1.0	-					
	10 - 49.9	0	0	-	-					
	50+	0	0	-	-					
Postnatal Exposure:	Leukemia and Ner	vous System	Cancer Diagno	osis Ages	0 through 4					
Parkway (1982 and later)	<10	8	26	1.0	-					
	10 - 49.9	6	30	0.62	0.17 - 2.31					
	50+	4	15	0.83	0.19 - 3.53					
Holly Street (prior to 1976)	<10	18	71	1.0	-					
	10 - 49.9	0	0	-	-					
	50+	0	0	-	-					

Table 9b. Interview Study Analysis of Time-specific Public Water Indices: Leukemia

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval					
Total Time	Period Exposure: L	.eukemia Dia	gnosis Ages 0	through	19					
Parkway (1982 and later)	<10 10 - 49.9 50+	11 6 5	6 38		- 0.15 - 1.62 0.31 - 4.61					
Holly Street (prior to 1976)	<10 10 - 49.9 50+	21 1 0	78 10 0	1.0 0.25 -	- 0.02 - 2.75 -					
Prena	Prenatal Exposure: Leukemia Diagnosis Ages 0 through 19									
Parkway (1982 and later)	<10 10 - 49.9 50+	17 1 4	70 9 8	1.0 0.47 2.17	- 0.05 - 4.31 0.50 - 9.39					
Holly Street (prior to 1976)	<10 10 - 49.9 50+	21 1 0	80 0 8	1.0 - 0						
Postna	atal Exposure: Leuk	emia Diagnos	sis Ages 0 thro	ough 19						
Parkway (1982 and later)	<10 10 - 49.9 50+	11 6 5	35 36 17	1.0 0.46 0.78	- 0.14 - 1.54 0.21 - 2.97					
Holly Street (prior to 1976)	<10 10 - 49.9 50+	21 1 0	79 9 0	1.0 0.35 -	- 0.04 - 3.33 -					

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval						
Total Tim	e Period Exposure:	Leukemia Dia	ignosis Ages 0	through	4						
Parkway (1982 and later)	<10 10 - 49.9 50+	4 2 3	2 17		- 0.06 - 2.36 0.21 - 7.28						
Holly Street (prior to 1976)	<10	9	36	1.0	-						
	10 - 49.9	0	0	-	-						
	50+	0	0	-	-						
Pren	Prenatal Exposure: Leukemia Diagnosis Ages 0 through 4										
Parkway (1982 and later)	<10	6	22	1.0	-						
	10 - 49.9	0	9	0	-						
	50+	3	4	2.24	0.44 - 11.5						
Holly Street (prior to 1976)	<10	9	36	1.0	-						
	10 - 49.9	0	0	-	-						
	50+	0	0	-	-						
Postn	atal Exposure: Leuk	kemia Diagno	sis Ages 0 thr	ough 4							
Parkway (1982 and later)	<10	4	11	1.0	-						
	10 - 49.9	2	15	0.37	0.05 - 2.49						
	50+	3	10	0.72	0.12 - 4.47						
Holly Street (prior to 1976)	<10	9	36	1.0	-						
	10 - 49.9	0	0	-	-						
	50+	0	0	-	-						

Table 9c. Interview Study Analysis of Time-specific Public Water Indices: Nervous System Cancers

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval						
Total Time Period	d Exposure: Nervou	s System Cand	er Diagnosis	Ages 0 th	rough 19						
Parkway (1982 and later)	<10	10	36	1.0	-						
	10 - 49.9	7	30	0.79	0.20 - 3.07						
	50+	1	5	0.68	0.06 - 7.99						
Holly Street (prior to 1976)	<10	16	65	1.0	-						
	10 - 49.9	2	5	1.67	0.27 - 10.4						
	50+	0	1	0	-						
Prenatal Exp	Prenatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 19										
Parkway (1982 and later)	<10	14	54	1.0	-						
	10 - 49.9	3	12	0.92	0.16 - 5.23						
	50+	1	5	0.74	0.06 - 8.73						
Holly Street (prior to 1976)	<10	17	68	1.0	-						
	10 - 49.9	0	0	-	-						
	50+	1	2	2.00	0.18 - 22.1						
Postnatal Ex	posure: Nervous Sys	stem Cancer D	Diagnosis Ages	s 0 throu	gh 19						
Parkway (1982 and later)	<10	10	37	1.0	-						
	10 - 49.9	7	29	0.87	0.23 - 3.30						
	50+	1	5	0.72	0.07 - 7.85						
Holly Street (prior to 1976)	<10	16	65	1.0	-						
	10 - 49.9	2	5	1.67	0.27 - 10.4						
	50+	0	1	0	-						

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval					
Total Time Perio	d Exposure: Nervou	ıs System Can	cer Diagnosis	Ages 0 t	hrough 4					
Parkway (1982 and later)	<10	4	4 14		-					
	10 - 49.9	4	4 16		0.13 - 6.53					
	50+	1	1 5		0.06 - 9.21					
Holly Street (prior to 1976)	<10	9	35	1.0	-					
	10 - 49.9	0	0	-	-					
	50+	0	0	-	-					
Prenatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 4										
Parkway (1982 and later)	<10	5	20	1.0	-					
	10 - 49.9	3	11	1.21	0.18 - 8.15					
	50+	1	4	1.12	0.08 - 16.6					
Holly Street (prior to 1976)	<10	9	35	1.0	-					
	10 - 49.9	0	0	-	-					
	50+	0	0	-	-					
Postnatal Ex	posure: Nervous Sy	stem Cancer I	Diagnosis Age	s 0 throu	ıgh 4					
Parkway (1982 and later)	<10	4	15	1.0	-					
	10 - 49.9	4	15	1.10	0.17 - 7.27					
	50+	1	5	0.80	0.07 - 9.70					
Holly Street (prior to 1976)	<10	9	35	1.0	-					
	10 - 49.9	0	0	-	-					
	50+	0	0	-	-					

Table 9d. Interview Study Analysis of Time-specific Public Water Indices: Brain and Central Nervous System Cancers

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Total Time Period Exposu	ure: Brain and Cent	ral Nervous S	ystem Cancer	Diagnosi	is Ages 0 through
Parkway (1982 and later)	<10 10 - 49.9 50+	8 5 O	30 20 2	1.0 0.87 0	- 0.21 - 3.56 -
Holly Street (prior to 1976)	<10	11	46	1.0	-
	10 - 49.9	2	5	1.67	0.27 - 10.4
	50+	0	1	0	-
Prenatal Exposure: Br	ain and Central Ne	rvous System	Cancer Diagn	osis Ages	s 0 through 19
Parkway (1982 and later)	<10	12	45	1.0	-
	10 - 49.9	1	4	0.60	0.05 - 7.70
	50+	0	3	0	-
Holly Street (prior to 1976)	<10	12	49	1.0	-
	10 - 49.9	0	0	-	-
	50+	1	2	2.00	0.18 - 22.1
Postnatal Exposure: B	rain and Central Ne	ervous System	Cancer Diagr	nosis Age	s 0 through 19
Parkway (1982 and later)	<10	7	30	1.0	-
	10 - 49.9	6	21	1.28	0.27 - 5.98
	50+	0	1	0	-
Holly Street (prior to 1976)	<10	11	46	1.0	-
	10 - 49.9	2	5	1.67	0.27 - 10.4
	50+	0	1	0	-

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval					
Total Time Period Exposu	re: Brain and Centr	al Nervous Sy	stem Cancer [Diagnosis	Ages 0 through 4					
Parkway (1982 and later)	<10	2	8	1.0	-					
	10 - 49.9	2	6	1.17	0.14 - 9.63					
	50+	0	2	0	-					
Holly Street (prior to 1976)	<10 10 - 49.9 50+	4 0 0	16 0 0	1.0 - -						
Prenatal Exposure: B	Prenatal Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 4									
Parkway (1982 and later)	<10	3	11	1.0	-					
	10 - 49.9	1	3	0.87	0.05 - 15.4					
	50+	0	2	0	-					
Holly Street (prior to 1976)	<10	4	16	1.0	-					
	10 - 49.9	0	0	-	-					
	50+	0	0	-	-					
Postnatal Exposure: E	Brain and Central N	ervous Systen	n Cancer Diag	nosis Age	es 0 through 4					
Parkway (1982 and later)	<10	1	8	0	-					
	10 - 49.9	3	7	3.46	0.27 - 43.9					
	50+	0	1	0	-					
Holly Street (prior to 1976)	<10	4	16	1.0	-					
	10 - 49.9	0	0	-	-					
	50+	0	0	-	-					

Table 10a. Interview Study Analysis of Time-specific Public Water Indices by Sex: Leukemia and Nervous System Cancers

	Average		N	/lale			F	emale			
Source Well Field	Percent of Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI		
Total Time Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 19											
Holly Street (prior to 1976)	<10 10 - 49.9 50+	17 3 0	67 11 1	1.0 1.10 0	- 0.23 - 5.21 -	20 0 0	76 4 0	1.0 0 -			
Parkway (1982 and later)	<10 10 - 49.9 50+	12 7 1	45 27 7	1.0 0.94 0.46	- 0.24 - 3.66 0.04 - 5.38	9 6 5	28 41 11	1.0 0.41 1.37	- 0.12 - 1.39 0.36 - 5.20		
Prena	ital Exposure	e: Leuke	mia and N	ervous S	System Cance	r Diagno	sis Ages 0	through	19		
Holly Street (prior to 1976)	<10 10 - 49.9 50+	18 1 1	72 0 6	1.0 - 1.33	- - 0.14 - 12.8	20 0 0	76 0 4	1.0 - 0	- - -		
Parkway (1982 and later)	<10 10 - 49.9 50+	18 2 0	68 7 4	1.0 1.11 0	- 0.15 - 8.22 -	13 2 5	56 14 9	1.0 0.68 2.63	- 0.12 - 3.91 0.62 - 11.2		
Postna	atal Exposur	e: Leuke	emia and N	lervous	System Cance	r Diagno	osis Ages C	through	า 19		
Holly Street (prior to 1976)	<10 10 - 49.9 50+	17 3 0	68 10 1	1.0 1.23 0	- 0.28 - 5.50 -	20 0 0	76 4 0	1.0 0 -	- - -		
Parkway (1982 and later)	<10 10 - 49.9 50+	12 7 1	44 26 9	1.0 0.88 0.35	- 0.22 - 3.46 0.03 - 3.83	9 6 5	28 39 13	1.0 0.44 1.15	- 0.13 - 1.47 0.29 - 4.50		

	Average		N	/lale			Female				
Source Well Field	Percent of Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI		
Total	Total Time Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 4										
Holly Street (prior to 1976)	<10 10 - 49.9 50+	6 0 0	23 0 0	1.0 - -	- - -	12 0 0	48 0 0	1.0 - -	- - -		
Parkway (1982 and later)	<10 10 - 49.9 50+	2 3 1	10 9 4	1.0 2.88 1.70	- 0.18 - 45.7 0.08 - 37.7	6 3 3	16 24 8	1.0 0.29 0.92	- 0.05 - 1.57 0.19 - 4.43		
Prena	atal Exposur	e: Leuke	emia and N	lervous	System Cance	r Diagn	osis Ages () througl	h 4		
Holly Street (prior to 1976)	<10 10 - 49.9 50+	6 0 0	23 0 0	1.0 - -	- - -	12 0 0	48 0 0	1.0 - -	- - -		
Parkway (1982 and later)	<10 10 - 49.9 50+	4 2 0	14 7 2	1.0 1.11 0	- 0.15 - 8.22 -	7 1 4	28 13 6	1.0 0.31 2.48	- 0.03 - 3.04 0.49 - 12.5		
Postn	atal Exposu	re: Leuk	emia and l	Nervous	System Cance	er Diagn	osis Ages	0 throug	h 4		
Holly Street (prior to 1976)	<10 10 - 49.9 50+	6 0 0	23 0 0	1.0 - -	- - -	12 0 0	48 0 0	1.0 - -	- - -		
Parkway (1982 and later)	<10 10 - 49.9 50+	2 3 1	10 7 6	1.0 3.82 1.30	- 0.23 - 63.2 0.07 - 24.4	6 3 3	16 23 9	1.0 0.32 0.78	- 0.06 - 1.60 0.15 - 4.10		

Table 10b. Interview Study Analysis of Time-specific Public Water Indices by Sex: Leukemia

	Average		N	/lale			Fe	emale			
Source Well Field	Percent of Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI		
	Tota	ıl Time E	xposure: L	eukemia	a Diagnosis A	ges 0 thi	ough 19				
Holly Street (prior to 1976)	<10 10 - 49.9 50+	8 1 0	30 6 0	1.0 0.47 -	- 0.03 - 7.50 -	13 0 0	48 4 0	1.0 0 -	- - -		
Parkway (1982 and later)	<10 10 - 49.9 50+	4 4 1	17 14 5	1.0 1.28 0.88	- 0.18 - 9.32 0.05 - 16.8	7 2 4	20 24 8	1.0 0.22 1.23	- 0.04 - 1.24 0.29 - 5.21		
	Prenatal Exposure: Leukemia Diagnosis Ages 0 through 19										
Holly Street (prior to 1976)	<10 10 - 49.9 50+	8 1 0	32 0 4	1.0 - 0	- - -	13 0 0	48 0 4	1.0 - 0	- - -		
Parkway (1982 and later)	<10 10 - 49.9 50+	9 0 0	31 2 3	1.0 0 0	- - -	8 1 4	39 7 5	1.0 0.82 4.99	- 0.08 - 8.78 0.80 - 31.2		
	Pos	tnatal Ex	(posure: Le	eukemia	Diagnosis Ag	ges 0 thr	ough 19				
Holly Street (prior to 1976)	<10 10 - 49.9 50+	8 1 0	31 5 0	1.0 0.72 -	- 0.06 - 9.12 -	13 0 0	48 4 0	1.0 0 -	- - -		
Parkway (1982 and later)	<10 10 - 49.9 50+	4 4 1	16 14 6	1.0 1.10 0.65	- 0.15 - 8.27 0.04 - 11.1	7 2 4	19 22 11	1.0 0.22 0.83	- 0.04 - 1.28 0.18 - 3.77		

	Average		N	/lale		Female					
Source Well Field	Percent of Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI		
	Tota	al Time l	Exposure: l	_eukemi	a Diagnosis A	ges 0 th	rough 4				
Holly Street (prior to 1976)	<10 10 - 49.9 50+	2 0 0	8 0 0	1.0 - -	- - -	7 0 0	28 0 0	1.0 - -	- - -		
Parkway (1982 and later)	<10 10 - 49.9 50+	0 1 1	2 4 2	0 - -	- - -	4 1 2	10 13 5	1.0 0.20 0.89	- 0.02 - 2.04 0.14 - 5.44		
	Prenatal Exposure: Leukemia Diagnosis Ages 0 through 4										
Holly Street (prior to 1976)	<10 10 - 49.9 50+	2 0 0	8 0 0	1.0 - -	- - -	7 0 0	28 0 0	1.0 - -	- - -		
Parkway (1982 and later)	<10 10 - 49.9 50+	2 0 0	5 2 1	1.0 0 0	- - -	4 0 3	17 7 3	1.0 0 3.22	- - 0.52 - 20.1		
	Pos	stnatal E	xposure: L	eukemia	a Diagnosis A	ges 0 th	rough 4				
Holly Street (prior to 1976)	<10 10 - 49.9 50+	2 0 0	8 0 0	1.0 - -	- - -	7 0 0	28 0 0	1.0 - -	- - -		
Parkway (1982 and later)	<10 10 - 49.9 50+	0 1 1	2 3 3	0 - -	- - -	4 1 2	9 12 7	1.0 0.17 0.52	- 0.02 - 2.01 0.07 - 3.90		

Table 10c. Interview Study Analysis of Time-specific Public Water Indices by Sex: Nervous System Cancers

	Average		N	/lale		Female			
Source Well Field	Percent of Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Total Time	Exposur	e: Nervous	System	Cancer Diagr	nosis Ag	es 0 throug	jh 19	
Holly Street (prior to 1976)	<10 10 - 49.9 50+	9 2 0	37 5 1	1.0 1.67 0	- 0.27 - 10.4 -	7 0 0	28 0 0	1.0 - -	
Parkway (1982 and later)	<10 10 - 49.9 50+	8 3 0	28 13 2	1.0 0.81 0	- 0.11 - 5.95 -	2 4 1	8 17 3	1.0 0.93 1.43	- 0.13 - 6.91 0.07 - 30.6
	Prenatal E	xposure	: Nervous	System (Cancer Diagn	osis Age	s 0 througl	า 19	
Holly Street (prior to 1976)	<10 10 - 49.9 50+	10 0 1	40 0 2	1.0 - 2.00	- - 0.18 - 22.1	7 0 0	28 0 0	1.0 - -	- - -
Parkway (1982 and later)	<10 10 - 49.9 50+	9 2 0	37 5 1	1.0 2.55 0	- 0.19 - 34.8 -	5 1 1	17 7 4	1.0 0.41 0.65	- 0.03 - 4.88 0.05 - 9.32
	Postnatal	Exposure	e: Nervous	System	Cancer Diagn	osis Age	s 0 throug	h 19	
Holly Street (prior to 1976)	<10 10 - 49.9 50+	9 2 0	37 5 1	1.0 1.67 0	- 0.27 - 10.4 -	7 0 0	28 0 0	1.0 - -	- - -
Parkway (1982 and later)	<10 10 - 49.9 50+	8 3 0	28 12 3	1.0 0.81 0	- 0.11 - 5.95 -	2 4 1	9 17 2	1.0 1.05 2.54	- 0.15 - 7.47 0.11 - 59.2

	Average		N	/lale			Fe	emale	
Source Well Field	Percent of Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Total Time	Exposu	e: Nervou	s System	n Cancer Diag	nosis Ag	es 0 throu	gh 4	
Holly Street (prior to 1976)	<10 10 - 49.9 50+	4 0 0	15 0 0	1.0 - -		5 0 0	20 0 0	1.0 - -	
Parkway (1982 and later)	<10 10 - 49.9 50+	2 2 0	8 5 2	1.0 - 0	- - -	2 2 1	6 11 3	1.0 0.47 0.97	- 0.04 - 6.05 0.05 - 20.1
	Prenatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 4								
Holly Street (prior to 1976)	<10 10 - 49.9 50+	4 0 0	15 0 0	1.0 - -	- - -	5 0 0	20 0 0	1.0 - -	- - -
Parkway (1982 and later)	<10 10 - 49.9 50+	2 2 0	9 5 1	- 2.55 0	- 0.19 - 34.8 -	3 1 1	11 6 3	1.0 0.58 1.08	- 0.04 - 9.30 0.05 - 25.1
	Postnatal	Exposur	e: Nervous	System	Cancer Diagi	nosis Ag	es 0 throuç	gh 4	
Holly Street (prior to 1976)	<10 10 - 49.9 50+	4 0 0	15 0 0	1.0 - -	- - -	5 0 0	20 0 0	1.0 - -	- - -
Parkway (1982 and later)	<10 10 - 49.9 50+	2 2 0	8 4 3	1.0 - 0	- - -	2 2 1	7 11 2	1.0 0.61 1.79	- 0.06 - 6.20 0.08 - 41.7

Table 10d. Interview Study Analysis of Time-specific Public Water Indices by Sex: Brain and Central Nervous System Cancers

	Average		N	/lale			Fe	emale	
Source Well Field	Percent of Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Total Tir	ne Exposure	: Brain a	and Centra	l Nervou	us System Can	cer Diaç	gnosis Age	s 0 throu	ıgh 19
Holly Street (prior to 1976)	<10 10 - 49.9 50+	6 2 0	26 5 1	1.0 1.67 0	- 0.27 - 10.4 -	5 0 0	20 0 0	1.0 - -	
Parkway (1982 and later)	<10 10 - 49.9 50+	6 2 0	23 9 0	1.0 0.81 -	- 0.11 - 5.95 -	2 3 0	7 11 2	1.0 0.93 0	- 0.13 - 6.91 -
Prenata	al Exposure:	Brain aı	nd Central	Nervous	s System Cand	er Diag	nosis Ages	0 throug	gh 19
Holly Street (prior to 1976)	<10 10 - 49.9 50+	7 0 1	29 0 2	1.0 - 2.00	- - 0.18 - 22.1	5 0 0	20 0 0	1.0 - -	- - -
Parkway (1982 and later)	<10 10 - 49.9 50+	7 1 0	31 1 0	1.0 - -	- - -	5 0 0	14 3 3	1.0 0 0	- - -
Postnat	al Exposure:	Brain a	nd Central	Nervou	s System Can	cer Diag	nosis Ages	0 throu	gh 19
Holly Street (prior to 1976)	<10 10 - 49.9 50+	6 2 0	26 5 1	1.0 1.67 0	- 0.27 - 10.4 -	5 0 0	20 0 0	1.0 - -	- - -
Parkway (1982 and later)	<10 10 - 49.9 50+	6 2 0	23 9 0	1.0 0.81 -	- 0.11 - 5.95 -	1 4 0	7 12 1	1.0 2.53 0	- 0.19 - 34.3 -

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	Average		N	/lale			F	emale	
Source Well Field	Percent of Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Total Ti	me Exposure	e: Brain	and Centra	al Nervo	us System Cai	ncer Dia	gnosis Age	s 0 thro	ugh 4
Holly Street (prior to 1976)	<10 10 - 49.9 50+	1 0 0	4 0 0	1.0 - -	- - -	3 0 0	12 0 0	1.0 - -	- - -
Parkway (1982 and later)	<10 10 - 49.9 50+	0 1 0	3 1 0	0 - -	- - -	2 1 0	5 5 2	1.0 0.47 0	- 0.04 - 6.05 -
Prenat	Prenatal Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 4								
Holly Street (prior to 1976)	<10 10 - 49.9 50+	1 0 0	4 0 0	1.0 - -	- - -	3 0 0	12 0 0	1.0 - -	- - -
Parkway (1982 and later)	<10 10 - 49.9 50+	0 1 0	3 1 0	0 - -	- - -	3 0 0	8 2 2	1.0 0 0	
Postna	tal Exposure	: Brain a	and Centra	l Nervo	us System Car	ncer Diaç	gnosis Age	s 0 throu	ıgh 4
Holly Street (prior to 1976)	<10 10 - 49.9 50+	1 0 0	4 0 0	1.0 - -	- - -	3 0 0	12 0 0	1.0 - -	- - -
Parkway (1982 and later)	<10 10 - 49.9 50+	0 1 0	3 1 0	0 - -	- - -	1 2 0	5 6 1	1.0 1.63 0	- 0.08 - 34.6 -

Table 11a. Interview Study Public Water Source/Consumption Analysis: Leukemia and Nervous System Cancers

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval		
Prenatal Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 19							
Brookside	None/Low	36	145	1.0	-		
	Medium	1	7	0.58	0.07 - 4.95		
	High	3	5	2.84	0.51 - 15.8		
Holly Street	None/Low	31	116	1.0	-		
	Medium	4	20	0.80	0.23 - 2.82		
	High	4	21	0.70	0.22 - 2.16		
Indian Head	None/Low	38	152	1.0	-		
	Medium	0	1	0	-		
	High	1	4	1.33	0.14 - 12.8		
Parkway	None/Low	25	110	1.0	-		
	Medium	1	20	0.22	0.03 - 1.84		
	High	13	27	2.45	1.03 - 5.83		
Route 70	None/Low	35	147	1.0	-		
	Medium	1	6	0.81	0.10 - 6.92		
	High	3	4	4.94	0.79 - 30.8		

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Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Postnatal Exposu	re: Leukemia and Nerv	ous System (Cancer Diagn	osis Ages	0 through 19
Brookside	None/Low	38	144	1.0	-
	Medium	0	8	0	-
	High	2	6	1.12	0.22 - 5.62
Holly Street	None/Low	24	86	1.0	-
	Medium	7	43	0.56	0.21 - 1.47
	High	8	29	1.02	0.41 - 2.54
Indian Head	None/Low	38	145	1.0	-
	Medium	1	9	0.57	0.07 - 4.64
	High	0	4	0	-
Parkway	None/Low	14	46	1.0	-
	Medium	8	62	0.45	0.18 - 1.17
	High	17	50	1.15	0.52 - 2.58
Route 70	None/Low	38	137	1.0	-
	Medium	1	13	0.29	0.04 -2.33
	High	0	8	0	-

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal Exposu	ire: Leukemia and Nerv	ous System (Cancer Diagn	osis Ages	0 through 4
Brookside	None/Low	16	65	1.0	-
	Medium	1	3	1.40	0.12 - 16.4
	High	1	2	-	-
Holly Street	None/Low	13	48	1.0	-
	Medium	2	13	0.64	0.12 - 3.42
	High	2	9	0.74	0.14 - 3.87
Indian Head	None/Low	16	67	1.0	-
	Medium	0	1	0	-
	High	1	2	4.00	0.25 - 64.0
Parkway	None/Low	7	38	1.0	-
	Medium	1	16	0.32	0.03 - 2.93
	High	9	16	4.19	1.17 - 15.0
Route 70	None/Low	15	61	1.0	-
	Medium	0	5	0	-
	High	2	4	2.67	0.35 - 20.5

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Postnatal Expos	ure: Leukemia and Ner	vous System	Cancer Diagr	osis Age	s 0 through 4
Brookside	None/Low	18	67	1.0	-
	Medium	0	2	0	-
	High	0	1	0	-
Holly Street	None/Low	9	38	1.0	-
	Medium	4	22	0.72	0.17 - 3.09
	High	4	10	1.78	0.43 - 7.35
Indian Head	None/Low	17	66	1.0	-
	Medium	0	3	0	-
	High	0	1	0	-
Parkway	None/Low	6	23	1.0	-
	Medium	2	27	0.33	0.06 - 1.79
	High	9	20	1.81	0.57 - 5.75
Route 70	None/Low	16	59	1.0	-
	Medium	1	7	0.57	0.07 - 5.05
	High	0	4	0	-

Table 11b. Interview Study Public Water Source/Consumption Analysis: Leukemia

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Pr	Prenatal Exposure: Leukemia Diagnosis Ages 0 through 19							
Brookside	None/Low	20	80	1.0	-			
	Medium	1	5	0.79	0.08 - 7.28			
	High	1	2	2.00	0.18 - 22.1			
Holly Street	None/Low	18	67	1.0	-			
	Medium	2	11	0.62	0.11 - 3.61			
	High	2	9	0.83	0.17 - 4.03			
Indian Head	None/Low	22	83	1.0	-			
	Medium	0	1	0	-			
	High	0	3	0	-			
Parkway	None/Low	15	62	1.0	-			
	Medium	0	10	0	-			
	High	7	15	1.80	0.64 - 5.10			
Route 70	None/Low	19	78	1.0	-			
	Medium	1	6	0.76	0.09 - 6.49			
	High	2	3	3.05	0.40 - 23.0			

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Ро	Postnatal Exposure: Leukemia Diagnosis Ages 0 through 19							
Brookside	None/Low	21	81	1.0	-			
	Medium	0	3	0	-			
	High	1	3	1.24	0.13 - 11.9			
Holly Street	None/Low	14	48	1.0	-			
	Medium	3	24	0.41	0.10 - 1.62			
	High	5	15	1.23	0.36 - 4.16			
Indian Head	None/Low	22	79	1.0	-			
	Medium	0	4	0	-			
	High	0	4	0	-			
Parkway	None/Low	9	19	1.0	-			
	Medium	2	39	0.11	0.02 - 0.58			
	High	11	29	0.83	0.30 - 2.33			
Route 70	None/Low	21	70	1.0	-			
	Medium	1	10	0.35	0.04 - 2.83			
	High	0	7	0	-			

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval		
Prenatal Exposure: Leukemia Diagnosis Ages 0 through 4							
Brookside	None/Low	8	33	1.0	-		
	Medium	1	2	2.45	0.14 - 42.6		
	High	0	0	-	-		
Holly Street	None/Low	8	27	1.0	-		
	Medium	1	5	0.64	0.06 - 6.52		
	High	0	3	0	-		
Indian Head	None/Low	9	33	1.0	-		
	Medium	0	1	0	-		
	High	0	1	0	-		
Parkway	None/Low	5	20	1.0	-		
	Medium	0	7	0	-		
	High	4	8	2.01	0.45 - 8.91		
Route 70	None/Low	8	27	1.0	-		
	Medium	0	5	0	-		
	High	1	3	1.09	0.09 - 13.3		

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Po	Postnatal Exposure: Leukemia Diagnosis Ages 0 through 4							
Brookside	None/Low	9	34	1.0	-			
	Medium	0	1	0	-			
	High	0	0	-	-			
Holly Street	None/Low	6	20	1.0	-			
	Medium	2	10	0.64	0.09 - 4.53			
	High	1	5	0.68	0.06 - 7.28			
Indian Head	None/Low	9	33	1.0	-			
	Medium	0	1	0	-			
	High	0	1	0	-			
Parkway	None/Low	4	10	1.0	-			
	Medium	0	15	0	-			
	High	5	10	1.16	0.25 - 5.47			
Route 70	None/Low	8	26	1.0	-			
	Medium	1	6	0.57	0.07 - 5.05			
	High	0	3	0	-			

Table 11c. Interview Study Public Water Source/Consumption Analysis: Nervous System Cancers

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal	Exposure: Nervous Syst	em Cancer D	iagnosis Age	s 0 throu	gh 19
Brookside	None/Low	16	65	1.0	-
	Medium	0	2	0	-
	High	2	3	4.04	0.30 - 54.8
Holly Street	None/Low	13	49	1.0	-
	Medium	2	9	1.06	0.18 - 6.22
	High	2	12	0.60	0.12 - 3.00
Indian Head	None/Low Medium High	16 0 1	69 0 1	1.0 - -	
Parkway	None/Low	10	48	1.0	-
	Medium	1	10	0.64	0.05 - 7.41
	High	6	12	5.02	0.88 - 28.4
Route 70	None/Low	16	69	1.0	-
	Medium	0	0	-	-
	High	1	1	-	-

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Postnatal	Exposure: Nervous Sys	tem Cancer I	Diagnosis Age	es 0 throu	ıgh 19
Brookside	None/Low	17	63	1.0	-
	Medium	0	5	0	-
	High	1	3	1.02	0.10 - 10.0
Holly Street	None/Low	10	38	1.0	-
	Medium	4	19	0.80	0.21 - 3.13
	High	3	14	0.83	0.20 - 3.33
Indian Head	None/Low	16	66	1.0	-
	Medium	1	5	1.33	0.14 - 12.8
	High	0	0	-	-
Parkway	None/Low	5	27	1.0	-
	Medium	6	23	1.53	0.42 - 5.54
	High	6	21	1.68	0.45 - 6.26
Route 70	None/Low	17	67	1.0	-
	Medium	0	3	0	-
	High	0	1	0	-

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenata	Exposure: Nervous Sys	tem Cancer I	Diagnosis Age	es 0 throu	ıgh 4
Brookside	None/Low	8	32	1.0	-
	Medium	0	1	0	-
	High	1	2	-	-
Holly Street	None/Low	5	21	1.0	-
	Medium	1	8	0.64	0.06 - 7.16
	High	2	6	1.16	0.19 - 7.23
Indian Head	None/Low	7	34	1.0	-
	Medium	0	0	-	-
	High	1	1	-	-
Parkway	None/Low	2	18	1.0	-
	Medium	1	9	1.00	0.06 - 16.9
	High	5	8	-	-
Route 70	None/Low	7	34	1.0	-
	Medium	0	0	-	-
	High	1	1	-	-

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Postnata	I Exposure: Nervous Sys	stem Cancer	Diagnosis Ag	es 0 thro	ugh 4
Brookside	None/Low	9	33	1.0	-
	Medium	0	1	0	-
	High	0	1	0	-
Holly Street	None/Low	3	18	1.0	-
	Medium	2	12	0.87	0.10 - 7.17
	High	3	5	3.72	0.51 - 26.9
Indian Head	None/Low	8	33	1.0	-
	Medium	0	2	0	-
	High	0	0	-	-
Parkway	None/Low	2	13	1.0	-
	Medium	2	12	1.33	0.17 - 10.3
	High	4	10	2.99	0.48 - 18.5
Route 70	None/Low	8	33	1.0	-
	Medium	0	1	0	-
	High	0	1	0	-

Table 11d. Interview Study Public Water Source/Consumption Analysis: Brain and Central Nervous System Cancers

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal Exposure	e: Brain and Central Nei	rvous System	Cancer Diag	nosis Age	es 0 through 19
Brookside	None/Low	12	49	1.0	-
	Medium	0	1	0	-
	High	1	1	3.46	0.22 - 55.8
Holly Street	None/Low	10	39	1.0	-
	Medium	1	4	1.80	0.16 - 20.2
	High	1	8	0.48	0.05 - 4.24
Indian Head	None/Low Medium High	12 0 0	50 0 1	1.0 - 0	
Parkway	None/Low	9	41	1.0	-
	Medium	0	3	0	-
	High	3	7	3.46	0.53 - 22.6
Route 70	None/Low	12	50	1.0	-
	Medium	0	0	-	-
	High	0	1	0	-

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Postnatal Exposure	e: Brain and Central Ne	rvous System	n Cancer Diag	nosis Ag	es 0 through 19
Brookside	None/Low	12	46	1.0	-
	Medium	0	4	0	-
	High	1	2	1.56	0.14 - 17.8
Holly Street	None/Low	8	31	1.0	-
	Medium	3	10	1.24	0.30 - 5.17
	High	1	11	0.38	0.04 - 3.22
Indian Head	None/Low	11	47	1.0	-
	Medium	1	5	1.33	0.14 - 12.8
	High	0	0	-	-
Parkway	None/Low	3	22	1.0	-
	Medium	6	15	3.17	0.71 - 14.2
	High	3	15	1.72	0.31 - 9.54
Route 70	None/Low	12	49	1.0	-
	Medium	0	3	0	-
	High	0	0	-	-

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal Exposure	e: Brain and Central Ne	rvous System	n Cancer Diag	nosis Ag	es 0 through 4
Brookside	None/Low	4	16	1.0	-
	Medium	0	0	-	-
	High	0	0	-	-
Holly Street	None/Low	2	11	1.0	-
	Medium	0	3	0	-
	High	1	2	2.00	0.11 - 37.8
Indian Head	None/Low	3	15	1.0	-
	Medium	0	0	-	-
	High	0	1	0	-
Parkway	None/Low	1	11	1.0	-
	Medium	0	2	0	-
	High	2	3	-	-
Route 70	None/Low	3	15	1.0	-
	Medium	0	0	-	-
	High	0	1	0	-

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Postnatal Exposur	e: Brain and Central Ne	ervous Syster	n Cancer Dia	gnosis Ag	es 0 through 4
Brookside	None/Low	4	16	1.0	-
	Medium	0	0	-	-
	High	0	0	-	-
Holly Street	None/Low	1	11	1.0	-
	Medium	1	3	3.48	0.15 - 82.0
	High	1	2	5.09	0.28 - 94.2
Indian Head	None/Low	3	14	1.0	-
	Medium	0	2	0	-
	High	0	0	-	-
Parkway	None/Low	0	8	0	-
	Medium	2	4	-	-
	High	1	4	-	-
Route 70	None/Low	3	15	1.0	-
	Medium	0	1	0	-
	High	0	0	-	-

Table 12a. Interview Study Analysis of Public Water Source/Consumption by Sex: Leukemia and Nervous System Cancers

	Water		N	/lale			Female			
Source Well Field	Source/ Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
Pr	enatal Exposure	e: Leuke	mia and N	ervous S	System Cancer	r Diagno	sis Ages 0	through	19	
Brookside	None/Low	18	70	1.0	-	18	75	1.0	-	
	Medium	1	3	1.30	0.13 - 12.5	0	4	0	-	
	High	1	5	0.57	0.04 - 7.97	2	0	-	-	
Holly Street	None/Low	16	60	1.0	-	15	56	1.0	-	
	Medium	1	8	0.45	0.05 - 4.25	3	12	1.14	0.23 - 5.75	
	High	3	10	1.07	0.26 - 4.39	1	11	0.35	0.04 - 2.85	
Indian Head	None/Low	20	77	1.0	-	18	75	1.0	-	
	Medium	0	0	-	-	0	1	0	-	
	High	0	1	0	-	1	3	2.00	0.18 - 22.1	
Parkway	None/Low	15	59	1.0	-	10	51	1.0	-	
	Medium	0	4	0	-	1	16	0.32	0.03 - 2.94	
	High	5	15	1.42	0.34 - 5.88	8	12	3.43	1.14 - 10.4	
Route 70	None/Low Medium High	19 0 1	73 2 3	1.0 0 1.09	- - 0.09 - 13.3	16 1 2	74 4 1	1.0 1.00	- 0.11 - 8.95 -	

	Water		N	/lale			F	emale	
Source Well Field	Source/ Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Po	stnatal Exposur	e: Leuke	mia and N	lervous	System Cance	r Diagno	osis Ages C	through	า 19
Brookside	None/Low	20	68	1.0	-	18	76	1.0	-
	Medium	0	6	0	-	0	2	0	-
	High	0	5	0	-	2	1	8.00	0.73 - 88.2
Holly Street	None/Low	12	46	1.0	-	12	40	1.0	-
	Medium	3	20	0.59	0.15 - 2.26	4	23	0.54	0.13 - 2.16
	High	5	13	1.46	0.43 - 4.95	3	16	0.65	0.16 - 2.74
Indian Head	None/Low	19	72	1.0	-	19	73	1.0	-
	Medium	1	5	0.80	0.09 - 6.85	0	4	0	-
	High	0	2	0	-	0	2	0	-
Parkway	None/Low	7	26	1.0	-	7	20	1.0	-
	Medium	4	28	0.55	0.15 - 2.07	4	34	0.37	0.10 - 1.43
	High	9	25	1.36	0.43 - 4.33	8	25	0.98	0.32 - 2.98
Route 70	None/Low	20	69	1.0	-	18	68	1.0	-
	Medium	0	4	0	-	1	9	0.47	0.05 - 4.02
	High	0	6	0	-	0	2	0	-

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	Water		N	/lale			F	emale	
Source Well Field	Source/ Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Pi	renatal Exposur	e: Leuke	emia and N	lervous	System Cance	r Diagn	osis Ages () througl	n 4
Brookside	None/Low	4	21	1.0	-	12	44	1.0	-
	Medium	1	0	-	-	0	3	0	-
	High	1	2	-	-	0	0	-	-
Holly Street	None/Low	4	16	1.0	-	9	32	1.0	-
	Medium	0	3	0	-	2	10	0.74	0.12 - 4.69
	High	2	4	1.86	0.24 - 14.5	0	5	0	-
Indian Head	None/Low	6	22	1.0	-	10	45	1.0	-
	Medium	0	0	-	-	0	1	0	-
	High	0	1	0	-	1	1	-	-
Parkway	None/Low	2	11	1.0	-	5	27	1.0	-
	Medium	0	3	0	-	1	13	0.43	0.04 - 4.42
	High	4	9	3.91	0.34 - 44.3	5	7	4.41	0.98 - 19.8
Route 70	None/Low	6	18	1.0	-	9	43	1.0	-
	Medium	0	2	0	-	0	3	0	-
	High	0	3	0	-	2	1	-	-

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	Water		N	/lale		Female			
Source Well Field	Source/ Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Po	ostnatal Exposu	re: Leuk	emia and I	Vervous	System Cance	er Diagn	osis Ages	0 throug	h 4
Brookside	None/Low	6	21	1.0	-	12	46	1.0	-
	Medium	0	1	0	-	0	1	0	-
	High	0	1	0	-	0	0	-	-
Holly Street	None/Low	2	15	1.0	-	7	23	1.0	-
	Medium	1	4	3.00	0.18 - 50.9	3	18	0.46	0.08 - 2.56
	High	3	4	8.96	0.53 - 152	1	6	0.63	0.06 - 6.16
Indian Head	None/Low	6	22	1.0	-	11	44	1.0	-
	Medium	0	0	-	-	0	3	0	-
	High	0	1	0	-	0	0	-	-
Parkway	None/Low	1	8	1.0	-	5	15	1.0	-
	Medium	0	5	0	-	2	22	0.33	0.06 - 1.88
	High	5	10	4.70	0.43 - 51.4	4	10	1.25	0.31 - 5.06
Route 70	None/Low	6	18	1.0	-	10	41	1.0	-
	Medium	0	2	0	-	1	5	1.00	0.10 - 10.1
	High	0	3	0	-	0	1	0	-

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Table 12b. Interview Study Analysis of Public Water Source/Consumption by Sex: Leukemia

	Water		N	/lale			F	emale	
Source Well Field	Source/ Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Pre	natal Ex	posure: Le	ukemia	Diagnosis Ag	es 0 thro	ough 19		
Brookside	None/Low	8	32	1.0	-	12	48	1.0	-
	Medium	1	2	2.00	0.18 - 22.1	0	3	0	-
	High	0	2	0	-	1	0	-	-
Holly Street	None/Low	8	29	1.0	-	10	38	1.0	-
	Medium	0	4	0	-	2	7	1.16	0.17 - 7.68
	High	1	3	0.87	0.08 - 9.22	1	6	0.66	0.07 - 5.89
Indian Head	None/Low Medium High	9 0 0	35 0 1	1.0 - 0		13 0 0	48 1 2	1.0 0 0	- - -
Parkway	None/Low	7	28	1.0	-	8	34	1.0	-
	Medium	0	1	0	-	0	9	0	-
	High	2	7	1.16	0.17 - 7.89	5	8	2.22	0.62 - 7.93
Route 70	None/Low	8	31	1.0	-	11	47	1.0	-
	Medium	0	2	0	-	1	4	1.00	0.11 - 8.95
	High	1	3	1.09	0.09 - 13.3	1	0	-	-

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	Water		N	/lale			F	emale			
Source Well Field	Source/ Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI		
	Postnatal Exposure: Leukemia Diagnosis Ages 0 through 19										
Brookside	None/Low	9	33	1.0	-	12	48	1.0	-		
	Medium	0	1	0	-	0	2	0	-		
	High	0	2	0	-	1	1	4.00	0.25 - 64.0		
Holly Street	None/Low	6	19	1.0	-	8	29	1.0	-		
	Medium	1	12	0.27	0.03 - 2.47	2	12	0.57	0.09 - 3.47		
	High	2	5	1.20	0.17 - 8.54	3	10	1.21	0.25 - 5.84		
Indian Head	None/Low Medium High	9 0 0	32 2 2	1.0 0 0	- - -	13 0 0	47 2 2	1.0 0 0			
Parkway	None/Low	3	8	1.0	-	6	11	1.0	-		
	Medium	1	16	0.20	0.02 - 1.97	1	23	0.07	0.01 - 0.73		
	High	5	12	1.32	0.24 - 7.23	6	17	0.62	0.17 - 2.29		
Route 70	None/Low	9	28	1.0	-	12	42	1.0	-		
	Medium	0	3	0	-	1	7	0.54	0.06 - 4.77		
	High	0	5	0	-	0	2	0	-		

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	Water		N	/lale			F	emale			
Source Well Field	Source/ Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI		
	Prenatal Exposure: Leukemia Diagnosis Ages 0 through 4										
Brookside	None/Low	1	8	1.0	-	7	25	1.0	-		
	Medium	1	0	-	-	0	2	0	-		
	High	0	0	-	-	0	0	-	-		
Holly Street	None/Low	2	7	1.0	-	6	20	1.0	-		
	Medium	0	0	-	-	1	5	0.64	0.06 - 6.52		
	High	0	1	0	-	0	2	0	-		
Indian Head	None/Low	2	7	1.0	-	7	26	1.0	-		
	Medium	0	0	-	-	0	1	0	-		
	High	0	1	0	-	0	0	-	-		
Parkway	None/Low	1	4	1.0	-	4	16	1.0	-		
	Medium	0	0	-	-	0	7	0	-		
	High	1	4	1.00	0.03 - 32.0	3	4	2.35	0.45 - 12.2		
Route 70	None/Low	2	3	1.0	-	6	24	1.0	-		
	Medium	0	2	0	-	0	3	0	-		
	High	0	3	0	-	1	0	-	-		

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	Water		N	/lale			F	emale			
Source Well Field	Source/ Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI		
	Postnatal Exposure: Leukemia Diagnosis Ages 0 through 4										
Brookside	None/Low Medium High	2 0 0	800	1.0 - -		7 0 0	26 1 0	1.0 0 -			
Holly Street	None/Low	1	5	1.0	-	5	15	1.0	-		
	Medium	1	1	-	-	1	9	0.27	0.02 - 3.25		
	High	0	2	0	-	1	3	1.24	0.11 - 14.2		
Indian Head	None/Low	2	7	1.0	-	7	26	1.0	-		
	Medium	0	0	-	-	0	1	0	-		
	High	0	1	0	-	0	0	-	-		
Parkway	None/Low	0	2	0	-	4	8	1.0	-		
	Medium	0	1	-	-	0	14	0	-		
	High	2	5	-	-	3	5	0.88	0.15 - 5.00		
Route 70	None/Low	2	4	1.0	-	6	22	1.0	-		
	Medium	0	2	0	-	1	4	1.00	0.10 - 10.1		
	High	0	2	0	-	0	1	0	-		

Table 12c. Interview Study Analysis of Public Water Source/Consumption by Sex: Nervous System Cancers

	Water		N	/lale			F	emale				
Source Well Field			Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI			
	Prenatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 19											
Brookside	None/Low	10	38	1.0	-	6	27	1.0	-			
	Medium	0	1	0	-	0	1	0	-			
	High	1	3	1.00	0.04 - 24.5	1	0	-	-			
Holly Street	None/Low	8	31	1.0	-	5	18	1.0	-			
	Medium	1	4	1.01	0.11 - 9.22	1	5	1.00	0.04 - 24.5			
	High	2	7	1.09	0.18 - 6.40	0	5	0	-			
Indian Head	None/Low	11	42	1.0	-	5	27	1.0	-			
	Medium	0	0	-	-	0	0	-	-			
	High	0	0	-	-	1	1	-	-			
Parkway	None/Low	8	31	1.0	-	2	17	1.0	-			
	Medium	0	3	0	-	1	7	1.92	0.07 - 49.7			
	High	3	8	1.90	0.18 - 20.0	3	4	11.3	0.99 - 129			
Route 70	None/Low	11	42	1.0	-	5	27	1.0	-			
	Medium	0	0	-	-	0	0	-	-			
	High	0	0	-	-	1	1	-	-			

	Water		N	/lale			F	emale				
Source Well Field	Source/ Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI			
	Postnatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 19											
Brookside	None/Low	11	35	1.0	-	6	28	1.0	-			
	Medium	0	5	0	-	0	0	-	-			
	High	0	3	0	-	1	0	-	-			
Holly Street	None/Low	6	27	1.0	-	4	11	1.0	-			
	Medium	2	8	1.09	0.21 - 5.79	2	11	0.34	0.03 - 4.15			
	High	3	8	1.61	0.33 - 7.84	0	6	0	-			
Indian Head	None/Low	10	40	1.0	-	6	26	1.0	-			
	Medium	1	3	1.33	0.14 - 12.8	0	2	0	-			
	High	0	0	-	-	0	0	-	-			
Parkway	None/Low	4	18	1.0	-	1	9	1.0	-			
	Medium	3	12	1.13	0.22 - 5.86	3	11	2.73	0.26 - 28.5			
	High	4	13	1.38	0.28 - 6.81	2	8	2.72	0.23 - 32.3			
Route 70	None/Low	11	41	1.0	-	6	26	1.0	-			
	Medium	0	1	0	-	0	2	0	-			
	High	0	1	0	-	0	0	-	-			

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	Water		N	/lale			F	emale	
Source Well Field	Source/ Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Prenatal	Exposure	e: Nervous	System	Cancer Diagr	osis Age	es 0 throug	ıh 4	
Brookside	None/Low	3	13	1.0	-	5	19	1.0	-
	Medium	0	0	-	-	0	1	0	-
	High	1	2	-	-	0	0	-	-
Holly Street	None/Low	2	9	1.0	-	3	12	1.0	-
	Medium	0	3	0	-	1	5	1.00	0.04 - 24.5
	High	2	3	3.00	0.25 - 35.8	0	3	0	-
Indian Head	None/Low Medium High	4 0 0	15 0 0	1.0 - -	- - -	3 0 1	19 0 1	1.0 - -	
Parkway	None/Low	1	7	-	-	1	11	1.0	-
	Medium	0	3	0	-	1	6	-	-
	High	3	5	-	-	2	3	-	-
Route 70	None/Low	4	15	1.0	-	3	19	1.0	-
	Medium	0	0	-	-	0	0	-	-
	High	0	0	-	-	1	1	-	-

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	Water		N	/lale			F	emale				
Source Well Field	Source/ Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI			
	Postnatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 4											
Brookside	None/Low	4	13	1.0	-	5	20	1.0	-			
	Medium	0	1	0	-	0	0	-	-			
	High	0	1	0	-	0	0	-	-			
Holly Street	None/Low	1	10	1.0	-	2	8	1.0	-			
	Medium	0	3	0	-	2	9	0.61	0.03 - 13.0			
	High	3	2	-	-	0	3	0	-			
Indian Head	None/Low Medium High	4 0 0	15 0 0	1.0 - -	- - -	4 0 0	18 2 0	1.0 0 -				
Parkway	None/Low	1	6	1.0	-	1	7	1.0	-			
	Medium	0	4	0	-	2	8	2.14	0.17 - 26.3			
	High	3	5	3.79	0.30 - 48.0	1	5	2.07	0.13 - 33.8			
Route 70	None/Low	4	14	1.0	-	4	19	1.0	-			
	Medium	0	0	-	-	0	1	0	-			
	High	0	1	0	-	0	0	-	-			

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Table 12d. Interview Study Analysis of Public Water Source/Consumption by Sex: Brain and Central Nervous System Cancers

Comment Maril	Water		N	/lale			F	emale		
Source Well Field	Source/ Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
Prer	Prenatal Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 19									
Brookside	None/Low Medium High	8 0 0	29 1 1	1.0 0 0	- - -	4 0 1	20 0 0	1.0 - -		
Holly Street	None/Low Medium High	6 1 1	24 2 5	1.0 1.94 0.83	- 0.17 - 22.0 0.08 - 8.57	4 0 0	15 2 3	1.0 0 0		
Indian Head	None/Low Medium High	8 0 0	31 0 0	1.0 - -	- - -	4 0 0	19 0 1	1.0 - 0		
Parkway	None/Low Medium High	7 0 1	27 0 4	1.0 - 1.00	- - 0.06 - 16.9	2 0 2	14 3 3	1.0 0 7.29	- - 0.66 - 80.8	
Route 70	None/Low Medium High	8 0 0	31 0 0	1.0 - -	- - -	4 0 0	19 0 1	1.0 - 0	- - -	

	Water		N	/lale			F	emale	
Source Well Field	Source/ Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Post	natal Exposure:	Brain a	nd Central	Nervou	s System Can	cer Diag	nosis Ages	0 throu	gh 19
Brookside	None/Low Medium High	8 0 0	26 4 2	1.0 0 0	- - -	4 0 1	20 0 0	1.0 - -	- - -
Holly Street	None/Low Medium High	5 2 1	20 6 6	1.0 1.33 0.66	- 0.23 - 7.71 0.07 - 6.36	3 1 0	11 4 5	1.0 1.03 0	- 0.09 - 11.6 -
Indian Head	None/Low Medium High	7 1 0	29 3 0	1.0 1.33	- 0.14 - 12.8 -	4 0 0	18 2 0	1.0 0 -	- - -
Parkway	None/Low Medium High	3 3 2	15 9 8	1.0 1.66 1.25	- 0.28 - 9.88 0.18 - 8.81	0 3 1	7 6 7	0 -	- - -
Route 70	None/Low Medium High	8 0 0	31 1 0	1.0 0 -	- - -	4 0 0	18 2 0	1.0 0 -	- - -

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	Water		N	/lale			F	emale		
Source Well Field	Source/ Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
Pre	Prenatal Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 4									
Brookside	None/Low Medium High	1 0 0	4 0 0	1.0 - -		3 0 0	12 0 0	1.0 - -		
Holly Street	None/Low Medium High	0 0 1	2 1 1	0 - -	- - -	2 0 0	9 2 1	1.0 0 0		
Indian Head	None/Low Medium High	1 0 0	4 0 0	1.0 - -	- - -	2 0 0	11 0 1	1.0 - 0		
Parkway	None/Low Medium High	0 0 1	3 0 1	0 - -	- - -	1 0 1	8 2 2	1.0 0 -	- - -	
Route 70	None/Low Medium High	1 0 0	4 0 0	1.0 - -	- - -	2 0 0	11 0 1	1.0 - 0	-	

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	Water		N	/lale			F	emale	
Source Well Field	Source/ Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Pos	tnatal Exposure	: Brain a	and Centra	l Nervou	ıs System Car	cer Diaç	gnosis Age	s 0 throu	ıgh 4
Brookside	None/Low Medium High	1 0 0	4 0 0	1.0 - -	- - -	3 0 0	12 0 0	1.0 - -	- - -
Holly Street	None/Low Medium High	0 0 1	3 1 0	0 - -		1 1 0	8 2 2	1.0 - 0	
Indian Head	None/Low Medium High	1 0 0	4 0 0	1.0 - -	- - -	2 0 0	10 2 0	1.0 0 -	- - -
Parkway	None/Low Medium High	0 0 1	3 1 0	0 - -		0 2 0	5 3 4	0 -	
Route 70	None/Low Medium High	1 0 0	4 0 0	1.0 - -	- - -	2 0 0	11 1 0	1.0 0 -	- - -

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Table 13a. Interview Study Analysis of Time-specific Public Water Source/Consumption: Leukemia and Nervous System Cancer

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval							
Prenatal Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 19												
Holly Street (prior to 1976)	None/Low	38	148	1.0	-							
	Medium	2	4	4.45	0.32 - 62.7							
	High	0	6	0	-							
Parkway (1982 and later)	None/Low	30	124	1.0	-							
	Medium	1	21	0.22	0.03 - 1.91							
	High	8	13	3.02	0.99 - 9.24							
Postnatal Exposure:	Leukemia and Nerv	vous System C	ancer Diagno	sis Ages	0 through 19							
Holly Street (prior to 1976)	None/Low	37	144	1.0	-							
	Medium	2	8	0.94	0.17 - 5.10							
	High	1	7	0.53	0.06 - 4.77							
Parkway (1982 and later)	None/Low	21	71	1.0	-							
	Medium	5	51	0.33	0.11 - 0.99							
	High	13	36	1.18	0.48 - 2.91							

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal Exposure:	sis Ages	0 through 4			
Holly Street (prior to 1976)	None/Low Medium High	18 0 0	71 0 0	1.0 - -	- - -
Parkway (1982 and later)	None/Low Medium High	10 1 6	1 17		- 0.03 - 2.46 0.78 - 11.6
Postnatal Exposure:	Leukemia and Ner	vous System	Cancer Diagno	osis Ages	0 through 4
Holly Street (prior to 1976)	None/Low Medium High	18 0 0	71 0 0	1.0 - -	- - -
Parkway (1982 and later)	None/Low Medium High	8 1 8	25 26 19	1.0 0.14 1.39	- 0.02 - 1.20 0.43 - 4.46

Table 13b. Interview Study Analysis of Time-specific Public Water Source/Consumption: Leukemia

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval				
Prenatal Exposure: Leukemia Diagnosis Ages 0 through 19									
Holly Street (prior to 1976)	None/Low Medium High	21 1 0	80 3 5	1.0 - 0	1 1 1				
Parkway (1982 and later)	None/Low Medium High	17 70 0 11 5 6		1.0 0 2.57	- - 0.72 - 9.10				
Postna	atal Exposure: Leuk	emia Diagnos	sis Ages 0 thro	ough 19					
Holly Street (prior to 1976)	None/Low Medium High	21 0 1	79 5 4	1.0 0 0.79	- - 0.08 - 7.80				
Parkway (1982 and later)	None/Low Medium High	11 2 9	34 31 22	1.0 0.17 1.12	- 0.03 - 0.91 0.36 - 3.56				

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval					
Prenatal Exposure: Leukemia Diagnosis Ages 0 through 4										
Holly Street (prior to 1976)	None/Low Medium High	9 0 0	36 0 0	1.0 - -	- - -					
Parkway (1982 and later)	None/Low Medium High	6 0 3	22 8 5	1.0 0 1.80	- - 0.39 - 8.37					
Postn	atal Exposure: Leul	kemia Diagno	sis Ages 0 thr	ough 4						
Holly Street (prior to 1976)	None/Low Medium High	9 0 0	36 0 0	1.0 - -	- - -					
Parkway (1982 and later)	None/Low 4 Medium 0 High 5		10 1.0 15 0 10 1.16		- - 0.25 - 5.47					

Table 13c. Interview Study Analysis of Time-specific Public Water Source/Consumption: Nervous System Cancer

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval				
Prenatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 19									
Holly Street (prior to 1976)	None/Low Medium High	17 1 0	68 1 1	1.0 4.00 0	- 0.25 - 64.0 -				
Parkway (1982 and later)	982 and later) None/Low Medium High		54 10 7	1.0 0.62 4.51	- 0.05 - 7.41 0.39 - 51.6				
Postnatal Exp	oosure: Nervous Sys	stem Cancer D	Diagnosis Ages	s 0 throu	gh 19				
Holly Street (prior to 1976)	None/Low Medium High	16 2 0	65 3 3	1.0 2.93 0	- 0.40 - 21.6 -				
Parkway (1982 and later)	32 and later) None/Low 10 37 Medium 3 20 High 4 14		20	1.0 0.63 1.19	- 0.14 - 2.87 0.27 - 5.23				

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval				
Prenatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 4									
Holly Street (prior to 1976)	None/Low Medium High	9 0 0	35 0 0	1.0 - -					
Parkway (1982 and later)	None/Low Medium High	4 1 3	20 9 6	1.0 1.00 -	- 0.06 - 16.9 -				
Postnatal Ex	posure: Nervous Sy	stem Cancer	Diagnosis Age	s 0 throu	ıgh 4				
Holly Street (prior to 1976)	None/Low Medium High	9 0 0	35 0 0	1.0 - -	- - -				
Parkway (1982 and later)	y (1982 and later) None/Low Medium High 3		15 11 9	1.0 0.47 1.65	- 0.04 - 5.21 0.27 - 9.93				

Table 13d. Interview Study Analysis of Time-specific Public Water Source/Consumption: Brain and Central Nervous System Cancer

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval				
Prenatal Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 19									
Holly Street (prior to 1976)	None/Low Medium High	12 1 0	49 1 1	1.0 4.00 0	- 0.25 - 64.0 -				
Parkway (1982 and later)	None/Low Medium High	11 0 1	45 3 4	1.0 0 2.12	- - 0.13 - 35.4				
Postnatal Exposure: B	rain and Central Ne	ervous System	Cancer Diagr	nosis Age	s 0 through 19				
Holly Street (prior to 1976)	None/Low Medium High	11 2 0	46 3 3	1.0 2.93 0	- 0.40 - 21.6 -				
Parkway (1982 and later)	y (1982 and later) None/Low 7 Medium 3 High 2		30 13 9	1.0 1.26 1.30	- 0.22 - 7.14 0.20 - 8.58				

Source Well Field	Water Source/ Consumption Rating	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal Exposure: B	rain and Central Ne	ervous System	Cancer Diagr	nosis Age	es 0 through 4
Holly Street (prior to 1976)	None/Low	4	16	1.0	-
	Medium	0	0	-	-
	High	0	0	-	-
Parkway (1982 and later)	None/Low	2 11		1.0	-
	Medium	0 2		0	-
	High	1 3		-	-
Postnatal Exposure: E	Brain and Central N	ervous Systen	n Cancer Diag	nosis Age	es 0 through 4
Holly Street (prior to 1976)	None/Low	4	16	0	-
	Medium	0	0	-	-
	High	0	0	-	-
Parkway (1982 and later)	None/Low	1	8	1.0	-
	Medium	1	4	4.02	0.16 - 103
	High	1	4	3.20	0.20 - 52.3

Table 14a. Interview Study Analysis of Time-specific Public Water Source/Consumption by Sex: Leukemia and Nervous System Cancers

	Water Source/		N	/lale		Female				
Source Well Field	Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
Pre	Prenatal Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 19									
Holly Street (prior to 1976)	None/Low Medium High	18 2 0	72 4 2	1.0 4.45 0	- 0.32 - 62.7 -	20 0 0	76 0 4	1.0 - 0	- - -	
Parkway (1982 and later)	None/Low Medium High	18 0 2	68 5 6	1.0 0 1.17	- - 0.16 - 8.30	12 1 6	56 16 7	1.0 0.37 5.16	- 0.04 - 3.64 1.20 - 22.1	
Post	tnatal Exposure: I	_eukemi	a and Ner	vous Sys	tem Cancer D	iagnosis	Ages 0 th	rough 1	9	
Holly Street (prior to 1976)	None/Low Medium High	17 2 1	68 7 4	1.0 1.18 1.03	- 0.20 - 6.84 0.10 - 10.6	20 0 0	76 1 3	1.0 0 0	- - -	
Parkway (1982 and later)	None/Low Medium High	12 2 6	44 19 16	1.0 0.40 1.43	- 0.07 - 2.26 0.32 - 6.45	9 3 7	27 32 20	1.0 0.28 1.06	- 0.07 - 1.19 0.34 - 3.26	

	Water Source/			Male		Female			
Source Well Field	Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Pre	Prenatal Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 4								
Holly Street (prior to 1976)	None/Low Medium High	6 0 0	23 0 0	1.0 - -		12 0 0	48 0 0	1.0 - -	- - -
Parkway (1982 and later)	None/Low Medium High	4 0 2	14 4 5	1.0 0 1.64	- - 0.19 - 14.2	6 1 4	28 13 6	1.0 0.44 4.60	- 0.04 - 4.61 0.76 - 27.7
Pos	stnatal Exposure:	Leuken	nia and Ne	rvous Sy	stem Cancer D	iagnosis	Ages 0 th	rough 4	
Holly Street (prior to 1976)	None/Low Medium High	6 0 0	23 0 0	1.0 - -	- - -	12 0 0	48 0 0	1.0 - -	- - -
Parkway (1982 and later)	None/Low Medium High	2 0 4	10 4 9	1.0 0 4.00	- - 0.33 - 49.0	6 1 4	15 22 10	1.0 0.13 0.99	- 0.01 - 1.19 0.25 - 3.95

Table 14b. Interview Study Analysis of Time-specific Public Water Source/Consumption by Sex: Leukemia

	Water Source/		ı	Male			Female			
Source Well Field	Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
	Prena	atal Expo	osure: Leuk	cemia Di	agnosis Ages () throug	h 19			
Holly Street (prior to 1976)	None/Low Medium High	8 1 0	32 3 1	1.0 - 0		13 0 0	48 0 4	1.0 - 0		
Parkway (1982 and later)	None/Low Medium High	9 0 0	31 2 3	1.0 0 0	- - -	8 0 5	39 9 3	1.0 0 5.96	- - 1.12 - 31.7	
	Postn	atal Exp	osure: Leu	kemia Di	agnosis Ages	0 throug	jh 19			
Holly Street (prior to 1976)	None/Low Medium High	8 0 1	31 4 1	1.0 0 2.83	- - 0.17 - 47.1	13 0 0	48 1 3	1.0 0 0		
Parkway (1982 and later)	None/Low Medium High	4 1 4	16 10 10	1.0 0.46 1.83	- 0.03 - 6.47 0.19 - 17.3	7 1 5	18 21 12	1.0 0.10 0.96	- 0.01 - 0.96 0.24 - 3.79	

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	Water Source/		I	Male		Female			
Source Well Field	Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Pren	atal Exp	osure: Leu	kemia Di	iagnosis Ages	0 throug	jh 4		
Holly Street (prior to 1976)	None/Low Medium High	2 0 0	8 0 0	1.0 - -	-	7 0 0	28 0 0	1.0 - -	- - -
Parkway (1982 and later)	None/Low Medium High	2 0 0	5 1 2	1.0 0 0		4 0 3	17 7 3	1.0 0 3.22	- - 0.52 - 20.1
	Postr	natal Exp	oosure: Leu	ıkemia D	iagnosis Ages	0 throu	gh 4		
Holly Street (prior to 1976)	None/Low Medium High	2 0 0	8 0 0	1.0 - -	- - -	7 0 0	28 0 0	1.0 - -	- - -
Parkway (1982 and later)	None/Low Medium High	0 0 2	2 1 5		- - -	4 0 3	8 14 5	1.0 0 0.88	- - 0.15 - 5.00

Table 14c. Interview Study Analysis of Time-specific Public Water Source/Consumption by Sex: Nervous System Cancers

	Water Source/		ח	Male		Female			
Source Well Field	Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Prenatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 19								
Holly Street (prior to 1976)	None/Low Medium High	10 1 0	40 1 1	1.0 4.00 0	- 0.25 - 64.0 -	7 0 0	28 0 0	1.0 - -	- - -
Parkway (1982 and later)	None/Low Medium High	9 0 2	37 3 3	1.0 0 -	- - -	4 1 1	17 7 4	1.0 0.98 2.43	- 0.05 - 17.6 0.10 - 56.3
	Postnatal Exp	osure: N	Nervous Sy	stem Car	cer Diagnosis	s Ages 0	through 1	9	
Holly Street (prior to 1976)	None/Low Medium High	9 2 0	37 3 3	1.0 2.93 0	- 0.40 - 21.6 -	7 0 0	28 0 0	1.0 - -	
Parkway (1982 and later)	None/Low Medium High	8 1 2	28 9 6	1.0 0.38 1.12	- 0.04 - 3.87 0.12 - 10.2	2 2 2	9 11 8	1.0 1.02 1.41	- 0.12 - 8.95 0.17 - 11.4

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	Water Source/		r	Male			Fe	emale	
Source Well Field	Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Prenatal Exp	oosure: l	Nervous Sy	stem Car	ncer Diagnosi	s Ages 0	through 4		
Holly Street (prior to 1976)	None/Low Medium High	4 0 0	15 0 0	1.0 - -	- - -	5 0 0	20 0 0	1.0 - -	- - -
Parkway (1982 and later)	None/Low Medium High	2 0 2	9 3 3	1.0 0 -	- - -	2 1 1	11 6 3	1.0 - -	- - -
	Postnatal Ex	posure:	Nervous Sy	ystem Ca	ncer Diagnosi	s Ages (through 4	1	
Holly Street (prior to 1976)	None/Low Medium High	4 0 0	15 0 0	1.0 - -	- - -	5 0 0	20 0 0	1.0 - -	- - -
Parkway (1982 and later)	None/Low Medium High	2 0 2	8 3 4	1.0 0 3.00	- - 0.19 - 48.0	2 1 1	7 8 5	1.0 0.58 1.07	- 0.04 - 8.09 0.09 - 12.5

Table 14d. Interview Study Analysis of Time-specific Public Water Source/Consumption by Sex: Brain and Central Nervous System Cancers

	Water Source/		ı	Male			Fe	male	
Source Well Field	Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Cases Controls	Odds Ratio	95% CI
Prer	Prenatal Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 19								
Holly Street (prior to 1976)	None/Low Medium High	7 1 0	29 1 1	1.0 4.00 0	- 0.25 - 64.0 -	5 0 0	20 0 0	1.0 - -	- - -
Parkway (1982 and later)	None/Low Medium High	7 0 1	31 0 1	1.0 - -	- - -	4 0 0	14 3 3	1.0 0 0	- - -
Post	natal Exposure: E	Brain an	d Central N	lervous S	System Cancer	Diagnos	is Ages 0 tl	nrough 1	9
Holly Street (prior to 1976)	None/Low Medium High	6 2 0	26 3 3	1.0 2.93 0	- 0.40 - 21.6 -	5 0 0	20 0 0	1.0 - -	- - -
Parkway (1982 and later)	None/Low Medium High	6 1 1	23 7 2	1.0 0.53 1.60	- 0.05 - 6.17 0.13 - 19.5	1 2 1	7 6 7	1.0 4.33 1.81	- 0.18 - 103 0.09 - 36.9

	Water Source/					Female			
Source Well C Field	Consumption Rating	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Pre	natal Exposure: E	Brain an	d Central I	Nervous S	System Cancer	Diagnos	is Ages 0 t	hrough 4	
Holly Street (prior to 1976)	None/Low Medium High	1 0 0	4 0 0	1.0		3 0 0	12 0 0	1.0 - -	-
Parkway (1982 and later)	None/Low Medium High	0 0 1	3 0 1	O - -		2 0 0	8 2 2	1.0 0 0	
Post	natal Exposure:	Brain ar	nd Central	Nervous	System Cancei	Diagnos	sis Ages 0 t	hrough 4	ļ
Holly Street (prior to 1976)	None/Low Medium High	1 0 0	4 0 0	1.0 - -	- - -	3 0 0	12 0 0	1.0 - -	- - -
Parkway (1982 and later)	None/Low Medium High	0 0 1	3 1 0	0 - -	- - -	1 1 0	5 3 4	1.0 - 0	- - -

Table 15. Interview Study Average Point Source Airborne Gas Emission Exposure over Total Study Time Period

_	Cases (n	= 40)	Controls (n = 159)		
Exposure	Number	Percent	Number	Percent	
Ciba-Geigy Toms River Chemical Plant Airborne Gas Emissions (relative air impact units) <1.00 1.00 - 2.17 > 2.17	16	40.0	79	49.7	
	12	30.0	40	25.2	
	12	30.0	40	25.2	
Oyster Creek Nuclear Generating Station Airborne Gas Emissions (fCi/m³) <0.080 0.080 - 0.27 >0.27	21	52.5	81	50.9	
	11	27.5	38	23.9	
	8	20.0	40	25.2	

Note: Cut points are set at the 50th and 75th percentiles among controls.

Table 16a. Interview Study Analysis of Point Source Air Emission Estimates (See Table 15 for exposure level units): Leukemia and Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Total Time Period Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 19								
Ciba-Geigy Gas	<1.00	16	79	1.0	-			
	1.00 - 2.17	12	40	1.59	0.63 - 4.00			
	>2.17	12	40	1.62	0.65 - 4.03			
Oyster Creek Gas	<0.080	21	81	1.0	-			
	0.080 - 0.27	11	38	1.02	0.39 - 2.70			
	>0.27	8	40	0.48	0.12 - 1.99			
Prenatal Exposure:	Prenatal Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 19							
Ciba-Geigy Gas	<1.00	21	101	1.0	-			
	1.00 - 2.17	10	28	1.85	0.72 - 4.71			
	>2.17	9	28	1.59	0.64 - 3.98			
Oyster Creek Gas	<0.080	26	112	1.0	-			
	0.080 - 0.27	7	15	3.57	0.80 - 16.0			
	>0.27	7	30	1.07	0.31 - 3.71			
Postnatal Exposure:	Leukemia and Ne	rvous System	Cancer Diag	nosis Ages 0	through 19			
Ciba-Geigy Gas	<1.00	17	70	1.0	-			
	1.00 - 2.17	12	51	0.98	0.41 - 2.36			
	>2.17	11	38	1.21	0.47 - 3.04			
Oyster Creek Gas	<0.080	20	81	1.0	-			
	0.080 - 0.27	12	42	1.21	0.40 - 3.68			
	>0.27	8	36	0.67	0.14 - 3.12			

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval		
Total Time Period Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 4							
Ciba-Geigy Gas	<1.00	6	34	1.0	-		
	1.00 - 2.17	5	23	1.35	0.29 - 6.42		
	>2.17	7	14	3.45	0.80 - 14.9		
Oyster Creek Gas	<0.080	11	49	1.0	-		
	0.080 - 0.27	6	17	1.79	0.41 - 7.84		
	>0.27	1	5	-	-		
Prenatal Exposure	Prenatal Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 4						
Ciba-Geigy Gas	<1.00	8	39	1.0	-		
	1.00 - 2.17	4	20	0.88	0.20 - 3.94		
	>2.17	6	11	2.99	0.78 - 11.5		
Oyster Creek Gas	<0.080	11	52	1.0	-		
	0.080 - 0.27	5	10	6.37	0.62 - 65.3		
	>0.27	2	8	1.55	0.02 - 99.9		
Postnatal Exposure	: Leukemia and Ne	ervous System	n Cancer Diag	jnosis Ages (through 4		
Ciba-Geigy Gas	<1.00	7	31	1.0	-		
	1.00 - 2.17	5	27	0.89	0.22 - 3.53		
	>2.17	6	13	2.21	0.52 - 9.27		
Oyster Creek Gas	<0.080	10	46	1.0	-		
	0.080 - 0.27	7	22	2.53	0.40 - 16.0		
	>0.27	1	3	-	-		

Table 16b. Interview Study Analysis of Point Source Air Emission Estimates (See Table 15 for exposure level units): Leukemia

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Total Time Period Exposure: Leukemia Diagnosis Ages 0 through 19								
Ciba-Geigy Gas	<1.00	10	42	1.0	-			
	1.00 - 2.17	6	19	1.36	0.38 - 4.86			
	>2.17	6	27	0.97	0.28 - 3.33			
Oyster Creek Gas	<0.080	11	46	1.0	-			
	0.080 - 0.27	7	25	1.18	0.36 - 3.83			
	>0.27	4	17	0.93	0.11 - 7.59			
Prenatal Exposure: Leukemia Diagnosis Ages 0 through 19								
Ciba-Geigy Gas	<1.00	11	56	1.0	-			
	1.00 - 2.17	7	15	2.69	0.81 - 8.92			
	>2.17	4	16	1.34	0.36 - 4.95			
Oyster Creek Gas	<0.080	15	65	1.0	-			
	0.080 - 0.27	2	4	2.62	0.33 - 20.6			
	>0.27	5	18	1.41	0.29 - 6.98			
Postn	atal Exposure: Leu	kemia Diagn	osis Ages 0 th	rough 19				
Ciba-Geigy Gas	<1.00	11	38	1.0	-			
	1.00 - 2.17	5	26	0.60	0.17 - 2.19			
	>2.17	6	24	0.78	0.23 - 2.65			
Oyster Creek Gas	<0.080	10	44	1.0	-			
	0.080 - 0.27	8	28	1.52	0.36 - 6.38			
	>0.27	4	16	1.36	0.14 - 13.6			

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Total Time Period Exposure: Leukemia Diagnosis Ages 0 through 4								
Ciba-Geigy Gas	<1.00	3	16	1.0	-			
	1.00 - 2.17	3	10	1.78	0.25 - 12.6			
	>2.17	3	10	1.79	0.24 - 13.3			
Oyster Creek Gas	<0.080	4	23	1.0	-			
	0.080 - 0.27	5	12	2.73	0.48 - 15.6			
	>0.27	0	1	0	-			
Prena	Prenatal Exposure: Leukemia Diagnosis Ages 0 through 4							
Ciba-Geigy Gas	<1.00	4	20	1.0	-			
	1.00 - 2.17	3	10	1.60	0.27 - 9.41			
	>2.17	2	5	2.08	0.26 - 16.3			
Oyster Creek Gas	<0.080	7	30	1.0	-			
	0.080 - 0.27	1	2	2.45	0.14 - 42.6			
	>0.27	1	3	-	-			
Postn	atal Exposure: Let	ukemia Diagn	osis Ages 0 t	hrough 4				
Ciba-Geigy Gas	<1.00	4	13	1.0	-			
	1.00 - 2.17	2	15	0.39	0.05 - 2.98			
	>2.17	3	8	1.03	0.17 - 6.36			
Oyster Creek Gas	<0.080	3	18	1.0	-			
	0.080 - 0.27	6	18	3.78	0.35 - 40.8			
	>0.27	0	0	-	-			

Table 16c. Interview Study Analysis of Point Source Air Emission Estimates (See Table 15 for exposure level units): Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Total Time Period Exposure: Nervous System Cancer Diagnosis Ages 0 through 19								
Ciba-Geigy Gas	<1.00	6	37	1.0	-			
	1.00 - 2.17	6	21	1.86	0.49 - 7.15			
	>2.17	6	13	3.05	0.79 - 11.8			
Oyster Creek Gas	<0.080	10	35	1.0	-			
	0.080 - 0.27	4	13	0.86	0.16 - 4.65			
	>0.27	4	23	0.28	0.04 - 2.05			
Prenatal Exp	Prenatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 19							
Ciba-Geigy Gas	<1.00	10	45	1.0	-			
	1.00 - 2.17	3	13	0.89	0.16 - 4.81			
	>2.17	5	12	1.96	0.54 - 7.10			
Oyster Creek Gas	<0.080	11	47	1.0	-			
	0.080 - 0.27	5	11	4.49	0.40 - 50.0			
	>0.27	2	12	0.68	0.07 - 7.02			
Postnatal Exp	oosure: Nervous S	ystem Cancer	Diagnosis A	ges 0 throug	h 19			
Ciba-Geigy Gas	<1.00	6	32	1.0	-			
	1.00 - 2.17	7	25	1.54	0.44 - 5.37			
	>2.17	5	14	2.05	0.49 - 8.51			
Oyster Creek Gas	<0.080	10	37	1.0	-			
	0.080 - 0.27	4	14	0.97	0.16 - 5.70			
	>0.27	4	20	0.37	0.04 - 3.02			

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval		
Total Time Period Exposure: Nervous System Cancer Diagnosis Ages 0 through 4							
Ciba-Geigy Gas	<1.00	3	18	1.0	-		
	1.00 - 2.17	2	13	0.53	0.03 - 9.12		
	>2.17	4	4	9.00	0.86 - 94.2		
Oyster Creek Gas	<0.080	7	26	1.0	-		
	0.080 - 0.27	1	5	0.47	0.03 - 7.86		
	>0.27	1	4	-	-		
Prenatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 4							
Ciba-Geigy Gas	<1.00	4	19	1.0	-		
	1.00 - 2.17	1	10	-	-		
	>2.17	4	6	3.35	0.55 - 20.2		
Oyster Creek Gas	<0.080	4	22	1.0	-		
	0.080 - 0.27	4	8	-	-		
	>0.27	1	5	-	-		
Postnatal Ex	posure: Nervous S	System Cancer	Diagnosis A	ges 0 throug	jh 4		
Ciba-Geigy Gas	<1.00	3	18	1.0	-		
	1.00 - 2.17	3	12	1.78	0.26 - 12.4		
	>2.17	3	5	5.21	0.54 - 50.3		
Oyster Creek Gas	<0.080	7	28	1.0	-		
	0.080 - 0.27	1	4	1.00	0.03 - 32.0		
	>0.27	1	3	-	-		

Table 16d. Interview Study Analysis of Point Source Air Emission Estimates (See Table 15 for exposure level units): Brain and Central Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Total Time Period Exposur	Total Time Period Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 19							
Ciba-Geigy Gas	<1.00	4	24	1.0	-			
	1.00 - 2.17	5	15	1.92	0.47 - 7.85			
	>2.17	4	13	1.84	0.40 - 8.51			
Oyster Creek Gas	<0.080	7	21	1.0	-			
	0.080 - 0.27	3	11	0.58	0.09 - 3.67			
	>0.27	3	20	0.23	0.03 - 1.76			
Prenatal Exposure: Br	Prenatal Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 19							
Ciba-Geigy Gas	<1.00	8	34	1.0	-			
	1.00 - 2.17	2	6	1.42	0.25 - 8.14			
	>2.17	3	11	1.13	0.24 - 5.46			
Oyster Creek Gas	<0.080	8	33	1.0	-			
	0.080 - 0.27	4	9	3.58	0.29 - 44.8			
	>0.27	1	9	0.63	0.06 - 6.65			
Postnatal Exposure: B	rain and Central N	lervous Syste	m Cancer Dia	gnosis Ages	0 through 19			
Ciba-Geigy Gas	<1.00	4	19	1.0	-			
	1.00 - 2.17	5	19	1.24	0.30 - 5.17			
	>2.17	4	14	1.34	0.29 - 6.15			
Oyster Creek Gas	<0.080	7	24	1.0	-			
	0.080 - 0.27	3	11	0.80	0.12 - 5.30			
	>0.27	3	17	0.34	0.04 - 2.86			

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Total Time Period Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 4								
Ciba-Geigy Gas	<1.00	1	5	1.0	-			
	1.00 - 2.17	1	7	0.58	0.03 - 12.5			
	>2.17	2	4	2.79	0.17 - 44.8			
Oyster Creek Gas	<0.080	4	12	1.0	-			
	0.080 - 0.27	0	3	0	-			
	>0.27	0	1	0	-			
Prenatal Exposure: B	Prenatal Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 4							
Ciba-Geigy Gas	<1.00	2	8	1.0	-			
	1.00 - 2.17	0	3	0	-			
	>2.17	2	5	2.14	0.17 - 27.7			
Oyster Creek Gas	<0.080	1	8	1.0	-			
	0.080 - 0.27	3	6	-	-			
	>0.27	0	2	0	-			
Postnatal Exposure: B	Brain and Central I	Nervous Syste	em Cancer Dia	agnosis Ages	o through 4			
Ciba-Geigy Gas	<1.00	1	5	1.0	-			
	1.00 - 2.17	1	6	0.85	0.04 - 16.3			
	>2.17	2	5	1.86	0.14 - 24.7			
Oyster Creek Gas	<0.080	4	15	1.0	-			
	0.080 - 0.27	0	1	0	-			
	>0.27	0	0	0	-			

Table 17a. Interview Study Analysis of Point Source Air Emission Estimates (See Table 15 for exposure level units) by Sex: Leukemia and Nervous System Cancers

				Male			Fe	male			
Exposure Factor	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI		
Tota	Total Time Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 19										
Ciba-Geigy Gas	<1.00	8	36	1.0	-	8	43	1.0	-		
	1.00 - 2.17	6	20	1.31	0.38 - 4.50	6	20	2.16	0.52 - 9.01		
	>2.17	6	23	1.18	0.37 - 3.82	6	17	2.62	0.60 - 11.4		
Oyster Creek Gas	<0.080	7	29	1.0	-	14	52	1.0	-		
	0.080 - 0.27	6	21	1.16	0.31 - 4.32	5	17	1.00	0.23 - 4.41		
	>0.27	7	29	0.85	0.14 - 5.27	1	11	-	-		
Pro	enatal Exposure: Lo	eukemia	and Nerv	ous Syste	em Cancer Diaç	gnosis Ag	ges 0 throu	ıgh 19			
Ciba-Geigy Gas	<1.00	12	51	1.0	-	9	50	1.0	-		
	1.00 - 2.17	3	11	1.05	0.21 - 5.25	7	17	2.92	0.79 - 10.8		
	>2.17	5	16	1.32	0.41 - 4.22	4	12	2.36	0.51 - 11.0		
Oyster Creek Gas	<0.080	14	55	1.0	-	12	57	1.0	-		
	0.080 - 0.27	3	6	3.58	0.31 - 41.0	4	9	4.20	0.57 - 31.2		
	>0.27	3	17	0.52	0.08 - 3.22	4	13	2.64	0.34 - 20.3		
Pos	stnatal Exposure: L	eukemia	a and Nerv	ous Syst	em Cancer Dia	gnosis A	ges 0 thro	ugh 19			
Ciba-Geigy Gas	<1.00	9	32	1.0	-	8	38	1.0	-		
	1.00 - 2.17	5	27	0.65	0.19 - 2.16	7	24	1.65	0.42 - 6.53		
	>2.17	6	20	1.02	0.34 - 3.33	5	18	1.64	0.34 - 7.89		
Oyster Creek Gas	<0.080	7	29	1.0	-	13	52	1.0	-		
	0.080 - 0.27	6	22	1.06	0.24 - 5.83	6	20	1.52	0.29 - 7.95		
	>0.27	7	28	0.97	0.13 - 7.27	1	8	-	-		

				Male			Fe	male			
Exposure Factor	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI		
Tot	Total Time Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 4										
Ciba-Geigy Gas	<1.00 1.00 - 2.17 >2.17	10 8 5	2 2 2	1.0 1.03 2.05	- 0.08 - 12.8 0.20 - 20.6	4 3 5	24 15 9	1.0 1.70 4.83	- 0.22 - 13.1 0.69 - 33.7		
Oyster Creek Gas	<0.080 0.080 - 0.27 >0.27	2 3 1	14 6 3	1.0 - -		9 3 0	35 11 2	1.0 0.92 0	- 0.16 - 5.30 -		
Pr	enatal Exposure: L	.eukemia	a and Nerv	ous Syst	em Cancer Dia	gnosis A	ges 0 thro	ugh 4			
Ciba-Geigy Gas	<1.00 1.00 - 2.17 >2.17	3 1 2	11 6 6	1.0 - 1.22	- - 0.19 - 7.95	5 3 4	28 14 5	1.0 1.58 7.51	- 0.28 - 8.88 0.97 - 58.0		
Oyster Creek Gas	<0.080 0.080 - 0.27 >0.27	3 2 1	17 3 3	1.0 - -		8 3 1	35 7 5	1.0 3.70 1.18	- 0.28 - 48.4 0.02 - 56.3		
Po	stnatal Exposure: I	Leukemi	a and Ner	vous Sys	tem Cancer Dia	ignosis <i>F</i>	Ages 0 thro	ough 4			
Ciba-Geigy Gas	<1.00 1.00 - 2.17 >2.17	3 1 2	11 9 3	1.0 0.36 2.34	- 0.03 - 4.18 0.30 - 18.3	4 4 4	20 18 10	1.0 1.48 2.72	- 0.22 - 10.1 0.33 - 22.3		
Oyster Creek Gas	<0.080 0.080 - 0.27 >0.27	2 3 1	11 9 3	1.0 - -	- - -	8 4 0	35 13 0	1.0 1.88 -	- 0.25 - 14.5 -		

Table 17b. Interview Study Analysis of Point Source Air Emission Estimates (See Table 15 for exposure level units) by Sex: Leukemia

				Male			Fe	emale	
Exposure Factor	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Total Ti	те Ехро	sure: Leuk	cemia Dia	agnosis Ages 0	through	ı 19		
Ciba-Geigy Gas	<1.00	4	16	1.0	-	6	26	1.0	-
	1.00 - 2.17	3	5	2.63	0.33 - 20.7	3	14	1.03	0.18 - 5.90
	>2.17	2	15	0.62	0.10 - 3.93	4	12	1.60	0.28 - 9.03
Oyster Creek Gas	<0.080	3	15	1.0	-	8	31	1.0	-
	0.080 - 0.27	3	12	1.58	0.29 - 8.69	4	13	1.21	0.22 - 6.67
	>0.27	3	9	-	-	1	8	-	-
	Prenat	al Expos	sure: Leuke	emia Dia	gnosis Ages 0	through	19		
Ciba-Geigy Gas	<1.00	6	23	1.0	-	5	33	1.0	-
	1.00 - 2.17	1	5	0.78	0.08 - 7.52	6	10	6.42	1.09 - 37.8
	>2.17	2	8	0.96	0.14 - 6.36	2	8	2.06	0.31 - 13.6
Oyster Creek Gas	<0.080	6	27	1.0	-	9	38	1.0	-
	0.080 - 0.27	1	1	-	-	1	3	1.61	0.12 - 20.8
	>0.27	2	8	1.00	0.11 - 8.95	3	10	1.87	0.16 - 21.5
	Postna	tal Expo	sure: Leuk	emia Dia	ignosis Ages 0	through	19		
Ciba-Geigy Gas	<1.00	5	15	1.0	-	6	23	1.0	-
	1.00 - 2.17	2	9	0.64	0.10 - 3.95	3	17	0.65	0.10 - 4.11
	>2.17	2	12	0.49	0.08 - 3.03	4	12	1.21	0.20 - 7.21
Oyster Creek Gas	<0.080	3	16	1.0	-	7	28	1.0	-
	0.080 - 0.27	3	11	3.31	0.26 - 42.1	5	17	1.48	0.21 - 10.5
	>0.27	3	9	-	-	1	7	-	-

				Male			Fe	emale	
Exposure Factor	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Total T	ime Exp	osure: Leu	kemia Di	agnosis Ages () throug	h 4		
Ciba-Geigy Gas	<1.00 1.00 - 2.17 >2.17	1 1 0	2 1 5	1.0 - 0	- - -	2 2 3	14 9 5	1.0 2.69 7.28	- 0.19 - 37.6 0.44 - 120
Oyster Creek Gas	<0.080 0.080 - 0.27 >0.27	0 2 0	4 4 0	-	- - -	4 3 0	19 8 1	1.0 1.84 0	- 0.27 - 12.7 -
	Prena	tal Expo	sure: Leuk	emia Dia	agnosis Ages 0	through	4		
Ciba-Geigy Gas	<1.00 1.00 - 2.17 >2.17	2 0 0	2 2 4	1.0 0 0	- - -	2 3 2	18 8 1	1.0 5.21 18.9	- 0.48 - 56.5 0.90 - 397
Oyster Creek Gas	<0.080 0.080 - 0.27 >0.27	1 1 0	7 1 0	1.0 - -	- - -	6 0 1	23 1 3	1.0 0 -	- - -
	Postna	atal Expo	osure: Leuk	cemia Di	agnosis Ages 0	through	n 4		
Ciba-Geigy Gas	<1.00 1.00 - 2.17 >2.17	2 0 0	2 3 3	1.0 0 0	- - -	2 2 3	11 12 5	1.0 1.65 5.52	- 0.09 - 30.9 0.25 - 122
Oyster Creek Gas	<0.080 0.080 - 0.27 >0.27	0 2 0	2 6 0	- - -	- - -	3 4 0	16 12 0	1.0 3.06 -	- 0.25 - 37.7 -

Table 17c. Interview Study Analysis of Point Source Air Emission Estimates (See Table 15 for exposure level units) by Sex: Nervous System Cancers

				Male			Fer	nale	
Exposure Factor	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Total Time Exp	osure: N	Nervous Sy	stem Can	cer Diagnosis	Ages 0 th	rough 19		
Ciba-Geigy Gas	<1.00	4	20	1.0	-	2	17	1.0	-
	1.00 - 2.17	3	15	0.90	0.16 - 5.17	3	6	8.34	0.63 - 110
	>2.17	4	8	2.35	0.48 - 11.4	2	5	5.94	0.44 - 81.0
Oyster Creek Gas	<0.080	4	14	1.0	-	6	21	1.0	-
	0.080 - 0.27	3	9	1.08	0.13 - 8.80	1	4	0.58	0.03 - 10.3
	>0.27	4	20	0.39	0.04 - 3.60	0	3	0	-
	Prenatal Exp	osure: N	ervous Sys	tem Can	er Diagnosis A	ges 0 thr	ough 19		
Ciba-Geigy Gas	<1.00	6	28	1.0	-	4	17	1.0	-
	1.00 - 2.17	2	6	1.43	0.15 - 13.9	1	7	0.73	0.06 - 9.36
	>2.17	3	8	1.60	0.36 - 7.04	2	4	3.77	0.20 - 69.6
Oyster Creek Gas	<0.080	8	28	1.0	-	3	19	1.0	-
	0.080 - 0.27	2	5	1.15	0.07 - 20.5	3	6	-	-
	>0.27	1	9	-	-	1	3	-	-
	Postnatal Exp	osure: N	lervous Sys	stem Can	cer Diagnosis A	Ages 0 th	rough 19		
Ciba-Geigy Gas	<1.00	4	17	1.0	-	2	15	1.0	-
	1.00 - 2.17	3	18	0.67	0.13 - 3.49	4	7	5.19	0.51 - 52.5
	>2.17	4	8	2.06	0.43 - 9.96	1	6	2.00	0.09 - 46.8
Oyster Creek Gas	<0.080	4	13	1.0	-	6	24	1.0	-
	0.080 - 0.27	3	11	0.78	0.09 - 6.58	1	3	1.63	0.08 - 34.6
	>0.27	4	19	0.36	0.04 - 3.55	0	1	0	-

				Male			Fer	nale	
Exposure Factor	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Total Time Ex	posure:	Nervous S	ystem Ca	ncer Diagnosis	Ages 0 tl	nrough 4		
Ciba-Geigy Gas	<1.00 1.00 - 2.17 >2.17	1 1 2	8 7 0	1.0 - 0	- - -	2 1 2	10 6 4	1.0 0.78 3.19	- 0.03 - 23.0 0.20 - 51.1
Oyster Creek Gas	<0.080 0.080 - 0.27 >0.27	2 1 1	10 2 3	1.0 - -	- - -	5 0 0	16 3 1	1.0 0 0	-
	Prenatal Exp	osure: N	lervous Sy	stem Can	cer Diagnosis A	Ages 0 th	rough 4		
Ciba-Geigy Gas	<1.00 1.00 - 2.17 >2.17	1 1 2	9 4 2	1.0 - 5.40	- - 0.47 - 62.1	3 0 2	10 6 4	1.0 0 1.82	- - 0.14 - 23.6
Oyster Creek Gas	<0.080 0.080 - 0.27 >0.27	2 1 1	10 2 3	1.0 - -	- - -	2 3 0	12 6 2	1.0 - 0	- - -
	Postnatal Exp	osure: I	Nervous Sy	stem Car	ncer Diagnosis	Ages 0 th	rough 4		
Ciba-Geigy Gas	<1.00 1.00 - 2.17 >2.17	1 1 2	9 6 0	1.0 1.15 -	- 0.04 - 32.1 -	2 2 1	9 6 5	1.0 1.53 0.96	- 0.13 - 18.5 0.04 - 21.2
Oyster Creek Gas	<0.080 0.080 - 0.27 >0.27	2 1 1	9 3 3	1.0 - -	- - -	5 0 0	19 1 0	1.0 0 -	- - -

Table 17d. Interview Study Analysis of Point Source Air Emission Estimates (See Table 15 for exposure level units) by Sex: Brain and Central Nervous System Cancers

			N	/lale			Fe	male	
Exposure Factor	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Total Ti	me Exposure: Bra	in and C	entral Ner	vous Sys	stem Cancer D	Diagnosi	s Ages 0 th	rough 1	19
Ciba-Geigy Gas	<1.00	3	15	1.0	-	1	9	1.0	-
	1.00 - 2.17	2	9	1.12	0.18 - 7.06	3	6	4.51	0.39 - 52.8
	>2.17	3	8	1.76	0.31 - 9.90	1	5	1.95	0.08 - 46.0
Oyster Creek Gas	<0.080	3	8	1.0	-	4	13	1.0	-
	0.080 - 0.27	2	7	0.61	0.06 - 6.50	1	4	0.58	0.03 - 10.3
	>0.27	3	17	0.29	0.03 - 2.88	0	3	0	-
Prenat	tal Exposure: Brai	n and Ce	entral Nerv	ous Syst	em Cancer Di	agnosis	Ages 0 thr	ough 19	9
Ciba-Geigy Gas	<1.00	5	22	1.0	-	3	12	1.0	-
	1.00 - 2.17	1	2	2.03	0.18 - 22.5	1	4	1.00	0.08 - 12.1
	>2.17	2	7	1.16	0.20 - 6.65	1	4	1.00	0.03 - 33.8
Oyster Creek Gas	<0.080	7	22	1.0	-	1	11	1.0	-
	0.080 - 0.27	1	3	-	-	3	6	-	-
	>0.27	0	6	0	-	1	3	-	-
Postna	tal Exposure: Brai	n and C	entral Ner	vous Sys	tem Cancer D	iagnosis	Ages 0 th	rough 1	9
Ciba-Geigy Gas	<1.00	3	11	1.0	-	1	8	1.0	-
	1.00 - 2.17	2	13	0.57	0.08 - 3.89	3	6	3.54	0.30 - 41.3
	>2.17	3	8	1.32	0.24 - 7.26	1	6	1.45	0.06 - 33.9
Oyster Creek Gas	<0.080	3	8	1.0	-	4	16	1.0	-
	0.080 - 0.27	2	8	0.55	0.05 - 5.79	1	3	1.63	0.08 - 34.6
	>0.27	3	16	0.30	0.03 - 3.19	0	1	0	-

			N	/lale			Fei	male	
Exposure Factor	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Total T	ime Exposure: Bra	ain and (Central Ne	rvous Sy	stem Cancer I	Diagnos	is Ages 0 tl	hrough	4
Ciba-Geigy Gas	<1.00 1.00 - 2.17 >2.17	0 0 1	3 1 0	- - -	- - -	1 1 1	2 6 4	1.0 0.41 0.65	- 0.02 - 7.10 0.03 - 13.1
Oyster Creek Gas	<0.080 0.080 - 0.27 >0.27	1 0 0	4 0 0			3 0 0	8 3 1	1.0 0 0	- - -
Prena	ital Exposure: Bra	in and C	entral Ner	vous Sys	tem Cancer D	iagnosis	Ages 0 th	rough 4	
Ciba-Geigy Gas	<1.00 1.00 - 2.17 >2.17	0 0 1	3 0 1	- - -	- - -	2 0 1	5 3 4	1.0 0 0.71	- - 0.03 - 16.6
Oyster Creek Gas	<0.080 0.080 - 0.27 >0.27	1 0 0	4 O O	1.0 - -	- - -	0 3 0	4 6 2		- - -
Postna	atal Exposure: Bra	in and C	entral Ner	rvous Sys	stem Cancer E	Diagnosi	s Ages 0 th	rough 4	ļ
Ciba-Geigy Gas	<1.00 1.00 - 2.17 >2.17	0 0 1	3 1 0	- - -	- - -	1 1 1	2 5 5	1.0 0.50 0.50	- 0.03 - 8.34 0.03 - 8.34
Oyster Creek Gas	<0.080 0.080 - 0.27 >0.27	1 0 0	4 0 0	1.0 - -	- - -	3 0 0	11 1 0	1.0 0 -	- - -

Table 18. Interview Study Proximity to Sites of Concern

	Cases (r	n = 40)	Controls (n = 159)
Sites of Concern	Number	Percent	Number	Percent
Percentage of Total Time Period Lived Within ½ mile of Ciba-Geigy				
0	35	87.5	147	92.5
>0 - 50 >50	3 2	7.5 5.0	3 9	1.9 5.7
	2	5.0	7	5.7
Percentage of Total Time Period Lived Within ½ mile of Ciba-Geigy Pipeline				
0	26	65.0	121	76.1
>0 - 50 >50	8 6	20.0 15.0	15 23	9.4 14.5
Percentage of Total Time Period Lived Within ½ mile of a Break in Ciba-				
Geigy Pipeline*				
0	35	87.5	144	91.1
>0 - 50 >50	3 2	7.5 5.0	10 4	6.3 2.5
Percentage of Total Time Period Lived Within ½ mile of Toms River Section				
0	35	87.5	141	88.7
>0 - 50 >50	2 3	5.0 7.5	10 8	6.3 5.0
Percentage of Total Time Period Lived Within ½ mile of Reich Farm				
0	40	100.0	155	97.5
>0 - 50	0	0.0	3	1.9
>50	0	0.0	1	0.6
Percentage of Total Time Period Lived Within ½ mile of Dover Township Municipal Landfill				
0	40	100.0	158	99.4
>0 - 50 >50	0 0	0.0 0.0	0 1	0.0 0.6
/50		0.0	l	0.0

	Cases (r	n = 40)	Controls (n = 159)
Sites of Concern	Number	Percent	Number	Percent
Percentage of Total Time Period Lived Within ½ mile of Ocean County Landfill				
0	40	100.0	158	99.4
>0 - 50 >50	0 0	0.0 0.0	1 0	0.6 0.0
Percentage of Total Time Period Lived Within ½ mile of Toms River Coal Gas Site				
0 >0 - 50	38 1	95.0 2.5	157 2	98.7 1.3
>50	1	2.5	0	0.0

 $^{^{\}ast}$ This index only includes residences within $1\!\!/\!_2$ mile of a pipeline break during or after the year a break occurred.

Table 19a. Interview Study Analysis of Proximity to Sites of Concern: Leukemia and Nervous System Cancers

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Total Time Exposure: Leukemia	and Nervo	us System Ca	ncer Diagnos	is Ages (through 19
Lived within ½ mile of Ciba-Geigy	Never	35	147	1.0	-
	Ever	5	12	1.82	0.58 - 5.71
Lived within ½ mile of Ciba-Geigy Pipeline	Never	26	120	1.0	-
	Ever	14	38	1.66	0.80 - 3.43
Lived within ½ mile of a Break in Ciba-	Never	35	144	1.0	-
Geigy Pipeline	Ever	5	14	1.48	0.51 - 4.30
Lived within ½ mile of Toms River	Never	35	141	1.0	-
Section	Ever	5	18	1.14	0.38 - 3.40
Lived within ½ mile of Reich Farm	Never	40	155	1.0	-
	Ever	0	4	0	-
Lived within ½ mile of Dover Township	Never	40	158	1.0	-
Municipal Landfill	Ever	0	1	0	-
Lived within ½ mile of Ocean County Landfill	Never	40	158	1.0	-
	Ever	0	1	0	-
Lived within ½ mile of Toms River Coal Gas Site	Never	38	157	1.0	-
	Ever	2	2	4.00	0.56 - 28.4

Table 19: page 1 of 24

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal Exposure: Leukemia a	and Nervou	s System Can	cer Diagnosis	s Ages 0	through 19
Lived within ½ mile of Ciba-Geigy	Never	37	151	1.0	-
	Ever	3	6	2.25	0.49 - 10.4
Lived within ½ mile of Ciba-Geigy Pipeline	Never	34	144	1.0	-
	Ever	6	13	1.82	0.68 - 4.89
Lived within ½ mile of a Break in Ciba-	Never	39	156	1.0	-
Geigy Pipeline	Ever	1	1	4.00	0.25 - 64.0
Lived within ½ mile of Toms River	Never	36	150	1.0	-
Section	Ever	4	7	2.34	0.65 - 8.41
Lived within ½ mile of Reich Farm	Never Ever	40 0	156 1	1.0 0	-
Lived within ½ mile of Dover Township	Never	40	157	1.0	-
Municipal Landfill	Ever	0	0	0	
Lived within ½ mile of Ocean County Landfill	Never Ever	40 0	156 1	1.0 0	
Lived within ½ mile of Toms River Coal	Never	38	156	1.0	-
Gas Site	Ever	2	1	8.00	0.73 - 88.2

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Postnatal Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 19								
Lived within ½ mile of Ciba-Geigy	Never	36	147	1.0	-			
	Ever	4	12	1.38	0.41 - 4.59			
Lived within ½ mile of Ciba-Geigy Pipeline	Never	27	120	1.0	-			
	Ever	13	38	1.51	0.72 - 3.18			
Lived within ½ mile of a Break in Ciba-	Never	35	144	1.0	-			
Geigy Pipeline	Ever	5	14	1.48	0.51 - 4.30			
Lived within ½ mile of Toms River	Never	35	141	1.0	-			
Section	Ever	5	18	1.14	0.38 - 3.40			
Lived within ½ mile of Reich Farm	Never	40	155	1.0	-			
	Ever	0	4	0	-			
Lived within ½ mile of Dover Township	Never	40	158	1.0	-			
Municipal Landfill	Ever	0	1	0	-			
Lived within ½ mile of Ocean County Landfill	Never Ever	40 0	158 1	1.0 0	-			
Lived within ½ mile of Toms River Coal	Never	38	157	1.0	-			
Gas Site	Ever	2	2	4.00	0.56 - 28.4			

Table 19: page 3 of 24

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval					
Total Time Exposure: Leukemia	Total Time Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 4									
Lived within ½ mile of Ciba-Geigy	Never	16	67	1.0	-					
	Ever	2	4	3.00	0.27 - 33.1					
Lived within ½ mile of Ciba-Geigy Pipeline	Never	12	58	1.0	-					
	Ever	6	12	2.29	0.74 - 7.09					
Lived within ½ mile of a Break in Ciba-	Never	16	68	1.0	-					
Geigy Pipeline	Ever	2	2	4.00	0.56 - 28.4					
Lived within ½ mile of Toms River	Never	16	65	1.0	-					
Section	Ever	2	6	1.43	0.24 - 8.65					
Lived within ½ mile of Reich Farm	Never Ever	18 0	69 2	1.0 0	-					
Lived within ½ mile of Dover Township	Never	18	71	1.0	-					
Municipal Landfill	Ever	0	0	-						
Lived within ½ mile of Ocean County Landfill	Never Ever	18 0	71 0	1.0 -	-					
Lived within ½ mile of Toms River Coal	Never	17	70	1.0	-					
Gas Site	Ever	1	1	4.00	0.25 - 64.0					

Table 19: page 4 of 24

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval					
Prenatal Exposure: Leukemia	Prenatal Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 4									
Lived within ½ mile of Ciba-Geigy	Never	16	67	1.0	-					
	Ever	2	3	4.29	0.37 - 50.4					
Lived within ½ mile of Ciba-Geigy Pipeline	Never	14	63	1.0	-					
	Ever	4	7	2.27	0.63 - 8.17					
Lived within ½ mile of a Break in Ciba-	Never	18	69	1.0	-					
Geigy Pipeline	Ever	0	1	0	-					
Lived within ½ mile of Toms River	Never	16	67	1.0	-					
Section	Ever	2	3	2.67	0.45 - 16.0					
Lived within ½ mile of Reich Farm	Never	18	69	1.0	-					
	Ever	0	1	0	-					
Lived within ½ mile of Dover Township	Never	18	70	1.0	-					
Municipal Landfill	Ever	0	0	-	-					
Lived within ½ mile of Ocean County Landfill	Never Ever	18 0	70 0	1.0	-					
Lived within ½ mile of Toms River Coal Gas Site	Never Ever	17 1	70 0	1.0	-					

Table 19: page 5 of 24

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval				
Postnatal Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 4									
Lived within ½ mile of Ciba-Geigy	Never	17	67	1.0	-				
	Ever	1	4	1.00	0.09 - 11.6				
Lived within ½ mile of Ciba-Geigy Pipeline	Never	13	58	1.0	-				
	Ever	5	12	1.86	0.56 - 6.14				
Lived within ½ mile of a Break in Ciba-	Never	16	68	1.0	-				
Geigy Pipeline	Ever	2	2	4.00	0.56 - 28.4				
Lived within ½ mile of Toms River	Never	16	65	1.0	-				
Section	Ever	2	6	1.43	0.24 - 8.65				
Lived within ½ mile of Reich Farm	Never	18	69	1.0	-				
	Ever	0	2	0	-				
Lived within ½ mile of Dover Township	Never	18	71	1.0	-				
Municipal Landfill	Ever	0	0	-	-				
Lived within ½ mile of Ocean County Landfill	Never Ever	18 0	71 0	1.0	-				
Lived within ½ mile of Toms River Coal	Never	17	70	1.0	-				
Gas Site	Ever	1	1	4.00	0.25 - 64.0				

Table 19: page 6 of 24

Table 19b. Interview Study Analysis of Proximity to Sites of Concern: Leukemia

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval				
Total Time Expos	Total Time Exposure: Leukemia Diagnosis Ages 0 through 19								
Lived within ½ mile of Ciba-Geigy	Never	20	79	1.0	-				
	Ever	2	9	0.87	0.17 - 4.49				
Lived within ½ mile of Ciba-Geigy Pipeline	Never	11	64	1.0	-				
	Ever	11	23	2.63	1.03 - 6.67				
Lived within ½ mile of a Break in Ciba-	Never	18	78	1.0	-				
Geigy Pipeline	Ever	4	9	1.93	0.54 - 6.87				
Lived within ½ mile of Toms River	Never	20	74	1.0	-				
Section	Ever	2	14	0.49	0.10 - 2.51				
Lived within ½ mile of Reich Farm	Never	22	85	1.0	-				
	Ever	0	3	0	-				
Lived within ½ mile of Dover Township	Never	22	88	1.0	-				
Municipal Landfill	Ever	0	0	-	-				
Lived within ½ mile of Ocean County Landfill	Never	22	87	1.0	-				
	Ever	0	1	0	-				
Lived within ½ mile of Toms River Coal	Never	21	87	1.0	-				
Gas Site	Ever	1	1	4.00	0.25 - 64.0				

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal Exposu	re: Leukem	ia Diagnosis	Ages 0 throu	gh 19	
Lived within ½ mile of Ciba-Geigy	Never	20	82	1.0	-
	Ever	2	5	1.77	0.28 - 11.1
Lived within ½ mile of Ciba-Geigy Pipeline	Never	18	81	1.0	-
	Ever	4	6	2.59	0.73 - 9.19
Lived within ½ mile of a Break in Ciba-	Never	21	87	1.0	-
Geigy Pipeline	Ever	1	0	-	-
Lived within ½ mile of Toms River	Never	20	82	1.0	-
Section	Ever	2	5	1.67	0.30 - 9.39
Lived within ½ mile of Reich Farm	Never	22	86	1.0	-
	Ever	0	1	0	-
Lived within ½ mile of Dover Township	Never	22	87	1.0	-
Municipal Landfill	Ever	0	0	-	-
Lived within ½ mile of Ocean County Landfill	Never Ever	22 0	86 1	1.0 0	-
Lived within ½ mile of Toms River Coal	Never	21	87	1.0	-
Gas Site	Ever	1	0	-	-

Table 19: page 8 of 24

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Postnatal Exposu	ıre: Leukem	nia Diagnosis	Ages 0 throu	gh 19	
Lived within ½ mile of Ciba-Geigy	Never	21	79	1.0	-
	Ever	1	9	0.42	0.05 - 3.48
Lived within ½ mile of Ciba-Geigy Pipeline	Never	12	64	1.0	-
	Ever	10	23	2.31	0.89 - 6.02
Lived within ½ mile of a Break in Ciba-	Never	18	78	1.0	-
Geigy Pipeline	Ever	4	9	1.93	0.54 - 6.87
Lived within ½ mile of Toms River	Never	20	74	1.0	-
Section	Ever	2	14	0.49	0.10 - 2.51
Lived within ½ mile of Reich Farm	Never	22	85	1.0	-
	Ever	0	3	0	-
Lived within ½ mile of Dover Township	Never	22	88	1.0	-
Municipal Landfill	Ever	0	0	-	-
Lived within ½ mile of Ocean County Landfill	Never Ever	22 0	87 1	1.0 0	-
Lived within ½ mile of Toms River Coal	Never	21	87	1.0	-
Gas Site	Ever	1	1	4.00	0.25 - 64.0

Table 19: page 9 of 24

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Total Time Expos	ure: Leukei	mia Diagnosi	s Ages 0 thro	ugh 4	
Lived within ½ mile of Ciba-Geigy	Never	7	32	1.0	-
	Ever	2	4	3.00	0.27 - 33.1
Lived within ½ mile of Ciba-Geigy Pipeline	Never	4	30	1.0	-
	Ever	5	5	7.09	1.32 - 38.2
Lived within ½ mile of a Break in Ciba-	Never	7	34	1.0	-
Geigy Pipeline	Ever	2	1	8.00	0.73 - 88.2
Lived within ½ mile of Toms River	Never	8	32	1.0	-
Section	Ever	1	4	1.00	0.07 - 13.7
Lived within ½ mile of Reich Farm	Never Ever	9 0	34 2	1.0 0	-
Lived within ½ mile of Dover Township	Never	9	36	1.0	
Municipal Landfill	Ever	0	0	-	
Lived within ½ mile of Ocean County Landfill	Never Ever	9 0	36 0	1.0 0	-
Lived within ½ mile of Toms River Coal	Never	9	35	1.0	-
Gas Site	Ever	0	1	0	

Table 19: page 10 of 24

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal Exposu	ıre: Leukem	nia Diagnosis	Ages 0 throu	ıgh 4	
Lived within ½ mile of Ciba-Geigy	Never	7	32	1.0	-
	Ever	2	3	4.29	0.37 - 50.4
Lived within ½ mile of Ciba-Geigy Pipeline	Never	6	33	1.0	-
	Ever	3	2	5.67	0.95 - 34.0
Lived within ½ mile of a Break in Ciba-	Never	9	35	1.0	-
Geigy Pipeline	Ever	0	0	-	-
Lived within ½ mile of Toms River	Never	8	33	1.0	-
Section	Ever	1	2	2.00	0.18 - 22.1
Lived within ½ mile of Reich Farm	Never	9	34	1.0	-
	Ever	0	1	0	-
Lived within ½ mile of Dover Township	Never	9	35	1.0	-
Municipal Landfill	Ever	0	0	-	-
Lived within ½ mile of Ocean County Landfill	Never Ever	9 0	35 0	1.0 -	-
Lived within ½ mile of Toms River Coal	Never	9	35	1.0	-
Gas Site	Ever	0	0	-	

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Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval					
Postnatal Expos	Postnatal Exposure: Leukemia Diagnosis Ages 0 through 4									
Lived within ½ mile of Ciba-Geigy	Never	8	32	1.0	-					
	Ever	1	4	1.00	0.09 - 11.6					
Lived within ½ mile of Ciba-Geigy Pipeline	Never	5	30	1.0	-					
	Ever	4	5	5.53	0.95 - 32.2					
Lived within ½ mile of a Break in Ciba-	Never	7	34	1.0	-					
Geigy Pipeline	Ever	2	1	8.00	0.73 - 88.2					
Lived within ½ mile of Toms River	Never	8	32	1.0	-					
Section	Ever	1	4	1.00	0.07 - 13.7					
Lived within ½ mile of Reich Farm	Never	9	34	1.0	-					
	Ever	0	2	0	-					
Lived within ½ mile of Dover Township	Never	9	36	1.0	-					
Municipal Landfill	Ever	0	0	-	-					
Lived within ½ mile of Ocean County Landfill	Never Ever	9 0	36 0	1.0	-					
Lived within ½ mile of Toms River Coal	Never	9	35	1.0	-					
Gas Site	Ever	0	1	0						

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Table 19c. Interview Study Analysis of Proximity to Sites of Concern: Nervous System Cancers

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval				
Total Time Exposure: Ne	Total Time Exposure: Nervous System Cancer Diagnosis Ages 0 through 19								
Lived within ½ mile of Ciba-Geigy	Never	15	68	1.0	-				
	Ever	3	3	5.04	0.82 - 31.0				
Lived within ½ mile of Ciba-Geigy Pipeline	Never	15	56	1.0	-				
	Ever	3	15	0.76	0.20 - 2.83				
Lived within ½ mile of a Break in Ciba-	Never	17	66	1.0	-				
Geigy Pipeline	Ever	1	5	0.80	0.09 - 6.85				
Lived within ½ mile of Toms River	Never	15	67	1.0	-				
Section	Ever	3	4	3.00	0.67 - 13.4				
Lived within ½ mile of Reich Farm	Never	18	70	1.0	-				
	Ever	0	1	0	-				
Lived within ½ mile of Dover Township	Never	18	70	1.0	-				
Municipal Landfill	Ever	0	1	0	-				
Lived within ½ mile of Ocean County Landfill	Never Ever	18 0	71 0	1.0	- -				
Lived within ½ mile of Toms River Coal Gas Site	Never	17	70	1.0	-				
	Ever	1	1	4.00	0.25 - 64.0				

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal Exposure: Ner	vous Syster	n Cancer Dia	gnosis Ages () througl	h 19
Lived within ½ mile of Ciba-Geigy	Never	17	69	1.0	-
	Ever	1	1	4.00	0.25 - 64.0
Lived within ½ mile of Ciba-Geigy Pipeline	Never	16	63	1.0	-
	Ever	2	7	1.11	0.22 - 5.62
Lived within ½ mile of a Break in Ciba-	Never	18	69	1.0	-
Geigy Pipeline	Ever	0	1	0	-
Lived within ½ mile of Toms River	Never	16	68	1.0	-
Section	Ever	2	2	3.72	0.52 - 26.5
Lived within ½ mile of Reich Farm	Never	18	70	1.0	<u>-</u>
	Ever	0	0	-	-
Lived within ½ mile of Dover Township	Never	18	70	1.0	-
Municipal Landfill	Ever	0	0	-	-
Lived within ½ mile of Ocean County Landfill	Never	18	70	1.0	-
	Ever	0	0	-	-
Lived within ½ mile of Toms River Coal	Never	17	69	1.0	-
Gas Site	Ever	1	1	4.00	0.25 - 64.0

Table 19: page 14 of 24

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Postnatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 19								
Lived within ½ mile of Ciba-Geigy	Never	15	68	1.0	-			
	Ever	3	3	5.04	0.82 - 31.0			
Lived within ½ mile of Ciba-Geigy Pipeline	Never	15	56	1.0	-			
	Ever	3	15	0.76	0.20 - 2.83			
Lived within ½ mile of a Break in Ciba-	Never	17	66	1.0	-			
Geigy Pipeline	Ever	1	5	0.80	0.09 - 6.85			
Lived within ½ mile of Toms River	Never	15	67	1.0	-			
Section	Ever	3	4	3.00	0.67 - 13.4			
Lived within ½ mile of Reich Farm	Never Ever	18 0	70 1	1.0 0	-			
Lived within ½ mile of Dover Township	Never	18	70	1.0	-			
Municipal Landfill	Ever	0	1	0				
Lived within ½ mile of Ocean County Landfill	Never Ever	18 0	71 0	1.0	- -			
Lived within ½ mile of Toms River Coal	Never	17	70	1.0	-			
Gas Site	Ever	1	1	4.00	0.25 - 64.0			

Table 19: page 15 of 24

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Total Time Exposure: Nervous System Cancer Diagnosis Ages 0 through 4								
Lived within ½ mile of Ciba-Geigy	Never	9	35	1.0	-			
	Ever	0	0	-	-			
Lived within ½ mile of Ciba-Geigy Pipeline	Never	8	28	1.0	-			
	Ever	1	7	0.52	0.06 - 4.55			
Lived within ½ mile of a Break in Ciba-	Never	9	34	1.0	-			
Geigy Pipeline	Ever	0	1	0	-			
Lived within ½ mile of Toms River	Never	8	33	1.0	-			
Section	Ever	1	2	2.00	0.18 - 22.1			
Lived within ½ mile of Reich Farm	Never	9	35	1.0	<u>-</u>			
	Ever	0	0	-	-			
Lived within ½ mile of Dover Township	Never	9	35	1.0	-			
Municipal Landfill	Ever	0	0	-				
Lived within ½ mile of Ocean County Landfill	Never	9	35	1.0	-			
	Ever	0	0	-	-			
Lived within ½ mile of Toms River Coal	Never	8	35	1.0	-			
Gas Site	Ever	1	0	-	-			

Table 19: page 16 of 24

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Prenatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 4								
Lived within ½ mile of Ciba-Geigy	Never Ever	9 0	35 0	1.0 -	-			
Lived within ½ mile of Ciba-Geigy Pipeline	Never Ever	8 1	30 5	1.0 0.74	- 0.08 - 6.87			
Lived within ½ mile of a Break in Ciba- Geigy Pipeline	Never Ever	9 0	34 1	1.0 0	-			
Lived within ½ mile of Toms River Section	Never Ever	8 1	34 1	1.0 4.00	- 0.25 - 64.0			
Lived within ½ mile of Reich Farm	Never Ever	9 0	35 0	1.0	- -			
Lived within ½ mile of Dover Township Municipal Landfill	Never Ever	9 0	35 0	1.0 -	-			
Lived within ½ mile of Ocean County Landfill	Never Ever	9 0	35 0	1.0	-			
Lived within ½ mile of Toms River Coal Gas Site	Never Ever	8 1	35 0	1.0	-			

Table 19: page 17 of 24

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Postnatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 4								
Lived within ½ mile of Ciba-Geigy	Never	9	35	1.0	-			
	Ever	0	0	-	-			
Lived within ½ mile of Ciba-Geigy Pipeline	Never	8	28	1.0	-			
	Ever	1	7	0.52	0.06 - 4.55			
Lived within ½ mile of a Break in Ciba-	Never	9	34	1.0	-			
Geigy Pipeline	Ever	0	1	0				
Lived within ½ mile of Toms River	Never	8	33	1.0	-			
Section	Ever	1	2	2.00	0.18 - 22.1			
Lived within ½ mile of Reich Farm	Never Ever	9 0	35 0	1.0	- -			
Lived within ½ mile of Dover Township	Never	9	35	1.0	-			
Municipal Landfill	Ever	0	0	-				
Lived within ½ mile of Ocean County Landfill	Never Ever	9 0	35 0	1.0 -	-			
Lived within ½ mile of Toms River Coal	Never	8	35	1.0	-			
Gas Site	Ever	1	0	-				

Table 19: page 18 of 24

Table 19d. Interview Study Analysis of Proximity to Sites of Concern: Brain and Central Nervous System Cancers

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Total Time Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 19								
Lived within ½ mile of Ciba-Geigy	Never	10	49	1.0	-			
	Ever	3	3	5.04	0.82 - 31.0			
Lied within ½ mile of Ciba-Geigy	Never	11	42	1.0	-			
Pipeline	Ever	2	10	0.78	0.16 - 3.87			
Lived within ½ mile of a Break in Ciba-	Never	12	48	1.0	-			
Geigy Pipeline	Ever	1	4	1.00	0.11 - 8.95			
Lived within ½ mile of Toms River	Never	11	48	1.0	-			
Section	Ever	2	4	2.00	0.37 - 10.9			
Lived within ½ mile of Reich Farm	Never	13	51	1.0	-			
	Ever	0	1	0	-			
Lived within ½ mile of Dover Township	Never	13	51	1.0	-			
Municipal Landfill	Ever	0	1	0	-			
Lived within ½ mile of Ocean County Landfill	Never Ever	13 0	52 0	1.0	-			
Lived within ½ mile of Toms River Coal	Never	13	51	1.0	-			
Gas Site	Ever	0	1	0				

Table 19: page 19 of 24

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal Exposure: Brain and Co	entral Nervo	ous System Ca	ancer Diagno	sis Ages	0 through 19
Lived within ½ mile of Ciba-Geigy	Never	12	50	1.0	-
	Ever	1	1	4.00	0.25 - 64.0
Lived within ½ mile of Ciba-Geigy Pipeline	Never	12	48	1.0	-
	Ever	1	3	1.33	0.14 - 12.8
Lived within ½ mile of a Break in Ciba-	Never	13	51	1.0	-
Geigy Pipeline	Ever	0	0	-	
Lived within ½ mile of Toms River	Never	12	49	1.0	-
Section	Ever	1	2	1.81	0.16 - 20.1
Lived within ½ mile of Reich Farm	Never Ever	13 0	51 0	1.0 -	-
Lived within ½ mile of Dover Township	Never	13	51	1.0	-
Municipal Landfill	Ever	0	0	-	
Lived within ½ mile of Ocean County Landfill	Never Ever	13 0	51 0	1.0 -	-
Lived within ½ mile of Toms River Coal	Never	13	50	1.0	-
Gas Site	Ever	0	1	0	-

Table 19: page 20 of 24

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Postnatal Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 19								
Lived within ½ mile of Ciba-Geigy	Never	10	49	1.0	-			
	Ever	3	3	5.04	0.82 - 31.0			
Lived within ½ mile of Ciba-Geigy Pipeline	Never	11	42	1.0	-			
	Ever	2	10	0.78	0.16 - 3.87			
Lived within ½ mile of a Break in Ciba-	Never	12	48	1.0	-			
Geigy Pipeline	Ever	1	4	1.00	0.11 - 8.95			
Lived within ½ mile of Toms River	Never	11	48	1.0	-			
Section	Ever	2	4	2.00	0.37 - 10.9			
Lived within ½ mile of Reich Farm	Never Ever	13 0	51 1	1.0 0	-			
Lived within ½ mile of Dover Township	Never	13	51	1.0	-			
Municipal Landfill	Ever	0	1	0	-			
Lived within ½ mile of Ocean County Landfill	Never Ever	13 0	52 0	1.0 -	-			
Lived within ½ mile of Toms River Coal	Never	13	51	1.0	-			
Gas Site	Ever	0	1	0	-			

Table 19: page 21 of 24

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Total Time Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 4								
Lived within ½ mile of Ciba-Geigy	Never Ever	4 0	16 0	1.0 -	-			
Lived within ½ mile of Ciba-Geigy Pipeline	Never Ever	4 0	14 2	1.0 0	-			
Lived within ½ mile of a Break in Ciba- Geigy Pipeline	Never Ever	4 0	16 0	1.0 -	-			
Lived within ½ mile of Toms River Section	Never Ever	4 0	14 2	1.0 0	- -			
Lived within ½ mile of Reich Farm	Never Ever	4 0	16 0	1.0 -	-			
Lived within ½ mile of Dover Township Municipal Landfill	Never Ever	4 0	16 0	1.0	- -			
Lived within ½ mile of Ocean County Landfill	Never Ever	4 0	16 0	1.0	-			
Lived within ½ mile of Toms River Coal Gas Site	Never Ever	4 0	16 0	1.0 -	- -			

Table 19: page 22 of 24

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Prenatal Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 4								
Lived within ½ mile of Ciba-Geigy	Never Ever	4 0	16 0	1.0 -	-			
Lived within ½ mile of Ciba-Geigy Pipeline	Never Ever	4 0	15 1	1.0 0	-			
Lived within ½ mile of a Break in Ciba- Geigy Pipeline	Never Ever	4 0	16 0	1.0 -	-			
Lived within ½ mile of Toms River Section	Never Ever	4 0	15 1	1.0 0	- -			
Lived within ½ mile of Reich Farm	Never Ever	4 0	16 0	1.0 -	-			
Lived within ½ mile of Dover Township Municipal Landfill	Never Ever	4 0	16 0	1.0	- -			
Lived within ½ mile of Ocean County Landfill	Never Ever	4 0	16 0	1.0 -	-			
Lived within ½ mile of Toms River Coal Gas Site	Never Ever	4 0	16 0	1.0 -	- -			

Table 19: page 23 of 24

Sites of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Postnatal Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through								
Lived within ½ mile of Ciba-Geigy	Never	4	16	1.0	-			
	Ever	0	0	-	-			
Lived within ½ mile of Ciba-Geigy Pipeline	Never	4	14	1.0	-			
	Ever	0	2	0	-			
Lived within ½ mile of a Break in Ciba-	Never	4	16	1.0	-			
Geigy Pipeline	Ever	0	0	-	-			
Lived within ½ mile of Toms River	Never	4	14	1.0	-			
Section	Ever	0	2	0	-			
Lived within ½ mile of Reich Farm	Never Ever	4 0	16 0	1.0 -	-			
Lived within ½ mile of Dover Township	Never	4	16	1.0	-			
Municipal Landfill	Ever	0	0	-	-			
Lived within ½ mile of Ocean County Landfill	Never	4	16	1.0	-			
	Ever	0	0	-	-			
Lived within ½ mile of Toms River Coal	Never	4	16	1.0	-			
Gas Site	Ever	0	0	-	-			

Table 20a. Interview Study Analysis of Proximity to Sites of Concern by Sex: Leukemia and Nervous System Cancers

au	_		Male Femal				male		
Sites of Concern	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Total Time Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 19									
Lived within ½ mile of Ciba-	Never	18	71	1.0	-	17	76	1.0	-
Geigy	Ever	2	8	1.00	0.20 - 5.12	3	4	4.16	0.66 - 26.1
Lived within ½ mile of Ciba-	Never	16	56	1.0	-	10	64	1.0	-
Geigy Pipeline	Ever	4	23	0.60	0.18 - 2.03	10	15	3.62	1.34 - 9.76
Lived within ½ mile of a	Never	20	71	1.0	1 1	15	73	1.0	-
Break in Ciba-Geigy Pipeline	Ever	0	8	0		5	6	3.33	1.02 - 10.9
Lived within ½ mile of Toms	Never	18	70	1.0	-	17	71	1.0	-
River Section	Ever	2	9	0.87	0.16 - 4.66	3	9	1.42	0.33 - 6.07
Prenatal Exp	osure: Leul	kemia a	nd Nervou	s System	Cancer Diag	nosis Ag	jes 0 throu	gh 19	
Lived within ½ mile of Ciba-	Never	19	74	1.0	-	18	77	1.0	-
Geigy	Ever	1	4	1.00	0.10 - 10.1	2	2	6.00	0.52 - 69.5
Lived within ½ mile of Ciba-	Never	19	71	1.0	-	15	73	1.0	-
Geigy Pipeline	Ever	1	7	0.53	0.06 - 4.52	5	6	3.25	0.99 - 10.6
Lived within ½ mile of a Break in Ciba-Geigy Pipeline	Never Ever	20 0	78 0	1.0 -	-	19 1	78 1	1.0 4.00	- 0.25 - 64.0
Lived within ½ mile of Toms	Never	18	74	1.0	-	18	76	1.0	-
River Section	Ever	2	4	2.05	0.33 - 12.7	2	3	2.67	0.45 - 16.0

au	_		Male			Fe	emale		
Sites of Concern	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Postnatal Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 19									
Lived within ½ mile of Ciba-	Never	18	71	1.0	-	18	76	1.0	-
Geigy	Ever	2	8	1.00	0.20 - 5.12	2	4	2.17	0.35 - 13.5
Lived within ½ mile of Ciba-	Never	16	56	1.0	-	11	64	1.0	-
Geigy Pipeline	Ever	4	23	0.60	0.18 - 2.03	9	15	3.20	1.16 - 8.84
Lived within ½ mile of a	Never	20	71	1.0	1 1	15	73	1.0	-
Break in Ciba-Geigy Pipeline	Ever	0	8	0		5	6	3.33	1.02 - 10.9
Lived within ½ mile of Toms	Never	18	70	1.0	-	17	71	1.0	-
River Section	Ever	2	9	0.87	0.16 - 4.66	3	9	1.42	0.33 - 6.07
Total Time Ex	xposure: Le	ukemia	and Nervo	us Syste	m Cancer Dia	ignosis <i>A</i>	Ages 0 thro	ugh 4	
Lived within ½ mile of Ciba- Geigy	Never Ever	6 0	21 2	1.0 0		10 2	46 2	1.0 -	-
Lived within ½ mile of Ciba-	Never	5	16	1.0	-	7	42	1.0	-
Geigy Pipeline	Ever	1	7	0.45	0.04 - 4.63	5	5	4.39	1.16 - 16.6
Lived within ½ mile of a	Never	6	23	1.0	-	10	45	1.0	-
Break in Ciba-Geigy Pipeline	Ever	0	0	-		2	2	4.00	0.56 - 28.4
Lived within ½ mile of Toms	Never	6	22	1.0	-	10	43	1.0	-
River Section	Ever	0	1	0		2	5	1.85	0.28 - 12.4

211 5.0			ľ	/lale			Fe	male		
Sites of Concern	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
Prenatal Ex	Prenatal Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 4									
Lived within ½ mile of Ciba-	Never	6	21	1.0	-	10	46	1.0	-	
Geigy	Ever	0	2	0	-	2	1	-		
Lived within ½ mile of Ciba-	Never	5	19	1.0	-	9	44	1.0	-	
Geigy Pipeline	Ever	1	4	0.93	0.09 - 9.34	3	3	3.81	0.77 - 18.9	
Lived within ½ mile of a Break in Ciba-Geigy Pipeline	Never Ever	6 0	23 0	1.0 -	-	12 0	46 1	1.0 0	-	
Lived within ½ mile of Toms	Never	6	22	1.0	-	10	45	1.0	-	
River Section	Ever	0	1	0		2	2	4.00	0.56 - 28.4	
Postnatal Ex	posure: Le	ukemia a	and Nervo	us Syste	m Cancer Dia	gnosis A	ges 0 thro	ugh 4		
Lived within ½ mile of Ciba-	Never	6	21	1.0	-	11	46	1.0	-	
Geigy	Ever	0	2	0		1	2	2.45	0.14 - 42.6	
Lived within ½ mile of Ciba-	Never	5	16	1.0	-	8	42	1.0	-	
Geigy Pipeline	Ever	1	7	0.45	0.04 - 4.63	4	5	3.56	0.88 - 14.5	
Lived within ½ mile of a Break in Ciba-Geigy Pipeline	Never Ever	6 0	23 0	1.0 -	-	10 2	45 2	1.0 4.00	- 0.56 - 28.4	
Lived within ½ mile of Toms	Never	6	22	1.0	-	10	43	1.0	-	
River Section	Ever	0	1	0		2	5	1.85	0.28 - 12.4	

Table 20b. Interview Study Analysis of Proximity to Sites of Concern by Sex: Leukemia

au	_		N	/lale			Fe	male		
Sites of Concern	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
Total Time Exposure: Leukemia Diagnosis Ages 0 through 19										
Lived within ½ mile of Ciba-	Never	9	31	1.0	-	11	48	1.0	-	
Geigy	Ever	0	5	0		2	4	2.45	0.33 - 18.4	
Lived within ½ mile of Ciba-	Never	7	23	1.0	-	4	41	1.0	-	
Geigy Pipeline	Ever	2	13	0.47	0.08 - 2.84	9	10	6.97	1.83 - 26.5	
Lived within ½ mile of a	Never	9	31	1.0	-	9	47	1.0	-	
Break in Ciba-Geigy Pipeline	Ever	0	5	0		4	4	4.00	1.00 - 16.0	
Lived within ½ mile of Toms	Never	8	29	1.0	-	12	45	1.0	-	
River Section	Ever	1	7	0.49	0.05 - 4.93	1	7	0.49	0.05 - 4.93	
	Prenatal	Exposur	e: Leukem	ia Diagn	osis Ages 0 tl	rough 1	9			
Lived within ½ mile of Ciba-	Never	9	33	1.0	-	11	49	1.0	-	
Geigy	Ever	0	3	0		2	2	6.00	0.52 - 69.5	
Lived within ½ mile of Ciba- Geigy Pipeline	Never Ever	9	33 3	1.0 0	1 1	9 4	48 3	1.0 5.12	- 1.14 - 22.9	
Lived within ½ mile of a Break in Ciba-Geigy Pipeline	Never Ever	9 0	36 0	1.0 -	-	12 1	51 0	1.0 -	-	
Lived within ½ mile of Toms	Never	8	33	1.0	-	12	49	1.0	-	
River Section	Ever	1	3	1.40	0.12 - 16.4	1	2	2.00	0.18 - 22.1	

211 6.0			N	/lale			Fe	male			
Sites of Concern	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI		
	Postnatal Exposure: Leukemia Diagnosis Ages 0 through 19										
Lived within ½ mile of Ciba- Geigy	Never Ever	9	31 5	1.0 0	-	12 1	48 4	1.0 1.00	- 0.10 - 10.1		
Lived within ½ mile of Ciba- Geigy Pipeline	Never Ever	7 2	23 13	1.0 0.47	- 0.08 - 2.84	5 8	41 10	1.0 6.00	- 1.54 - 23.4		
Lived within ½ mile of a Break in Ciba-Geigy Pipeline	Never Ever	9	31 5	1.0 0	-	9 4	47 4	1.0 4.00	- 1.00 - 16.0		
Lived within ½ mile of Toms River Section	Never Ever	8 1	29 7	1.0 0.49	- 0.05 - 4.93	12 1	45 7	1.0 0.49	- 0.05 - 4.93		
	Total Time	e Exposu	ıre: Leuker	mia Diag	gnosis Ages 0	through	1 4				
Lived within ½ mile of Ciba- Geigy	Never Ever	2 0	6 2	1.0 0	-	5 2	26 2	1.0 -	-		
Lived within ½ mile of Ciba- Geigy Pipeline	Never Ever	2 0	5 3	1.0 0	- -	2 5	25 2	1.0 16.9	- 1.94 - 146		
Lived within ½ mile of a Break in Ciba-Geigy Pipeline	Never Ever	2 0	8 0	1.0 -	-	5 2	26 1	1.0 8.00	- 0.73 - 88.2		
Lived within ½ mile of Toms River Section	Never Ever	2 0	7 1	1.0 0	-	6 1	25 3	1.0 1.63	- 0.08 - 34.6		

011 60	_		N	/lale			Fe	male		
Sites of Concern	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
Prenatal Exposure: Leukemia Diagnosis Ages 0 through 4										
Lived within ½ mile of Ciba- Geigy	Never Ever	2 0	6 2	1.0 0	-	5 2	26 1	1.0 -	-	
Lived within ½ mile of Ciba- Geigy Pipeline	Never Ever	2 0	7 1	1.0 0		4 3	26 1	1.0 11.2	- 1.16 - 108	
Lived within ½ mile of a Break in Ciba-Geigy Pipeline	Never Ever	2 0	8 0	1.0 -		7 0	27 0	1.0 -	-	
Lived within ½ mile of Toms River Section	Never Ever	2 0	7 1	1.0 0	-	6 1	26 1	1.0 4.00	- 0.25 - 64.0	
	Postnata	l Exposu	re: Leuken	nia Diag	nosis Ages 0	through	4			
Lived within ½ mile of Ciba- Geigy	Never Ever	2 0	6 2	1.0 0	-	6 1	26 2	1.0 2.45	- 0.14 - 42.6	
Lived within ½ mile of Ciba- Geigy Pipeline	Never Ever	2 0	5 3	1.0 0	-	3 4	25 2	1.0 13.7	- 1.51 - 125	
Lived within ½ mile of a Break in Ciba-Geigy Pipeline	Never Ever	2 0	8 0	1.0 -	-	5 2	26 1	1.0 8.00	0.73 - 88.2	
Lived within ½ mile of Toms River Section	Never Ever	2 0	7 1	1.0 0	-	6 1	25 3	1.0 1.63	0.08 - 34.6	

Table 20c. Interview Study Analysis of Proximity to Sites of Concern by Sex: Nervous System Cancers

	_		ľ	/lale			Fe	male	
Sites of Concern	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Total Time Exposure: Nervous System Cancer Diagnosis Ages 0 through 19									
Lived within ½ mile of Ciba-	Never	9	40	1.0	-	6	28	1.0	-
Geigy	Ever	2	3	3.15	0.43 - 23.4	1	0	-	
Lived within ½ mile of Ciba-	Never	9	33	1.0	-	6	23	1.0	-
Geigy Pipeline	Ever	2	10	0.75	0.15 - 3.81	1	5	0.79	0.08 - 7.28
Lived within ½ mile of a	Never	11	40	1.0		6	26	1.0	-
Break in Ciba-Geigy Pipeline	Ever	0	3	0		1	2	2.00	0.18 - 22.1
Lived within ½ mile of Toms	Never	10	41	1.0	-	5	26	1.0	-
River Section	Ever	1	2	2.00	0.18 - 22.1	2	2	4.00	0.56 - 28.4
Pren	atal Exposu	re: Nerv	ous Syster	n Cancei	Diagnosis A	ges 0 thi	ough 19		
Lived within ½ mile of Ciba-	Never	10	41	1.0	-	7	28	1.0	-
Geigy	Ever	1	1	4.00	0.25 - 64.0	0	0	-	
Lived within ½ mile of Ciba-	Never	10	38	1.0	-	6	25	1.0	-
Geigy Pipeline	Ever	1	4	0.93	0.09 - 9.34	1	3	1.33	0.14 - 12.8
Lived within ½ mile of a	Never	11	42	1.0	-	7	27	1.0	-
Break in Ciba-Geigy Pipeline	Ever	0	0	-	-	0	1	0	-
Lived within ½ mile of Toms	Never	10	41	1.0	-	6	27	1.0	-
River Section	Ever	1	1	3.46	0.22 - 55.8	1	1	4.00	0.25 - 64.0

au	_		N	/lale			Fe	male		
Sites of Concern	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI 0.08 - 7.28 - 0.18 - 22.1	
Postr	Postnatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 19									
Lived within ½ mile of Ciba-	Never	9	40	1.0	-	6	28	1.0	-	
Geigy	Ever	2	3	3.15	0.43 - 23.4	1	0	-		
Lived within ½ mile of Ciba-	Never	9	33	1.0	-	6	23	1.0	-	
Geigy Pipeline	Ever	2	10	0.75	0.15 - 3.81	1	5	0.79	0.08 - 7.28	
Lived within ½ mile of a	Never	11	40	1.0	1 1	6	26	1.0	-	
Break in Ciba-Geigy Pipeline	Ever	0	3	0		1	2	2.00	0.18 - 22.1	
Lived within ½ mile of Toms	Never	10	41	1.0	-	5	26	1.0	-	
River Section	Ever	1	2	2.00	0.18 - 22.1	2	2	4.00	0.56 - 28.4	
Total	Time Expos	sure: Ne	rvous Syste	em Canc	er Diagnosis	Ages 0 t	hrough 4			
Lived within ½ mile of Ciba- Geigy	Never Ever	4 0	15 0	1.0 -		5 0	20 0	1.0 -	-	
Lived within ½ mile of Ciba-	Never	3	11	1.0	-	5	17	1.0	-	
Geigy Pipeline	Ever	1	4	0.93	0.08 - 10.5	0	3	0		
Lived within ½ mile of a Break in Ciba-Geigy Pipeline	Never Ever	4 0	15 0	1.0 -	-	5 0	19 1	1.0 0	-	
Lived within ½ mile of Toms	Never	4	15	1.0	-	4	18	1.0	-	
River Section	Ever	0	0	-	-	1	2	2.00	0.18 - 22.1	

au	_		N	l ale			Fe	male		
Sites of Concern	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI 0.25 - 64.0	
Prer	Prenatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 4									
Lived within ½ mile of Ciba- Geigy	Never Ever	4 0	15 0	1.0 -	1 1	5 0	20 0	1.0 -	-	
Lived within ½ mile of Ciba- Geigy Pipeline	Never Ever	3 1	12 3	1.0 1.28	- 0.11 - 14.8	5 0	18 2	1.0 0	-	
Lived within ½ mile of a Break in Ciba-Geigy Pipeline	Never Ever	4 0	15 0	1.0 -	1 1	5 0	19 1	1.0 0	-	
Lived within ½ mile of Toms River Section	Never Ever	4 0	15 0	1.0 -	1 1	4 1	19 1	1.0 4.00	- 0.25 - 64.0	
Post	natal Expos	ure: Ner	vous Syste	m Cance	er Diagnosis I	Ages 0 th	rough 4			
Lived within ½ mile of Ciba- Geigy	Never Ever	4 0	15 0	1.0 -		5 0	20 0	1.0 -	-	
Lived within ½ mile of Ciba- Geigy Pipeline	Never Ever	3 1	11 4	1.0 0.93	- 0.08 - 10.5	5 0	17 3	1.0 0	-	
Lived within ½ mile of a Break in Ciba-Geigy Pipeline	Never Ever	4 0	15 0	1.0 -	-	5 0	19 1	1.0 0	-	
Lived within ½ mile of Toms River Section	Never Ever	4 0	15 0	1.0 -	-	4 1	18 2	1.0 2.00	- 0.18 - 22.1	

Table 20d. Interview Study Analysis of Proximity to Sites of Concern by Sex: Brain and Central Nervous System Cancers

	_		N	/lale			Fe	male	
Sites of Concern	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Total Time Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 19									
Lived within ½ mile of Ciba-	Never	6	29	1.0	-	4	20	1.0	-
Geigy	Ever	2	3	3.15	0.43 - 23.4	1	0	-	-
Lived within ½ mile of Ciba-	Never	7	26	1.0	-	4	16	1.0	-
Geigy Pipeline	Ever	1	6	0.63	0.07 - 5.89	1	4	1.00	0.10 - 10.1
Lived within ½ mile of a	Never	8	29	1.0	-	4	19	1.0	-
Break in Ciba-Geigy Pipeline	Ever	0	3	0		1	1	4.00	0.25 - 64.0
Lived within ½ mile of Toms	Never	7	30	1.0	-	4	18	1.0	-
River Section	Ever	1	2	2.00	0.18 - 22.1	1	2	2.00	0.18 - 22.1
Prenatal Expo	sure: Brain	and Cer	ntral Nervo	us Syste	m Cancer Dia	gnosis A	Ages 0 thro	ugh 19	
Lived within ½ mile of Ciba-	Never	7	30	1.0	-	5	20	1.0	-
Geigy	Ever	1	1	4.00	0.25 - 64.0	0	0	-	
Lived within ½ mile of Ciba- Geigy Pipeline	Never Ever	8 0	30 1	1.0 0	1 1	4 1	18 2	1.0 2.00	- 0.18 - 22.1
Lived within ½ mile of a Break in Ciba-Geigy Pipeline	Never Ever	8	31 0	1.0 -	-	5 0	20 0	1.0 -	-
Lived within ½ mile of Toms	Never	7	30	1.0	-	5	19	1.0	-
River Section	Ever	1	1	3.46	0.22 - 55.8	0	1	0	

au			ľ	/lale			Fe	male		
Sites of Concern	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
Postnatal Expo	Postnatal Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 19									
Lived within ½ mile of Ciba- Geigy	Never Ever	6 2	29 3	1.0 3.15	- 0.43 - 23.4	4 1	20 0	1.0 -	-	
Lived within ½ mile of Ciba- Geigy Pipeline	Never Ever	7 1	26 6	1.0 0.63	- 0.07 - 5.89	4 1	16 4	1.0 1.00	- 0.10 - 10.1	
Lived within ½ mile of a Break in Ciba-Geigy Pipeline	Never Ever	8	29 3	1.0 0	-	4 1	19 1	1.0 4.00	- 0.25 - 64.0	
Lived within ½ mile of Toms River Section	Never Ever	7 1	30 2	1.0 2.00	- 0.18 - 22.1	4 1	18 2	1.0 2.00	- 0.18 - 22.1	
Total Time Exp	osure: Brai	n and Co	entral Ner	vous Sys	tem Cancer D	iagnosis	Ages 0 th	rough 4		
Lived within ½ mile of Ciba- Geigy	Never Ever	1 0	4 0	1.0 -	- -	3 0	12 0	1.0 -	- -	
Lived within ½ mile of Ciba- Geigy Pipeline	Never Ever	1 0	4 0	1.0 -	-	3 0	10 2	1.0 0	-	
Lived within ½ mile of a Break in Ciba-Geigy Pipeline	Never Ever	1 0	4 0	1.0 -	-	3 0	12 0	1.0 -	-	
Lived within ½ mile of Toms River Section	Never Ever	1 0	4 0	1.0 -	- -	3 0	10 2	1.0 0	-	

211 5.0			N	/lale			Fe	male			
Sites of Concern	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI		
Prenatal Expo	Prenatal Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 4										
Lived within ½ mile of Ciba- Geigy	Never Ever	1 0	4 0	1.0 -	-	3 0	12 0	1.0	-		
Lived within ½ mile of Ciba- Geigy Pipeline	Never Ever	1 0	4 0	1.0 -		3	11 1	1.0 0			
Lived within ½ mile of a Break in Ciba-Geigy Pipeline	Never Ever	1 0	4 0	1.0 -		3	12 0	1.0			
Lived within ½ mile of Toms River Section	Never Ever	1 0	4 0	1.0	-	3 0	11 1	1.0 0	-		
Postnatal Exp	osure: Braii	n and Ce	entral Nerv	ous Syst	em Cancer Di	iagnosis	Ages 0 thr	ough 4			
Lived within ½ mile of Ciba- Geigy	Never Ever	1 0	4 0	1.0 -	-	3 0	12 0	1.0 -	-		
Lived within ½ mile of Ciba- Geigy Pipeline	Never Ever	1 0	4 0	1.0 -	-	3 0	10 2	1.0 0	-		
Lived within ½ mile of a Break in Ciba-Geigy Pipeline	Never Ever	1 0	4 0	1.0 -	-	3 0	12 0	1.0	-		
Lived within ½ mile of Toms River Section	Never Ever	1 0	4 0	1.0 -	-	3 0	10 2	1.0 0	- -		

Table 21. Significant (p<.01) Correlation Coefficients Among Select Environmental Indices for Interview Study Subjects During the Total Study Time Period

	Time-specific Parkway Well Field	Time-specific Holly Well Field	Ciba-Geigy Ambient Gas
Time-specific Holly Well Field	25		
Ciba-Geigy Ambient Gas		.36	
Oyster Creek Ambient Gas	37	.51	.21
Indian Head Well Field		.22	.56
Route 70 Well Field			.47
Proximity to Ciba-Geigy Pipeline	.30		
Proximity to Ciba-Geigy Pipeline Breaks	.23		
Proximity to Ciba-Geigy		.26	.81
Proximity to Section of the Toms River		.31	.68

Table 22. Interview Study Parental Occupational Data

	Cases	(n=40)	Controls	(n=159)
Characteristic	Number	Percent/ Average	Number	Percent/ Average
Children with parental occupational data: Birth mother Adoptive/step/custodial mother Birth father Adoptive/step/custodial father	39	97.5	157	98.7
	1	2.5	7	4.4
	40	100.0	156	98.1
	2	5.0	7	4.4
Parents contributing to mother's occupational composite: 1 2 Unknown	38	95.0	153	96.2
	1	2.5	6	3.8
	1	2.5	0	0.0
Parents contributing to father's occupational composite: 1 2 Unknown	38	95.0	153	96.2
	2	5.0	5	3.1
	0	0.0	1	0.6
Total Jobs/Hobbies Reported: Composite Mother Composite Father	155	0=3.9	546	0=3.4
	113	0=2.8	458	0=2.9
Total # Jobs: Composite Mother Composite Father	150	0=3.8	523	0=3.3
	110	0=2.8	437	0=2.7
Total # Hobbies/Short Term or <20 hr/wk Jobs: Composite Mother Composite Father	5 3	0=0.13 0=0.08	23 21	0=0.14 0=0.13

Note: Composite mother includes information on a child's birth, adoptive, step, and/or custodial mother;

Composite father includes information on a child's birth, adoptive, step, and/or custodial father.

Table 23. Interview Study Occupational SOC codes

	Case	es	Controls	
Occupational Group (SOC code)	Number	Percent	Number	Percent
Al	I Mothers			
Executives, administrative and managerial occupations (11-14) Ever Never Unknown	4	10.0	6	3.8
	35	87.5	153	96.2
	1	2.5	0	0.0
Engineers, surveyors and architects (16) Ever Never Unknown	0	0.0	1	0.6
	39	97.5	158	99.4
	1	2.5	0	0.0
Natural sciences and computer, mathematical and operations research (17-18) Ever Never Unknown	0 39 1	0.0 97.5 2.5	0 159 0	0.0 100.0 0.0
Social scientists, social workers, religious workers and lawyers (19-21) Ever Never Unknown	0	0.0	0	0.0
	39	97.5	159	100.0
	1	2.5	0	0.0
Teachers, librarians and counselors (22-25) Ever Never Unknown	7	17.5	15	9.4
	32	80.0	144	90.6
	1	2.5	0	0.0
Health diagnosing and treating practitioners (26-28) Ever Never Unknown	0	0.0	1	0.6
	39	97.5	158	99.4
	1	2.5	0	0.0

	Case	es	Cont	rols
Occupational Group (SOC code)	Number	Percent	Number	Percent
Registered nurses, pharmacists, dieticians, therapists and physician assistants (29-30) Ever Never Unknown	2	5.0	8	5.0
	37	92.5	151	95.0
	1	2.5	0	0.0
Writers, artists, entertainers and athletes (32-34) Ever Never Unknown	0 39 1	0.0 97.5 2.5	0 159 0	0.0 100.0 0.0
Health technologists and technicians (36) Ever Never Unknown	1	2.5	3	1.9
	38	95.0	156	98.1
	1	2.5	0	0.0
Technologists and technicians, except health (37-39) Ever Never Unknown	1	2.5	6	3.8
	38	95.0	153	96.2
	1	2.5	0	0.0
Marketing and sales occupations (40-44) Ever Never Unknown	7	17.5	32	20.1
	32	80.0	127	79.9
	1	2.5	0	0.0
Administrative support occupations, including clerical (45-47) Ever Never Unknown	16	40.0	57	35.8
	23	57.5	102	64.2
	1	2.5	0	0.0
Service occupations (50-52) Ever Never Unknown	7	17.5	31	19.5
	32	80.0	128	80.5
	1	2.5	0	0.0

	Case	es	Controls	
Occupational Group (SOC code)	Number	Percent	Number	Percent
Agricultural, forestry and fishing occupations (55-58) Ever Never Unknown	0	0.0	0	0.0
	39	97.5	159	100.0
	1	2.5	0	0.0
Mechanics and repairers (60-61) Ever Never Unknown	1	2.5	0	0.0
	38	95.0	159	100.0
	1	2.5	0	0.0
Construction and extractive occupations (63-65) Ever Never Unknown	0	0.0	0	0.0
	39	97.5	159	100.0
	1	2.5	0	0.0
Precision production occupations (67-69) Ever Never Unknown	0	0.0	0	0.0
	39	97.5	159	100.0
	1	2.5	0	0.0
Production working occupations (71-78) Ever Never Unknown	0	0.0	1	0.6
	39	97.5	158	99.4
	1	2.5	0	0.0
Transportation and material moving occupations (81-83) Ever Never Unknown	0	0.0	0	0.0
	39	97.5	159	100.0
	1	2.5	0	0.0
Handlers, equipment cleaners, helpers and laborers (85-87) Ever Never Unknown	0 39 1	0.0 97.5 2.5	1 158 0	0.6 99.4 0.0

	Case	es	Controls	
Occupational Group (SOC code)	Number	Percent	Number	Percent
Military (91) Ever Never Unknown	0	0.0	0	0.0
	39	97.5	159	100.0
	1	2.5	0	0.0
High school and undergraduate students Ever Never Unknown	0	0.0	4	2.5
	39	97.5	155	97.5
	1	2.5	0	0.0
Graduate students Ever Never Unknown	0	0.0	1	0.6
	39	97.5	158	99.4
	1	2.5	0	0.0
Homemaker, unemployed, disabled or retired Ever Never Unknown	33 6 1	82.5 15.0 2.5	143 16 0	89.9 10.1 0.0
	II Fathers	i		
Executives, administrative and managerial occupations (11-14) Ever Never Unknown	7	17.5	29	18.2
	33	82.5	129	81.1
	0	0.0	1	0.6
Engineers, surveyors and architects (16) Ever Never Unknown	2	5.0	7	4.4
	38	95.0	151	95.0
	0	0.0	1	0.6
Natural scientists and mathematicians (17-18) Ever Never Unknown	1	2.5	2	1.3
	39	97.5	156	98.1
	0	0.0	1	0.6

	Case	es	Cont	rols
Occupational Group (SOC code)	Number	Percent	Number	Percent
Social scientists, social workers, religious workers and lawyers (19-21) Ever Never	0	0.0	3	1.9
	40	100.0	155	97.5
Unknown	0	0.0	1	0.6
Teachers, librarians and counselors (22-25) Ever Never Unknown	2	5.0	11	6.9
	38	95.0	147	92.5
	0	0.0	1	0.6
Health diagnosing and treating practitioners (26-28) Ever Never Unknown	0	0.0	4	2.5
	40	100.0	154	96.9
	0	0.0	1	0.6
Registered nurses, pharmacists, dieticians, therapists and physician assistants (29-30) Ever Never Unknown	0	0.0	0	0.0
	40	100.0	158	99.4
	0	0.0	1	0.6
Writers, artists, entertainers and athletes (32-34) Ever Never Unknown	3 37 0	7.5 92.5 0.0	2 156 1	1.3 98.1 0.6
Health technologists and technicians (36) Ever Never Unknown	0	0.0	0	0.0
	40	100.0	158	99.4
	0	0.0	1	0.6

	Cas	es	Controls	
Occupational Group (SOC code)	Number	Percent	Number	Percent
Technologists and technicians, except health (37-39) Ever Never Unknown	1	2.5	12	7.5
	39	97.5	146	91.8
	0	0.0	1	0.6
Marketing and sales occupations (40-44) Ever Never Unknown	8	20.0	37	23.3
	32	80.0	121	76.1
	0	0.0	1	0.6
Administrative support occupations, including clerical (45-47) Ever Never Unknown	4	10.0	17	10.7
	36	90.0	141	88.7
	0	0.0	1	0.6
Service occupations (50-52) Ever Never Unknown	4	10.0	29	18.2
	36	90.0	129	81.1
	0	0.0	1	0.6
Agricultural, forestry and fishing occupations (55-58) Ever Never Unknown	2	5.0	3	1.9
	38	95.0	155	97.5
	0	0.0	1	0.6
Mechanics and repairers (60-61) Ever Never Unknown	9	22.5	22	13.8
	31	77.5	136	85.5
	0	0.0	1	0.6
Construction and extractive occupations (63-65) Ever Never Unknown	7	17.5	26	16.4
	33	82.5	132	83.0
	0	0.0	1	0.6

	Cas	es	Controls	
Occupational Group (SOC code)	Number	Percent	Number	Percent
Precision production occupations (67-69)				
Ever	3	7.5	11	6.9
Never	37	92.5	147	92.5
Unknown	0	0.0	1	0.6
Production working occupations (71-78) Ever Never Unknown	5	12.5	11	6.9
	35	87.5	147	92.5
	0	0.0	1	0.6
Transportation and material moving occupations (81-83) Ever Never Unknown	4	10.0	14	8.8
	36	90.0	144	90.6
	0	0.0	1	0.6
Handlers, equipment cleaners, helpers and laborers (85-87) Ever Never Unknown	2 38 0	5.0 95.0 0.0	2 156 1	1.3 98.1 0.6
Military (91) Ever Never Unknown	0	0.0	3	1.9
	40	100.0	155	97.5
	0	0.0	1	0.6
High school and undergraduate students Ever Never Unknown	1	2.5	3	1.9
	39	97.5	155	97.5
	0	0.0	1	0.6
Graduate students Ever Never Unknown	0	0.0	2	1.3
	40	100.0	156	98.1
	0	0.0	1	0.6

	Cases		Controls	
Occupational Group (SOC code)	Number	Percent	Number	Percent
Homemaker, unemployed, disabled or retired				
Ever	2	5.0	12	7.5
Never Unknown	38 0	95.0 0.0	146 1	91.8 0.6

Table 24. Interview Study Occupational NAICS codes

	Cas	ses	Cont	rols
Industry Group (NAICS code)	Number	Percent	Number	Percent
All N	/lothers			
Agriculture, forestry, fishing and hunting (11) Ever Never Unknown	0	0.0	0	0.0
	39	97.5	159	100.0
	1	2.5	0	0.0
Utilities (22) Ever Never Unknown	0	0.0	2	1.3
	39	97.5	157	98.7
	1	2.5	0	0.0
Construction (23) Ever Never Unknown	3	7.5	3	1.9
	36	90.0	156	98.1
	1	2.5	0	0.0
Manufacturing (31-33) Ever Never Unknown	0	0.0	10	6.3
	39	97.5	149	93.7
	1	2.5	0	0.0
Wholesale trade (42) Ever Never Unknown	0	0.0	1	0.6
	39	97.5	158	99.4
	1	2.5	0	0.0
Retail trade (44-45) Ever Never Unknown	8	20.0	38	23.9
	31	77.5	121	76.1
	1	2.5	0	0.0
Transportation and warehousing (48-49) Ever Never Unknown	2	5.0	3	1.9
	37	92.5	156	98.1
	1	2.5	0	0.0

	Cas	ses	Controls	
Industry Group (NAICS code)	Number	Percent	Number	Percent
Information (51) Ever Never Unkn0own	1	2.5	8	5.0
	38	95.0	151	95.0
	1	2.5	0	0.0
Finance and insurance (52) Ever Never Unknown	5	12.5	15	9.4
	34	85.0	144	90.6
	1	2.5	0	0.0
Real estate, rental and leasing (53) Ever Never Unknown	2	5.0	8	5.0
	37	92.5	151	95.0
	1	2.5	0	0.0
Professional, scientific and technical services (54) Ever Never Unknown	2	5.0	8	5.0
	37	92.5	151	95.0
	1	2.5	0	0.0
Management of companies and enterprises (55) Ever Never Unknown	1	2.5	5	3.1
	38	95.0	154	96.9
	1	2.5	0	0.0
Administrative, support, waste management and remediation services (56) Ever Never Unknown	1	2.5	10	6.3
	38	95.0	149	93.7
	1	2.5	0	0.0
Educational services (61) Ever Never Unknown	6	15.0	22	13.8
	33	82.5	137	86.2
	1	2.5	0	0.0

	Cas	es	Controls		
Industry Group (NAICS code)	Number	Percent	Number	Percent	
Health care and social assistance (62) Ever	11	27.5	28	17.6	
Never	28	70.0	131	82.4	
Unknown	1	2.5	0	0.0	
Arts, entertainment and recreation (71) Ever Never Unknown	2	5.0	2	1.3	
	37	92.5	157	98.7	
	1	2.5	0	0.0	
Accommodation and food services (72) Ever Never Unknown	6	15.0	20	12.6	
	33	82.5	139	87.4	
	1	2.5	0	0.0	
Other services, except public administration (81) Ever Never Unknown	4	10.0	6	3.8	
	35	87.5	153	96.2	
	1	2.5	0	0.0	
Public administration (92) Ever Never Unknown	4	10.0	7	4.4	
	35	87.5	152	95.6	
	1	2.5	0	0.0	
Homemaker, unemployed, disabled or retired Ever Never Unknown	34 5 1	85.0 12.5 2.5	143 16 0	89.9 10.1 0.0	
All Fathers					
Agriculture, forestry, fishing and hunting (11) Ever Never Unknown	0	0.0	1	0.6	
	40	100.0	157	98.7	
	0	0.0	1	0.6	

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	Cas	es	Controls	
Industry Group (NAICS code)	Number	Percent	Number	Percent
Utilities (22) Ever Never Unknown	4	10.0	5	3.1
	36	90.0	153	96.2
	0	0.0	1	0.6
Construction (23) Ever Never Unknown	9	22.5	31	19.5
	31	77.5	127	79.9
	0	0.0	1	0.6
Manufacturing (31-33) Ever Never Unknown	7	17.5	24	15.1
	33	82.5	134	84.3
	0	0.0	1	0.6
Wholesale trade (42) Ever Never Unknown	2	5.0	7	4.4
	38	95.0	151	95.0
	0	0.0	1	0.6
Retail Trade (44-45) Ever Never Unknown	7	17.5	36	22.6
	33	82.5	122	76.7
	0	0.0	1	0.6
Transportation and warehousing (48-49) Ever Never Unknown	3	7.5	16	10.1
	37	92.5	142	89.3
	0	0.0	1	0.6
Information (51) Ever Never Unknown	6	15.0	14	8.8
	34	85.0	144	90.6
	0	0.0	1	0.6
Finance and insurance (52) Ever Never Unknown	1	2.5	13	8.2
	39	97.5	145	91.2
	0	0.0	1	0.6

	Cas	ses	Cont	rols
Industry Group (NAICS code)	Number	Percent	Number	Percent
Real estate, rental and leasing (53) Ever Never Unknown	2	5.0	7	4.4
	38	95.0	151	95.0
	0	0.0	1	0.6
Professional, scientific and technical services (54) Ever Never Unknown	2	5.0	12	7.5
	38	95.0	146	91.8
	0	0.0	1	0.6
Management of companies and enterprises (55) Ever Never Unknown	2	5.0	5	3.1
	38	95.0	153	96.2
	0	0.0	1	0.6
Administrative, support, waste management and remediation services (56) Ever Never Unknown	2	5.0	7	4.4
	38	95.0	151	95.0
	0	0.0	1	0.6
Educational services (61) Ever Never Unknown	2	5.0	15	9.4
	38	95.0	143	89.9
	0	0.0	1	0.6
Health care and social assistance (62) Ever Never Unknown	1 39 0	2.5 97.5 0.0	8 150 1	5.0 94.3 0.6
Arts, entertainment and recreation (71) Ever Never Unknown	1	2.5	7	4.4
	39	97.5	151	95.0
	0	0.0	1	0.6

Table 24: page 5 of 6

	Cas	ses	Cont	rols
Industry Group (NAICS code)	Number	Percent	Number	Percent
Accommodation and food services (72)				
Ever Never Unknown	0 40 0	0.0 100.0 0.0	9 149 1	5.7 93.7 0.6
Other services, except public administration (81) Ever Never Unknown	1 39 0	2.5 97.5 0.0	9 149 1	5.7 93.7 0.6
Public administration (92) Ever Never Unknown	6 34 0	15.0 85.0 0.0	30 128 1	18.9 80.5 0.6
Homemaker, unemployed, disabled or retired Ever Never Unknown	2 38 0	5.0 95.0 0.0	12 146 1	7.5 91.8 0.6

Table 25. Interview Study Industrial Hygiene Rating of the Chemicals/Substances and Job Activities at Work

	Cas	es	Cont	rols
IH Rating Group	Number	Percent	Number	Percent
Al	I Mothers			
Solvents, dry cleaning agents and degreasers (A) None Low High Unknown	35 2 2 1	87.5 5.0 5.0 2.5	143 14 2 0	89.9 8.8 1.3 0.0
Paints and thinners (B) None Low High Unknown	38 1 0 1	95.0 2.5 0.0 2.5	147 11 1 0	92.5 6.9 0.6 0.0
Dyes and pigments (C) None Low High Unknown	36 3 0 1	90.0 7.5 0.0 2.5	149 10 0 0	93.7 6.3 0.0 0.0
Petroleum products (D) None Low High Unknown	39 0 0 1	97.5 0.0 0.0 2.5	158 1 0 0	99.4 0.6 0.0 0.0
Pesticides, herbicides & fungicides (E) None Low High Unknown	39 0 0 1	97.5 0.0 0.0 2.5	155 4 0 0	97.5 2.5 0.0 0.0
Plastics and resins (F) None Low High Unknown	36 3 0 1	90.0 7.5 0.0 2.5	139 20 0	87.4 12.6 0.0 0.0

Table 25: page 1 of 5

	Cas	es	Cont	rols
IH Rating Group	Number	Percent	Number	Percent
Metals (G) None Low High Unknown	38	95.0	153	96.2
	1	2.5	6	3.8
	0	0.0	0	0.0
	1	2.5	0	0.0
Radiation, ionizing and low frequency (H) None Low High Unknown	28 10 1 1	70.0 25.0 2.5 2.5	133 26 0	83.7 16.4 0.0 0.0
Painting, printing, dye coloring and graphics (1) Never Ever Unknown	34 5 1	85.0 12.5 2.5	136 23 0	85.5 14.5 0.0
Electrical and electronics (2) Never Ever Unknown	28	70.0	132	83.0
	11	27.5	27	17.0
	1	2.5	0	0.0
Metal work (3) Never Ever Unknown	38	95.5	159	100.0
	1	2.5	0	0.0
	1	2.5	0	0.0
Motor vehicle work (4) Never Ever Unknown	39	97.5	157	98.7
	0	0.0	2	1.3
	1	2.5	0	0.0
Chemical manufacturing (5) Never Ever Unknown	39	97.5	159	100.0
	0	0.0	0	0.0
	1	2.5	0	0.0
Agricultural, yard maintenance and pest control (6) Never Ever Unknown	39 0 1	97.5 0.0 2.5	156 3 0	98.1 1.9 0.0

	Cas	es	Cont	rols				
IH Rating Group	Number	Percent	Number	Percent				
Cleaning and Maintenance (7) Never Ever Unknown	38	95.0	150	94.3				
	1	2.5	9	5.7				
	1	2.5	0	0.0				
Medical professions (8) Never Ever Unknown	36	90.0	138	86.8				
	3	7.5	21	13.2				
	1	2.5	0	0.0				
Radiation (9) Never Ever Unknown	38	95.0	158	99.4				
	1	2.5	1	0.6				
	1	2.5	0	0.0				
All Fathers								
Solvents, dry cleaning agents and degreasers (A) None Low High Unknown	30 7 3 0	75.0 17.5 7.5 0.0	125 20 13 1	78.6 12.6 8.2 0.6				
Paints and thinners (B) None Low High Unknown	33	82.5	136	85.5				
	6	15.0	12	7.5				
	1	2.5	10	6.3				
	0	0.0	1	0.6				
Dyes and pigments (C) None Low High Unknown	37	92.5	157	98.7				
	0	0.0	1	0.6				
	3	7.5	0	0.0				
	0	0.0	1	0.6				
Petroleum products (D) None Low High Unknown	24	60.0	111	69.8				
	10	25.0	25	15.7				
	6	15.0	22	13.8				
	0	0.0	1	0.6				

	Cas	es	Cont	rols
IH Rating Group	Number	Percent	Number	Percent
Pesticides, herbicides & fungicides (E) None Low High Unknown	38	95.0	143	89.9
	0	0.0	12	7.5
	2	5.0	3	1.9
	0	0.0	1	0.6
Plastics and resins (F) None Low High Unknown	27	67.5	124	78.0
	4	10.0	18	11.3
	9	22.5	16	10.1
	0	0.0	1	0.6
Metals (G) None Low High Unknown	32	80.0	128	80.5
	3	7.5	18	11.3
	5	12.5	12	7.5
	0	0.0	1	0.6
Radiation, ionizing and low frequency (H) None Low High Unknown	30	75.0	120	75.5
	5	12.5	32	20.1
	5	12.5	6	3.8
	0	0.0	1	0.6
Painting, printing, dye coloring and graphics (1) Never Ever Unknown	35 5 0	87.5 12.5 0.0	128 30 1	80.5 18.9 0.6
Electrical and electronics (2) Never Ever Unknown	28	70.0	119	74.8
	12	30.0	39	24.5
	0	0.0	1	0.6
Metal work (3) Never Ever Unknown	34	85.0	136	85.5
	6	15.0	22	13.8
	0	0.0	1	0.6

	Cas	es	Cont	rols
IH Rating Group	Number	Percent	Number	Percent
Motor vehicle work (4) Never Ever Unknown	32	80.0	118	74.2
	8	20.0	40	25.2
	0	0.0	1	0.6
Chemical manufacturing (5) Never Ever Unknown	36	90.0	155	97.5
	4	10.0	3	1.9
	0	0.0	1	0.6
Agricultural, yard maintenance and pest control (6) Never Ever Unknown	38 2 0	95.0 5.0 0.0	146 12 1	91.8 7.5 0.6
Cleaning and maintenance (7) Never Ever Unknown	36	90.0	148	93.1
	4	10.0	10	6.3
	0	0.0	1	0.6
Medical professions (8) Never Ever Unknown	40	100.0	154	96.9
	0	0.0	4	2.5
	0	0.0	1	0.6
Radiation (9) Never Ever Unknown	38	95.0	153	96.2
	2	5.0	5	3.1
	0	0.0	1	0.6

Table 26a. Interview Study Analysis of IH Rating of Job Exposures and Activities: Leukemia and Nervous System Cancers

III Ballian Garan	Time		N	/lother		Father					
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI		
Leukemia and Nervous System Cancer Diagnosis Ages 0 through 19											
Ever exposed to	Total	4	16	1.00	0.32 - 3.08	10	33	1.27	0.57 - 2.84		
solvents, dry cleaning agents or	Prenatal	4	9	1.78	0.55 - 5.77	5	26	0.69	0.24 - 1.98		
degreasers (A)	Postnatal	4	11	1.48	0.46 - 4.75	10	30	1.43	0.63 - 3.23		
Ever exposed to	Total	1	12	0.31	0.04 - 2.50	7	22	1.31	0.52 - 3.31		
paints or thinners (B)	Prenatal	1	6	0.67	0.08 - 5.54	2	14	0.48	0.10 - 2.34		
, ,	Postnatal	1	8	0.50	0.06 - 4.00	6	20	1.22	0.45 - 3.28		
Ever exposed to	Total	3	10	1.20	0.33 - 4.36	3	1	12.0	1.25 - 115		
dyes or pigments (C)	Prenatal	3	5	2.40	0.57 - 10.0	3	1	12.0	1.25 - 115		
, ,	Postnatal	3	5	2.40	0.57 - 10.0	3	1	12.0	1.25 - 115		
Ever exposed to	Total	0	1	0	-	16	47	1.57	0.77 - 3.21		
petroleum products (D)	Prenatal	0	0	-	-	11	36	1.26	0.58 - 2.72		
. ,	Postnatal	0	1	0	-	16	42	1.92	0.92 - 4.02		

III Dalias Cas	Time		N	/lother			ı	Father	
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Ever exposed to pesticides, herbicides or fungicides (E)	Total	0	4	0	-	2	15	0.52	0.11 - 2.33
	Prenatal	0	1	0	-	2	8	0.97	0.20 - 4.75
	Postnatal	0	2	0	-	2	14	0.55	0.12 - 2.52
Ever exposed to	Total	3	20	0.57	0.16 - 2.01	13	34	1.73	0.81 - 3.70
plastics or resins (F)	Prenatal	2	12	0.66	0.14 - 3.00	11	25	1.90	0.84 - 4.32
	Postnatal	3	18	0.64	0.18 - 2.28	12	33	1.60	0.74 - 3.47
Ever exposed to	Total	1	6	0.65	0.07 - 5.72	8	30	1.07	0.43 - 2.63
metals (G)	Prenatal	0	3	0	-	5	22	0.90	0.31 - 2.62
	Postnatal	1	4	1.00	0.10 - 10.1	8	30	1.07	0.43 - 2.63
Ever exposed to	Total	11	26	2.30	0.94 - 5.62	10	38	1.05	0.46 - 2.41
radiation, ionizing or low frequency	Prenatal	3	10	1.42	0.31 - 6.37	6	25	0.91	0.35 - 2.38
(H)	Postnatal	11	21	3.19	1.22 - 8.30	10	36	1.18	0.52 - 2.69
Ever worked in	Total	5	23	0.86	0.31 - 2.37	5	30	0.61	0.22 - 1.70
painting, printing, dye coloring or	Prenatal	5	13	1.61	0.54 - 4.82	1	20	0.17	0.02 - 1.29
graphics (1)	Postnatal	5	16	1.28	0.44 - 3.72	4	27	0.53	0.17 - 1.64

III Dating Consum	Time		N	/lother				Father	
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Ever did electrical or electronics work (2)	Total	11	27	2.10	0.88 - 4.98	12	39	1.33	0.60 - 2.94
	Prenatal	2	11	0.73	0.15 - 3.67	6	22	1.04	0.40 - 2.71
	Postnatal	11	21	2.99	1.19 - 7.49	12	37	1.49	0.67 - 3.32
Ever did metal	Total	1	0	-	-	6	22	1.10	0.38 - 3.20
working (3)	Prenatal	0	0	-	1	4	16	1.10	0.33 - 3.65
	Postnatal	1	0	-	-	6	21	1.16	0.40 - 3.35
Ever did motor	Total	0	2	0	-	8	40	0.75	0.32 - 1.74
vehicle work (4)	Prenatal	0	0	-	-	6	32	0.70	0.27 - 1.78
	Postnatal	0	2	0	-	8	35	0.92	0.39 - 2.17
Ever worked in	Total	0	0	-	-	4	3	5.33	1.19 - 23.8
chemical manufacturing (5)	Prenatal	0	0	-	-	4	2	16.0	1.79 - 143
3 ()	Postnatal	0	0	-	-	4	3	5.33	1.19 - 23.8
Ever worked in	Total	0	3	0	-	2	12	0.66	0.14 - 3.00
agriculture, yard maintenance or	Prenatal	0	0	-	-	1	5	0.76	0.09 - 6.51
pest control (6)	Postnatal	0	2	0	-	2	11	0.72	0.16 - 3.32

III Balian Garan	Time		N	/lother			ı	Father	
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Ever worked in cleaning or maintenance (7)	Total	1	9	0.43	0.05 - 3.50	4	10	1.75	0.49 - 6.27
	Prenatal	0	3	0	-	3	5	2.93	0.55 - 15.6
	Postnatal	1	7	0.55	0.07 - 4.71	4	10	1.75	0.49 - 6.27
Ever worked in	Total	3	21	0.57	0.16 - 2.02	0	4	0	-
the medical professions (8)	Prenatal	3	13	0.98	0.26 - 3.62	0	4	0	-
. , ,	Postnatal	3	18	0.69	0.19 - 2.44	0	4	0	-
Ever wore	Total	1	1	4.00	0.25 - 64.0	2	5	1.67	0.30 - 9.39
radiation badge (9)	Prenatal	1	1	4.00	0.25 - 64.0	1	4	1.00	0.11 - 8.95
	Postnatal	1	0	-	-	2	5	1.67	0.30 - 9.39
	Leuk	emia an	d Nervous	System	Cancer Diagnosi	is Ages () through 4	4	
Ever exposed to	Total	1	7	0.57	0.07 - 4.64	3	16	0.70	0.18 - 2.71
solvents, dry cleaning agents or	Prenatal	1	5	0.80	0.09 - 6.85	2	13	0.58	0.12 - 2.76
degreasers (A)	Postnatal	1	4	1.00	0.11 - 8.95	3	15	0.77	0.20 - 2.92
Ever exposed to	Total	1	8	0.48	0.06 - 4.01	3	9	1.40	0.34 - 5.79
paints or thinners (B)	Prenatal	1	4	1.00	0.11 - 8.95	1	6	0.63	0.07 - 5.89
	Postnatal	1	5	0.80	0.09 - 6.85	2	8	1.00	0.19 - 5.37

III Dating Crown	Time		N	/lother			ı	Father	
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Ever exposed to dyes or pigments (C)	Total	1	5	0.80	0.09 - 6.85	1	1	4.00	0.25 - 64.0
	Prenatal	1	3	1.33	0.14 - 12.8	1	1	4.00	0.25 - 64.0
	Postnatal	1	2	2.00	0.18 - 22.1	1	1	4.00	0.25 - 64.0
Ever exposed to	Total	0	0	-	-	8	21	1.94	0.66 - 5.68
petroleum products (D)	Prenatal	0	0	-	-	6	19	1.33	0.45 - 3.95
	Postnatal	0	0	-	-	8	20	2.28	0.75 - 6.92
Ever exposed to	Total	0	3	0	-	1	5	0.79	0.08 - 7.28
pesticides, herbicides or	Prenatal	0	0	-	-	1	2	1.81	0.16 - 20.1
fungicides (E)	Postnatal	0	2	0	-	1	4	1.00	0.10 - 10.1
Ever exposed to	Total	1	5	0.79	0.08 - 7.28	4	17	0.91	0.27 - 3.03
plastics or resins (F)	Prenatal	1	4	1.00	0.10 - 10.1	4	16	0.96	0.29 - 3.15
. ,	Postnatal	1	4	1.00	0.10 - 10.1	3	17	0.64	0.17 - 2.44
Ever exposed to	Total	0	2	0	-	2	15	0.44	0.09 - 2.21
metals (G)	Prenatal	0	2	0	-	2	13	0.56	0.12 - 2.69
	Postnatal	0	1	0	<u> </u>	2	15	0.44	0.09 - 2.21

III Dating Cross	Time		N	/lother			I	Father	
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Ever exposed to	Total	3	9	1.74	0.37 - 8.25	1	18	0.16	0.02 - 1.34
radiation, ionizing or low frequency	Prenatal	2	7	1.22	0.18 - 8.37	0	15	0	-
(H)	Postnatal	3	6	3.09	0.58 - 16.4	1	17	0.19	0.02 - 1.54
Ever worked in	Total	2	14	0.54	0.11 - 2.51	2	15	0.48	0.10 - 2.30
painting, printing, dye coloring or	Prenatal	2	9	0.87	0.17 - 4.49	1	12	0.30	0.04 - 2.46
graphics (1)	Postnatal	2	10	0.78	0.16 - 3.87	1	13	0.26	0.03 - 2.16
Ever did electrical	Total	2	9	1.00	0.19 - 5.37	2	15	0.46	0.10 - 2.24
or electronics work (2)	Prenatal	1	7	0.51	0.05 - 4.93	1	13	0.27	0.03 - 2.15
	Postnatal	2	6	1.67	0.30 - 9.39	2	14	0.54	0.11 - 2.71
Ever did metal	Total	0	0	-	-	1	9	0.38	0.04 - 3.37
working (3)	Prenatal	0	0	-	-	1	8	0.47	0.06 - 3.87
	Postnatal	0	0	-	-	1	9	0.38	0.04 - 3.37
Ever did motor	Total	0	0	-	-	3	19	0.56	0.15 - 2.14
vehicle work (4)	Prenatal	0	0	-	-	2	17	0.40	0.09 - 1.87
	Postnatal	0	0	-	-	3	17	0.69	0.18 - 2.73

III Dating Crown	Time		N	/lother				Father	
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Ever worked in	Total	0	0	-	-	1	1	4.00	0.25 - 64.0
chemical manufacturing (5)	Prenatal	0	0	-	-	1	0	-	-
9 . ,	Postnatal	0	0	-	-	1	1	4.00	0.25 - 64.0
Ever worked in	Total	0	3	0	-	2	3	3.15	0.43 - 23.4
agriculture, yard maintenance or	Prenatal	0	0	-	-	1	1	3.46	0.22 - 55.8
pest control (6)	Postnatal	0	2	0	-	2	2	6.00	0.52 - 69.5
Ever worked in	Total	0	3	0	-	3	3	5.04	0.82 - 31.0
cleaning or maintenance (7)	Prenatal	0	2	0	-	2	2	3.72	0.52 - 26.5
, ,	Postnatal	0	1	0	-	3	3	5.04	0.82 - 31.0
Ever worked in	Total	2	6	1.60	0.31 - 8.25	0	3	0	-
the medical professions (8)	Prenatal	2	4	2.67	0.45 - 16.0	0	3	0	-
. ,	Postnatal	2	4	2.67	0.45 - 16.0	0	3	0	-
Ever wore	Total	1	1	4.00	0.25 - 64.0	0	3	0	-
radiation badge (9)	Prenatal	1	1	4.00	0.25 - 64.0	0	2	0	-
	Postnatal	1	0	-	-	0	3	0	-

Table 26b. Interview Study Analysis of IH Rating of Job Exposures and Activities: Leukemia

III Ballian Garan	Time		IV	lother		Father				
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
		L	.eukemia [Diagnos	is Ages 0 throu	gh 19				
Ever exposed to	Total	4	7	2.29	0.67 - 7.81	7	12	2.77	0.95 - 8.13	
solvents, dry cleaning agents or	Prenatal	4	6	2.67	0.75 - 9.45	3	8	1.57	0.36 - 6.79	
degreasers (A)	Postnatal	4	5	3.20	0.86 - 11.9	7	12	2.77	0.95 - 8.13	
Ever exposed to	Total	1	4	1.00	0.11 - 8.95	4	8	2.11	0.58 - 7.66	
paints or thinners (B)	Prenatal	1	4	1.00	0.11 - 8.95	0	4	0	-	
	Postnatal	1	3	1.33	0.14 - 12.8	4	8	2.11	0.58 - 7.66	
Ever exposed to	Total	3	5	2.40	0.57 - 10.0	1	0	-	-	
dyes or pigments (C)	Prenatal	3	4	3.00	0.67 - 13.4	1	0	-	-	
. ,	Postnatal	3	3	4.00	0.81 - 19.8	1	0	-	-	
Ever exposed to	Total	0	1	0	-	9	21	2.20	0.80 - 6.03	
petroleum products (D)	Prenatal	0	0	-	-	8	14	2.83	1.03 - 7.81	
	Postnatal	0	1	0	-	9	20	2.55	0.90 - 7.19	

III Datin n Consum	Time		IV	lother		Father				
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
Ever exposed to	Total	0	1	0	-	1	11	0.34	0.04 - 2.75	
pesticides, herbicides or	Prenatal	0	0	-	-	1	6	0.62	0.07 - 5.44	
fungicides (E)	Postnatal	0	1	0	-	1	11	0.34	0.04 - 2.75	
Ever exposed to	Total	1	10	0.38	0.05 - 3.07	6	15	1.74	0.59 - 5.13	
plastics or resins (F)	Prenatal	0	7	0	-	5	10	2.12	0.62 - 7.22	
	Postnatal	1	9	0.42	0.05 - 3.48	6	15	1.74	0.59 - 5.13	
Ever exposed to	Total	1	2	2.00	0.18 - 22.1	4	13	1.29	0.35 - 4.73	
metals (G)	Prenatal	0	2	0	-	2	10	0.84	0.16 - 4.46	
	Postnatal	1	1	4.00	0.25 - 64.0	4	13	1.29	0.35 - 4.73	
Ever exposed to	Total	6	13	1.87	0.61 - 5.70	8	22	1.70	0.63 - 4.59	
radiation, ionizing or low frequency	Prenatal	2	5	1.90	0.35 - 10.4	5	14	1.43	0.47 - 4.30	
(H)	Postnatal	6	12	2.52	0.77 - 8.19	8	21	1.91	0.70 - 5.23	
Ever worked in	Total	5	10	2.13	0.69 - 6.64	4	11	1.49	0.44 - 5.08	
painting, printing, dye coloring or	Prenatal	5	8	2.79	0.83 - 9.34	0	6	0	-	
graphics (1)	Postnatal	5	7	3.31	0.94 - 11.7	4	10	1.67	0.48 - 5.87	

III Dating Consum	Time		IV	lother		Father				
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
Ever did electrical	Total	6	15	1.87	0.61 - 5.70	10	21	2.62	0.98 - 7.01	
or electronics work (2)	Prenatal	2	5	1.90	0.35 - 10.4	5	13	1.56	0.50 - 4.80	
. ,	Postnatal	6	12	2.52	0.77 - 8.19	10	20	3.04	1.10 - 8.37	
Ever did metal	Total	1	0	-	-	3	11	1.10	0.23 - 5.24	
working (3)	Prenatal	0	0	-	-	2	8	1.33	0.24 - 7.58	
	Postnatal	1	0	-	-	3	10	1.25	0.27 - 5.77	
Ever did motor	Total	0	1	0	-	5	17	1.20	0.39 - 3.66	
vehicle work (4)	Prenatal	0	0	-	-	5	13	1.76	0.54 - 5.76	
	Postnatal	0	1	0	-	5	16	1.42	0.44 - 4.53	
Ever worked in	Total	0	0	-	-	2	2	4.00	0.56 - 28.4	
chemical manufacturing (5)	Prenatal	0	0	-	-	2	1	-	-	
J . ,	Postnatal	0	0	-	-	2	2	4.00	0.56 - 28.4	
Ever worked in	Total	0	1	0	-	1	9	0.43	0.05 - 3.50	
agriculture, yard maintenance or	Prenatal	0	0	-	-	1	5	0.76	0.09 - 6.51	
pest control (6)	Postnatal	0	1	0	-	1	9	0.43	0.05 - 3.50	

III Dakina Garasa	Time		IV	lother		Father				
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
Ever worked in	Total	1	5	0.79	0.08 - 7.28	2	5	1.67	0.30 - 9.39	
cleaning or maintenance (7)	Prenatal	0	1	0	-	2	2	3.72	0.52 - 26.5	
, ,	Postnatal	1	5	0.79	0.08 - 7.28	2	5	1.67	0.30 - 9.39	
Ever worked in	Total	0	11	0	-	0	2	0	-	
the medical professions (8)	Prenatal	0	7	0	-	0	2	0	-	
, , ,	Postnatal	0	9	0	-	0	2	0	-	
Ever wore	Total	0	0	-	-	2	2	6.00	0.52 - 69.5	
radiation badge (9)	Prenatal	0	0	-	-	1	1	4.00	0.25 - 64.0	
. ,	Postnatal	0	0	-	-	2	2	6.00	0.52 - 69.5	
			Leukemia	Diagnos	sis Ages 0 throu	ıgh 4				
Ever exposed to	Total	1	5	0.80	0.09 - 6.85	2	6	1.44	0.23 - 9.04	
solvents, dry cleaning agents or	Prenatal	1	5	0.80	0.09 - 6.85	1	5	0.77	0.08 - 7.76	
degreasers (A)	Postnatal	1	3	1.33	0.14 - 12.8	2	6	1.44	0.23 - 9.04	
Ever exposed to	Total	1	4	1.00	0.11 - 8.95	1	3	1.40	0.12 - 16.4	
paints or thinners (B)	Prenatal	1	4	1.00	0.11 - 8.95	0	2	0	-	
	Postnatal	1	3	1.33	0.14 - 12.8	1	3	1.40	0.12 - 16.4	

III Dakia a Gasara	Time		IV	lother		Father				
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
Ever exposed to	Total	1	4	1.00	0.11 - 8.95	0	0	-	-	
dyes or pigments (C)	Prenatal	1	3	1.33	0.14 - 12.8	0	0	-	-	
` ,	Postnatal	1	2	2.00	0.18 - 22.1	0	0	-	-	
Ever exposed to	Total	0	0	-	-	4	6	3.57	0.77 - 16.7	
petroleum products (D)	Prenatal	0	0	-	-	4	5	3.93	0.84 - 18.4	
	Postnatal	0	0	-	-	4	6	5.10	0.89 - 29.1	
Ever exposed to	Total	0	1	0	-	1	3	1.40	0.12 - 16.4	
pesticides, herbicides or	Prenatal	0	0	-	-	1	1	3.46	0.22 - 55.8	
fungicides (E)	Postnatal	0	1	0	-	1	3	1.40	0.12 - 16.4	
Ever exposed to	Total	0	4	0	-	1	7	0.54	0.06 - 4.77	
plastics or resins (F)	Prenatal	0	4	0	-	1	7	0.52	0.06 - 4.55	
. ,	Postnatal	0	3	0	-	1	7	0.54	0.06 - 4.77	
Ever exposed to	Total	0	2	0	-	1	7	0.47	0.05 - 4.91	
metals (G)	Prenatal	0	2	0	-	1	6	0.61	0.06 - 6.04	
	Postnatal	0	1	0	-	1	7	0.47	0.05 - 4.91	

III Dation Coore	Time		IV	lother		Father				
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
Ever exposed to	Total	1	3	1.33	0.14 - 12.8	0	8	0	-	
radiation, ionizing or low frequency	Prenatal	1	2	2.00	0.18 - 22.1	0	6	0	-	
(H)	Postnatal	1	2	2.00	0.18 - 22.1	0	8	0	-	
Ever worked in	Total	2	8	1.00	0.20 - 5.12	1	5	0.79	0.08 - 7.28	
painting, printing, dye coloring or	Prenatal	2	7	1.16	0.22 - 6.23	0	4	0	-	
graphics (1)	Postnatal	2	6	1.40	0.24 - 7.97	1	4	1.00	0.10 - 10.1	
Ever did electrical	Total	1	3	1.33	0.14 - 12.8	1	7	0.54	0.06 - 4.77	
or electronics work (2)	Prenatal	1	2	2.00	0.18 - 22.1	1	6	0.63	0.07 - 5.89	
. ,	Postnatal	1	2	2.00	0.18 - 22.1	1	7	0.63	0.07 - 5.89	
Ever did metal	Total	0	0	-	-	1	5	0.75	0.07 - 8.54	
working (3)	Prenatal	0	0	-	-	1	4	1.00	0.10 - 10.1	
	Postnatal	0	0	-	-	1	5	0.75	0.07 - 8.54	
Ever did motor	Total	0	0	-	-	2	6	1.40	0.24 - 7.97	
vehicle work (4)	Prenatal	0	0	-	-	2	5	1.62	0.25 - 10.5	
	Postnatal	0	0	-	-	2	6	1.77	0.28 - 11.1	

III Dating Coore	Time		IV	lother		Father				
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
Ever worked in	Total	0	0	-	-	0	1	0	-	
chemical manufacturing (5)	Prenatal	0	0	-	-	0	0	-	-	
0 . ,	Postnatal	0	0	-	-	0	1	0	-	
Ever worked in	Total	0	1	0	-	1	2	2.45	0.14 - 42.6	
agriculture, yard maintenance or	Prenatal	0	0	-	-	1	1	3.46	0.22 - 55.8	
pest control (6)	Postnatal	0	1	0	-	1	2	2.45	0.14 - 42.6	
Ever worked in	Total	0	1	0	-	2	2	6.00	0.52 - 69.5	
cleaning or maintenance (7)	Prenatal	0	0	-	-	2	1	7.29	0.66 - 80.8	
, ,	Postnatal	0	1	0	-	2	2	6.00	0.52 - 69.5	
Ever worked in	Total	0	4	0	-	0	1	0	-	
the medical professions (8)	Prenatal	0	3	0	-	0	1	0	-	
, ,	Postnatal	0	2	0	-	0	1	0	-	
Ever wore	Total	0	0	-	-	0	1	0	-	
radiation badge (9)	Prenatal	0	0	-	-	0	0	-	-	
	Postnatal	0	0	-	-	0	1	0	-	

Table 26c. Interview Study Analysis of IH Rating of Job Exposures and Activities: Nervous System Cancers

III Datin o Consum	Time		N	lother (Father			
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
		Nervous	s System C	ancer D	iagnosis Ages () througl	h 19		
Ever exposed to	Total	0	9	0	-	3	21	0.48	0.12 - 1.87
solvents, dry cleaning agents or	Prenatal	0	3	0	-	2	18	0.34	0.07 - 1.70
degreasers (A)	Postnatal	0	6	0	-	3	18	0.59	0.15 - 2.34
Ever exposed to	Total	0	8	0	-	3	14	0.83	0.21 - 3.24
paints or thinners (B)	Prenatal	0	2	0	-	2	10	0.71	0.13 - 3.82
	Postnatal	0	5	0	-	2	12	0.62	0.12 - 3.10
Ever exposed to	Total	0	5	0	-	2	1	8.00	0.73 - 88.2
dyes or pigments (C)	Prenatal	0	1	0	-	2	1	8.00	0.73 - 88.2
, ,	Postnatal	0	2	0	-	2	1	8.00	0.73 - 88.2
Ever exposed to	Total	0	0	-	-	7	26	1.11	0.40 - 3.11
petroleum products (D)	Prenatal	0	0	-	-	3	22	0.45	0.12 - 1.66
	Postnatal	0	0	-	-	7	22	1.43	0.50 - 4.12

III Dating Crown	Time		N	/lother		Father				
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
Ever exposed to	Total	0	3	0	-	1	4	1.00	0.11 - 8.95	
pesticides, herbicides or	Prenatal	0	1	0	-	1	2	2.00	0.18 - 22.1	
fungicides (E)	Postnatal	0	1	0	-	1	3	1.33	0.14 - 12.8	
Ever exposed to	Total	2	10	0.78	0.16 - 3.87	7	19	1.72	0.59 - 5.02	
plastics or resins (F)	Prenatal	2	5	1.60	0.31 - 8.25	6	15	1.74	0.58 - 5.27	
	Postnatal	2	9	0.88	0.18 - 4.36	6	18	1.46	0.48 - 4.42	
Ever exposed to	Total	0	4	0	-	4	17	0.90	0.26 - 3.19	
metals (G)	Prenatal	0	1	0	-	3	12	0.95	0.24 - 3.79	
	Postnatal	0	3	0	-	4	17	0.90	0.26 - 3.19	
Ever exposed to	Total	5	11	3.41	0.73 - 15.9	2	16	0.40	0.08 - 2.01	
radiation, ionizing or low frequency	Prenatal	1	5	0.65	0.03 - 12.4	1	11	0.30	0.03 - 2.55	
(H)	Postnatal	5	9	5.12	0.91 - 28.7	2	15	0.44	0.09 - 2.21	
Ever worked in	Total	0	13	0	-	1	19	0.16	0.02 - 1.31	
painting, printing, dye coloring or	Prenatal	0	5	0	-	1	14	0.24	0.03 - 1.95	
graphics (1)	Postnatal	0	9	0	-	0	17	0	-	

III Dakina Grana	Time		N	lother		Father				
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
Ever did electrical	Total	5	12	2.51	0.62 - 10.1	2	18	0.34	0.07 - 1.67	
or electronics work (2)	Prenatal	0	6	0	-	1	9	0.39	0.05 - 3.25	
, ,	Postnatal	5	9	3.91	0.88 - 17.4	2	17	0.36	0.07 - 1.82	
Ever did metal	Total	0	0	-	-	3	11	1.09	0.25 - 4.76	
working (3)	Prenatal	0	0	-	-	2	8	0.93	0.17 - 4.97	
	Postnatal	0	0	-	-	3	11	1.09	0.25 - 4.76	
Ever did motor	Total	0	1	0	-	3	23	0.44	0.12 - 1.64	
vehicle work (4)	Prenatal	0	0	-	-	1	19	0.17	0.02 - 1.33	
	Postnatal	0	1	0	-	3	19	0.57	0.15 - 2.13	
Ever worked in	Total	0	0	-	-	2	1	8.00	0.73 - 88.2	
chemical manufacturing (5)	Prenatal	0	0	-	-	2	1	8.00	0.73 - 88.2	
3 ()	Postnatal	0	0	-	-	2	1	8.00	0.73 - 88.2	
Ever worked	Total	0	2	0	-	1	3	1.33	0.14 - 12.8	
agriculture, yard maintenance or	Prenatal	0	0	-	-	0	0	-	-	
pest control (6)	Postnatal	0	1	0	-	1	2	2.00	0.18 - 22.1	

	Time		N	lother			F	ather	
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Ever worked in	Total	0	4	0	-	2	5	1.85	0.28 - 12.4
cleaning or maintenance (7)	Prenatal	0	2	0	-	1	3	1.63	0.08 - 34.6
	Postnatal	0	2	0	-	2	5	1.85	0.28 - 12.4
Ever worked in	Total	3	10	1.45	0.32 - 6.55	0	2	0	-
the medical professions (8)	Prenatal	3	6	2.90	0.56 - 15.0	0	2	0	-
	Postnatal	3	9	1.62	0.37 - 7.06	0	2	0	-
Ever wore	Total	1	1	4.00	0.25 - 64.0	0	3	0	-
radiation badge (9)	Prenatal	1	1	4.00	0.25 - 64.0	0	3	0	-
. ,	Postnatal	1	0	-	-	0	3	0	-
		Nervou	s System (Cancer D	Diagnosis Ages	0 throug	h 4		
Ever exposed to	Total	0	2	0	-	1	10	0.33	0.04 - 2.96
solvents, dry cleaning agents or	Prenatal	0	0	-	-	1	8	0.47	0.05 - 4.02
degreasers (A)	Postnatal	0	1	0	-	1	9	0.40	0.05 - 3.45
Ever exposed to	Total	0	4	0	-	2	6	1.40	0.24 - 7.97
paints or thinners (B)	Prenatal	0	0	-	-	1	4	1.00	0.10 - 10.1
·	Postnatal	0	2	0	-	1	5	0.77	0.08 - 7.76

III Dating Crown	Time		N	/lother			F	ather	
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Ever exposed to	Total	0	1	0	-	1	1	4.00	0.25 - 64.0
dyes or pigments (C)	Prenatal	0	0	-	-	1	1	4.00	0.25 - 64.0
	Postnatal	0	0	-	-	1	1	4.00	0.25 - 64.0
Ever exposed to petroleum products (D)	Total	0	0	-	-	4	15	1.11	0.26 - 4.73
	Prenatal	0	0	-	-	2	14	0.47	0.09 - 2.47
. , ,	Postnatal	0	0	-	-	4	14	1.24	0.29 - 5.24
Ever exposed to	Total	0	2	0	-	0	2	0	-
pesticides, herbicides or	Prenatal	0	0	-	-	0	1	0	-
fungicides (E)	Postnatal	0	1	0	-	0	1	0	-
Ever exposed to	Total	1	1	4.00	0.25 - 64.0	3	10	1.23	0.28 - 5.50
plastics or resins (F)	Prenatal	1	0	-	-	3	9	1.38	0.32 - 5.98
	Postnatal	1	1	4.00	0.25 - 64.0	2	10	0.73	0.13 - 3.98
Ever exposed to metals (G)	Total	0	0	-	-	1	8	0.41	0.04 - 3.87
	Prenatal	0	0	-	-	1	7	0.52	0.06 - 4.55
	Postnatal	0	0	-	-	1	8	0.41	0.04 - 3.87

III Dating Crown	Time		N	lother			F	ather	
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Ever exposed to	Total	2	6	2.31	0.25 - 21.1	1	10	0.28	0.03 - 2.66
radiation, ionizing or low frequency (H)	Prenatal	1	5	0.65	0.03 - 12.4	0	9	0	-
	Postnatal	2	4	5.06	0.40 - 64.0	1	9	0.32	0.03 - 3.14
Ever worked in painting, dye coloring or	Total	0	6	0	-	1	10	0.33	0.04 - 2.96
	Prenatal	0	2	0	-	1	8	0.47	0.05 - 4.02
graphics (1)	Postnatal	0	4	0	-	0	9	0	-
Ever did electrical	Total	1	6	0.75	0.07 - 8.54	1	8	0.40	0.04 - 3.82
or electronics work (2)	Prenatal	0	5	0	-	0	7	0	-
, ,	Postnatal	1	4	1.40	0.12 - 16.4	1	7	0.47	0.05 - 4.67
Ever did metal	Total	0	0	-	-	0	4	0	-
working (3)	Prenatal	0	0	-	-	0	4	0	-
	Postnatal	0	0	-	-	0	4	0	-
Ever did motor vehicle work (4)	Total	0	0	-	-	1	13	0.22	0.03 - 1.96
	Prenatal	0	0	-	-	0	12	0	-
	Postnatal	0	0	-	-	1	11	0.28	0.03 - 2.52

III Dating Crown	Time		N	lother			F	ather	
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Ever worked in	Total	0	0	-	-	1	0	-	-
chemical manufacturing (5)	Prenatal	0	0	-	-	1	0	-	-
	Postnatal	0	0	-	-	1	0	-	-
Ever worked in agriculture, yard maintenance or	Total	0	2	0	-	1	1	4.00	0.25 - 64.0
	Prenatal	0	0	-	-	0	0	-	-
pest control (6)	Postnatal	0	1	0	-	1	0	-	-
Ever worked in	Total	0	2	0	-	1	1	4.00	0.25 - 64.0
cleaning or maintenance (7)	Prenatal	0	2	0	-	0	1	0	-
	Postnatal	0	0	-	-	1	1	4.00	0.25 - 64.0
Ever worked in	Total	2	2	8.00	0.73 - 88.2	0	2	0	-
the medical professions (8)	Prenatal	2	1	-	-	0	2	0	-
, ,	Postnatal	2	2	8.00	0.73 - 88.2	0	2	0	-
Ever wore radiation badge (9)	Total	1	1	4.00	0.25 - 64.0	0	2	0	-
	Prenatal	1	1	4.00	0.25 - 64.0	0	2	0	-
	Postnatal	1	0	-	-	0	2	0	-

Table 26d. Interview Study Analysis of IH Rating of Job Exposures and Activities: Brain and Central Nervous System Cancers

III Datin n Chann	Time		N	/lother			F	ather	
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Brain and	d Centra	l Nervous	System	Cancer Diagno	sis Ages	0 through	19	
Ever exposed to	Total	0	8	0	-	2	17	0.36	0.07 - 1.88
solvents, dry cleaning agents or	Prenatal	0	3	0	-	1	14	0.18	0.02 - 1.69
degreasers (A)	Postnatal	0	5	0	-	2	14	0.46	0.08 - 2.54
Ever exposed to	Total	0	5	0	-	3	10	1.26	0.29 - 5.39
paints or thinners (B)	Prenatal	0	2	0	1	2	8	0.92	0.15 - 5.57
	Postnatal	0	3	0	-	2	9	0.87	0.16 - 4.66
Ever exposed to	Total	0	5	0	-	1	1	4.00	0.25 - 64.0
dyes or pigments (C)	Prenatal	0	1	0	-	1	1	4.00	0.25 - 64.0
, ,	Postnatal	0	2	0	-	1	1	4.00	0.25 - 64.0
Ever exposed to petroleum products (D)	Total	0	0	-	-	5	19	1.08	0.33 - 3.50
	Prenatal	0	0	-	-	1	15	0.21	0.03 - 1.72
	Postnatal	0	0	-	-	5	15	1.49	0.44 - 5.09

III Dakina Garana	Time		N	lother			F	ather	
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Ever exposed to	Total	0	1	0	-	1	2	2.00	0.18 - 22.1
pesticides, herbicides or fungicides (E)	Prenatal	0	1	0	-	1	1	4.00	0.25 - 64.0
	Postnatal	0	0	-	-	1	2	2.00	0.18 - 22.1
Ever exposed to plastics or resins (F)	Total	2	10	0.78	0.16 - 3.87	5	12	2.11	0.57 - 7.85
	Prenatal	2	5	1.60	0.31 - 8.25	4	9	2.01	0.50 - 8.07
	Postnatal	2	9	0.88	0.18 - 4.36	4	11	1.67	0.42 - 6.60
Ever exposed to	Total	0	4	0	-	3	12	1.00	0.23 - 4.38
metals (G)	Prenatal	0	1	0	-	2	8	0.96	0.17 - 5.41
	Postnatal	0	3	0	-	3	12	1.00	0.23 - 4.38
Ever exposed to	Total	4	6	8.64	0.90 - 83.0	2	8	1.00	0.17 - 5.98
radiation, ionizing or low frequency	Prenatal	0	0	-	-	1	3	1.33	0.14 - 12.8
(H)	Postnatal	4	6	8.64	0.90 - 83.0	2	8	1.00	0.17 - 5.98
Ever worked in	Total	0	10	0	-	1	13	0.26	0.03 - 2.16
painting, printing, dye coloring or	Prenatal	0	5	0	-	1	10	0.33	0.04 - 2.92
graphics (1)	Postnatal	0	7	0	-	0	12	0	-

III Dakina Gunaan	Time		N	lother (F	ather	
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Ever did electrical	Total	5	7	10.3	1.14 - 93.4	2	12	0.54	0.09 - 3.17
or electronics work (2)	Prenatal	0	1	0	-	1	3	1.24	0.13 - 11.9
	Postnatal	5	6	12.4	1.37 - 111	2	12	0.54	0.09 - 3.17
Ever did metal working (3)	Total	0	0	-	-	3	7	2.36	0.41 - 13.6
	Prenatal	0	0	-	-	2	4	2.46	0.31 - 19.7
	Postnatal	0	0	-	-	3	7	2.36	0.41 - 13.6
Ever did motor	Total	0	1	0	-	3	18	0.59	0.15 - 2.31
vehicle work (4)	Prenatal	0	0	-	-	1	14	0.23	0.03 - 1.88
	Postnatal	0	1	0	-	3	15	0.76	0.19 - 2.99
Ever worked in	Total	0	0	-	-	1	1	4.00	0.25 - 64.0
chemical manufacturing (5)	Prenatal	0	0	-	-	1	1	4.00	0.25 - 64.0
3 ()	Postnatal	0	0	-	-	1	1	4.00	0.25 - 64.0
Ever worked in	Total	0	0	-	-	1	2	2.00	0.18 - 22.1
agriculture, yard maintenance or	Prenatal	0	0	-	-	0	0	-	-
pest control (6)	Postnatal	0	0	-	-	1	2	2.00	0.18 - 22.1

III Datin n Consum	Time		N	lother			F	ather	
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Ever worked in	Total	0	3	0	-	2	4	2.67	0.33 - 21.5
cleaning or maintenance (7)	Prenatal	0	1	0	-	1	2	-	-
. ,	Postnatal	0	2	0	-	2	4	2.67	0.33 - 21.5
Ever worked in	Total	2	10	0.86	0.15 - 4.82	0	1	0	-
the medical professions (8)	Prenatal	2	6	1.77	0.28 - 11.1	0	1	0	-
prorossions (o)	Postnatal	2	9	1.00	0.19 - 5.37	0	1	0	-
Ever wore	Total	0	0	-	-	0	2	0	-
radiation badge (9)	Prenatal	0	0	-	-	0	2	0	-
, ,	Postnatal	0	0	-	-	0	2	0	-
	Brain an	d Centra	al Nervous	System	Cancer Diagno	sis Ages	0 through	1 4	
Ever exposed to	Total	0	1	0	-	0	6	0	-
solvents, dry cleaning agents or	Prenatal	0	0	-	-	0	4	0	-
degreasers (A)	Postnatal	0	0	-	-	0	5	0	-
Ever exposed to	Total	0	1	0	-	2	2	6.00	0.52 - 69.5
paints or thinners (B)	Prenatal	0	0	-	-	1	2	2.45	0.14 - 42.6
	Postnatal	0	0	-	-	1	2	2.45	0.14 - 42.6

III Dating Cross	Time		N	/lother			F	ather	
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Ever exposed to	Total	0	1	0	-	0	1	0	-
dyes or pigments (C)	Prenatal	0	0	-	-	0	1	0	-
	Postnatal	0	0	-	-	0	1	0	-
Ever exposed to petroleum products (D)	Total	0	0	-	-	2	8	1.00	0.14 - 7.39
	Prenatal	0	0	-	-	0	7	0	-
	Postnatal	0	0	-	-	2	7	1.23	0.17 - 8.99
Ever exposed to	Total	0	0	-	-	0	0	-	-
pesticides, herbicides or	Prenatal	0	0	-	-	0	0	-	-
fungicides (E)	Postnatal	0	0	-	-	0	0	-	-
Ever exposed to	Total	1	1	4.00	0.25 - 64.0	1	3	1.40	0.12 - 16.4
plastics or resins (F)	Prenatal	0	0	-	-	1	3	1.40	0.12 - 16.4
, ,	Postnatal	1	1	4.00	0.25 - 64.0	0	3	0	-
Ever exposed to	Total	0	0	-	-	0	3	0	-
metals (G)	Prenatal	0	0	-	-	0	3	0	-
	Postnatal	0	0	-	-	0	3	0	-

III Dating Crown	Time		N	lother			F	ather	
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Ever exposed to	Total	1	1	-	-	1	2	0	-
radiation, ionizing or low frequency (H)	Prenatal	0	0	-	-	0	1	0	-
	Postnatal	1	1	-	-	1	2	-	-
Ever worked in painting, dye coloring or	Total	0	3	0	-	1	4	1.00	0.10 - 10.1
	Prenatal	0	2	0	-	1	4	1.00	0.10 - 10.1
graphics (1)	Postnatal	0	2	0	-	0	4	0	-
Ever did electrical	Total	1	1	0	-	1	2	-	-
or electronics work (2)	Prenatal	0	0	-	-	0	1	0	-
, ,	Postnatal	1	1	-	-	1	2	0	-
Ever did metal	Total	0	0	-	-	0	0	-	-
working (3)	Prenatal	0	0	-	-	0	0	-	-
	Postnatal	0	0	-	-	0	0	-	-
Ever did motor vehicle work (4)	Total	0	0	-	-	1	8	0.37	0.04 - 3.89
	Prenatal	0	0	-	-	0	7	0	-
	Postnatal	0	0	-	-	1	7	0.47	0.05 - 4.91

III Dating Cross	Time		N	/lother			F	ather	
IH Rating Group	Period	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
Ever worked in	Total	0	0	-	-	0	0	-	-
chemical manufacturing (5)	Prenatal	0	0	-	-	0	0	-	-
	Postnatal	0	0	-	-	0	0	-	-
Ever worked in agriculture, yard maintenance or	Total	0	0	-	-	1	0	-	-
	Prenatal	0	0	-	-	0	0	-	-
pest control (6)	Postnatal	0	0	-	-	1	0	-	-
Ever worked in	Total	0	1	0	-	1	0	-	-
cleaning or maintenance (7)	Prenatal	0	1	0	-	0	0	-	-
, ,	Postnatal	0	0	-	-	1	0	-	-
Ever worked in	Total	1	2	4.00	0.25 - 64.0	0	1	0	-
the medical professions (8)	Prenatal	1	1	-	-	0	1	0	-
, , , , , , , , , , , , , , , , , , , ,	Postnatal	1	2	4.00	0.25 - 64.0	0	1	0	-
Ever wore radiation badge (9)	Total	0	0	-	-	0	1	0	-
	Prenatal	0	0	-	-	0	1	0	-
	Postnatal	0	0	-	-	0	1	0	-

Table 27. Interview Study Demographic, Pregnancy, and Birth Characteristics

	Cases (n	i=40)	Controls	(n=159)
Characteristic	Number	Percent	Number	Percent
Sex of child: Female Male	20 20	50.0 50.0	80 79	50.3 49.7
Race of child: White Non-white	40 0	100 0	154 5	96.9 3.1
Hispanic origin of child: Yes No Unknown	1 39 0	2.5 97.5 0	3 155 1	1.9 97.5 0.6
Plurality of child: Singleton Twin Unknown	38 1 1	95.0 2.5 2.5	152 5 2	95.6 3.1 1.3
Mother's residence in Dover Township during pregnancy with study subject: Entire pregnancy Part of pregnancy None of pregnancy Unknown	21 4 15 0	52.5 10.0 37.5 0.0	70 12 75 2	44.0 7.5 47.2 1.3
Length of child's residence in Dover Township from birth to end of relevant period: < 1 year 1 - 5 years > 5 - 10 years > 10 - 15 years > 15 years	7 16 11 3 3	17.5 40.0 27.5 7.5 7.5	20 61 52 17 9	12.6 38.4 32.7 10.7 5.7

	Cases (n	i=40)	Controls	(n=159)
Characteristic	Number	Percent	Number	Percent
Percent of child's life lived in Dover Township from birth to end of relevant period: 100% 50% - < 100% < 50%	23 4 13	57.5 10.0 32.5	79 46 34	49.7 28.9 21.4
Average number of months in study (entire relevant time period)	109.1		109.8	
Number of maternal residences during the child's prenatal period: 1 2+	31 9	77.5 22.5	123 36	77.4 22.6
Number of residences of child from birth to end of relevant period: 1 2 - 3 4+	17 12 11	42.5 30.0 27.5	56 78 25	35.2 49.1 15.7
Number of day care, camp, and/or school locations child attended: None 1 - 2 3+ Unknown	8 14 17 1	20.0 35.0 42.5 2.5	51 46 62 0	32.1 28.9 39.0 0
Year of birth of child: 1963 - 69 1970 - 74 1975 - 79 1980 - 84 1985 - 89 1990 - 96	6 4 7 14 5 4	15.0 10.0 17.5 35.0 12.5 10.0	20 21 32 50 21 15	12.6 13.2 20.1 31.1 13.2 9.4

	Cases (n	1=40)	Controls (n=159)	
Characteristic	Number	Percent	Number	Percent
Age of child at end of relevant period: 0 - 4 5 - 9 10 - 14 15+	18	45.0	65	40.9
	8	20.0	38	23.9
	6	15.0	28	17.6
	8	20.0	28	17.6
Year at end of child's relevant period: 1979 - 82 1983 - 86 1987 - 90 1991 - 94 1995 - 96	7 9 12 6 6	17.5 22.5 30.0 15.0 15.0	27 36 48 24 24	17.0 22.6 30.2 15.1 15.1
Mother's age at child's birth: <20 years 20 - 34 years >34 years Unknown	2	5.0	11	6.9
	35	87.5	128	80.5
	2	5.0	19	12.0
	1	2.5	1	0.6
Mother's educational level: < High school High school Some college College graduate Post-graduate Unknown	2	5.0	10	6.3
	23	57.5	105	66.0
	3	7.5	10	6.3
	10	25.0	23	14.5
	0	0	6	3.8
	2	5.0	5	3.1
Father's educational level: < High school High school Some college College graduate Post-graduate Unknown	2	5.0	13	8.2
	24	60.0	77	48.4
	3	7.5	13	8.2
	7	17.5	34	21.4
	2	5.0	17	10.7
	2	5.0	5	3.1
Mother's pregnancies prior to child's birth: 0 1 2+ Unknown	12	30.0	54	34.0
	9	22.5	45	28.3
	17	42.5	58	36.5
	2	5.0	2	1.3

	Cases (n	i=40)	Controls (n=159)		
Characteristic	Number	Percent	Number	Percent	
Adverse pregnancy outcome (stillbirths; miscarriages; tubal, ectopic, or molar pregnancies) of mother prior to child's birth:	,	15.0		17.0	
Yes	6	15.0	27	17.0	
No	32	80.0	130	81.8	
Unknown	2	5.0	2	1.3	
Any pregnancy termination of mother prior to child's birth: Yes No Unknown	5	12.5	16	10.1	
	33	82.5	141	88.7	
	2	5.0	2	1.3	
Total number of pregnancies of mother: 1 2-3 4+ Unknown	3	7.5	6	3.8	
	17	42.5	89	56.0	
	18	45.0	62	39.0	
	2	5.0	2	1.3	
Total live births of mother: 1 2-3 4+ Unknown	4	10.0	11	6.9	
	23	57.5	115	72.3	
	11	27.5	31	19.5	
	2	5.0	2	1.3	
Total adverse pregnancy outcomes (stillbirths; miscarriages; tubal, ectopic, or molar pregnancies) of mother: Yes No Unknown	11	27.5	42	26.4	
	27	67.5	115	72.3	
	2	5.0	2	1.3	
Pregnancy duration of child: < 37 weeks 37 - 44 weeks Unknown	2 36 2	5.0 90.0 5.0	21 137 1	13.2 86.9 0.6	

	Cases (n	ı=40)	Controls (n=159)	
Characteristic	Number	Percent	Number	Percent
Delivery method of child: Vaginal C-section Unknown	31	77.5	130	81.8
	8	20.0	29	18.2
	1	2.5	0	0
Child was first live birth of mother: Yes No Unknown	14	35.0	65	40.9
	24	60.0	91	57.2
	2	5.0	3	1.9
Child's birth weight: <2500 grams 2500 - 3999 grams >3999 grams Unknown	2	5.0	12	7.6
	31	77.5	128	80.5
	6	15.0	19	11.9
	1	2.5	0	0.0

Table 28a. Interview Study Analysis of Demographic, Pregnancy, and Birth Characteristics: Leukemia and Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Leukemia and	l Nervous System	Cancer Diag	nosis Ages 0	through 19	
Mother's age at child's birth	20-34 years	35	128	1.0	-
	<20 years	2	11	0.65	0.14 - 3.04
	35+ years	2	19	0.34	0.07 - 1.63
Mother's educational level	High School	26	115	1.0	-
	< High School	2	10	0.81	0.16 - 4.04
	College+	10	29	1.51	0.65 - 3.47
Father's educational level	High School	27	90	1.0	-
	< High School	2	13	0.51	0.11 - 2.39
	College+	9	51	0.57	0.24 - 1.35
Child was mother's first live birth	No	24	91	1.0	-
	Yes	14	65	0.78	0.37 - 1.66
Child's birth weight	2500-3999gm	31	128	1.0	-
	<2500 grams	2	12	0.66	0.14 - 3.17
	4000+ grams	6	19	1.39	0.48 - 4.04
Adverse pregnancy outcome (stillbirths; miscarriages; tubal, ectopic, or molar pregnancies) of mother prior to child's birth	No	32	130	1.0	-
	Yes	6	27	0.93	0.33 - 2.65

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother's total live births equal to 4 or more	No	27	126	1.0	-
	Yes	11	31	1.62	0.73 - 3.61
Any pregnancy termination of mother prior to child's birth	No	33	141	1.0	-
	Yes	5	16	1.31	0.43 - 3.98
Leukemia an	d Nervous System	Cancer Dia	gnosis Ages 0	through 4	
Mother's age at child's birth	20-34 years	14	58	1.0	-
	<20 years	1	2	1.85	0.16 - 21.7
	35+ years	2	10	0.79	0.14 - 4.49
Mother's educational level	High School	9	51	1.0	-
	< High School	1	3	1.84	0.14 - 24.0
	College+	7	16	2.60	0.82 - 8.20
Father's educational level	High School	13	45	1.0	-
	< High School	0	2	0	-
	College+	5	23	0.71	0.21 - 2.38
Child was mother's first live birth	No	12	37	1.0	-
	Yes	5	33	0.49	0.16 - 1.53
Child's birth weight	2500-3999gm	12	56	1.0	-
	<2500 grams	1	4	1.12	0.11 - 11.7
	4000+ grams	4	11	1.83	0.46 - 7.31
Adverse pregnancy outcome (stillbirths; miscarriages; tubal, ectopic, or molar pregnancies) of mother prior to child's birth	No	15	53	1.0	-
	Yes	2	17	0.44	0.10 - 2.07

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother's total live births equal to 4 or more	No	11	61	1.0	-
	Yes	6	9	3.63	1.08 - 12.2
Any pregnancy termination of mother prior to child's birth	No	15	60	1.0	-
	Yes	2	10	0.79	0.17 - 3.72

Table 28b. Interview Study Analysis of Demographic, Pregnancy, and Birth Characteristics: Leukemia

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
	Leukemia Diagno	sis Ages 0 t	hrough 19		
Mother's age at child's birth	20-34 years	20	71	1.0	-
	<20 years	2	5	1.47	0.28 - 7.59
	35+ years	0	11	0	-
Mother's educational level	High School	15	60	1.0	-
	<high school<="" td=""><td>2</td><td>7</td><td>0.99</td><td>0.17 - 5.63</td></high>	2	7	0.99	0.17 - 5.63
	College+	4	17	0.87	0.26 - 2.90
Father's educational level	High School	17	41	1.0	-
	<high school<="" td=""><td>0</td><td>9</td><td>0</td><td>-</td></high>	0	9	0	-
	College+	3	34	0.20	0.05 - 0.76
Child was maternal first live birth	No	13	49	1.0	-
	Yes	8	37	0.73	0.26 - 2.05
Child's birth weight	2500-3999gm	17	67	1.0	-
	<2500 grams	1	9	0.42	0.05 - 3.61
	4000+ grams	4	12	1.36	0.37 - 4.94
Adverse pregnancy outcome (stillbirths; miscarriages; tubal, ectopic, or molar pregnancies) of mother prior to child's birth	No	18	74	1.0	-
	Yes	3	13	1.00	0.26 - 3.89

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother's total live births equal to 4 or more	No	14	72	1.0	-
	Yes	7	15	2.13	0.77 - 5.93
Any pregnancy termination of mother prior to child's birth	No	17	77	1.0	-
	Yes	4	10	1.93	0.47 - 7.86
	Leukemia Diagno	osis Ages 0 t	through 4		
Mother's age at child's birth	20-34 years	8	24	1.0	-
	<20 years	1	1	3.46	0.22 - 55.8
	35+ years	0	6	0	-
Mother's educational level	High School	6	25	1.0	-
	<high school<="" td=""><td>1</td><td>2</td><td>2.04</td><td>0.10 - 41.8</td></high>	1	2	2.04	0.10 - 41.8
	College+	2	8	1.06	0.18 - 6.36
Father's educational level	High School	7	19	1.0	-
	<high school<="" td=""><td>0</td><td>1</td><td>0</td><td>-</td></high>	0	1	0	-
	College+	2	15	0.34	0.06 - 2.01
Child was mother's first live birth	No	6	16	1.0	-
	Yes	3	19	0.43	0.09 - 2.01
Child's birth weight	2500-3999gm	6	26	1.0	-
	<2500 grams	0	4	0	-
	4000+ grams	3	6	2.75	0.41 - 18.4
Adverse pregnancy outcome (stillbirths; miscarriages; tubal, ectopic, or molar pregnancies) of mother prior to child's birth	No Yes	9	25 10	1.0 0	- -

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother's total live births equal to 4 or more	No	5	30	1.0	-
	Yes	4	5	3.94	0.85 - 18.2
Any pregnancy termination of mother prior to child's birth	No	7	29	1.0	-
	Yes	2	6	1.36	0.26 - 7.20

Table 28c. Interview Study Analysis of Demographic, Pregnancy, and Birth Characteristics: Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Nervo	us System Cancer	Diagnosis A	ges 0 through	າ 19	
Mother's age at child's birth	20-34 years	15	57	1.0	-
	<20 years	0	6	0	-
	35+ years	2	8	0.85	0.14 - 5.15
Mother's educational level	High School	11	55	1.0	-
	<high school<="" td=""><td>0</td><td>3</td><td>0</td><td>-</td></high>	0	3	0	-
	College+	6	12	3.03	0.88 - 10.5
Father's educational level	High School	10	49	1.0	-
	<high school<="" td=""><td>2</td><td>4</td><td>2.26</td><td>0.40 - 12.7</td></high>	2	4	2.26	0.40 - 12.7
	College+	6	17	1.72	0.50 - 5.86
Child's was mother's first live birth	No	11	42	1.0	-
	Yes	6	28	0.85	0.28 - 2.52
Child's birth weight	2500-3999gm	14	61	1.0	-
	<2500 grams	1	3	1.37	0.14 - 13.2
	4000+ grams	2	7	1.43	0.21 - 9.57
Adverse pregnancy outcome (stillbirths; miscarriages; tubal, ectopic, or molar pregnancies) of mother prior to child's birth	No	14	56	1.0	-
	Yes	3	14	0.85	0.16 - 4.33

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother's total live births equal to 4 or more	No	13	54	1.0	-
	Yes	4	16	1.07	0.29 - 3.97
Any pregnancy termination of mother prior to child's birth	No	16	64	1.0	-
	Yes	1	6	0.67	0.08 - 5.54
Nervo	ous System Cancer	Diagnosis A	ges 0 throug	h 4	
Mother's age at child's birth	20-34 years	6	30	1.0	-
	<20 years	0	1	0	-
	35+ years	2	4	2.20	0.25 - 19.2
Mother's educational level	High School	3	26	1.0	-
	<high school<="" td=""><td>0</td><td>1</td><td>0</td><td>-</td></high>	0	1	0	-
	College+	5	8	5.89	1.07 - 32.4
Father's educational level	High School	6	26	1.0	-
	<high school<="" td=""><td>0</td><td>1</td><td>0</td><td>-</td></high>	0	1	0	-
	College+	3	8	1.59	0.29 - 8.73
Child was mother's first live birth	No	6	21	1.0	-
	Yes	2	14	0.57	0.11 - 3.06
Child's birth weight	2500-3999gm	6	30	1.0	-
	<2500 grams	1	0	-	-
	4000+ grams	1	5	1.28	0.11 - 14.8
Adverse pregnancy outcome (stillbirths; miscarriages; tubal, ectopic, or molar pregnancies) of mother prior to child's birth	No	6	28	1.0	-
	Yes	2	7	1.37	0.22 - 8.49

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother's total live births equal to 4 or more	No Yes	6 2	31 4	1.0 3.15	- 0.43 - 23.4
Any pregnancy termination of mother prior to child's birth	No Yes	8 0	31 4	1.0 0	-

Table 28d. Interview Study Analysis of Demographic, Pregnancy, and Birth Characteristics: Brain and Central Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Brain and Central Nervous System Cancer Diagnosis Ages 0 through 19								
Mother's age at child's birth	20-34 years <20 years 35+ years	12 0 0	39 6 7	1.0 0 0				
Mother's educational level	High School	9	42	1.0	-			
	<high school<="" td=""><td>0</td><td>3</td><td>0</td><td>-</td></high>	0	3	0	-			
	College+	3	6	3.26	0.64 - 16.5			
Father's educational level	High School	7	36	1.0	-			
	<high school<="" td=""><td>2</td><td>4</td><td>2.33</td><td>0.41 - 13.4</td></high>	2	4	2.33	0.41 - 13.4			
	College+	4	11	1.94	0.43 - 8.71			
Child was mother's first live birth	No	7	31	1.0	-			
	Yes	5	20	1.14	0.31 - 4.19			
Child's birth weight	2500-3999gm	10	45	1.0	-			
	<2500 grams	1	3	1.39	0.14 - 13.6			
	4000+ grams	1	4	1.71	0.08 - 38.2			
Adverse pregnancy outcome (stillbirths; miscarriages; tubal, ectopic, or molar pregnancies) of mother prior to child's birth	No	10	41	1.0	-			
	Yes	2	10	0.79	0.08 - 7.28			

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother's total live births equal to 4 or more	No	10	35	1.0	-
	Yes	2	16	0.40	0.07 - 2.22
Any pregnancy termination of mother prior to child's birth	No	11	48	1.0	-
	Yes	1	3	1.33	0.14 - 12.8
Brain and Cent	ral Nervous Syste	m Cancer Di	agnosis Ages	0 through 4	
Mother's age at child's birth	20-34 years	3	12	1.0	-
	<20 years	0	1	0	-
	35+ years	0	3	0	-
Mother's educational level	High School <high school<br="">College+</high>	1 0 2	13 1 2	1.0 0 0	
Father's educational level	High School	3	13	1.0	-
	<high school<="" td=""><td>0</td><td>1</td><td>0</td><td>-</td></high>	0	1	0	-
	College+	1	2	2.12	0.13 - 35.4
Child was mother's first live birth	No	2	10	1.0	-
	Yes	1	6	1.00	0.07 - 13.7
Child's birth weight	2500-3999gm	2	14	1.0	-
	<2500 grams	1	0	-	-
	4000+ grams	0	2	0	-
Adverse pregnancy outcome (stillbirths; miscarriages; tubal, ectopic, or molar pregnancies) of mother prior to child's birth	No	2	13	1.0	-
	Yes	1	3	2.45	0.14 - 42.6

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother's total live births equal to 4 or more	No Yes	3 0	12 4	1.0 0	- -
Any pregnancy termination of mother prior to child's birth	No Yes	3 0	15 1	1.0 0	-

Table 29. Interview Study Family Medical History

	Cases (r	า=40)	Controls (n=159)		
Characteristic	Number	Percent	Number	Percent	
Self reported inherited health problem or birth defect in child: Yes No Unknown	1 37 2	2.5 92.5 5.0	4 153 2	2.5 96.2 1.3	
Reported problem in child appears to be a definite birth defect: Yes No Unknown	0 38 2	0.0 95.0 5.0	1 156 2	0.6 98.1 1.3	
Self reported inherited health problem or birth defect in any of child's siblings: Yes No Unknown	2 36 2	5.0 90.0 5.0	9 148 2	5.7 93.1 1.3	
Reported problem in any of child's siblings appears to be a definite birth defect: Yes No Unknown	2 36 2	5.0 90.0 5.0	6 151 2	3.8 95.0 1.3	
Family* history of any type of cancer: Yes No Unknown	26 11 3	65.0 27.5 7.5	108 47 4	67.9 29.6 2.5	
Family* history of leukemia: Yes No Unknown	2 36 2	5.0 90.0 5.0	2 155 2	1.3 97.5 1.3	

	Cases (ı	า=40)	Controls (n=159)		
Characteristic	Number	Percent	Number	Percent	
Family* history of brain tumors: Yes No Unknown	0	0.0	4	2.5	
	38	95.0	153	96.2	
	2	5.0	2	1.3	
History of any cancer in grandparents: Yes No Unknown	26	65.0	108	67.9	
	12	30.0	49	30.8	
	2	5.0	2	1.3	
History of any cancer in parents: Yes No Unknown	4	10.0	8	5.0	
	34	85.0	149	93.7	
	2	5.0	2	1.3	
History of any cancer in siblings: Yes No Unknown	0	0.0	0	0.0	
	38	95.0	157	98.7	
	2	5.0	2	1.3	

^{*} Family history includes subject's biological grandparents, parents and siblings.

Table 30a. Interview Study Analysis of Family Medical History: Leukemia and Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Leukemia and	Nervous Sys	tem Cancer	Diagnosis Age	es 0 through 19	
Self reported inherited health problem or birth defect in child	No	37	153	1.0	-
	Yes	1	4	1.00	0.10 - 10.1
Reported problem in child appears to be a definite birth defect	No Yes	38 0	156 1	1.0 0	-
Self reported inherited health problem or birth defect in any of child's siblings	No	36	148	1.0	-
	Yes	2	9	0.86	0.18 - 4.11
Reported problem in any of child's siblings appears to be a definite birth defect	No	36	151	1.0	-
	Yes	2	6	1.36	0.26 - 7.20
Family history of any type of cancer	No	11	47	1.0	-
	Yes	26	108	0.97	0.44 - 2.17
Family history of leukemia	No	36	155	1.0	-
	Yes	2	2	4.00	0.56 - 28.4
Family history of brain tumors	No Yes	38 0	153 4	1.0 0	-
History of any cancer in grandparents	No	12	49	1.0	-
	Yes	26	108	0.95	0.44 - 2.03
History of any cancer in parents	No	34	149	1.0	-
	Yes	4	8	2.11	0.58 - 7.66

Table 30: page 1 of 12

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
History of any cancer in siblings	No Yes	38 0	157 0	1.0 -	-
Leukemia and	d Nervous Sy	stem Cancer	Diagnosis Ag	es 0 through 4	
Self reported inherited health problem or birth defect in child	No	16	68	1.0	-
	Yes	1	2	2.45	0.14 - 42.6
Reported problem in child appears to be a definite birth defect	No Yes	17 0	70 0	1.0	-
Self reported inherited health problem or birth defect in any of child's siblings	No	16	67	1.0	-
	Yes	1	3	1.33	0.14 - 12.8
Reported problem in any of child's siblings appears to be a definite birth defect	No	16	68	1.0	-
	Yes	1	2	2.00	0.18 - 22.1
Family history of any type of cancer	No	4	23	1.0	-
	Yes	12	46	1.41	0.39 - 5.01
Family history of leukemia	No Yes	17 0	69 1	1.0 0	-
Family history of brain tumors	No Yes	17 0	68 2	1.0 0	-
History of any cancer in grandparents	No	5	24	1.0	-
	Yes	12	46	1.17	0.37 - 3.70
History of any cancer in parents	No	15	68	1.0	-
	Yes	2	2	3.72	0.52 - 26.5

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
History of any cancer in siblings	No Yes	17 0	70 0	1.0 -	-

Table 30b. Interview Study Analysis of Family Medical History: Leukemia

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
	Leukemia D	iagnosis Age	s 0 through 1	9	
Self reported inherited health problem or birth defect in child	No	20	84	1.0	-
	Yes	1	3	1.40	0.12 - 16.4
Reported problem in child appears to be a definite birth defect	No Yes	21 0	86 1	1.0 0	-
Self reported inherited health problem or birth defect in any of child's siblings	No	19	83	1.0	-
	Yes	2	4	2.17	0.35 - 13.5
Reported problem in any of child's siblings appears to be a definite birth defect	No	19	83	1.0	-
	Yes	2	4	2.17	0.35 - 13.5
Family history of any type of cancer	No	7	24	1.0	-
	Yes	13	62	0.73	0.27 - 2.00
Family history of leukemia	No	20	86	1.0	-
	Yes	1	1	4.00	0.25 - 64.0
Family history of brain tumors	No Yes	21 0	87 0	1.0 -	-
History of any cancer in grandparents	No	8	25	1.0	-
	Yes	13	62	0.69	0.26 - 1.77
History of any cancer in parents	No	19	80	1.0	-
	Yes	2	7	0.73	0.27 - 2.00

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
History of any cancer in siblings	No Yes	21 0	87 0	1.0 -	-
	Leukemia l	Diagnosis Age	es 0 through 4	ļ	
Self reported inherited health problem or birth defect in child	No Yes	8 1	33 2	1.0 2.45	- 0.14 - 42.6
Reported problem in child appears to be a definite birth defect	No Yes	9 0	35 0	1.0 -	-
Self reported inherited health problem or birth defect in any of child's siblings	No Yes	8 1	34 1	1.0 4.00	- 0.25 - 64.0
Reported problem in any of child's siblings appears to be a definite birth defect	No Yes	8 1	34 1	1.0 4.00	- 0.25 - 64.0
Family history of any type of cancer	No Yes	3 5	11 24	1.0 0.80	- 0.17 - 3.76
Family history of leukemia	No Yes	9 0	35 0	1.0 -	-
Family history of brain tumors	No Yes	9 0	35 0	1.0 -	-
History of any cancer in grandparents	No Yes	4 5	11 24	1.0 0.60	- 0.14 - 2.49
History of any cancer in parents	No Yes	9 0	33 2	1.0 0	-

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
History of any cancer in siblings	No Yes	9 0	35 0	1.0 -	-

Table 30c. Interview Study Analysis of Family Medical History: Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval				
Nervous System Cancer Diagnosis Ages 0 through 19									
Self reported inherited health problem or birth defect in child	No Yes	17 0	69 1	1.0 0	-				
Reported problem in child appears to be a definite birth defect	No Yes	17 0	70 0	1.0	-				
Self reported inherited health problem or birth defect in any of child's siblings	No Yes	17 0	65 5	1.0 0	- -				
Reported problem in any of child's siblings appears to be a definite birth defect	No Yes	17 0	68 2	1.0 0	-				
Family history of any type of cancer	No Yes	4 13	23 46	1.0 1.53	- 0.42 - 5.67				
Family history of leukemia	No Yes	16 1	69 1	1.0 4.00	- 0.25 - 64.0				
Family history of brain tumors	No Yes	17 0	66 4	1.0 0	-				
History of any cancer in grandparents	No Yes	4 13	24 46	1.0 1.63	- 0.45 - 5.88				
History of any cancer in parents	No Yes	15 2	69 1	1.0 7.29	- 0.66 - 80.8				

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
History of any cancer in siblings	No Yes	17 0	70 0	1.0 -	-
Nervo	us System Ca	ancer Diagno	sis Ages 0 thr	ough 4	
Self reported inherited health problem or birth defect in child	No Yes	8 0	35 0	1.0 -	- -
Reported problem in child appears to be a definite birth defect	No Yes	8 0	35 0	1.0 -	-
Self reported inherited health problem or birth defect in any of child's siblings	No Yes	8 0	33 2	1.0 0	-
Reported problem in any of child's siblings appears to be a definite birth defect	No Yes	8 0	34 1	1.0 0	-
Family history of any type of cancer	No Yes	1 7	12 22	1.0 3.93	- 0.36 - 42.4
Family history of leukemia	No Yes	8 0	34 1	1.0 0	-
Family history of brain tumors	No Yes	8 0	33 2	1.0 0	-
History of any cancer in grandparents	No Yes	1 7	13 22	1.0 4.27	- 0.41 - 44.0
History of any cancer in parents	No Yes	6 2	35 0	1.0 -	-

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
History of any cancer in siblings	No Yes	8 0	35 0	1.0 -	-

Table 30d. Interview Study Analysis of Family Medical History: Brain and Central Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Brain and Central Nervous System Cancer Diagnosis Ages 0 through 19								
Self reported inherited health problem or birth defect in child	No Yes	12 0	50 1	1.0 0	-			
Reported problem in child appears to be a definite birth defect	No Yes	12 0	51 0	1.0 -	-			
Self reported inherited health problem or birth defect in any of child's siblings	No Yes	12 0	47 4	1.0 0	- -			
Reported problem in any of child's siblings appears to be a definite birth defect	No Yes	12 0	49 2	1.0 0	-			
Family history of any type of cancer	No Yes	3 9	16 34	1.0 1.26	- 0.28 - 5.66			
Family history of leukemia	No Yes	11 1	51 0	1.0 -	-			
Family history of brain tumors	No Yes	12 0	47 4	1.0 0	-			
History of any cancer in grandparents	No Yes	3 9	17 34	1.0 1.38	- 0.32 - 5.95			
History of any cancer in parents	No Yes	11 1	50 1	1.0 1.26	- 0.28 - 5.66			

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
History of any cancer in siblings	No Yes	12 0	51 0	1.0 -	-
Brain and Centr	al Nervous	System Canc	er Diagnosis A	Ages 0 through	4
Self reported inherited health problem or birth defect in child	No Yes	3 0	16 0	1.0 -	- -
Reported problem in child appears to be a definite birth defect	No Yes	3 0	16 0	1.0 -	-
Self reported inherited health problem or birth defect in any of child's siblings	No Yes	3 0	15 1	1.0 0	-
Reported problem in any of child's siblings appears to be a definite birth defect	No Yes	3 0	15 1	1.0 0	-
Family history of any type of cancer	No Yes	0	5 10	-	-
Family history of leukemia	No Yes	3 0	16 0	1.0 -	-
Family history of brain tumors	No Yes	3 0	14 2	1.0 0	-
History of any cancer in grandparents	No Yes	0 3	6 10	-	-
History of any cancer in parents	No Yes	2 1	16 0	1.0 -	-

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
History of any cancer in siblings	No Yes	3 0	16 0	1.0 -	-

 Table 31. Health, Medical Conditions and Medical Procedures

Charastaristia	Cases ((n=40)	Controls (n=159)	
Characteristic	Number	Percent	Number	Percent
Prenatal E	xposure			
Mother had measles during pregnancy: Yes No Unknown	0	0.0	0	0.0
	38	95.0	156	98.1
	2	5.0	3	1.9
Mother had rubella during pregnancy: Yes No Unknown	0	0.0	0	0.0
	38	95.0	156	98.1
	2	5.0	3	1.9
Mother had chickenpox during pregnancy: Yes No Unknown	0	0.0	0	0.0
	38	95.0	156	98.1
	2	5.0	3	1.9
Mother had cytomegalovirus during pregnancy: Yes No Unknown	0	0.0	0	0.0
	38	95.0	156	98.1
	2	5.0	3	1.9
Mother had fever >100° for 3 or more days during pregnancy: Yes No Unknown	1	2.5	5	3.1
	37	92.5	149	93.7
	2	5.0	5	3.1
Mother had mononucleosis during pregnancy: Yes No Unknown	0	0.0	2	1.3
	38	95.0	154	96.9
	2	5.0	3	1.9

	Cases ((n=40)	Controls (n=159)		
Characteristic	Number	Percent	Number	Percent	
Mother had vaginal or uterine bleeding during pregnancy: Yes No Unknown	3	7.5	19	11.9	
	35	87.5	136	85.5	
	2	5.0	4	2.5	
Mother had high blood pressure during pregnancy: Yes No Unknown	3	7.5	10	6.3	
	35	87.5	146	91.8	
	2	5.0	3	1.9	
Mother had toxemia or pre-eclampsia during pregnancy: Yes No Unknown	1	2.5	8	5.0	
	37	92.5	148	93.1	
	2	5.0	3	1.9	
Mother had protein in urine during pregnancy: Yes No Unknown	1	2.5	6	3.8	
	37	92.5	145	91.2	
	2	5.0	8	5.0	
Mother had nausea or vomiting > 3 months during pregnancy: Yes No Unknown	5	12.5	11	6.9	
	33	82.5	145	91.2	
	2	5.0	3	1.9	
Mother had aplastic anemia, due to bone marrow defects during pregnancy: Yes No Unknown	0	0.0	0	0.0	
	38	95.0	156	98.1	
	2	5.0	3	1.9	
Mother had other illnesses or complications during pregnancy: Yes No Unknown	9	22.5	29	18.2	
	29	72.5	129	81.1	
	2	5.0	1	0.6	

	Cases ((n=40)	Controls (n=159)	
Characteristic	Number	Percent	Number	Percent
Mother took antibiotics for 5+ days during pregnancy: Yes No Unknown	5	12.5	23	14.5
	31	77.5	130	81.8
	4	10.0	6	3.8
Mother took steroids for 5+ days during pregnancy: Yes No Unknown	1	2.5	0	0.0
	37	92.5	156	98.1
	2	5.0	3	1.9
Mother had any vaccinations during pregnancy: Yes No Unknown	1	2.5	3	1.9
	37	92.5	151	95.0
	2	5.0	5	3.1
Mother had dental x-rays during pregnancy: Yes No Unknown	9	22.5	46	28.9
	29	72.5	99	62.3
	2	5.0	14	8.8
Mother had diagnostic x-rays or radiation therapy during pregnancy: Yes No Unknown	5	12.5	9	5.7
	33	82.5	147	92.5
	2	5.0	3	1.9
Mothers who had diagnostic x-rays: Average total x-rays	1.0		1.1	
Mother received blood or blood products during pregnancy: Yes No Unknown	0	0.0	1	0.6
	38	95.0	155	97.5
	2	5.0	3	1.9

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Charactaristic	Cases ((n=40)	Controls (n=159)	
Characteristic	Number	Percent	Number	Percent
Postnatal I	Exposure			
Oxygen given to child immediately after birth: Yes No Unknown	2	5.0	8	5.0
	37	92.5	148	93.1
	1	2.5	3	1.9
Child had an IV tube immediately after birth: Yes No Unknown	1	2.5	8	5.0
	38	95.0	149	93.7
	1	2.5	2	1.3
Child was breast fed: Yes No Unknown	17	42.5	65	40.9
	22	55.0	92	57.9
	1	2.5	2	1.3
Children who were breast fed: Average number of breast feeding months	9.6		6.8	
Mother took multivitamins for 5+ days while breast feeding: Yes No Unknown	13	76.5	48	73.9
	4	23.5	14	21.5
	0	0.0	3	4.6
Mother took antibiotics while breast feeding: Yes No Unknown	0	0.0	5	7.7
	16	94.1	59	90.8
	1	5.9	1	1.5
Mother took steroids while breast feeding: Yes No Unknown	0 17 0	0.0 100.0 0.0	0 65 0	0.0 100.0 0.0
Mother received a vaccine while breast feeding: Yes No Unknown	0	0.0	2	3.1
	17	100.0	63	96.9
	0	0.0	0	0.0

	Cases ((n=40)	Controls (n=159)		
Characteristic	Number	Percent	Number	Percent	
Child had phototherapy immediately after birth: Yes No Unknown	9	22.5	37	23.3	
	29	72.5	117	73.6	
	2	5.0	5	3.1	
Child had problems after birth, prior to leaving hospital: Yes No Unknown	4	10.0	19	11.9	
	35	87.5	140	88.1	
	1	2.5	0	0.0	
Child had mononucleosis: Yes No Unknown	1	2.5	2	1.3	
	38	95.0	157	98.7	
	1	2.5	0	0.0	
Child had chickenpox: Yes No Unknown	19	47.5	79	49.7	
	20	50.0	78	49.1	
	1	2.5	2	1.3	
Child had rubella: Yes No Unknown	3	7.5	8	5.0	
	36	90.0	150	94.3	
	1	2.5	1	0.6	
Child had measles: Yes No Unknown	4	10.0	28	17.6	
	35	87.5	130	81.8	
	1	2.5	1	0.6	
Child had mumps: Yes No Unknown	2	5.0	12	7.6	
	37	92.5	147	92.5	
	1	2.5	0	0.0	
Child had cytomegalovirus: Yes No Unknown	0	0.0	0	0.0	
	39	97.5	159	100.0	
	1	2.5	0	0.0	
Child had aplastic anemia: Yes No Unknown	0	0.0	0	0.0	
	38	95.0	159	100.0	
	2	5.0	0	0.0	

	Cases (Cases (n=40)		Controls (n=159)	
Characteristic	Number	Percent	Number	Percent	
Child had epilepsy, seizures or convulsions: Yes No Unknown	2	5.0	6	3.8	
	37	92.5	153	96.2	
	1	2.5	0	0.0	
Child had autoimmune disorder: Yes No Unknown	1	2.5	1	0.6	
	38	95.0	158	99.4	
	1	2.5	0	0.0	
Child had organ transplant: Yes No Unknown	0	0.0	0	0.0	
	39	97.5	159	100.0	
	1	2.5	0	0.0	
Child had immunosuppression or recurring infections: Yes No Unknown	8	20.0	35	22.0	
	31	77.5	124	77.9	
	1	2.5	0	0.0	
Child had severe head injury: Yes No Unknown	4	10.0	18	11.3	
	35	87.5	140	88.1	
	1	2.5	1	0.6	
Child had other major illness: Yes No Unknown	16	40.0	43	27.0	
	23	57.5	116	73.0	
	1	2.5	0	0.0	
Child took antibiotics for 10+ days: Yes No Unknown	10	25.0	21	13.2	
	28	70.0	136	85.5	
	2	5.0	2	1.3	
Child had DPT or DT immunization: Yes No Unknown	38	95.0	154	96.9	
	1	2.5	5	3.1	
	1	2.5	0	0.0	
Child had mumps immunization: Yes No Unknown	33	82.5	135	84.9	
	5	12.5	13	8.2	
	2	5.0	11	6.9	

Characteristic	Cases ((n=40)	Controls (n=159)		
Characteristic	Number	Percent	Number	Percent	
Child had rubella immunization: Yes No Unknown	34	85.0	146	91.8	
	5	12.5	8	5.0	
	1	2.5	5	3.1	
Child had chickenpox immunization: Yes No Unknown	5	12.5	32	20.1	
	34	85.0	121	76.1	
	1	2.5	6	3.8	
Child had measles immunization: Yes No Unknown	31	77.5	139	87.4	
	8	20.0	14	8.8	
	1	2.5	6	3.8	
Child had polio immunization: Yes No Unknown	37	92.5	150	94.3	
	2	5.0	7	4.4	
	1	2.5	2	1.3	
Child had diagnostic x-rays: Yes No Unknown	15	37.5	41	25.8	
	24	60.0	117	73.6	
	1	2.5	1	0.6	
<u>Children who had diagnostic x-rays</u> : Average total x-rays	1.4		1.4		
Child had dental x-rays: Yes No Unknown	19	47.5	84	52.8	
	20	50.0	73	45.9	
	1	2.5	2	1.3	
Child had transfusion: Yes No Unknown	1	2.5	2	1.3	
	38	95.0	157	98.7	
	1	2.5	0	0.0	

Table 32a. Interview Study Analysis of Health, Medical Conditions and Medical Procedures: Leukemia and Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal Exposure: Leuk	emia and Ne	ervous Systen	n Cancer Diag	nosis Ages 0 th	rough 19
Mother had fever >100° for 3 or more days during pregnancy	No	37	149	1.0	-
	Yes	1	5	0.76	0.09 - 6.51
Mother had vaginal or uterine bleeding during pregnancy	No	35	136	1.0	-
	Yes	3	19	0.60	0.17 - 2.11
Mother had high blood pressure during pregnancy	No	35	146	1.0	-
	Yes	3	10	1.18	0.32 - 4.41
Mother had toxemia or pre-	No	37	148	1.0	-
eclampsia during pregnancy	Yes	1	8	0.48	0.06 - 4.01
Mother had protein in urine during pregnancy	No	37	145	1.0	-
	Yes	1	6	0.61	0.07 - 5.08
Mother had nausea or vomiting >3 months during pregnancy	No	33	145	1.0	-
	Yes	5	11	1.90	0.60 - 6.02
Mother had other illnesses or complications during pregnancy	No	29	129	1.0	-
	Yes	9	29	1.30	0.55 - 3.10
Mother took antibiotics for 5+ days during pregnancy	No	31	130	1.0	-
	Yes	5	23	0.81	0.29 - 2.27
Mother had any vaccinations during pregnancy	No	37	151	1.0	-
	Yes	1	3	1.24	0.13 - 11.9

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother had dental x-rays during pregnancy	No	29	99	1.0	-
	Yes	9	46	0.65	0.28 - 1.49
Mother had diagnostic x-rays or radiation therapy during pregnancy	No	33	147	1.0	-
	Yes	5	9	2.50	0.79 - 7.98
Postnatal Exposure: Leuk	emia and No	ervous Syster	n Cancer Diaç	gnosis Ages 0 th	rough 19
Oxygen given to child immediately after birth	No	37	148	1.0	-
	Yes	2	8	0.97	0.20 - 4.74
Child had IV tube immediately after birth	No	38	149	1.0	-
	Yes	1	8	0.48	0.06 - 4.01
Child had phototherapy immediately after birth	No	29	117	1.0	-
	Yes	9	37	0.93	0.39 - 2.18
Child had problems after birth, prior to leaving hospital	No	35	140	1.0	-
	Yes	4	19	0.86	0.27 - 2.74
Child was breast fed	No	22	92	1.0	-
	Yes	17	65	1.15	0.56 - 2.35
Mother took multivitamins for 5+ days while breast feeding	No	4	15	1.0	-
	Yes	13	48	0.79	0.21 - 3.00
Child had mononucleosis	No	38	157	1.0	-
	Yes	1	2	2.00	0.18 - 22.1
Child had chickenpox	No	20	78	1.0	-
	Yes	19	79	0.82	0.33 - 2.05
Child had rubella	No	36	150	1.0	-
	Yes	3	8	1.80	0.31 - 10.6

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child had measles	No	35	130	1.0	-
	Yes	4	28	0.42	0.12 - 1.46
Child had mumps	No	37	147	1.0	-
	Yes	2	12	0.58	0.11 - 3.16
Child had epilepsy, seizures or convulsions	No	37	153	1.0	-
	Yes	2	6	1.40	0.25 - 7.97
Child had autoimmune disorder	No	38	158	1.0	-
	Yes	1	1	4.00	0.25 - 64.0
Child had immunosuppression or recurring infections	No	31	124	1.0	-
	Yes	8	35	0.88	0.35 - 2.21
Child had severe head injury	No	35	140	1.0	-
	Yes	4	18	0.87	0.28 - 2.69
Child had other major illnesses	No	23	116	1.0	-
	Yes	16	43	1.93	0.91 - 4.08
Child took antibiotics for 10 days or more	No	28	136	1.0	-
	Yes	10	21	2.37	1.02 - 5.54
Child had DPT or DT immunization	No	1	5	1.0	-
	Yes	38	154	1.35	0.15 - 12.4
Child had mumps immunization	No	5	13	1.0	-
	Yes	33	135	0.72	0.17 - 3.15
Child had rubella immunization	No	5	8	1.0	-
	Yes	34	146	0.23	0.04 - 1.38

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child had chickenpox immunization	No	34	121	1.0	-
	Yes	5	32	0.57	0.21 - 1.55
Child had measles immunization	No	8	14	1.0	-
	Yes	31	139	0.37	0.12 - 1.14
Child had polio immunization	No	2	7	1.0	-
	Yes	37	150	1.05	0.15 - 7.54
Child had dental x-rays	No	20	73	1.0	-
	Yes	19	84	0.44	0.12 - 1.69
Child had diagnostic x-rays or radiation therapy	No	24	117	1.0	-
	Yes	15	41	1.78	0.85 - 3.73
Child had diagnostic x-rays or radiation therapy, excluding those received within 1 year of diagnosis	No	30	123	1.0	-
	Yes	9	35	1.05	0.43 - 2.55
Child's total number of diagnostic x-rays or radiation therapy	None	24	117	1.0	-
	1	10	29	1.65	0.72 - 3.76
	>1	5	12	2.20	0.65 - 7.41
Child's total number of diagnostic x-rays or radiation therapy, excluding those received within 1 year of diagnosis	None	30	123	1.0	-
	1	6	24	1.03	0.38 - 2.77
	>1	3	11	1.13	0.26 - 4.93
Child had transfusion	No	38	157	1.0	-
	Yes	1	2	2.00	0.18 - 22.1

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal Exposure: Leuk	cemia and N	ervous Systei	m Cancer Dia	gnosis Ages 0 th	rough 4
Mother had fever >100° for 3 or more days during pregnancy	No	16	65	1.0	-
	Yes	1	5	0.76	0.09 - 6.51
Mother had vaginal or uterine bleeding during pregnancy	No	14	59	1.0	-
	Yes	3	10	1.20	0.30 - 4.78
Mother had high blood pressure during pregnancy	No	15	65	1.0	-
	Yes	2	5	1.53	0.30 - 7.91
Mother had toxemia or pre-	No	16	66	1.0	-
eclampsia during pregnancy	Yes	1	4	1.00	0.10 - 10.1
Mother had protein in urine during pregnancy	No	16	64	1.0	-
	Yes	1	4	0.94	0.10 - 8.43
Mother had nausea or vomiting >3 months during pregnancy	No	14	67	1.0	-
	Yes	3	3	4.76	0.76 - 29.9
Mother had other illnesses or complications during pregnancy	No	12	57	1.0	-
	Yes	5	13	1.71	0.50 - 5.82
Mother had antibiotics for 5+ days during pregnancy	No	13	56	1.0	-
	Yes	4	13	1.22	0.36 - 4.05
Mother had any vaccinations during pregnancy	No	16	68	1.0	-
	Yes	1	2	2.00	0.18 - 22.1
Mother had dental x-rays during pregnancy	No	13	40	1.0	-
	Yes	4	24	0.49	0.14 - 1.69

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother had diagnostic x-rays or radiation therapy during pregnancy	No	15	66	1.0	-
	Yes	2	4	2.67	0.45 - 16.0
Postnatal Exposure: Leul	kemia and N	lervous Syste	m Cancer Dia	gnosis Ages 0 t	hrough 4
Oxygen given to child immediately after birth	No	15	65	1.0	-
	Yes	2	4	1.90	0.35 - 10.4
Child had IV tube immediately after birth	No	16	66	1.0	-
	Yes	1	4	1.00	0.11 - 8.95
Child had phototherapy immediately after birth	No	12	48	1.0	-
	Yes	5	20	0.95	0.30 - 2.97
Child had problems after birth, prior to leaving hospital	No	14	59	1.0	-
	Yes	3	12	1.08	0.26 - 4.45
Child was breast fed	No	8	35	1.0	-
	Yes	9	35	1.18	0.44 - 3.17
Mother took multivitamins for 5+ days while breast feeding	No	3	6	1.0	-
	Yes	6	27	0.23	0.02 - 2.25
Child had mononucleosis	No Yes	17 0	71 0	1.0 -	-
Child had chickenpox	No	13	63	1.0	-
	Yes	4	7	3.11	0.63 - 15.3
Child had rubella	No Yes	17 0	71 0	1.0	-
Child had measles	No Yes	17 0	71 0	1.0 -	-

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child had mumps	No Yes	17 0	71 0	1.0 -	-
Child had epilepsy, seizures or convulsions	No Yes	16 1	70 1	1.0 0	-
Child had autoimmune disorder	No Yes	17 0	70 1	1.0 0	-
Child had immunosuppression or recurring infections	No	13	59	1.0	-
	Yes	4	12	1.57	0.37 - 6.67
Child had severe head injury	No	15	67	1.0	-
	Yes	2	4	2.00	0.37 - 10.9
Child had other major illnesses	No	11	57	1.0	-
	Yes	6	14	2.50	0.71 - 8.73
Child took antibiotics for 10 days or more	No	11	61	1.0	-
	Yes	6	9	4.35	1.17 - 16.1
Child had DPT or DT immunization	No	1	4	1.0	-
	Yes	16	67	1.07	0.11 - 10.7
Child had mumps immunization	No	3	8	1.0	-
	Yes	14	55	1.07	0.11 - 10.7
Child had rubella immunization	No	3	7	1.0	-
	Yes	14	61	0.52	0.06 - 4.39
Child had chickenpox immunization	No	14	56	1.0	-
	Yes	3	10	1.22	0.30 - 5.00

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child had measles immunization	No	3	9	1.0	-
	Yes	14	56	1.35	0.15 - 12.4
Child had polio immunization	No	2	6	1.0	-
	Yes	15	63	0.84	0.10 - 7.08
Child had dental x-rays	No	16	65	1.0	-
	Yes	1	5	0.74	0.08 - 6.87
Child had diagnostic x-rays or radiation therapy	No	8	57	1.0	-
	Yes	9	13	4.67	1.49 - 14.6
Child had diagnostic x-rays or radiation therapy, excluding those received within 1 year of diagnosis	No	14	60	1.0	-
	Yes	3	10	1.36	0.28 - 6.70
Child's total number of diagnostic x-rays or radiation therapy	None	8	57	1.0	-
	1	7	10	5.13	1.40 - 18.8
	>1	2	3	3.75	0.58 - 24.1
Child's total number of diagnostic x-rays or radiation therapy, excluding those received within 1 year of diagnosis	None	14	60	1.0	-
	1	3	8	1.75	0.34 - 9.05
	>1	0	2	0	-
Child had transfusion	No	16	69	1.0	-
	Yes	1	2	2.00	0.18 - 22.1

Table 32b. Interview Study Analysis of Health, Medical Conditions and Medical Procedures: Leukemia

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal E	xposure: Leu	ıkemia Diagr	nosis Ages 0 tl	hrough 19	
Mother had fever >100 ° for 3 or more days during pregnancy	No	21	81	1.0	-
	Yes	0	3	0	-
Mother had vaginal or uterine bleeding during pregnancy	No	20	74	1.0	-
	Yes	1	12	0.31	0.04 - 2.50
Mother had high blood pressure during pregnancy	No	19	79	1.0	-
	Yes	2	7	1.15	0.23 - 5.83
Mother had toxemia or pre-	No	21	84	1.0	-
eclampsia during pregnancy	Yes	0	2	0	-
Mother had protein in urine during pregnancy	No	21	79	1.0	-
	Yes	0	4	0	-
Mother had nausea or vomiting >3 months during pregnancy	No	17	79	1.0	-
	Yes	4	7	2.57	0.67 - 9.83
Mother had other illnesses or complications during pregnancy	No	19	72	1.0	-
	Yes	2	15	0.47	0.09 - 2.30
Mother had antibiotics for 5+ days during pregnancy	No	19	72	1.0	-
	Yes	1	11	0.33	0.04 - 2.68
Mother had any vaccinations during pregnancy	No Yes	21 0	84 1	1.0 0	-

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother had dental x-rays during pregnancy	No	18	57	1.0	-
	Yes	3	25	0.38	0.10 - 1.38
Mother had diagnostic x-rays or radiation therapy during pregnancy	No	17	80	1.0	-
	Yes	4	6	2.78	0.73 - 10.5
Postnatal I	Exposure: Lei	ukemia Diag	nosis Ages 0 t	hrough 19	
Oxygen given to child immediately after birth	No Yes	22 0	80 5	1.0 0	-
Child had IV tube immediately after birth	No Yes	22 0	82 5	1.0 0	-
Child had phototherapy immediately after birth	No	16	66	1.0	-
	Yes	5	18	1.15	0.33 - 3.99
Child had problems after birth, prior to leaving hospital	No	20	77	1.0	-
	Yes	2	11	0.69	0.14 - 3.47
Child was breast fed	No	14	50	1.0	-
	Yes	8	37	0.77	0.30 - 2.02
Mother took multivitamins for 5+ days while breast feeding	No	3	10	1.0	-
	Yes	5	25	0.50	0.08 - 3.07
Child had mononucleosis	No	21	87	1.0	-
	Yes	1	1	4.00	0.25 - 64.0
Child had chickenpox	No	11	42	1.0	-
	Yes	11	45	0.88	0.27 - 2.88
Child had rubella	No	21	85	1.0	-
	Yes	1	3	1.40	0.12 - 16.4

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child had measles	No	21	72	1.0	-
	Yes	1	16	0.15	0.02 - 1.37
Child had mumps	No	21	82	1.0	-
	Yes	1	6	0.53	0.04 - 6.68
Child had epilepsy, seizures or convulsions	No Yes	22 0	86 2	1.0 0	-
Child had autoimmune disorder	No Yes	21 1	88 0	1.0	-
Child had immunosuppression or recurring infections	No	16	63	1.0	-
	Yes	6	25	0.94	0.32 - 2.79
Child had severe head injury	No	20	72	1.0	-
	Yes	2	15	0.49	0.10 - 2.28
Child had other major illnesses	No	11	62	1.0	-
	Yes	11	26	2.38	0.91 - 6.23
Child took antibiotics for 10 days or more	No	15	72	1.0	-
	Yes	7	15	2.13	0.77 - 5.93
Child had DPT or DT immunization	No Yes	0 22	0 88	-	-
Child had mumps immunization	No	2	3	1.0	-
	Yes	20	81	0.37	0.05 - 2.86
Child had rubella immunization	No	2	1	1.0	-
	Yes	20	86	0.14	0.01 - 1.52

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child had chickenpox immunization	No	19	62	1.0	-
	Yes	3	21	0.50	0.14 - 1.74
Child had measles immunization	No	3	3	1.0	-
	Yes	19	83	0.21	0.03 - 1.30
Child had polio immunization	No Yes	1 21	0 88		-
Child had dental x-rays	No	11	36	1.0	-
	Yes	11	50	0.37	0.07 - 2.12
Child had diagnostic x-rays or radiation therapy	No	12	61	1.0	-
	Yes	10	26	2.02	0.75 - 5.44
Child had diagnostic x-rays or radiation therapy, excluding those received within 1 year of diagnosis	No	14	63	1.0	-
	Yes	8	24	1.51	0.54 - 4.21
Child's total number of diagnostic x-rays or radiation therapy	None	12	61	1.0	-
	1	7	16	2.21	0.73 - 6.67
	>1	3	10	1.64	0.36 - 7.51
Child's total number of diagnostic x-rays or radiation therapy, excluding those received within 1 year of diagnosis	None	14	63	1.0	-
	1	5	15	1.45	0.45 - 4.66
	>1	3	9	1.64	0.33 - 8.13
Child had transfusion	No	21	87	1.0	-
	Yes	1	1	4.00	0.25 - 64.0

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval				
Prenatal	Prenatal Exposure: Leukemia Diagnosis Ages 0 through 4								
Mother had fever >100 ° for 3 or more days during pregnancy	No Yes	9 0	32 3	1.0 0	-				
Mother had vaginal or uterine bleeding during pregnancy	No	8	30	1.0	-				
	Yes	1	5	0.77	0.08 - 7.76				
Mother had high blood pressure during pregnancy	No	8	33	1.0	-				
	Yes	1	2	2.00	0.18 - 22.1				
Mother had toxemia or pre-	No	9	34	1.0	-				
eclampsia during pregnancy	Yes	0	1	0					
Mother had protein in urine during pregnancy	No Yes	9 0	30 3	1.0 0	-				
Mother had nausea or vomiting >3 months during pregnancy	No	7	34	1.0	-				
	Yes	2	1	8.00	0.73 - 88.2				
Mother had other illnesses or complications during pregnancy	No Yes	9 0	31 4	1.0 0					
Mother had antibiotics for 5+ days during pregnancy	No	8	28	1.0	-				
	Yes	1	6	0.62	0.07 - 5.44				
Mother had any vaccinations during pregnancy	No Yes	9 0	34 1	1.0 0	-				
Mother had dental x-rays during pregnancy	No	8	23	1.0	-				
	Yes	1	11	0.27	0.03 - 2.32				
Mother had diagnostic x-rays or radiation therapy during pregnancy	No	7	33	1.0	-				
	Yes	2	2	4.00	0.56 - 28.4				

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Postnatal	Exposure: Le	ukemia Diaç	nosis Ages 0	through 4	
Oxygen given to child immediately after birth	No Yes	9 0	32 2	1.0 0	-
Child had IV tube immediately after birth	No Yes	9 0	33 2	1.0 0	-
Child had phototherapy immediately after birth	No Yes	7 2	23 10	1.0 0.71	- 0.12 - 4.09
Child had problems after birth, prior to leaving hospital	No Yes	8 1	29 7	1.0 0.49	- 0.05 - 4.93
Child was breast fed	No Yes	6 3	17 18	1.0 0.52	- 0.13 - 2.18
Mother took multivitamins for 5+ days while breast feeding	No Yes	2 1	4 12	1.0 0	-
Child had mononucleosis	No Yes	9 0	36 0	1.0	-
Child had chickenpox	No Yes	6 3	33 3	1.0 7.81	- 0.77 - 78.8
Child had rubella	No Yes	9 0	36 0	1.0 -	-
Child had measles	No Yes	9 0	36 0	1.0 -	
Child had mumps	No Yes	9 0	36 0	1.0 -	-

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child had epilepsy, seizures or convulsions	No Yes	9 0	36 0	1.0 -	-
Child had autoimmune disorder	No Yes	9 0	36 0	1.0	-
Child had immunosuppression or recurring infections	No	6	25	1.0	-
	Yes	3	11	1.16	0.22 - 6.09
Child had severe head injury	No	8	32	1.0	-
	Yes	1	4	1.00	0.11 - 8.95
Child had other major illnesses	No	5	28	1.0	-
	Yes	4	8	2.81	0.59 - 13.5
Child took antibiotics for 10 days or more	No	5	29	1.0	-
	Yes	4	7	3.27	0.68 - 15.7
Child had DPT or DT immunization	No Yes	0 9	0 36	-	-
Child had mumps immunization	No	1	1	1.0	-
	Yes	8	33	0.25	0.02 - 4.00
Child had rubella immunization	No	1	1	1.0	-
	Yes	8	35	0.25	0.02 - 4.00
Child had chickenpox immunization	No	7	24	1.0	-
	Yes	2	8	0.85	0.16 - 4.48
Child had measles immunization	No	1	1	1.0	-
	Yes	8	33	0.29	0.02 - 4.65

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child had polio immunization	No Yes	1 8	0 36	1 1	-
Child had dental x-rays	No	8	31	1.0	-
	Yes	1	4	0.93	0.09 - 9.34
Child had diagnostic x-rays or radiation therapy	No	4	26	1.0	-
	Yes	5	9	3.46	0.75 - 16.0
Child had diagnostic x-rays or radiation therapy, excluding those received within 1 year of diagnosis	No	6	27	1.0	-
	Yes	3	8	1.64	0.31 - 8.74
Child's total number of diagnostic x-rays or radiation therapy	None	4	26	1.0	-
	1	5	6	9.43	1.02 - 87.4
	>1	0	3	0	-
Child's total number of diagnostic x-rays or radiation therapy, excluding those received within 1 year of diagnosis	None	6	27	1.0	-
	1	3	6	2.24	0.39 - 13.0
	>1	0	2	0	-
Child had transfusion	No	8	35	1.0	-
	Yes	1	1	4.00	0.25 - 64.0

Table 32c. Interview Study Analysis of Health, Medical Conditions and Medical Procedures: Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval				
Prenatal Exposur	Prenatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 19								
Mother had fever >100 ° for 3 or more days during pregnancy	No	16	68	1.0	-				
	Yes	1	2	1.81	0.16 - 20.1				
Mother had vaginal or uterine bleeding during pregnancy	No	15	62	1.0	-				
	Yes	2	7	1.11	0.22 - 5.62				
Mother had high blood pressure during pregnancy	No	16	67	1.0	-				
	Yes	1	3	1.24	0.13 - 11.9				
Mother had toxemia or pre-	No	16	64	1.0	-				
eclampsia during pregnancy	Yes	1	6	0.65	0.07 - 5.72				
Mother had protein in urine during pregnancy	No	16	66	1.0	-				
	Yes	1	2	1.65	0.15 - 18.2				
Mother had nausea or vomiting >3 months during pregnancy	No	16	66	1.0	-				
	Yes	1	4	0.87	0.08 - 9.22				
Mother had other illnesses or complications during pregnancy	No	10	57	1.0	-				
	Yes	7	14	2.62	0.83 - 8.31				
Mother had antibiotics for 5+ days during pregnancy	No	12	58	1.0	-				
	Yes	4	12	1.33	0.37 - 4.72				
Mother had any vaccinations during pregnancy	No	16	67	1.0	-				
	Yes	1	2	1.81	0.16 - 20.1				

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother had dental x-rays during pregnancy	No	11	42	1.0	-
	Yes	6	21	1.08	0.35 - 3.34
Mother had diagnostic x-rays or radiation therapy during pregnancy	No	16	67	1.0	-
	Yes	1	3	1.81	0.16 - 20.1
Postnatal Exposu	re: Nervous S	System Cance	r Diagnosis A	ges 0 through	19
Oxygen given to child immediately after birth	No	15	68	1.0	-
	Yes	2	3	2.51	0.42 - 15.1
Child had IV tube immediately after birth	No	16	67	1.0	-
	Yes	1	3	1.33	0.14 - 12.8
Child had phototherapy immediately after birth	No	13	51	1.0	-
	Yes	4	19	0.76	0.23 - 2.54
Child had problems after birth, prior to leaving hospital	No	15	63	1.0	-
	Yes	2	8	1.12	0.21 - 5.97
Child was breast fed	No	8	42	1.0	-
	Yes	9	28	2.03	0.64 - 6.48
Mother took multivitamins for 5+ days while breast feeding	No	1	5	1.0	-
	Yes	8	23	1.50	0.16 - 14.4
Child had mononucleosis	No Yes	17 0	70 1	1.0 0	-
Child had chickenpox	No	9	36	1.0	-
	Yes	8	34	0.74	0.17 - 3.09
Child had rubella	No	15	65	1.0	-
	Yes	2	5	2.46	0.16 - 36.8

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child had measles	No	14	58	1.0	-
	Yes	3	12	0.97	0.19 - 4.90
Child had mumps	No	16	65	1.0	-
	Yes	1	6	0.63	0.07 - 5.89
Child had epilepsy, seizures or convulsions	No	15	67	1.0	-
	Yes	2	4	2.45	0.33 - 18.5
Child had autoimmune disorder	No Yes	17 0	70 1	1.0 0	-
Child had immunosuppression or recurring infections	No	15	61	1.0	-
	Yes	2	10	0.73	0.12 - 4.39
Child had severe head injury	No	15	68	1.0	-
	Yes	2	3	2.67	0.45 - 16.0
Child had other major illnesses	No	12	54	1.0	-
	Yes	5	17	1.38	0.40 - 4.71
Child took antibiotics for 10 days or more	No	13	64	1.0	-
	Yes	3	6	3.00	0.67 - 13.4
Child had DPT or DT immunization	No	1	5	1.0	-
	Yes	16	66	1.35	0.15 - 12.4
Child had mumps immunization	No	3	10	1.0	-
	Yes	13	54	1.46	0.15 - 14.4
Child had rubella immunization	No	3	7	1.0	-
	Yes	14	60	0.46	0.04 - 5.36

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child had chickenpox immunization	No	15	59	1.0	-
	Yes	2	11	0.76	0.14 - 4.06
Child had measles immunization	No	5	11	1.0	-
	Yes	12	56	0.54	0.13 - 2.34
Child had polio immunization	No	1	7	1.0	-
	Yes	16	62	3.04	0.27 - 34.3
Child had dental x-rays	No	9	37	1.0	-
	Yes	8	34	0.59	0.06 - 5.41
Child had diagnostic x-rays or radiation therapy	No	12	56	1.0	-
	Yes	5	15	1.51	0.48 - 4.70
Child had diagnostic x-rays or radiation therapy, excluding those received within 1 year of diagnosis	No	16	60	1.0	-
	Yes	1	11	0.34	0.04 - 3.02
Child's total number of diagnostic x-rays or radiation therapy	None	12	56	1.0	-
	1	3	13	1.13	0.30 - 4.25
	>1	2	2	4.12	0.56 - 30.3
Child's total number of diagnostic x-rays or radiation therapy, excluding those received within 1 year of diagnosis	None	16	60	1.0	-
	1	1	9	0.43	0.05 - 3.61
	>1	0	2	0	-
Child had transfusion	No Yes	17 0	70 1	1.0 0	-

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal Exposu	re: Nervous	System Cance	er Diagnosis A	ges 0 through	4
Mother had fever >100 ° for 3 or more days during pregnancy	No	7	33	1.0	-
	Yes	1	2	1.81	0.16 - 20.1
Mother had vaginal or uterine bleeding during pregnancy	No	6	29	1.0	-
	Yes	2	5	1.59	0.28 - 8.93
Mother had high blood pressure during pregnancy	No	7	32	1.0	-
	Yes	1	3	1.24	0.13 - 11.9
Mother had toxemia or pre-	No	7	32	1.0	-
eclampsia during pregnancy	Yes	1	3	1.40	0.12 - 16.4
Mother had protein in urine during pregnancy	No	7	34	1.0	-
	Yes	1	1	3.46	0.22 - 55. 8
Mother had nausea or vomiting >3 months during pregnancy	No	7	33	1.0	-
	Yes	1	2	2.00	0.11 - 37.8
Mother had other illnesses or complications during pregnancy	No	3	26	1.0	-
	Yes	5	9	3.45	0.75 - 15.9
Mother had antibiotics for 5+ days during pregnancy	No	5	28	1.0	-
	Yes	3	7	1.86	0.40 - 8.66
Mother had any vaccinations during pregnancy	No	7	34	1.0	-
	Yes	1	1	4.00	0.25 - 64.0
Mother had dental x-rays during pregnancy	No	5	17	1.0	-
	Yes	3	13	0.75	0.15 - 3.71
Mother had diagnostic x-rays or radiation therapy during pregnancy	No Yes	8 0	33 2	1.0 0	-

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Postnatal Exposu	ıre: Nervous	System Canc	er Diagnosis <i>i</i>	Ages 0 through	4
Oxygen given to child immediately after birth	No	6	33	1.0	-
	Yes	2	2	3.72	0.52 - 26.5
Child had IV tube immediately after birth	No	7	33	1.0	-
	Yes	1	2	2.00	0.18 - 22.1
Child had phototherapy immediately after birth	No	5	25	1.0	-
	Yes	3	10	1.20	0.26 - 5.44
Child had problems after birth, prior to leaving hospital	No	6	30	1.0	-
	Yes	2	5	2.05	0.33 - 12.7
Child was breast fed	No	2	18	1.0	-
	Yes	6	17	3.16	0.61 - 16.5
Mother took multivitamins for 5+ days while breast feeding	No	1	2	1.0	-
	Yes	5	15	0.50	0.03 - 7.99
Child had mononucleosis	No Yes	8 0	35 0	1.0 -	
Child had chickenpox	No	7	30	1.0	-
	Yes	1	4	0.74	0.04 - 12.6
Child had rubella	No	8	35	1.0	-
	Yes	0	0	-	-
Child had measles	No Yes	8 0	35 0	1.0	- -
Child had mumps	No Yes	8 0	35 0	1.0 -	-

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child had epilepsy, seizures or convulsions	No Yes	7 1	34 1	1.0 -	-
Child had autoimmune disorder	No Yes	8 0	34 1	1.0 0	-
Child had immunosuppression or recurring infections	No	7	34	1.0	-
	Yes	1	1	4.00	0.25 - 64.0
Child had severe head injury	No Yes	7 1	35 0	1.0 -	-
Child had other major illnesses	No	6	29	1.0	-
	Yes	2	6	2.03	0.25 - 16.4
Child took antibiotics for 10 days or more	No	6	32	1.0	-
	Yes	2	2	8.00	0.73 - 88.2
Child had DPT or DT immunization	No	1	4	1.0	-
	Yes	7	31	1.07	0.11 - 10.7
Child had mumps immunization	No Yes	2 6	7 22	- -	-
Child had rubella immunization	No	2	6	1.0	-
	Yes	6	26	1.15	0.07 - 20.5
Child had chickenpox immunization	No	7	32	1.0	-
	Yes	1	2	4.00	0.25 - 64.0
Child had measles immunization	No Yes	2 6	8 23	-	-

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child had polio immunization	No	1	6	1.0	-
	Yes	7	27	2.68	0.22 - 33.1
Child had dental x-rays	No Yes	8 0	34 1	1.0 0	-
Child had diagnostic x-rays or radiation therapy	No	4	31	1.0	-
	Yes	4	4	6.64	1.19 - 36.9
Child had diagnostic x-rays or radiation therapy, excluding those received within 1 year of diagnosis	No	8	33	1.0	-
	Yes	0	2	0	-
Child's total number of diagnostic x-rays or radiation therapy	None	4	31	1.0	-
	1	2	4	3.72	0.52 - 26.5
	>1	2	0	-	-
Child's total number of diagnostic x-rays or radiation therapy, excluding those received within 1 year of diagnosis	None	8	33	1.0	-
	1	0	2	0	-
	>1	0	0	-	-
Child had transfusion	No Yes	8 0	34 1	1.0 0	-

Table 32d. Interview Study Analysis of Health, Medical Conditions and Medical Procedures: Brain and Central Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval		
Prenatal Exposure: Brain and Central Nervous System Diagnosis Ages 0 through 19							
Mother had fever >100 ° for 3 or more days during pregnancy							
Mother had vaginal or uterine bleeding during pregnancy	No Yes	12 0	47 3	1.0 0	-		
Mother had high blood pressure during pregnancy	No Yes	12 0	51 0	1.0 -	-		
Mother had toxemia or pre-	No	12	48	1.0	-		
eclampsia during pregnancy	Yes	0	3	0			
Mother had protein in urine during pregnancy	No	12	48	1.0	-		
	Yes	0	1	0	-		
Mother had nausea or vomiting >3 months during pregnancy	No	12	49	1.0	-		
	Yes	0	2	0	-		
Mother had other illnesses or complications during pregnancy	No	8	44	1.0	-		
	Yes	4	8	2.55	0.60 - 10.9		
Mother had antibiotics for 5+ days during pregnancy	No	8	44	1.0	-		
	Yes	3	7	1.83	0.39 - 8.67		
Mother had any vaccinations during pregnancy	No	11	48	1.0	-		
	Yes	1	2	1.81	0.16 - 20.1		

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother had dental x-rays during pregnancy	No	8	33	1.0	-
	Yes	4	15	1.05	0.27 - 4.08
Mother had diagnostic x-rays or radiation therapy during pregnancy	No	11	48	1.0	-
	Yes	1	3	1.81	0.16 - 20.1
Postnatal Exposure: Br	ain and Cent	ral Nervous	System Diagn	osis Ages 0 thro	ough 19
Oxygen given to child immediately after birth	No	11	51	1.0	-
	Yes	1	1	4.00	0.25 - 64.0
Child had IV tube immediately after birth	No	11	50	1.0	-
	Yes	1	1	4.00	0.25 - 64.0
Child had phototherapy immediately after birth	No Yes	9	40 11	1.0 1.08	- 0.26 - 4.46
Child had problems after birth, prior to leaving hospital	No	11	46	1.0	-
	Yes	1	6	0.77	0.08 - 7.76
Child was breast fed	No	6	31	1.0	-
	Yes	6	20	2.10	0.47 - 9.30
Mother took multivitamins for 5+ days while breast feeding	No Yes	0 6	5 15	-	-
Child had mononucleosis	No Yes	12 0	51 1	1.0 0	-
Child had chickenpox	No	4	18	1.0	-
	Yes	8	33	0.81	0.18 - 3.65
Child had rubella	No	10	46	1.0	-
	Yes	2	5	2.46	0.16 - 36.8

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child had measles	No Yes	9	39 12	1.0 0.97	- 0.19 - 4.90
Child had mumps	No	11	46	1.0	-
	Yes	1	6	0.63	0.07 - 5.89
Child had epilepsy, seizures or convulsions	No	10	48	1.0	-
	Yes	2	4	2.45	0.33 - 18.5
Child had autoimmune disorder	No Yes	12 0	51 1	1.0 0	-
Child had immunosuppression or recurring infections	No	10	42	1.0	-
	Yes	2	10	0.73	0.12 - 4.39
Child had severe head injury	No	10	49	1.0	-
	Yes	2	3	2.67	0.45 - 16.0
Child had other major illnesses	No	8	38	1.0	-
	Yes	4	14	1.37	0.33 - 5.66
Child had antibiotics for 10 days or more	No	9	46	1.0	-
	Yes	2	6	2.00	0.37 - 10.9
Child had DPT or DT immunization	No Yes	0 12	2 50	-	-
Child had mumps immunization	No	1	5	1.0	-
	Yes	10	45	0.85	0.08 - 9.71
Child had rubella immunization	No Yes	1 11	2 49	1 1	-

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child had chickenpox immunization	No	11	40	1.0	-
	Yes	1	11	0.33	0.04 - 2.96
Child had measles immunization	No	3	5	1.0	-
	Yes	9	47	0.29	0.06 - 1.48
Child had polio immunization	No Yes	0 12	1 50	-	-
Child had dental x-rays	No	4	18	1.0	-
	Yes	8	34	0.59	0.06 - 5.41
Child had diagnostic x-rays or radiation therapy	No	10	40	1.0	-
	Yes	2	12	0.68	0.13 - 3.51
Child had diagnostic x-rays or radiation therapy, excluding those received within 1 year of diagnosis	No	11	42	1.0	-
	Yes	1	10	0.38	0.04 - 3.45
Child's total number of diagnostic x-rays or radiation therapy	None	10	40	1.0	-
	1	2	10	0.80	0.16 - 4.02
	>1	0	2	0	-
Child's total number of diagnostic x-rays or radiation therapy, excluding those received within 1 year of diagnosis	None	11	42	1.0	-
	1	1	8	0.48	0.06 - 4.20
	>1	0	2	0	-
Child had transfusion	No Yes	12 0	52 0	1.0 -	-

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal Exposure: Brain	and Central	Nervous Syst	em Cancer Di	agnosis Ages 0	through 4
Mother had fever >100 ° for 3 or more days during pregnancy	No Yes	3 0	15 1	1.0 0	-
Mother had vaginal or uterine bleeding during pregnancy	No Yes	3 0	14 1	1.0 0	-
Mother had high blood pressure during pregnancy	No Yes	3 0	16 0	1.0 -	-
Mother had toxemia or pre- eclampsia during pregnancy	No Yes	3 0	16 0	1.0 -	-
Mother had protein in urine during pregnancy	No Yes	3 0	16 0	1.0 -	-
Mother had nausea or vomiting >3 months during pregnancy	No Yes	3 0	16 0	1.0	- -
Mother had other illnesses or complications during pregnancy	No Yes	1 2	13 3	1.0 5.06	- 0.40 - 64.0
Mother had antibiotics for 5+ days during pregnancy	No Yes	1 2	14 2	1.0 6.00	- 0.52 - 69.5
Mother had any vaccinations during pregnancy	No Yes	2 1	15 1	1.0 4.00	- 0.25 - 64.0
Mother had dental x-rays during pregnancy	No Yes	2 1	8 7	1.0 0.42	- 0.03 - 5.44
Mother had diagnostic x-rays or radiation therapy during pregnancy	No Yes	3 0	14 2	1.0 0	-

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval		
Postnatal Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 4							
Oxygen given to child immediately after birth	No Yes	2 1	16 0	1.0 -	-		
Child had IV tube immediately after birth	No Yes	2 1	16 0	1.0	-		
Child had phototherapy immediately after birth	No Yes	1 2	14 2	1.0 6.00	- 0.52 - 69.5		
Child had problems after birth, prior to leaving hospital	No Yes	2 1	13 3	1.0 2.45	- 0.14 - 42.6		
Child was breast fed	No Yes	0 3	7 9	-			
Mother took multivitamins for 5+ days while breast feeding	No Yes	0 3	2 7	- -	- -		
Child had mononucleosis	No Yes	3 0	16 0	1.0	- -		
Child had chickenpox	No Yes	2 1	12 3	1.0 1.15	- 0.04 - 32.1		
Child had rubella	No Yes	3 0	16 0	1.0	- -		
Child had measles	No Yes	3 0	16 0	1.0 -	- -		
Child had mumps	No Yes	3 0	16 0	1.0 -	- -		

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child had epilepsy, seizures or convulsions	No Yes	2 1	15 1	1.0 -	-
Child had autoimmune disorder	No Yes	3 0	15 1	1.0 0	- -
Child had immunosuppression or recurring infections	No Yes	2 1	15 1	1.0 4.00	- 0.25 - 64.0
Child had severe head injury	No Yes	2 1	16 0	1.0 -	-
Child had other major illnesses	No Yes	2 1	13 3	1.0 0	-
Child took antibiotics for 10 days or more	No Yes	2 1	14 2	1.0 4.00	- 0.25 - 64.0
Child had DPT or DT immunization	No Yes	0 3	1 15		-
Child had mumps immunization	No Yes	0 3	2 13		-
Child had rubella immunization	No Yes	0 3	1 15		-
Subject had chickenpox immunization	No Yes	3 0	13 2	1.0 0	-
Child had measles immunization	No Yes	0 3	2 14	-	-

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child had polio immunization	No Yes	0 3	0 15	1 1	-
Child had dental x-rays	No Yes	3 0	15 1	1.0 0	-
Child had diagnostic x-rays or radiation therapy	No Yes	2 1	15 1	1.0 0	-
Child had diagnostic x-rays or radiation therapy, excluding those received within 1 year of diagnosis	No Yes	3 0	15 1	1.0 0	-
Child's total number of diagnostic x-rays or radiation therapy	None 1 >1	2 1 0	15 1 0	1.0 - -	- - -
Child's total number of diagnostic x-rays or radiation therapy, excluding those received within 1 year of diagnosis	None 1 >1	3 0 0	15 1 0	1.0 0 -	- - -
Child had transfusion	No Yes	3 0	16 0	1.0 -	-

Table 33. Interview Study Dietary Factors

	Cases (ı	n = 40)	Controls (n =159)		
Characteristic	Number	Percent	Number	Percent	
Prenatal	Exposure				
Mother ate any fresh fruit or vegetables during pregnancy: Yes No Unknown	37	92.5	154	96.9	
	1	2.5	1	0.6	
	2	5.0	4	2.5	
Mother ate daily servings of fresh fruit or vegetables during pregnancy: Yes No Unknown	29 9 2	72.5 22.5 5.0	118 37 4	74.2 23.3 2.5	
Mother ate any hot dogs during pregnancy: Yes No Unknown	27	67.5	126	79.3	
	11	27.5	29	18.2	
	2	5.0	4	2.5	
Mother's ate hot dogs weekly during pregnancy: Yes No Unknown	3	7.5	33	20.8	
	34	85.0	122	76.7	
	3	7.5	4	2.5	
Mother ate any bacon, ham, or sausage during pregnancy: Yes No Unknown	33	82.5	138	86.8	
	5	12.5	18	11.3	
	2	5.0	3	1.9	
Mother ate bacon, ham, or sausage weekly during pregnancy: Yes No Unknown	5	12.5	63	39.6	
	33	82.5	93	58.5	
	2	5.0	3	1.9	

a	Cases (ı	n = 40)	Controls (n =159)		
Characteristic	Number	Percent	Number	Percent	
Mother ate any lunch meat during pregnancy: Yes No Unknown	32	80.0	137	86.2	
	5	12.5	19	12.0	
	3	7.5	3	1.9	
Mother ate lunch meat weekly during pregnancy: Yes No Unknown	18	45.0	102	64.2	
	19	47.5	54	33.9	
	3	7.5	3	1.9	
Mother ate any cured meat during pregnancy: Yes No Unknown	36	90.0	150	94.3	
	2	5.0	6	3.8	
	2	5.0	3	1.9	
Mother ate cured meat weekly during pregnancy: Yes No Unknown	22	55.0	121	76.1	
	16	40.0	35	22.0	
	2	5.0	3	1.9	
Mother took multivitamin supplementation for 5 days or more during pregnancy: Yes No Unknown	25	62.5	128	80.5	
	13	32.5	28	17.6	
	2	5.0	3	1.9	
Mother drank tap water or drinks made from tap water at home during pregnancy: Yes No Unknown	37	92.5	148	93.1	
	1	2.5	7	4.4	
	2	5.0	4	2.5	
For mothers who drank tap water during pregnancy:					
Average number of glasses per day	5.4		5.0		

	Cases (ı	n = 40)	Controls (n =159)		
Characteristic	Number	Percent	Number	Percent	
Postnatal	Exposure				
Child ate bacon, ham or sausage: Yes No Unknown	28 11 1	70.0 27.5 2.5	115 44 0	72.3 27.7 0.0	
Among those who ate bacon, ham or sausage: Average annual frequency of consumption	56.7		50.4		
Child ate hot dogs: Yes No Unknown	34 5 1	85.0 12.5 2.5	130 29 0	81.8 18.2 0.0	
Among those who ate hot dogs: Average annual frequency of consumption	53.6		48.5		
Child ate lunch meats: Yes No Unknown	23 16 1	57.5 40.0 2.5	94 65 0	59.1 40.9 0.0	
Among those who ate lunch meats: Average annual frequency of consumption	74.4		108.1		
Child ate fresh fruits or vegetables: Yes No Unknown Among those who age fresh fruits or	36 3 1	90.0 7.5 2.5	149 10 0	93.7 6.3 0.0	
vegetables: Average annual frequency of consumption	330.1		306.9		
Child consumed tap water or drinks made with tap water: Yes No Unknown	38 1 1	95.0 2.5 2.5	141 18 0	88.7 11.3 0.0	
Among those who consumed tap water or drinks made with tap water: Average number of glasses per day	4.4		4.1		

Table 34a. Interview Study Analysis of Dietary Factors: Leukemia and Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal Exposure: Leuker	mia and Nervo	us System Ca	ancer Diagnos	sis Ages 0 th	rough 19
Mother ate any fresh fruit or vegetables during pregnancy	No	1	1	1.0	-
	Yes	37	154	0.25	0.02 - 4.00
Mother ate daily servings of fresh fruit or vegetables during pregnancy	No	9	37	1.0	-
	Yes	29	118	0.96	0.42 - 2.18
Mother ate any hot dogs during pregnancy	No	11	29	1.0	-
	Yes	27	126	0.54	0.23 - 1.26
Mother ate hot dogs weekly during pregnancy	No	34	122	1.0	-
	Yes	3	33	0.33	0.10 - 1.12
Mother ate any bacon, ham, or sausage during pregnancy	No	5	18	1.0	-
	Yes	33	138	0.78	0.26 - 2.34
Mother ate bacon, ham, or sausage weekly during pregnancy	No	33	93	1.0	-
	Yes	5	63	0.21	0.08 - 0.57
Mother ate any lunch meat during pregnancy	No	5	19	1.0	-
	Yes	32	137	0.77	0.25 - 2.31
Mother ate lunch meat weekly during pregnancy	No	19	54	1.0	-
	Yes	18	102	0.44	0.22 - 0.91
Mother ate any cured meat during pregnancy	No	2	6	1.0	-
	Yes	36	150	0.46	0.07 - 2.85
Mother ate cured meat weekly during pregnancy	No	16	35	1.0	-
	Yes	22	121	0.34	0.16 - 0.74

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother took multivitamin supplements for 5+ days during pregnancy	No	13	28	1.0	-
	Yes	25	128	0.38	0.16 - 0.89
Mother drank tap water or made drinks from tap water during pregnancy	No	1	7	1.0	-
	Yes	37	148	1.54	0.17 - 13.6
Mother's average daily glasses of tap water or drinks made from tap water	None/Low	15	80	1.0	-
	High (>4/da)	23	75	1.58	0.78 - 3.20
Mother's average daily glasses of tap water or drinks made from tap water	None/Low	11	55	1.0	-
	Med. (4-5/da)	11	49	1.08	0.42 - 2.75
	High (6+/da)	16	51	1.52	0.66 - 3.50
Postnatal Exposure: Leuke	mia and Nervo	us System C	ancer Diagno	sis Ages 0 th	rough 19
Child ate fresh fruit or vegetables	No	3	10	1.0	-
	Yes	36	149	0.72	0.07 - 6.82
Child's average daily servings of fresh fruit or vegetables	None/Low	14	64	1.0	-
	High (1+/da)	25	95	1.25	0.59 - 2.67
Child ate hot dogs	No	5	29	1.0	-
	Yes	34	130	2.23	0.47 - 10.6
Child's average weekly servings of hot dogs	None	5	29	1.0	-
	Low	19	63	2.69	0.54 - 13.4
	High (1+/wk)	15	67	1.90	0.38 - 9.45
Child ate bacon, ham, or sausage	No	11	44	1.0	-
	Yes	28	115	0.83	0.28 - 2.47

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Child's average weekly servings of bacon, ham, or sausage	None	11	44	1.0	-			
	Low	14	46	1.00	0.32 - 3.16			
	High (1+/wk)	14	69	0.65	0.20 - 2.16			
Child ate lunch meat	No	16	65	1.0	-			
	Yes	23	94	0.92	0.37 - 2.28			
Child's average weekly servings of lunch meat	None	11	65	1.0	-			
	Low	8	15	1.93	0.61 - 6.13			
	High (1+/wk)	15	79	0.72	0.28 - 1.87			
Child ate cured meat	No	4	22	1.0	-			
	Yes	35	137	2.49	0.29 - 21.3			
Child's average weekly servings of cured meat	None/Low	20	73	1.0	-			
	High (2+/wk)	19	86	0.73	0.34 - 1.58			
Child drank tap water or made drinks from tap water	No	1	18	1.0	-			
	Yes	38	141	6.46	0.72 - 58.0			
Child's average daily glasses of tap water or made drinks from tap water	None/Low	8	55	1.0	-			
	Med. (3-4/da)	14	53	1.88	0.71 - 4.94			
	High (5+/da)	17	51	2.31	0.90 - 5.92			
Child's average daily glasses of tap water or made drinks from tap water	None/Low	14	80	1.0	-			
	High (4+/da)	25	79	1.78	0.85 - 3.72			
Prenatal Exposure: Leuke	Prenatal Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 4							
Mother ate any fresh fruit or vegetables during pregnancy	No Yes	1 16	0 70	-	- -			
Mother ate daily servings of fresh fruit or vegetables during pregnancy	No	5	19	1.0	-			
	Yes	12	51	0.93	0.29 - 2.96			

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother ate any hot dogs during pregnancy	No	5	15	1.0	-
	Yes	12	55	0.61	0.19 - 1.98
Mother ate hot dogs weekly during pregnancy	No	15	56	1.0	-
	Yes	2	14	0.55	0.12 - 2.52
Mother ate any bacon, ham, or sausage during pregnancy	No	2	11	1.0	-
	Yes	15	59	1.14	0.23 - 5.64
Mother ate bacon, ham, or sausage weekly during pregnancy	No	14	51	1.0	-
	Yes	3	19	0.53	0.14 - 2.08
Mother ate any lunch meat during pregnancy	No	2	11	1.0	-
	Yes	14	59	1.15	0.22 - 6.16
Mother ate lunch meat weekly during pregnancy	No	9	21	1.0	-
	Yes	7	49	0.30	0.10 - 0.93
Mother ate any cured meat during pregnancy	No	1	4	1.0	-
	Yes	16	66	0.41	0.02 - 7.10
Mother ate cured meat weekly during pregnancy	No	8	15	1.0	-
	Yes	9	55	0.24	0.07 - 0.85
Mother took multivitamin supplements for 5+days during pregnancy	No	7	12	1.0	-
	Yes	10	58	0.20	0.05 - 0.86
Mother drank tap water or made drinks from tap water during pregnancy	No	1	5	1.0	-
	Yes	16	65	1.00	0.11 - 8.95
Mother's average daily glasses of tap water or drinks made from tap water	None/Low	7	39	1.0	-
	High (>4/da)	10	31	1.74	0.60 - 5.06

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother's average daily glasses of tap water or drinks made from tap water	None/Low	6	28	1.0	-
	Med. (4-5/da)	4	17	1.08	0.26 - 4.59
	High (6+/da)	7	25	1.20	0.37 - 3.88
Postnatal Exposure: Leuke	emia and Nervo	ous System (Cancer Diagno	osis Ages 0 th	nrough 4
Child ate fresh fruit or vegetables	No	3	9	1.0	-
	Yes	14	62	0.45	0.03 - 6.77
Child's average daily servings of fresh fruit or vegetable	None/Low	5	31	1.0	-
	High (1+/da)	12	40	2.36	0.61 - 9.06
Child ate hot dogs	No	4	25	1.0	-
	Yes	13	46	3.70	0.43 - 31.8
Child's average weekly servings of hot dogs	None	4	25	1.0	-
	Low	4	22	2.49	0.24 - 25.8
	High (1+/wk)	9	24	4.55	0.51 - 40.4
Child ate bacon, ham, or sausage	No	11	37	1.0	-
	Yes	6	34	0.40	0.10 - 1.54
Child's average weekly servings of bacon, ham, or sausage	None	11	37	1.0	-
	Low	2	19	0.26	0.05 - 1.45
	High (1+/wk)	4	15	0.61	0.12 - 3.02
Child ate lunch meat	No	11	50	1.0	-
	Yes	6	21	1.34	0.34 - 5.22
Child's average weekly servings of lunch meat	None	11	50	1.0	-
	Low	2	5	1.75	0.28 - 10.8
	High (1+/wk)	4	16	1.19	0.27 - 5.26

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child ate cured meat	No	4	22	1.0	-
	Yes	13	49	2.49	0.29 - 21.3
Child's average weekly servings of cured meat	None/Low	11	50	1.0	-
	High (2+/wk)	6	21	1.26	0.38 - 4.22
Child drank tap water or made drinks from tap water	No Yes	1 16	13 58	1.0 4.88	0.48 - 49.3
Child's average daily glasses of tap water or made drinks from tap water	None/Low	4	32	1.0	-
	Med. (3-4/da)	6	19	2.83	0.67 - 12.0
	High (5+/da)	7	20	2.82	0.71 - 11.3
Child's average daily glasses of tap water or made drinks from tap water	None/Low	7	42	1.0	-
	High (4+/da)	10	29	1.94	0.66 - 5.68

Table 34b. Interview Study Analysis of Dietary Factors: Leukemia

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval					
Prenatal Ex	Prenatal Exposure: Leukemia Diagnosis Ages 0 through 19									
Mother ate any fresh fruit or vegetables during pregnancy	No Yes	1 20	0 85	-	-					
Mother ate daily servings of fresh fruit or vegetables during pregnancy	No	6	24	1.0	-					
	Yes	15	61	0.88	0.31 - 2.47					
Mother ate any hot dogs during pregnancy	No	8	13	1.0	-					
	Yes	13	72	0.30	0.10 - 0.90					
Mother ate hot dogs weekly during pregnancy	No Yes	20 0	72 13	1.0 0	-					
Mother ate any bacon, ham, or sausage during pregnancy	No	5	8	1.0	-					
	Yes	16	78	0.27	0.06 - 1.18					
Mother ate bacon, ham, or sausage weekly during pregnancy	No	18	54	1.0	-					
	Yes	3	32	0.27	0.07 - 1.02					
Mother ate any lunch meat during pregnancy	No	5	10	1.0	-					
	Yes	16	76	0.34	0.09 - 1.32					
Mother ate lunch meat weekly during pregnancy	No	11	34	1.0	-					
	Yes	10	52	0.51	0.19 - 1.34					
Mother ate any cured meat during pregnancy	No	2	2	1.0	-					
	Yes	19	84	0.17	0.01 - 1.93					

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother ate cured meat weekly during pregnancy	No	9	23	1.0	-
	Yes	12	63	0.41	0.15 - 1.13
Mother took multivitamin supplements for 5+ days during pregnancy	No	9	15	1.0	-
	Yes	12	71	0.23	0.07 - 0.73
Mother drank tap water or made drinks from tap water during pregnancy	No	1	1	1.0	-
	Yes	20	84	0.25	0.02 - 4.00
Mother's average daily glasses of tap water or drinks made from tap water	None/Low	6	49	1.0	-
	High (>4/da)	15	36	3.43	1.18 - 10.0
Mother's average daily glasses of tap water or drinks made from tap water	None/Low	3	30	1.0	-
	Med. (4-5/da)	9	31	3.07	0.72 - 13.0
	High (6+/da)	9	24	3.80	0.93 - 15.6
Postnatal Ex	posure: Leuker	nia Diagnos	is Ages 0 thro	ough 19	
Child ate fresh fruit or vegetables	No Yes	0 22	0 88	- -	-
Child's average daily servings of fresh fruit or vegetables	None/Low	6	32	1.0	-
	High (1+/da)	16	56	1.53	0.54 - 4.30
Child ate hot dogs	No	2	9	1.0	-
	Yes	20	79	1.15	0.21 - 6.21
Child's average weekly servings of hot dogs	None	2	9	1.0	-
	Low	13	38	1.63	0.28 - 9.29
	High (1+/wk)	7	41	0.79	0.13 - 4.73

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child ate bacon, ham, or sausage	No	5	15	1.0	-
	Yes	17	73	0.65	0.18 - 2.31
Child's average weekly servings of bacon, ham, or sausage	None	5	15	1.0	-
	Low	5	35	0.43	0.10 - 1.87
	High (1+/wk)	12	38	0.89	0.24 - 4.08
Child ate lunch meat	No	5	28	1.0	-
	Yes	17	60	1.67	0.52 - 5.31
Child's average weekly servings of lunch meat	None	4	28	1.0	-
	Low	4	12	1.93	0.43 - 8.55
	High (1+/wk)	13	48	1.60	0.48 - 5.28
Child ate cured meat	No	1	4	1.0	-
	Yes	21	84	1.00	0.10 - 10.1
Child's average weekly servings of cured meat	None/Low	8	38	1.0	-
	High (2+/wk)	14	50	1.39	0.49 - 3.95
Child drank tap water or made drinks from tap water	No Yes	0 22	8 80	-	-
Child's average daily glasses of tap water or made drinks from tap water	None/Low	4	31	1.0	-
	Med. (3-4/da)	7	29	1.79	0.49 - 6.63
	High (5+/da)	11	28	3.06	0.86 - 10.8
Child's average daily glasses of tap water or made drinks from tap water	None/Low	8	42	1.0	-
	High (4+/da)	14	46	1.60	0.61 - 4.18

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal Ex	posure: Leukei	mia Diagnos	sis Ages 0 thro	ough 4	
Mother ate any fresh fruit or vegetables during pregnancy	No Yes	1 8	0 35	-	-
Mother ate daily servings of fresh fruit or vegetables during pregnancy	No	5	10	1.0	-
	Yes	4	25	0.33	0.07 - 1.53
Mother ate any hot dogs during pregnancy	No	4	6	1.0	-
	Yes	5	29	0.29	0.06 - 1.36
Mother ate hot dogs weekly during pregnancy	No Yes	9 0	28 7	1.0 0	-
Mother ate any bacon, ham, or sausage during pregnancy	No	2	4	1.0	-
	Yes	7	31	0.41	0.05 - 3.07
Mother ate bacon, ham, or sausage weekly during pregnancy	No	7	26	1.0	-
	Yes	2	9	0.82	0.14 - 4.77
Mother ate any lunch meat during pregnancy	No	2	5	1.0	-
	Yes	7	30	0.53	0.07 - 3.89
Mother ate lunch meat weekly during pregnancy	No	5	11	1.0	-
	Yes	4	24	0.37	0.08 - 1.64
Mother ate any cured meat during pregnancy	No Yes	1 8	1 34	- -	-
Mother ate cured meat weekly during pregnancy	No	4	8	1.0	-
	Yes	5	27	0.36	0.07 - 1.71

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother took multivitamin supplements for 5+days during pregnancy	No	5	4	1.0	-
	Yes	4	31	0.06	0.01 - 0.57
Mother drank tap water or made drinks from tap water during pregnancy	No	1	1	1.0	-
	Yes	8	34	0.25	0.02 - 4.00
Mother's average daily glasses of tap water or drinks made from tap water	None/Low	4	21	1.0	-
	High (>4/da)	5	14	1.88	0.41 - 8.55
Mother's average daily glasses of tap water or drinks made from tap water	None/Low	3	13	1.0	-
	Med. (4-5/da)	3	10	1.35	0.20 - 9.36
	High (6+/da)	3	12	1.07	0.19 - 5.98
Postnatal Ex	posure: Leuke	mia Diagno:	sis Ages 0 thr	ough 4	
Child ate fresh fruit or vegetables	No Yes	0 9	0 36	-	-
Child's average daily servings of fresh fruit or vegetables	None/Low	1	11	1.0	-
	High (1+/da)	8	25	3.23	0.38 - 27.3
Child ate hot dogs	No	1	6	1.0	-
	Yes	8	30	1.72	0.16 - 18.8
Child's average weekly servings of hot dog	None	1	6	1.0	-
	Low	4	13	1.97	0.16 - 24.2
	High (1+/wk)	4	17	1.52	0.12 - 18.7
Child ate bacon, ham, or sausage	No	5	11	1.0	-
	Yes	4	25	0.35	0.08 - 1.61

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child's average weekly servings of bacon, ham, or sausage	None	5	11	1.0	-
	Low	1	15	0.17	0.02 - 1.59
	High (1+/wk)	3	10	0.70	0.11 - 4.67
Child ate lunch meat	No	4	17	1.0	-
	Yes	5	19	1.13	0.25 - 5.16
Child's average weekly servings of lunch meat	None	4	17	1.0	-
	Low	1	5	0.89	0.09 - 9.17
	High (1+/wk)	4	14	1.21	0.24 - 6.05
Child ate cured meat	No	1	4	1.0	-
	Yes	8	32	1.00	0.10 - 10.1
Child's average weekly servings of cured meat	None/Low	6	20	1.0	-
	High (2+/wk)	3	16	0.60	0.12 - 2.96
Child drank tap water or made drinks from tap water	No Yes	0 9	4 32	-	-
Child's average daily glasses of tap water or made drinks from tap water	None/Low	2	14	1.0	-
	Med. (3-4/da)	3	13	1.56	0.21 - 11.7
	High (5+/da)	4	9	3.01	0.45 - 19.9
Child's average daily glasses of tap water or made drinks from tap water	None/Low	4	18	1.0	-
	High (4+/da)	5	18	1.23	0.30 - 5.14

Table 34c. Interview Study Analysis of Dietary Factors: Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval					
Prenatal Exposure	Prenatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 19									
Mother ate any fresh fruit or vegetables during pregnancy	No Yes	0 17	1 69	1 1	-					
Mother ate daily servings of fresh fruit or vegetables during pregnancy	No Yes	3 14	13 57	1.0 1.10	- 0.28 - 4.37					
Mother ate any hot dogs during pregnancy	No Yes	3 14	16 54	1.0 1.27	- 0.32 - 5.14					
Mother ate hot dogs weekly during pregnancy	No Yes	14 3	50 20	1.0 0.54	- 0.14 - 1.99					
Mother ate any bacon, ham, or sausage during pregnancy	No Yes	0 17	10 60	-	-					
Mother ate bacon, ham, or sausage weekly during pregnancy	No Yes	15 2	39 31	1.0 0.15	- 0.03 - 0.72					
Mother ate any lunch meat during pregnancy	No Yes	0 16	9 61	-	-					
Mother ate lunch meat weekly during pregnancy	No Yes	8 8	20 50	1.0 0.38	- 0.13 - 1.10					
Mother ate any cured meat during pregnancy	No Yes	0 17	4 66	-	-					

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother ate cured meat weekly during pregnancy	No	7	12	1.0	-
	Yes	10	58	0.27	0.08 - 0.88
Mother took multivitamin supplements for 5+ days during pregnancy	No	4	13	1.0	-
	Yes	13	57	0.76	0.20 - 2.96
Mother drank tap water or made drinks from tap water during pregnancy	No Yes	0 17	6 64	-	-
Mother's average daily glasses of tap water or drinks made from tap water	None/Low	9	31	1.0	-
	High (>4/da)	8	39	0.72	0.26 - 1.97
Mother's average daily glasses of tap water or drinks made from tap water	None/Low	8	25	1.0	-
	Med. (4-5/da)	2	18	0.35	0.07 - 1.80
	High (6+/da)	7	27	0.82	0.28 - 2.46
Postnatal Exposur	e: Nervous Syst	em Cancer D	Diagnosis Age	s 0 through	19
Child ate fresh fruit or vegetables	No	3	10	1.0	-
	Yes	14	61	0.72	0.07 - 6.82
Child's average daily servings of fresh fruit or vegetables	None/Low	8	32	1.0	-
	High (1+/da)	9	39	0.98	0.32 - 3.01
Child ate hot dogs	No Yes	3 14	20 51	-	-
Child's average weekly servings of hot dogs	None Low High (1+/wk)	3 6 8	20 25 26	-	- - -

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child ate bacon, ham, or sausage	No	6	29	1.0	-
	Yes	11	42	1.59	0.19 - 13.3
Child's average weekly servings of bacon, ham, or sausage	None	6	29	1.0	-
	Low	9	11	6.25	0.35 - 122
	High (1+/wk)	2	31	0.65	0.04 - 11.7
Child ate lunch meat	No	11	37	1.0	-
	Yes	6	34	0.20	0.03 - 1.22
Child's average weekly servings of lunch meat	None	11	37	1.0	-
	Low	4	3	2.85	0.21 - 38.1
	High (1+/wk)	2	31	0.08	0.01 - 0.76
Child ate cured meat	No Yes	3 14	18 53	-	-
Child's average weekly servings of cured meat	None/Low	12	35	1.0	-
	High (2+/wk)	5	36	0.30	0.09 - 1.01
Child drank tap water or made drinks from tap water	No	1	10	1.0	-
	Yes	16	61	3.69	0.31 - 43.3
Child's average daily glasses of tap water or made drinks from tap water	None/Low	4	24	1.0	-
	Med. (3-4/da)	7	24	2.05	0.47 - 8.95
	High (5+/da)	6	23	1.60	0.38 - 6.72
Child's average daily glasses of tap water or made drinks from tap water	None/Low	6	38	1.0	-
	High (4+/da)	11	33	2.07	0.67 - 6.45

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval				
Prenatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 4									
Mother ate any fresh fruit or vegetables during pregnancy	No Yes	0 8	0 35	-	-				
Mother ate daily fresh fruit or vegetables during pregnancy	No Yes	0 8	9 26	-	-				
Mother ate any hot dogs during pregnancy	No Yes	1 7	9 26	1.0 2.01	- 0.22 - 18.5				
Mother ate hot dogs weekly during pregnancy	No Yes	6 2	28 7	1.0 1.16	- 0.22 - 6.23				
Mother ate any bacon, ham, or sausage during pregnancy	No Yes	0 8	7 28	-	-				
Mother ate bacon, ham, or sausage weekly during pregnancy	No Yes	7 1	25 10	1.0 0.31	- 0.03 - 2.83				
Mother ate any lunch meat during pregnancy	No Yes	0 7	6 29	- -	-				
Mother ate lunch meat weekly during pregnancy	No Yes	4 3	10 25	1.0 0.23	- 0.04 - 1.33				
Mother ate any cured meat during pregnancy	No Yes	0 8	3 32	-	-				
Mother ate cured meat weekly during pregnancy	No Yes	4 4	7 28	1.0 0.12	- 0.01 - 1.19				

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother took multivitamin supplements for 5+ days during pregnancy	No	2	8	1.0	-
	Yes	6	27	0.95	0.12 - 7.39
Mother drank tap water or made drinks from tap water during pregnancy	No Yes	0 8	4 31	- -	-
Mother's average daily glasses of tap water or drinks made from tap water	None/Low	3	18	1.0	-
	High (>4/da)	5	17	1.62	0.36 - 7.24
Mother's average daily glasses of tap water or drinks made from tap water	None/Low	3	15	1.0	-
	Med. (4-5/da)	1	7	0.76	0.07 - 7.98
	High (6+/da)	4	13	1.34	0.27 - 6.66
Postnatal Exposui	e: Nervous Syst	em Cancer	Diagnosis Age	s 0 through	4
Child ate fresh fruit or vegetables	No	3	9	1.0	-
	Yes	5	26	0.45	0.03 - 6.77
Child's average daily servings of fresh fruit or vegetables	None/Low	4	20	1.0	-
	High (1+/da)	4	15	1.82	0.30 - 11.1
Child ate hot dogs	No Yes	3 5	19 16	-	-
Child's average weekly servings of hot dogs	None	3	19	-	-
	Low	0	9	-	-
	High (1+/wk)	5	7	-	-
Child ate bacon, ham, or sausage	No	6	26	1.0	-
	Yes	2	9	0.65	0.03 - 12.4

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child's average weekly servings of bacon, ham, or sausage	None	6	26	1.0	-
	Low	1	4	0.71	0.02 - 24.7
	High (1+/wk)	1	5	0.62	0.03 - 14.8
Child ate lunch meat	No	7	33	1.0	-
	Yes	1	2	2.45	0.14 - 42.6
Child's average weekly servings of lunch meat	None	7	33	1.0	-
	Low	1	0	-	-
	High (1+/wk)	0	2	0	-
Child ate cured meat	No Yes	3 5	18 17	1.0 0	-
Child's average weekly servings of cured meat	None/Low	5	30	1.0	-
	High (2+/wk)	3	5	3.70	0.56 - 24.3
Child drank tap water or made drinks from tap water	No	1	9	1.0	-
	Yes	7	26	3.31	0.26 - 42.1
Child's average daily servings of tap water or made drinks from tap water	None/Low	2	18	1.0	-
	Med. (3-4/da)	3	6	5.52	0.72 - 42.6
	High (5+/da)	3	11	2.23	0.27 - 18.2
Child's average daily glasses of tap water or made drinks from tap water	None/Low	3	24	1.0	-
	High (4+/da)	5	11	3.26	0.68 - 15.5

Table 34d. Interview Study Analysis of Dietary Factors: Brain and Central Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Prenatal Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 19								
Mother ate any fresh fruit or vegetables during pregnancy	No Yes	0 12	1 50	1 1	-			
Mother ate daily servings of fresh fruit or vegetables during pregnancy	No Yes	3 9	8 43	1.0 0.55	- 0.12 - 2.59			
Mother ate any hot dogs during pregnancy	No Yes	2 10	11 40	1.0 1.22	- 0.21 - 7.05			
Mother ate hot dogs weekly during pregnancy	No Yes	9 3	36 15	1.0 0.75	- 0.19 - 3.01			
Mother ate any bacon, ham, or sausage during pregnancy	No Yes	0 12	7 44	-	-			
Mother ate bacon, ham, or sausage weekly during pregnancy	No Yes	11 1	24 27	1.0 0.08	- 0.01 - 0.65			
Mother ate any lunch meat during pregnancy	No Yes	0 12	6 45		-			
Mother ate lunch meat weekly during pregnancy	No Yes	6 6	14 37	1.0 0.37	- 0.10 - 1.28			
Mother ate any cured meat during pregnancy	No Yes	0 12	3 48		-			

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother ate cured meat weekly during pregnancy	No	4	8	1.0	-
	Yes	8	43	0.33	0.08 - 1.35
Mother took multivitamin supplements for 5+ days during pregnancy	No	2	6	1.0	-
	Yes	10	45	0.65	0.11 - 3.75
Mother drank tap water or made drinks from tap water during pregnancy	No Yes	0 12	4 47	-	- -
Mother's average daily glasses of tap water or drinks made from tap water	None/Low	7	22	1.0	-
	High (>4/da)	5	29	0.58	0.17 - 1.92
Mother's average daily glasses of tap water or drinks made from tap water	None/Low	6	16	1.0	-
	Med. (4-5/da)	2	15	0.37	0.07 - 1.99
	High (6+/da)	4	20	0.57	0.15 - 2.19
Postnatal Exposure: Brain a	nd Central Ner	vous System	Cancer Diagr	nosis Ages 0	through 19
Child ate fresh fruit or vegetables	No Yes	0 12	2 50	-	-
Child's average daily servings of fresh fruit or vegetables	None/Low	5	18	1.0	-
	High (1+/da)	7	34	0.78	0.22 - 2.72
Child ate hot dogs	No Yes	0 12	6 46		-
Child's average weekly servings of hot dogs	None	0	6	-	-
	Low	6	22	-	-
	High (1+/wk)	6	24	-	-

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child ate bacon, ham, or sausage	No	2	14	1.0	-
	Yes	10	38	2.11	0.13 - 33.5
Child's average weekly servings of bacon, ham, or sausage	None	2	14	1.0	-
	Low	9	8	13.3	0.20 - 885
	High (1+/wk)	1	30	0.60	0.01 - 39.0
Child ate lunch meat	No	6	19	1.0	-
	Yes	6	33	0.21	0.03 - 1.31
Child's average weekly servings of lunch meat	None	6	19	1.0	-
	Low	4	3	2.87	0.21 - 38.4
	High (1+/wk)	2	30	0.08	0.01 - 0.79
Child ate cured meat	No Yes	0 12	5 47	-	-
Child's average weekly servings of cured meat	None/Low	8	18	1.0	-
	High (2+/wk)	4	34	0.22	0.06 - 0.79
Child drank tap water or made drinks from tap water	No Yes	0 12	3 49	-	-
Child's average daily glasses of tap water or made drinks from tap water	None/Low	3	13	1.0	-
	Med. (3-4/da)	5	23	0.95	0.18 - 4.94
	High (5+/da)	4	16	1.06	0.21 - 5.40
Child's average daily glasses of tap water or made drinks from tap water	None/Low	5	26	1.0	-
	High (4+/da)	7	26	1.31	0.35 - 4.91

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Prenatal Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 4								
Mother ate any fresh fruit or vegetables during pregnancy	No Yes	0 3	0 16	-	-			
Mother ate daily servings of fresh fruit or vegetables during pregnancy	No Yes	0	4 12	-	-			
Mother ate any hot dogs during pregnancy	No Yes	0 3	4 12	-	-			
Mother ate hot dogs weekly during pregnancy	No Yes	1 2	14 2	1.0 6.00	- 0.52 - 69.5			
Mother ate any bacon, ham, or sausage during pregnancy	No Yes	0 3	4 12	- -	-			
Mother ate bacon, ham, or sausage weekly during pregnancy	No Yes	3 0	10 6	1.0 0	-			
Mother ate any lunch meat during pregnancy	No Yes	0 3	3 13	-	-			
Mother ate lunch meat weekly during pregnancy	No Yes	2 1	4 12	- -	-			
Mother ate any cured meat during pregnancy	No Yes	0 3	2 14	- -	-			
Mother ate cured meat weekly during pregnancy	No Yes	1 2	3 13	-	-			

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother took multivitamin supplements for 5+ days during pregnancy	No Yes	0 3	1 15	-	- -
Mother drank tap water or made drinks from tap water during pregnancy	No Yes	0 3	2 14	-	-
Mother's average daily glasses of tap water or drinks made from tap water	None/Low High (>4/da)	1 2	9 7	1.0 2.35	- 0.21 - 26.8
Mother's average daily glasses of tap water or drinks made from tap water	None/Low Med. (4-5/da) High (6+/da)	1 1 1	6 4 6	1.0 1.27 0.84	- 0.07 - 22.3 0.05 - 13.7
Postnatal Exposure: Brain	and Central Ner	vous Systen	n Cancer Diag	nosis Ages 0	through 4
Child ate fresh fruit or vegetables	No Yes	0 3	1 15	-	-
Child's average daily servings of fresh fruit or vegetables	None/Low High (1+/da)	1 2	6 10	1.0 1.38	- 0.11 - 17.4
Child ate hot dogs	No Yes	0 3	5 11	1 1	-
Child's average weekly servings of hot dogs	None Low High(1+/wk)	0 0 3	5 6 5	-	- - -
Child ate bacon, ham, or sausage	No Yes	2 1	11 5	-	-

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child's average weekly servings of bacon, ham, or sausage	None	2	11	1.0	-
	Low	1	1	-	-
	High (1+/wk)	0	4	0	-
Child ate lunch meat	No Yes	2 1	15 1	1.0	-
Child's average weekly servings of lunch meat	None	2	15	1.0	-
	Low	1	0	-	-
	High (1+/wk)	0	1	0	-
Child ate cured meat	No Yes	0 3	5 11	-	- -
Child's average weekly servings of cured meat	None/Low	1	13	1.0	-
	High (2+/wk)	2	3	5.06	0.40 - 64.0
Child drank tap water or made drinks from tap water	No Yes	0 3	2 14	-	-
Child's average daily glasses of tap water or made drinks from tap water	None/Low	1	7	1.0	-
	Med. (3-4/da)	1	7	1.79	0.11 - 30.3
	High (5+/da)	1	4	1.79	0.11 - 30.3
Child's average daily glasses of tap water or made drinks from tap water	None/Low	2	12	1.0	-
	High (4+/da)	1	4	1.40	0.12 - 16.4

Table 35. Interview Study Exposure to Tobacco Smoke and Alcohol

Ole a wa ata wiati a	Cases (r	n = 40)	Controls (n = 159)		
Characteristic	Number	Percent	Number	Percent	
Prena	tal Exposur	e			
Mother smoked during pregnancy: Yes No Unknown	12 27 1	30.0 67.5 2.5	46 111 2	28.9 69.8 1.3	
Among mothers who smoked during pregnancy:					
Average number of smoking months	7.8		8.2		
Average number of cigarettes per day	12.1		13.9		
Average total cigarettes	2800		3640		
Any regular smoking by anyone else in household during pregnancy: Yes No Unknown	12 26 2	30.0 65.0 5.0	65 89 5	40.9 55.9 3.1	
Anyone else who smoked in the household during pregnancy:					
Average number of cigarettes per day	13.6		14.3		
Average total cigarettes	3747		3838		
Mother consumed any alcohol during pregnancy: Yes No Unknown	8 30 2	20.0 75.0 5.0	50 106 3	31.5 66.7 1.9	

Table 35: page 1 of 2

	Cases (r	n = 40)	Controls (n = 159)		
Characteristic	Number	Percent	Number	Percent	
Among mothers who consumed alcohol during pregnancy:					
Mother drank wine	7		40		
Average servings of wine per month	1.8		1.4		
Mother drank beer	0		17		
Average servings of beer per month	0		1.8		
Mother drank mixed drinks	2		11		
Average servings of mixed drinks per month	0.7		1.0		
Average drinks per month	1.7		2.0		
Average number of drinks during pregnancy	16		18		
Ever had 5 or more drinks at one sitting: Yes No Unknown	0 8 0	0.0 100.0 0.0	0 50 0	0.0 100.0 0.0	
Postna	tal Exposur	e			
Child's exposure to tobacco smoke in the home: Yes No Unknown	19 20 1	47.5 50.0 2.5	81 78 0	50.9 49.1 0.0	
Among children with domestic smoke exposure:					
Average daily number of cigarettes smoked in the home	16.0		18.8		

Table 36a. Interview Study Analysis of Exposure to Tobacco Smoke and Alcohol: Leukemia and Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal Exposure: Leul	kemia and Nervo	us System C	ancer Diagno	sis Ages 0 th	rough 19
Mother smoked during pregnancy	No	27	111	1.0	-
	Yes	12	46	1.04	0.48 - 2.24
Average daily number of cigarettes smoked by mother when smoking during pregnancy	None	27	111	1.0	-
	Low	7	22	1.26	0.50 - 3.15
	High (>½pk/da)	5	22	0.93	0.31 - 2.81
Any regular smoking by anyone else in household during pregnancy	No	26	89	1.0	-
	Yes	12	65	0.58	0.27 - 1.26
Average daily number of cigarettes smoked in household by anyone else during pregnancy	None	26	89	1.0	-
	Low	7	34	0.64	0.25 - 1.64
	High (>½pk/da)	5	31	0.51	0.18 - 1.46
Mother consumed any alcohol during pregnancy	No	30	106	1.0	-
	Yes	8	50	0.54	0.23 - 1.26
Mother consumed any wine during pregnancy	No	31	115	1.0	-
	Yes	7	40	0.62	0.25 - 1.51
Mother consumed any mixed drinks during pregnancy	No	36	144	1.0	-
	Yes	2	11	0.70	0.14 - 3.44
Number of alcoholic drinks the mother consumed during pregnancy	None	30	106	1.0	-
	Low	6	26	0.78	0.30 - 2.03
	High (>9)	2	23	0.28	0.06 - 1.27

Table 36: page 1 of 12

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Postnatal Exposure: Leu	kemia and Nervo	ous System C	ancer Diagno	sis Ages 0 th	rough 19
Child's exposure to tobacco smoke in the home	No	20	78	1.0	-
	Yes	19	81	0.85	0.41 - 1.76
Average daily number of cigarettes smoked in the child's home	None	20	78	1.0	-
	Low	11	45	0.89	0.39 - 2.02
	High (1+ pk/da)	8	36	0.80	0.31 - 2.06
Prenatal Exposure: Leu	kemia and Nervo	ous System C	ancer Diagno	sis Ages 0 th	nrough 4
Mother smoked during pregnancy	No	13	51	1.0	-
	Yes	4	19	0.77	0.22 - 2.62
Average daily number of cigarettes smoked by mother when smoking during pregnancy	None	13	51	1.0	-
	Low	3	11	0.97	0.25 - 3.82
	High (>½pk/da)	1	8	0.46	0.05 - 3.95
Any regular smoking by anyone else in household during pregnancy	No	14	44	1.0	-
	Yes	3	25	0.32	0.08 - 1.27
Average number of cigarettes smoked in household by anyone else during pregnancy	None	14	44	1.0	-
	Low	2	14	0.40	0.08 - 1.94
	High (>½pk/da)	1	11	0.24	0.03 - 2.03
Mother consumed any alcohol during pregnancy	No	13	52	1.0	-
	Yes	4	18	0.85	0.25 - 2.82
Mother consumed any wine during pregnancy	No	13	55	1.0	-
	Yes	4	15	1.07	0.30 - 3.78

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother consumed any mixed drinks during pregnancy	No	16	69	1.0	-
	Yes	1	1	4.00	0.25 - 64.0
Number of alcoholic drinks the mother consumed during pregnancy	None	13	52	1.0	-
	Low	3	9	1.24	0.31 - 4.97
	High (>9)	1	9	0.43	0.05 - 3.63
Postnatal Exposure: Leu	ıkemia and Nerv	ous System (Cancer Diagn	osis Ages 0 t	hrough 4
Child's exposure to tobacco smoke in the home	No	12	41	1.0	-
	Yes	5	30	0.50	0.16 - 1.58
Average daily number of cigarettes smoked in the home	None	12	41	1.0	-
	Low	3	19	0.49	0.13 - 1.88
	High (1+ pk/da)	2	11	0.52	0.10 - 2.69

Table 36b. Interview Study Analysis of Exposure to Tobacco Smoke and Alcohol: Leukemia

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal	Exposure: Leuken	nia Diagnos	is Ages 0 thro	ugh 19	
Mother smoked during pregnancy	No	14	63	1.0	-
	Yes	8	24	1.56	0.54 - 4.52
Average daily number of cigarettes smoked by mother during pregnancy	None	14	63	1.0	-
	Low	5	9	2.61	0.72 - 9.54
	High (>½pk/da)	3	13	1.21	0.26 - 5.56
Any regular smoking by anyone else in household during pregnancy	No	14	56	1.0	-
	Yes	7	29	0.93	0.33 - 2.63
Average daily cigarettes smoked in household by anyone else during pregnancy	None	14	56	1.0	-
	Low	4	12	1.28	0.34 - 4.77
	High (>½pk/da)	3	17	0.70	0.18 - 2.72
Mother consumed any alcohol during pregnancy	No	15	57	1.0	-
	Yes	6	29	0.75	0.27 - 2.06
Mother consumed any wine during pregnancy	No	16	58	1.0	-
	Yes	5	27	0.65	0.22 - 1.90
Mother consumed any mixed drinks during pregnancy	No	19	81	1.0	-
	Yes	2	4	2.67	0.33 - 21.6
Number of alcoholic drinks the mother consumed during pregnancy	None	15	57	1.0	-
	Low	4	15	0.98	0.30 - 3.18
	High (>9)	2	13	0.52	0.10 - 2.67

Table 36: page 4 of 12

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Postnatal	Exposure: Leuker	mia Diagnos	sis Ages 0 thro	ough 19				
Child's exposure to tobacco smoke in the home	No	11	45	1.0	-			
	Yes	11	43	1.05	0.40 - 2.74			
Average daily number of cigarettes smoked in the home	None	11	45	1.0	-			
	Low	6	24	1.03	0.33 - 3.18			
	High (1+ pk/da)	5	19	1.08	0.33 - 3.53			
Prenatal	Prenatal Exposure: Leukemia Diagnosis Ages 0 through 4							
Mother smoked during pregnancy	No	6	26	1.0	-			
	Yes	3	9	1.40	0.29 - 6.79			
Average daily number of cigarettes smoked by mother when smoking during pregnancy	None	6	26	1.0	-			
	Low	2	5	1.69	0.26 - 11.1			
	High (>½pk/da)	1	4	1.07	0.11 - 10.2			
Any regular smoking by anyone else in household during pregnancy	No	7	24	1.0	-			
	Yes	2	11	0.58	0.10 - 3.32			
Average number of cigarettes smoked in household by anyone else during pregnancy	None	7	24	1.0	-			
	Low	1	4	0.78	0.08 - 7.36			
	High (>½pk/da)	1	7	0.46	0.05 - 4.37			
Mother consumed any alcohol during pregnancy	No	6	24	1.0	-			
	Yes	3	11	1.09	0.26 - 4.62			
Mother consumed any wine during pregnancy	No	6	24	1.0	-			
	Yes	3	11	1.09	0.26 - 4.62			

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother consumed any mixed drinks during pregnancy	No Yes	8 1	35 0	1.0 -	-
Number of alcoholic drinks the mother consumed during pregnancy	None	6	24	1.0	-
	Low	2	5	1.52	0.27 - 8.65
	High (>9)	1	6	0.67	0.07 - 6.35
Postnata	l Exposure: Leuke	mia Diagno	sis Ages 0 thr	ough 4	
Child's exposure to tobacco smoke in the home	No	5	21	1.0	-
	Yes	4	15	1.13	0.25 - 5.10
Average daily number of cigarettes smoked in the home	None	5	21	1.0	-
	Low	2	10	0.88	0.15 - 5.31
	High (1+ pk/da)	2	5	1.59	0.25 - 10.3

Table 36c. Interview Study Analysis of Exposure to Tobacco Smoke and Alcohol: Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Prenatal Exposu	Prenatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 19							
Mother smoked during pregnancy	No	13	48	1.0	-			
	Yes	4	22	0.66	0.20 - 2.14			
Average daily number of cigarettes smoked by mother when smoking during pregnancy	None	13	48	1.0	-			
	Low	2	13	0.57	0.12 - 2.64			
	High (>½pk/da)	2	9	0.79	0.15 - 4.10			
Any regular smoking by anyone else in household during pregnancy	No	12	33	1.0	-			
	Yes	5	36	0.33	0.10 - 1.10			
Average number of cigarettes smoked in household by anyone else during pregnancy	None	12	33	1.0	-			
	Low	3	22	0.33	0.08 - 1.34			
	High (>½pk/da)	2	14	0.33	0.06 - 1.73			
Mother consumed any alcohol during pregnancy	No	15	49	1.0	-			
	Yes	2	21	0.28	0.06 - 1.39			
Mother consumed any wine during pregnancy	No	15	57	1.0	-			
	Yes	2	13	0.54	0.11 - 2.80			
Mother consumed any mixed drinks during pregnancy	No Yes	17 0	63 7	1.0 0	-			
Number of alcoholic drinks the mother consumed during pregnancy	None	15	49	1.0	-			
	Low	2	11	0.51	0.10 - 2.64			
	High (>9)	0	10	0	-			

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Postnatal Exposu	ıre: Nervous Syste	em Cancer D	Diagnosis Age	s 0 through	19
Child's exposure to tobacco smoke in the home	Yes	8	38	1.0	-
	No	9	33	0.65	0.21 - 1.98
Average daily number of cigarettes smoked in the home	None	9	33	1.0	-
	Low	5	21	0.74	0.23 - 2.41
	High (1+ pk/da)	3	17	0.49	0.10 - 2.40
Prenatal Exposu	ıre: Nervous Syst	em Cancer [Diagnosis Age	s 0 through	4
Mother smoked during pregnancy	No	7	25	1.0	-
	Yes	1	10	0.32	0.04 - 2.90
Average daily number of cigarettes smoked by mother when smoking during pregnancy	None	7	25	1.0	-
	Low	1	6	0.53	0.06 - 4.61
	High (>½pk/da)	0	4	0	-
Any regular smoking by anyone else in household during pregnancy	No	7	20	1.0	-
	Yes	1	14	0.16	0.02 - 1.52
Average daily number of cigarettes smoked in household by anyone else during pregnancy	None	7	20	1.0	-
	Low	1	10	0.23	0.03 - 2.12
	High (1+ pk/da)	0	4	0	-
Mother consumed any alcohol during pregnancy	No	7	28	1.0	-
	Yes	1	7	0.51	0.05 - 4.93
Mother consumed any wine during pregnancy	No	7	31	1.0	-
	Yes	1	4	1.00	0.07 - 13.7

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother consumed any mixed drinks during pregnancy	No	8	34	1.0	-
	Yes	0	1	0	-
Number of alcoholic drinks the mother consumed during pregnancy	None	7	28	1.0	-
	Low	1	4	0.87	0.08 - 9.22
	High (>9)	0	3	0	-
Postnatal Expos	ure: Nervous Syst	em Cancer l	Diagnosis Age	es 0 through	4
Child's exposure to tobacco smoke in the home	No	7	20	1.0	-
	Yes	1	15	0.15	0.02 - 1.36
Average daily number of cigarettes smoke in the home	None	7	20	1.0	-
	Low	1	9	0.27	0.03 - 2.36
	High (1+ pk/da)	0	6	0	-

Table 36d. Interview Study Analysis of Exposure to Tobacco Smoke and Alcohol: Brain and Central Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal Exposure: Brain	and Central Nerv	ous System	Cancer Diagr	osis Ages 0	through 19
Mother smoked during pregnancy	No	8	34	1.0	-
	Yes	4	17	0.90	0.26 - 3.17
Average daily number of cigarettes smoked by mother when smoking during pregnancy	None	8	34	1.0	-
	Low	2	10	0.78	0.16 - 3.82
	High (>½pk/da)	2	7	1.12	0.19 - 6.51
Any regular smoking by anyone else in household during pregnancy	No	7	22	1.0	-
	Yes	5	28	0.49	0.13 - 1.80
Average daily number of cigarettes smoked in household by anyone else during pregnancy	None	7	22	1.0	-
	Low	3	16	0.51	0.11 - 2.32
	High (>½pk/da)	2	12	0.45	0.08 - 2.54
Mother consumed any alcohol during pregnancy	No	10	33	1.0	-
	Yes	2	18	0.32	0.06 - 1.69
Mother consumed any wine during pregnancy	No	10	39	1.0	-
	Yes	2	12	0.59	0.11 - 3.15
Mother consumed any mixed drinks during pregnancy	No Yes	12 0	45 6	1.0 0	-
Number of alcoholic drinks the mother consumed during pregnancy	None	10	33	1.0	-
	Low	2	9	0.61	0.11 - 3.39
	High (>9)	0	9	0	-

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Postnatal Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 19								
Child's exposure to tobacco smoke in the home	No	4	23	1.0	-			
	Yes	8	29	1.30	0.35 - 4.80			
Average daily number of cigarettes smoked in the home	None	4	23	1.0	-			
	Low	5	15	1.45	0.37 - 5.67			
	High (1+ pk/da)	3	14	1.00	0.17 - 5.69			
Prenatal Exposure: Brain	Prenatal Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 4							
Mother smoked during pregnancy	No	2	11	1.0	-			
	Yes	1	5	0.72	0.06 - 9.12			
Average daily number of cigarettes smoked by mother when smoking during pregnancy	None	2	11	1.0	-			
	Low	1	3	1.11	0.10 - 12.8			
	High (>½pk/da)	0	2	0	-			
Any regular smoking by anyone else in household during pregnancy	No Yes	2 1	9	1.0 0.47	- 0.03 - 7.50			
Average daily number of cigarettes smoked in household by anyone else during pregnancy	None	2	9	1.0	-			
	Low	1	4	0.64	0.05 - 8.51			
	High (>½pk/da)	0	2	0	-			
Mother consumed any alcohol during pregnancy	No	2	12	1.0	-			
	Yes	1	4	1.00	0.07 - 13.7			
Mother consumed any wine during pregnancy	No	2	13	1.0	-			
	Yes	1	3	1.63	0.08 - 34.6			

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother consumed any mixed drinks during pregnancy	No Yes	3 0	16 0	1.0 -	-
Number of alcoholic drinks the mother consumed during pregnancy	None	2	12	1.0	-
	Low	1	2	2.00	0.11 - 37.8
	High (>9)	0	2	0	-
Postnatal Exposures: Brai	n and Central Ne	rvous Syster	n Cancer Diaç	gnosis Ages () through 4
Child's exposure to tobacco smoke in the home	No	2	10	1.0	-
	Yes	1	6	0.56	0.05 - 6.44
Average daily number of cigarettes smoked in the home	None	2	10	1.0	-
	Low	1	3	1.03	0.09 - 11.6
	High (1+ pk/da)	0	3	0	-

Table 37. Interview Study Household-related Exposures: Chemicals, Animals and Electromagnetic Fields (EMFs)

Chamastanistia	Cases (ı	n = 40)	Controls (n =159)		
Characteristic	Number	Percent	Number	Percent	
Prenatal E	xposure				
Indoor use of pesticides during pregnancy: Yes No Unknown	4 34 2	10.0 85.0 5.0	20 134 5	12.6 84.3 3.1	
Among households using indoor pesticides, frequency of treatment:					
Monthly Less than monthly	2 2	50.0 50.0	3 17	15.0 85.0	
Mother applied some or all of these treatments	2	50.0	2	10.0	
Yard or garden use of pesticides or herbicides during pregnancy: Yes No Unknown	14 23 3	35.0 57.5 7.5	58 94 7	36.5 59.1 4.4	
Among households using outdoor pesticides or herbicides, frequency of treatment:					
Monthly Less than monthly Unknown	4 10 0	28.6 71.4 0.0	3 52 3	5.2 89.7 5.2	
Mother applied some or all of these treatments	0	0.0	3	5.2	
Use of pest strips at home during pregnancy: Yes No Unknown	1 37 2	2.5 92.5 5.0	7 146 6	4.4 91.8 3.8	

	Cases (r	n = 40)	Controls (n =159)		
Characteristic	Number	Percent	Number	Percent	
Use of flea collars on pets at home during pregnancy: Yes No Unknown	12	30.0	52	32.7	
	26	65.0	102	64.2	
	2	5.0	5	3.1	
Use of oil based paint, paint thinners, brush cleaners or furniture strippers at home during pregnancy: Yes No Unknown	9	22.5	37	23.3	
	27	67.5	118	74.2	
	4	10.0	4	2.5	
Among households using paints or solvents, frequency of use: Weekly or more Monthly Less than monthly	0	0.0	2	5.4	
	1	11.1	1	2.7	
	8	88.9	34	91.9	
Car repair at home during pregnancy: Yes No Unknown	10	25.0	28	17.6	
	28	70.0	128	80.5	
	2	5.0	3	1.9	
Among households repairing cars, frequency of activity: Weekly or more Monthly Less than monthly	0	0.0	8	28.6	
	2	20.0	2	7.1	
	8	80.0	18	64.3	
Use of fingernail polish or remover at home during pregnancy: Yes No Unknown	23	57.5	99	62.3	
	15	37.5	57	35.9	
	2	5.0	3	1.9	
Among households using nail polish or remover, frequency of use: Weekly or more Monthly Less than monthly	6	26.1	34	34.3	
	10	43.5	33	33.3	
	7	30.4	32	32.3	

<u> </u>	Cases (r	n = 40)	Controls (n =159)		
Characteristic	Number	Percent	Number	Percent	
Use of moth balls or moth crystals at home during pregnancy:					
Yes No Unknown	6 32 2	15.0 80.0 5.0	34 121 4	21.4 76.1 2.5	
Use of wood cleaner or furniture polish at home during pregnancy: Yes No Unknown	36 2 2	90.0 5.0 5.0	141 15 3	88.7 9.4 1.9	
Among households using wood cleaner or furniture polish, frequency of use: Weekly or more Monthly Less than monthly	24 11 1	66.7 30.6 2.8	109 24 8	77.3 17.0 5.7	
Mother regularly used electric blanket or electric mattress pad during pregnancy:	,				
Yes No Unknown	1 37 2	2.5 92.5 5.0	9 146 4	5.7 91.8 2.5	
Mother regularly used heated water bed during pregnancy:					
Yes No Unknown	2 36 2	5.0 90.0 5.0	5 151 3	3.1 95.0 1.9	
Postnatal	Exposure				
Indoor use of pesticides during childhood:					
Yes No Unknown	9 30 1	22.5 75.0 2.5	39 120 0	24.5 75.5 0	
Among indoor pesticide users, average annual frequency of use	3.1		2.8		

	Cases (r	n = 40)	Controls (n =159)		
Characteristic	Number	Percent	Number	Percent	
Applicator of indoor pesticides: Informant Professionals Study Subject Other Multiple	2 5 0 1 1	22.2 55.6 0.0 11.1 11.1	7 20 0 9 3	17.9 51.3 0.0 23.1 7.7	
Yard or garden use of pesticides or herbicides during childhood: Yes No Unknown	20 18 2	50.0 45.0 5.0	105 53 1	66.0 33.3 0.6	
Among outdoor yard or garden treatment users, average annual frequency of use	3.4		3.6		
Applicator of outdoor yard or garden treatment: Informant Professionals Study Subject Other Multiple	0 4 0 12 4	0.0 20.0 0.0 60.0 20.0	5 25 0 64 11	4.8 23.8 0.0 60.9 10.5	
Use of pest strips at home during childhood: Yes No Unknown	1 38 1	2.5 95.0 2.5	11 148 0	6.9 93.1 0.0	
Use of oil based paints, paint thinners, brush cleaners, or finish strippers at home during childhood: Yes No Unknown	10 29 1	25.0 72.5 2.5	65 94 0	40.9 59.1 0.0	
Among households using paints or solvents, annual frequency of use	1.5		8.2		

a	Cases (r	n = 40)	Controls (n =159)		
Characteristic	Number	Percent	Number	Percent	
Car repair at home during childhood: Yes No Unknown	14	35.0	42	26.4	
	25	62.5	117	73.6	
	1	2.5	0	0.0	
Among households repairing cars, annual frequency of activity	10.4		23.8		
Use of fingernail polish or remover at home during childhood: Yes No Unknown	27	67.5	116	73.0	
	12	30.0	43	27.0	
	1	2.5	0	0.0	
Among households using nail polish or remover, annual frequency of use	22.1		32.4		
Use of moth balls or crystals at the home during childhood: Yes No Unknown	8	20.0	28	17.6	
	31	77.5	130	81.8	
	1	2.5	1	0.6	
Use of wood cleaner or furniture polish at home during childhood: Yes No Unknown Among households using wood cleaner or furniture polish, annual frequency of	37	92.5	150	94.3	
	2	5.0	9	5.7	
	1	2.5	0	0	
<u>use</u>	47.7		56.1		
Child ever lived on a farm: Yes No Unknown	0	0	3	1.9	
	39	97.5	156	98.1	
	1	2.5	0	0.0	
Child was regularly around cows, pigs, or horses: Yes No Unknown	0	0	7	4.4	
	39	97.5	152	95.6	
	1	2.5	0	0.0	

	Cases (r	n = 40)	Controls (n =159)		
Characteristic	Number	Percent	Number	Percent	
Child was regularly around chickens, geese or ducks: Yes No	1	2.5	8	5.0	
	38	95.0	151	95.0	
Unknown Child lived with a pet: Yes No Unknown	29	72.5	119	74.8	
	10	25.0	40	25.2	
	1	2.5	0	0.0	
Child lived with a dog: Yes No Unknown	24	60.0	90	56.6	
	15	37.5	69	43.4	
	1	2.5	0	0.0	
Child lived with a cat: Yes No Unknown	8	20.0	54	34.0	
	31	77.5	105	66.0	
	1	2.5	0	0.0	
Child lived with a pet other than a dog or cat: Yes No Unknown	12	30.0	60	37.7	
	27	67.5	99	62.3	
	1	2.5	0	0.0	
Child lived with a household pet who used flea collars: Yes No Unknown	19	47.5	81	50.9	
	20	50.0	76	47.8	
	1	2.5	2	1.3	
Child regularly used an electric blanket or mattress pad: Yes No Unknown	2	5.0	4	2.5	
	37	92.5	155	97.5	
	1	2.5	0	0.0	
Child regularly used a heated water bed: Yes No Unknown	3	7.5	2	1.3	
	36	90.0	157	98.7	
	1	2.5	0	0.0	

Table 38a. Interview Study Analysis of Household-related Exposures: Chemicals, Animals, and EMFs: Leukemia and Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Prenatal Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 19								
Pesticides used indoors at home during pregnancy	No	34	134	1.0	-			
	Yes	4	20	0.70	0.22 - 2.25			
Pesticides or herbicides used outdoors during pregnancy	No	23	94	1.0	-			
	Yes	14	58	0.90	0.43 - 1.90			
Pest strips used at home during pregnancy	No	37	146	1.0	-			
	Yes	1	7	0.67	0.08 - 5.54			
Flea collars used on pets at home during pregnancy	No	26	102	1.0	-			
	Yes	12	52	0.79	0.35 - 1.74			
Oil based paint, paint thinners, brush cleaners or furniture strippers used at home during pregnancy	No	27	118	1.0	-			
	Yes	9	37	1.10	0.47 - 2.55			
Car repair at home during pregnancy	No	28	128	1.0	-			
	Yes	10	28	1.53	0.67 - 3.49			
Fingernail polish or remover used at home during pregnancy	No	15	57	1.0	-			
	Yes	23	99	0.88	0.42 - 1.81			
Moth balls or moth crystals used at home during pregnancy	No	32	121	1.0	-			
	Yes	6	34	0.67	0.25 - 1.76			
Wood cleaner or furniture polish used at home during pregnancy	No	2	15	1.0	-			
	Yes	36	141	1.80	0.36 - 8.98			

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval		
Mother regularly used electric blanket or electric mattress pad during pregnancy	No	37	146	1.0	-		
	Yes	1	9	0.48	0.06 - 4.01		
Mother regular used heated water bed during pregnancy	No	36	151	1.0	-		
	Yes	2	5	2.46	0.31 - 19.7		
Mother regular used electric blanket, electric mattress pad, or heated water bed during pregnancy	No	35	141	1.0	-		
	Yes	3	14	0.98	0.25 - 3.79		
Postnatal Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 19							
Pesticides used indoors at home during childhood	No	30	120	1.0	-		
	Yes	9	39	0.90	0.39 - 2.08		
Pesticides or herbicides used outdoors during childhood	No	18	53	1.0	-		
	Yes	20	105	0.52	0.25 - 1.08		
Average annual use of yard or garden treatments during childhood	None	18	53	1.0	-		
	Low	10	54	0.51	0.21 - 1.23		
	High (3+/yr)	10	51	0.54	0.22 - 1.30		
Pest strips used at home during childhood	No	38	148	1.0	-		
	Yes	1	11	0.35	0.04 - 2.79		
Oil based paints, thinner, brush cleaner or strippers used at home during childhood	No	29	94	1.0	-		
	Yes	10	65	0.44	0.19 - 1.02		
Car repair at home during childhood	No	25	117	1.0	-		
	Yes	14	42	1.53	0.72 - 3.25		

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Average annual frequency of car repairs at home during childhood	None	25	117	1.0	-
	Low	7	17	1.89	0.70 - 5.09
	High (4+/yr)	7	25	1.27	0.49 - 3.33
Fingernail polish or remover used at home during childhood	No	12	43	1.0	-
	Yes	27	116	0.82	0.39 - 1.74
Average monthly frequency of fingernail polish or remover used at home during childhood	None	12	43	1.0	-
	Low	13	55	0.86	0.37 - 2.01
	High (>1/mo)	14	61	0.79	0.33 - 1.88
Moth balls or crystals used at home during childhood	No	31	130	1.0	-
	Yes	8	28	1.17	0.49 - 2.80
Wood cleaner or furniture polish used at home during childhood	No	2	9	1.0	-
	Yes	37	150	0.80	0.10 - 6.12
Average weekly use of wood cleaner or furniture polish at home during childhood	None/Low	35	141	1.0	-
	High (>1/wk)	4	18	0.88	0.28 - 2.73
Child lived on a farm	No Yes	39 0	156 3	1.0 0	-
Child was regularly around cows, pigs, or horses	No Yes	39 0	152 7	1.0 0	-
Child was regularly around chickens, geese, or ducks	No	38	151	1.0	-
	Yes	1	8	0.45	0.05 - 4.00
Child lived with a pet	No	10	40	1.0	-
	Yes	29	119	0.90	0.39 - 2.06

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child lived with a dog	No	15	69	1.0	-
	Yes	24	90	1.16	0.54 - 2.49
Child lived with a cat	No	31	105	1.0	-
	Yes	8	54	0.48	0.21 - 1.13
Child lived with a pet other than a dog or cat	No	27	99	1.0	-
	Yes	12	60	0.69	0.30 - 1.56
Child lived with a pet who wore flea collars	No	20	76	1.0	-
	Yes	19	81	0.83	0.41 - 1.69
Child regularly used an electric blanket or mattress pad	No	37	155	1.0	-
	Yes	2	4	2.00	0.37 - 10.9
Child regularly used a heated water bed	No	36	157	1.0	-
	Yes	3	2	9.83	0.99 - 97.2
Child regularly used an electric blanket, mattress pad, or heated water bed	No	35	153	1.0	-
	Yes	4	6	3.15	0.76 - 13.0
Prenatal Exposure: Leuk	emia and Nerv	ous System C	ancer Diagno	sis Ages 0 th	rough 4
Pesticides used indoors at home during pregnancy	No	16	60	1.0	-
	Yes	1	9	0.42	0.05 - 3.39
Pesticides or herbicides used outdoors during pregnancy	No	8	37	1.0	-
	Yes	9	31	1.15	0.40 - 3.32
Pest strips used at home during pregnancy	No	16	64	1.0	-
	Yes	1	4	1.00	0.11 - 8.95

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Flea collars used on pets at home during pregnancy	No	9	42	1.0	-
	Yes	8	27	1.21	0.38 - 3.79
Oil based paint, paint thinners, brush cleaners or furniture strippers used at home during pregnancy	No	11	56	1.0	-
	Yes	6	13	2.31	0.70 - 7.60
Car repair at home during pregnancy	No	14	57	1.0	-
	Yes	3	13	0.90	0.22 - 3.70
Fingernail polish or remover used at home during pregnancy	No	8	25	1.0	-
	Yes	9	45	0.59	0.20 - 1.78
Moth balls or moth crystals used at home during pregnancy	No Yes	17 0	58 11	1.0 0	-
Wood cleaner or furniture polish used at home during pregnancy	No	2	9	1.0	-
	Yes	15	61	0.83	0.13 - 5.46
Mother regularly used electric blanket or electric mattress pad during pregnancy	No	16	68	1.0	-
	Yes	1	2	2.00	0.18 - 22.1
Mother regularly used heated water bed during pregnancy	No	16	65	1.0	-
	Yes	1	5	1.00	0.07 - 13.7
Mother regularly used electric blanket, electric mattress pad, or heated water bed during pregnancy	No	15	63	1.0	-
	Yes	2	7	1.43	0.24 - 8.65

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval		
Postnatal Exposure: Leukemia and Nervous System Cancer Diagnosis Ages 0 through 4							
Pesticides used indoors at home during childhood	No	16	60	1.0	-		
	Yes	1	11	0.35	0.04 - 2.79		
Pesticides or herbicides used outdoors during childhood	No	7	26	1.0	-		
	Yes	9	44	0.66	0.21 - 2.05		
Average annual use of yard or garden treatments during childhood	None	7	26	1.0	-		
	Low	6	19	1.07	0.29 - 3.92		
	High (3+/yr)	3	25	0.37	0.08 - 1.67		
Pest strips used at home during childhood	No	16	67	1.0	-		
	Yes	1	4	1.00	0.10 - 10.1		
Oil based paints, thinner, brush cleaner or strippers used at home during childhood	No	16	49	1.0	-		
	Yes	1	22	0.13	0.02 - 1.04		
Car repair done at home during childhood	No	14	58	1.0	-		
	Yes	3	13	0.91	0.23 - 3.62		
Average annual frequency of car repairs at home during childhood	None	14	58	1.0	-		
	Low	2	0	-	-		
	High (4+/yr)	1	13	0.25	0.03 - 2.12		
Fingernail polish or remover used at home during childhood	No	8	23	1.0	-		
	Yes	9	48	0.52	0.18 - 1.54		
Average monthly frequency of fingernail polish or remover used at home during childhood	None	8	23	1.0	-		
	Low	5	27	0.55	0.16 - 1.85		
	High (>1/mo)	4	21	0.49	0.13 - 1.91		

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Moth balls or crystals use at home during childhood	No Yes	17 0	59 11	1.0 0	-
Wood cleaner or furniture polish used at home during childhood	No	2	9	1.0	-
	Yes	15	62	0.80	0.11 - 6.12
Average weekly use of wood cleaner or furniture polish in the home during childhood	None/Low	14	64	1.0	-
	High (>1/wk)	3	7	1.94	0.42 - 9.07
Child lived on a farm	No Yes	17 0	71 0	1.0 -	-
Child was regularly around cows, pigs, or horses	No Yes	17 0	69 2	1.0 0	-
Child was regularly around chickens, geese, or ducks	No Yes	17 0	69 2	1.0 0	-
Child lived with a pet	No	7	25	1.0	-
	Yes	10	46	0.70	0.24 - 2.01
Child lived with a dog	No	8	35	1.0	-
	Yes	9	36	0.94	0.31 - 2.87
Child lived with a cat	No	13	57	1.0	-
	Yes	4	14	1.20	0.33 - 4.35
Child lived with a pet other than a dog or cat	No	14	59	1.0	-
	Yes	3	12	1.11	0.27 - 4.59

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child lived with a pet who wore flea collars	No Yes	10 7	40 29	1.0 0.83	- 0.28 - 2.43
Child regularly used an electric blanket or mattress pad	No Yes	17 0	70 1	1.0 0	-
Child regularly used a heated water bed	No Yes	17 0	71 0	1.0	-
Child regularly used an electric blanket, mattress pad, or headed water bed	No Yes	17 0	70 1	1.0 0	- -

Table 38b. Interview Study Analysis of Household-related Exposures: Chemicals, Animals, and EMFs: Leukemia

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval				
Prenatal Exposure: Leukemia Diagnosis Ages 0 through 19									
Pesticides used indoors at home during pregnancy	No	19	74	1.0	-				
	Yes	2	12	0.59	0.12 - 2.83				
Pesticides or herbicides used outdoors during pregnancy	No	12	46	1.0	-				
	Yes	8	38	0.73	0.27 - 1.99				
Pest strips used at home during pregnancy	No Yes	21 0	78 5	1.0 0	-				
Flea collars used on pets at home during pregnancy	No	17	62	1.0	-				
	Yes	4	23	0.56	0.17 - 1.87				
Oil based paint, paint thinners, brush cleaners or furniture strippers used at home during pregnancy	No	17	66	1.0	-				
	Yes	3	19	0.63	0.17 - 2.39				
Car repair at home during pregnancy	No	15	74	1.0	-				
	Yes	6	12	2.20	0.75 - 6.51				
Fingernail polish or remover used at home during pregnancy	No	10	32	1.0	-				
	Yes	11	54	0.65	0.24 - 1.75				
Moth balls or moth crystals used at home during pregnancy	No	18	65	1.0	-				
	Yes	3	21	0.55	0.15 - 2.06				
Wood cleaner or furniture polish used at home during pregnancy	No	2	9	1.0	-				
	Yes	19	77	1.15	0.22 - 5.89				

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Mother regularly used electric blanket or electric mattress pad during pregnancy	No	21	79	1.0	-
	Yes	0	6	0	-
Mother regularly used heated water bed during pregnancy	No	20	86	1.0	-
	Yes	1	0	-	-
Mother regularly used electric blanket, electric mattress pad, or heated water bed during pregnancy	No	20	79	1.0	-
	Yes	1	6	0.76	0.09 - 6.51
Postnatal E	xposure: Leuke	emia Diagnos	sis Ages 0 thro	ough 19	
Pesticides used indoors at home during childhood	No	18	65	1.0	-
	Yes	4	23	0.62	0.19 - 2.05
Pesticides or herbicides used outdoors during childhood	No	10	28	1.0	-
	Yes	12	60	0.55	0.21 - 1.43
Average annual use of yard or garden treatments during childhood	None	10	28	1.0	-
	Low	4	29	0.39	0.11 - 1.38
	High (3+/yr)	8	31	0.70	0.24 - 2.07
Pest strips used at home during childhood	No Yes	22 0	81 7	1.0 0	-
Oil based paints, thinner, brush cleaner or strippers used at home during childhood	No	16	48	1.0	-
	Yes	6	40	0.42	0.14 - 1.24
Car repair done at home during childhood	No	13	70	1.0	-
	Yes	9	18	2.59	0.96 - 6.95

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Average annual frequency of car repairs at home during childhood	None	13	70	1.0	-
	Low	5	9	2.84	0.82 - 9.86
	High (4+/yr)	4	9	2.30	0.57 - 9.22
Fingernail polish or remover used at home during childhood	No	10	20	1.0	-
	Yes	12	68	0.38	0.14 - 0.97
Average monthly frequency of fingernail polish or remover used at home during childhood	None	10	20	1.0	-
	Low	6	34	0.39	0.13 - 1.18
	High (>1/mo)	6	34	0.35	0.11 - 1.16
Moth balls or crystals used at home during childhood	No	18	69	1.0	-
	Yes	4	19	0.81	0.25 - 2.65
Wood cleaner or furniture polish used at home during childhood	No	2	3	1.0	-
	Yes	20	85	0.32	0.04 - 2.35
Average weekly use of wood cleaner or furniture polish at home during childhood	None/Low	19	81	1.0	-
	High (>1/wk)	3	7	1.85	0.43 - 7.99
Child lived on a farm	No Yes	22 0	86 2	1.0 0	-
Child was regularly around cows, pigs, or horses	No Yes	22 0	86 2	1.0 0	-
Child was regularly around chickens, geese, or ducks	No Yes	22 0	87 1	1.0 0	-
Child lived with a pet	No	7	27	1.0	-
	Yes	15	61	0.94	0.33 - 2.70

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child lived with a dog	No	10	45	1.0	-
	Yes	12	43	1.30	0.47 - 3.56
Child lived with a cat	No	19	63	1.0	-
	Yes	3	25	0.41	0.11 - 1.49
Child lived with a pet other than a dog or cat	No	15	55	1.0	-
	Yes	7	33	0.75	0.26 - 2.18
Child lived with a pet who wore flea collars	No	14	46	1.0	-
	Yes	8	42	0.60	0.21 - 1.67
Child regularly used an electric blanket or mattress pad	No	20	87	1.0	-
	Yes	2	1	8.00	0.72 - 88.2
Child regularly used a heated water bed	No Yes	20 2	88 0	1.0	-
Child regularly used an electric blanket, mattress pad, or heated water bed	No	19	87	1.0	-
	Yes	3	1	12.0	1.25 - 115
Prenatal E	xposure: Leuke	emia Diagnos	sis Ages 0 thro	ough 4	
Pesticides used indoors at home during pregnancy	No	8	30	1.0	-
	Yes	1	5	0.74	0.08 - 6.87
Pesticides or herbicides used outdoors during pregnancy	No	3	17	1.0	-
	Yes	6	17	2.04	0.39 - 10.7
Pest strips used at home during pregnancy	No Yes	9 0	30 3	1.0 0	-

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Flea collars used on pets at home during pregnancy	No	7	26	1.0	-
	Yes	2	9	0.80	0.14 - 4.52
Oil based paint, paint thinners, brush cleaners or furniture strippers used at home during pregnancy	No	7	30	1.0	-
	Yes	2	4	2.05	0.33 - 12.7
Car repair at home during pregnancy	No	7	30	1.0	-
	Yes	2	5	1.77	0.28 - 11.1
Fingernail polish or remover used at home during pregnancy	No	6	12	1.0	-
	Yes	3	23	0.23	0.04 - 1.25
Moth balls or moth crystals used at home during pregnancy	No Yes	9 0	27 8	1.0 0	-
Wood cleaner or furniture polish used at home during pregnancy	No	2	4	1.0	-
	Yes	7	31	0.41	0.05 - 3.07
Mother regularly used electric blanket or electric mattress pad during pregnancy	No Yes	9 0	34 1	1.0 0	-
Mother regularly used heated water bed during pregnancy	No Yes	9 0	35 0	1.0 -	-
Mother regularly used electric blanket, electric mattress pad, or heated water bed during pregnancy	No	9	34	1.0	-
	Yes	0	1	0	-

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Postnatal Exposure: Leukemia Diagnosis Ages 0 through 4								
Pesticides used indoors at home during childhood	No Yes	9 0	30 6	1.0 0	-			
Pesticides or herbicides used outdoors during childhood	No	4	12	1.0	-			
	Yes	5	24	0.58	0.12 - 2.80			
Average annual use of yard or garden treatments during childhood	None	4	12	1.0	-			
	Low	2	10	0.56	0.08 - 3.86			
	High (3+/yr)	3	14	0.59	0.10 - 3.47			
Pest strips used at home during childhood	No Yes	9 0	33 3	1.0 0	-			
Oil based paints, thinner, brush cleaner or strippers used at home during childhood	No	8	24	1.0	-			
	Yes	1	12	0.27	0.03 - 2.32			
Car repair at home during childhood	No	7	32	1.0	-			
	Yes	2	4	2.17	0.35 - 13.5			
Average annual frequency of car repairs at home during childhood	None	7	32	1.0	-			
	Low	2	0	-	-			
	High (4+/yr)	0	4	0	-			
Fingernail polish or remover used at home during childhood	No	6	10	1.0	-			
	Yes	3	26	0.19	0.04 - 1.02			
Average monthly frequency of fingernail polish or remover used at home during childhood	None	6	10	1.0	-			
	Low	2	15	0.23	0.04 - 1.36			
	High (>1/mo)	1	11	0.13	0.01 - 1.52			

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Moth balls or crystals used at home during childhood	No Yes	9 0	28 8	1.0 0	-
Wood cleaner or furniture polish used at home during childhood	No	2	3	1.0	-
	Yes	7	33	0.32	0.04 - 2.35
Average weekly use of wood cleaner or furniture polish at home during childhood	None/Low	7	33	1.0	-
	High (>1/wk)	2	3	3.15	0.43 - 23.4
Child lived on a farm	No Yes	9 0	36 0	1.0 -	-
Child was regularly around cows, pigs, or horses	No Yes	9 0	36 0	1.0 -	-
Child was regularly around chickens, geese, or ducks	No Yes	9 0	36 0	1.0 -	-
Child lived with a pet	No	4	16	1.0	-
	Yes	5	20	1.00	0.24 - 4.11
Child lived with a dog	No	5	21	1.0	-
	Yes	4	15	1.14	0.23 - 5.67
Child lived with a cat	No	8	30	1.0	-
	Yes	1	6	0.65	0.07 - 5.72
Child lived with a pet other than a dog or a cat	No	7	28	1.0	-
	Yes	2	8	1.00	0.18 - 5.65

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child lived with a pet who wore flea collars	No	6	24	1.0	-
	Yes	3	12	1.00	0.22 - 4.54
Child regularly used an electric blanket or mattress pad	No	9	36	1.0	-
	Yes	0	0	-	-
Child regularly used a heated water bed	No Yes	9 0	36 0	1.0 -	-
Child regularly used an electric blanket, mattress pad, or heated water bed	No	9	36	1.0	-
	Yes	0	0	-	-

Table 38c. Interview Study Analysis of Household-related Exposures: Chemicals, Animals, and EMFs: Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval					
Prenatal Exposure	Prenatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 19									
Pesticides used indoors at home during pregnancy	No	15	60	1.0	-					
	Yes	2	8	0.89	0.15 - 5.17					
Pesticides or herbicides used outdoors during pregnancy	No	11	48	1.0	-					
	Yes	6	20	1.18	0.39 - 3.57					
Pest strips used at home during pregnancy	No	16	68	1.0	-					
	Yes	1	2	2.00	0.18 - 22.1					
Flea collars used on pets at home during pregnancy	No	9	40	1.0	-					
	Yes	8	29	1.06	0.36 - 3.19					
Oil based paint, paint thinners, brush cleaners or furniture strippers used at home during pregnancy	No	10	52	1.0	-					
	Yes	6	18	1.77	0.56 - 5.58					
Car repair at home during pregnancy	No	13	54	1.0	-					
	Yes	4	16	0.98	0.28 - 3.46					
Fingernail polish or remover used at home during pregnancy	No	5	25	1.0	-					
	Yes	12	45	1.28	0.41 - 3.98					
Moth balls or moth crystals used at home during pregnancy	No	14	56	1.0	-					
	Yes	3	13	0.86	0.21 - 3.54					
Wood cleaner or furniture polish used at home during pregnancy	No Yes	0 17	6 64	-	-					

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Mother regularly used electric blanket or electric mattress pad during pregnancy	No	16	67	1.0	-			
	Yes	1	3	1.40	0.12 - 16.4			
Mother regularly used heated water bed during pregnancy	No	16	65	1.0	-			
	Yes	1	5	1.00	0.07 - 13.7			
Mother regularly used electric blanket, electric mattress pad, or heated water bed during pregnancy	No	15	62	1.0	-			
	Yes	2	8	1.19	0.20 - 7.21			
Postnatal Exposur	Postnatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 19							
Pesticides used indoors at home during childhood	No	12	55	1.0	-			
	Yes	5	16	1.38	0.40 - 4.71			
Pesticides or herbicides used outdoors during childhood	No	8	25	1.0	-			
	Yes	8	45	0.50	0.17 - 1.49			
Average annual use of yard or garden treatments during childhood	None	8	25	1.0	-			
	Low	6	25	0.73	0.21 - 2.49			
	High (3+/yr)	2	20	0.27	0.05 - 1.44			
Pest strips used at home during childhood	No	16	67	1.0	-			
	Yes	1	4	1.00	0.11 - 8.95			
Oil based paints, thinner, brush cleaner or strippers used at home during childhood	No	13	46	1.0	-			
	Yes	4	25	0.46	0.12 - 1.81			
Car repair at home during childhood	No	12	47	1.0	-			
	Yes	5	24	0.75	0.23 - 2.46			

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Average annual frequency of car repairs at home during childhood	None	12	47	1.0	-
	Low	2	8	0.90	0.16 - 5.04
	High (4+/yr)	3	16	0.69	0.17 - 2.75
Fingernail polish or remover used at home during childhood	No	2	23	1.0	-
	Yes	15	48	3.49	0.71 - 17.1
Average monthly frequency of fingernail polish or remover used at home during childhood	None	2	23	1.0	-
	Low	7	21	3.97	0.72 - 21.8
	High (>1/mo)	8	27	3.11	0.58 - 16.8
Moth balls or crystals used at home during childhood	No	13	61	1.0	-
	Yes	4	9	1.95	0.52 - 7.28
Wood cleaner or furniture polish used at home during childhood	No Yes	0 17	6 65	-	-
Average weekly use of wood cleaner or furniture polish at home during childhood	None/Low	16	60	1.0	-
	High (>1/wk)	1	11	0.34	0.04 - 2.75
Child lived on a farm	No Yes	17 0	70 1	1.0 0	-
Child was regularly around cows, pigs, or horses	No Yes	17 0	66 5	1.0 0	-
Child was regularly around chickens, geese, or ducks	No	16	64	1.0	-
	Yes	1	7	0.52	0.06 - 4.80
Child lived with a pet	No	3	13	1.0	-
	Yes	14	58	0.82	0.21 - 3.16

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child lived with a dog	No	5	24	1.0	-
	Yes	12	47	1.00	0.31 - 3.17
Child lived with a cat	No	12	42	1.0	-
	Yes	5	29	0.55	0.17 - 1.76
Child lived with a pet other than a dog or cat	No	12	44	1.0	-
	Yes	5	27	0.61	0.17 - 2.16
Child lived with a pet who wore flea collars	No	6	30	1.0	-
	Yes	11	39	1.18	0.41 - 3.42
Child regularly used an electric blanket or mattress pad	No Yes	17 0	68 3	1.0 0	-
Child regularly used a heated water bed	No	16	69	1.0	-
	Yes	1	2	2.45	0.14 - 42.6
Child regularly used an electric blanket, mattress pad, or heated water bed	No	16	66	1.0	-
	Yes	1	5	0.77	0.08 - 7.76
Prenatal Exposur	e: Nervous Sys	tem Cancer [Diagnosis Age	s 0 through	4
Pesticides used indoors at home during pregnancy	No Yes	8 0	30 4	1.0 0	-
Pesticides or herbicides used outdoors during pregnancy	No	5	20	1.0	-
	Yes	3	14	0.68	0.15 - 3.14
Pest strips used at home during pregnancy	No	7	34	1.0	-
	Yes	1	1	4.00	0.25 - 64.0

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Flea collars used on pets at home during pregnancy	No	2	16	1.0	-
	Yes	6	18	1.80	0.33 - 9.85
Oil based paint, paint thinners, brush cleaners or furniture strippers used at home during pregnancy	No	4	26	1.0	-
	Yes	4	9	2.53	0.51 - 12.5
Car repair at home during pregnancy	No	7	27	1.0	-
	Yes	1	8	0.41	0.04 - 4.00
Fingernail polish or remover used at home during pregnancy	No	2	13	1.0	-
	Yes	6	22	1.66	0.30 - 9.22
Moth balls or moth crystals used at home during pregnancy	No Yes	8 0	31 3	1.0 0	-
Wood cleaner or furniture polish used at home during pregnancy	No Yes	0 8	5 30	-	- -
Mother regularly used electric blanket or electric mattress pad during pregnancy	No	7	34	1.0	-
	Yes	1	1	4.00	0.25 - 64.0
Mother regularly used heated water bed during pregnancy	No	7	30	1.0	-
	Yes	1	5	1.00	0.07 - 13.7
Mother regularly used electric blanket, electric mattress pad, or heated water bed	No	6	29	1.0	-
	Yes	2	6	1.85	0.28 - 12.4

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Postnatal Exposur	Postnatal Exposure: Nervous System Cancer Diagnosis Ages 0 through 4							
Pesticides used indoors at home during childhood	No	7	30	1.0	-			
	Yes	1	5	0.78	0.08 - 7.28			
Pesticides or herbicides used outdoors during childhood	No	3	14	1.0	-			
	Yes	4	20	0.76	0.15 - 3.77			
Average annual frequency of yard or garden treatments during childhood	None	3	14	1.0	-			
	Low	4	9	3.68	0.36 - 37.6			
	High (3+/yr)	0	11	0	-			
Pest strips used at home during childhood	No	7	34	1.0	-			
	Yes	1	1	4.00	0.25 - 64.0			
Oil based paints, thinner, brush cleaner or strippers used at home during childhood	No	8	25	1.0	-			
	Yes	0	10	0	-			
Car repair at home during childhood	No	7	26	1.0	-			
	Yes	1	9	0.37	0.04 - 3.40			
Average annual frequency of car repairs at home during childhood	None	7	26	1.0	-			
	Low	0	0	-	-			
	High (4+/yr)	1	9	0.37	0.04 - 3.40			
Fingernail polish or remover used at home during childhood	No	2	13	1.0	-			
	Yes	6	22	1.73	0.28 - 10.5			
Average monthly frequency of fingernail polish or remover used at home during childhood	None	2	13	1.0	-			
	Low	3	12	1.79	0.23 - 13.8			
	High (>1/mo)	3	10	1.68	0.22 - 12.6			

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Moth balls or crystals used at home during childhood	No Yes	8 0	31 3	1.0 0	-
Wood cleaner or furniture polish used at home during childhood	No Yes	0 8	6 29	-	-
Average weekly use of wood cleaner or furniture polish at home during childhood	None/Low High (>1/wk)	7 1	31 4	1.0 1.00	- 0.09 - 11.6
Child lived on a farm	No Yes	8 0	35 0	1.0 -	-
Child was regularly around cows, pigs, or horses	No Yes	8 0	33 2	1.0 0	-
Child was regularly around chickens, geese, or ducks	No Yes	8 0	33 2	1.0 0	-
Child lived with a pet	No Yes	3 5	9 26	1.0 0.44	- 0.10 - 2.06
Child lived with a dog	No Yes	3 5	14 21	1.0 0.77	- 0.16 - 3.66
Child lived with a cat	No Yes	5 3	27 8	1.0 1.95	- 0.34 - 11.2
Child lived with a pet other than a dog or a cat	No Yes	7 1	31 4	1.0 1.40	- 0.12 - 16.4

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child lived with a pet who wore flea collar	No Yes	4 4	16 17	1.0 0.70	- 0.16 - 3.08
Child regularly used an electric blanket or mattress pad	No Yes	8 0	34 1	1.0 0	-
Child regularly used a heated water bed	No Yes	8 0	35 0	1.0 -	-
Child regularly used an electric blanket, mattress pad, or heated water bed	No Yes	8 0	34 1	1.0 0	- -

Table 38d. Interview Study Analysis of Household-related Exposures: Chemicals, Animals, and EMFs: Brain and Central Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Prenatal Exposure: Brain a	nd Central Ner	vous System	Cancer Diagn	osis Ages 0	through 19
Pesticides used indoors at home during pregnancy	No	10	44	1.0	-
	Yes	2	6	1.27	0.19 - 8.39
Pesticides or herbicides used outdoors during pregnancy	No	8	38	1.0	-
	Yes	4	12	1.42	0.38 - 5.32
Pest strips used at home during pregnancy	No Yes	12 0	49 2	1.0 0	-
Flea collars used on pets at home during pregnancy	No	8	31	1.0	-
	Yes	4	19	0.64	0.15 - 2.77
Oil based paint, paint thinners, brush cleaners or furniture strippers used at home during pregnancy	No	8	37	1.0	-
	Yes	3	14	1.00	0.24 - 4.24
Car repair at home during pregnancy	No	9	38	1.0	-
	Yes	3	13	0.88	0.22 - 3.59
Fingernail polish or remover used at home during pregnancy	No	3	16	1.0	-
	Yes	9	35	1.27	0.29 - 5.48
Moth balls or moth crystals used at home during pregnancy	No Yes	9	39 11	1.0 1.09	- 0.25 - 4.76
Wood cleaner or furniture polish used at home during pregnancy	No Yes	0 12	3 48	-	-

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Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Mother regularly used electric blanket or electric mattress pad during pregnancy	No	11	48	1.0	-			
	Yes	1	3	1.40	0.12 - 16.4			
Mother regularly used heated water bed during pregnancy	No Yes	12 0	49 2	1.0 0	-			
Mother regularly used electric blanket, electric mattress pad, or heated water bed during pregnancy	No	11	46	1.0	-			
	Yes	1	5	1.00	0.10 - 10.1			
Postnatal Exposure: Brain a	Postnatal Exposure: Brain and Central Nervous System Cancer Diagnosis Ages 0 through 19							
Pesticides used indoors at home during childhood	No	8	39	1.0	-			
	Yes	4	13	1.37	0.33 - 5.66			
Pesticides or herbicides used outdoors during childhood	No	6	20	1.0	-			
	Yes	6	32	0.50	0.14 - 1.80			
Average annual frequency of yard or garden treatments during childhood	None	6	20	1.0	-			
	Low	4	18	0.60	0.14 - 2.66			
	High (3+/yr)	2	14	0.40	0.07 - 2.22			
Pest strips used at home during childhood	No Yes	12 0	48 4	1.0 0	-			
Oil based paints, thinner, brush cleaner or strippers used at home during childhood	No	8	31	1.0	-			
	Yes	4	21	0.61	0.15 - 2.53			
Car repair at home during childhood	No	8	32	1.0	-			
	Yes	4	20	0.70	0.19 - 2.64			

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Average annual frequency of car repairs at home during childhood	None	8	32	1.0	-
	Low	2	8	0.87	0.15 - 4.92
	High (4+/yr)	2	12	0.60	0.12 - 3.11
Fingernail polish or remover used at home during childhood	No Yes	0 12	15 37	-	-
Average monthly frequency of fingernail polish or remover used at home during childhood	None	0	15	-	-
	Low	6	15	-	-
	High(>1/mo)	6	22	-	-
Moth balls or crystals used at home during childhood	No	8	44	1.0	-
	Yes	4	7	2.91	0.68 - 12.4
Wood cleaner or furniture polish used at home during childhood	No Yes	0 12	2 50	-	-
Average weekly use of wood cleaner or furniture polish at home during childhood	None/Low	12	43	1.0	-
	High (>1/wk)	0	9	0	-
Child lived on a farm	No Yes	12 0	51 1	1.0 0	-
Child was regularly around cows, pigs, or horses	No Yes	12 0	48 4	1.0 0	-
Child was regularly around chickens, geese, or ducks	No	11	45	1.0	-
	Yes	1	7	0.52	0.06 - 4.80
Child lived with a pet	No	2	8	1.0	-
	Yes	10	44	0.62	0.12 - 3.22

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child lived with a dog	No	4	16	1.0	-
	Yes	8	36	0.67	0.17 - 2.59
Child lived with a cat	No Yes	9	27 25	1.0 0.31	- 0.07 - 1.28
Child lived with a pet other than a dog or cat	No	8	26	1.0	-
	Yes	4	26	0.43	0.11 - 1.66
Child lived with a pet who wore flea collars	No	4	21	1.0	-
	Yes	8	30	1.11	0.31 - 3.97
Child regularly used an electric blanket or mattress pad	No Yes	12 0	49 3	1.0 0	-
Child regularly used a heated water bed	No	11	50	1.0	-
	Yes	1	2	2.45	0.14 - 42.6
Child regularly used an electric blanket, mattress pad, or heated water bed	No	11	47	1.0	-
	Yes	1	5	0.77	0.07 - 7.76
Prenatal Exposure: Brain a	and Central Ne	rvous System	Cancer Diagi	nosis Ages 0	through 4
Pesticides indoors at home during pregnancy	No Yes	3 0	14 2	1.0 0	-
Pesticides or herbicides used outdoors during pregnancy	No	2	10	1.0	-
	Yes	1	6	0.56	0.05 - 6.44
Pest strips used at home during pregnancy	No Yes	3 0	15 1	1.0 0	-

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Flea collars used on pets at home during pregnancy	No	1	7	1.0	-
	Yes	2	8	0.61	0.03 - 13.0
Oil based paint, paint thinners, brush cleaners or furniture strippers used at home during pregnancy	No	2	11	1.0	-
	Yes	1	5	0.72	0.06 - 9.12
Car repair at home during pregnancy	No	3	11	1.0	-
	Yes	0	5	0	-
Fingernail polish or remover used at home during pregnancy	No Yes	0	4 12	-	- -
Moth balls or moth crystals used at home during pregnancy	No Yes	3 0	14 1	1.0 0	-
Wood cleaner or furniture polish used at home	No Yes	0	2 14	0 0	-
Mother regularly used electric blanket or electric mattress pad during pregnancy	No	2	15	1.0	-
	Yes	1	1	4.00	0.25 - 64.0
Mother regularly used heated water bed during pregnancy	No	3	14	1.0	-
	Yes	0	2	0	-
Mother regularly used electric blanket, electric mattress pad, or heated water bed during pregnancy	No	2	13	1.0	-
	Yes	1	3	2.00	0.18 - 22.1

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Postnatal Exposure: Brain	and Central Ne	rvous System	n Cancer Diag	nosis Ages 0	through 4
Pesticides used indoors at home during childhood	No Yes	3 0	14 2	1.0 0	-
Pesticides or herbicides used outdoors during childhood	No Yes	1 2	9 7	1.0 1.38	- 0.11 - 17.4
Average annual frequency of use yard or garden treatments during childhood	None Low High (3+/yr)	1 2 0	9 2 5	- - -	- - -
Pest strips were used at home during childhood	No Yes	3 0	15 1	1.0 0	-
Oil based paints, thinner, brush cleaner or strippers used at home during childhood	No Yes	3 0	10 6	1.0 0	- -
Car repair at home during childhood	No Yes	3 0	11 5	1.0 0	-
Average annual frequency of car repairs at home during childhood	None Low High (4+/yr)	3 0 0	11 0 5	1.0 - 0	- - -
Fingernail polish or remover used at home during childhood	No Yes	0 3	5 11	-	- -
Average monthly frequency of fingernail polish or remover used at home during childhood	None Low High (>1/mo)	0 2 1	5 6 5	- - -	- - -

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Moth balls or crystals used at home during childhood	No Yes	3 0	14 1	1.0 0	-
Wood cleaner or furniture polish used at home during childhood	No Yes	0 3	2 14	- -	-
Average weekly use of wood cleaner or furniture polish at home during childhood	None/Low High (>1/wk)	3 0	14 2	1.0 0	- -
Child lived on a farm	No Yes	3 0	16 0	1.0 -	-
Child was regularly around cows, pigs, or horses	No Yes	3 0	15 1	1.0 0	-
Child was regularly around chickens, geese, or ducks	No Yes	3 0	14 2	1.0 0	-
Child lived with a pet	No Yes	2 1	4 12	1.0 0.12	- 0.01 - 1.38
Child lived with a dog	No Yes	2 1	6 10	1.0 0.17	- 0.01 - 1.93
Child lived with a cat	No Yes	2 1	12 4	1.0 1.00	- 0.03 - 32.0
Child lived with a pet other than a dog or a cat	No Yes	3 0	13 3	1.0 0	-

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child lived with a pet who wore flea collars	No Yes	2 1	7 8	1.0 0.22	- 0.02 - 2.78
Child regularly used an electric blanket or mattress pad	No Yes	3 0	15 1	1.0 0	-
Child regularly used a heated water bed	No Yes	3 0	16 0	1.0 -	-
Child regularly used an electric blanket, mattress pad, or heated water bed	No Yes	3 0	15 1	1.0 0	- -

Table 39. Comparison of Controls Lost to Follow-up and Interview Study Controls

Characteristic	Lost to Fe	ollow-up 39)	Interview Study (n=159)		
	Number	Percent	Number	Percent	
Race: White Non-white Unknown	31 1 7	79.5 2.6 17.9	154 5 0	96.9 3.1 0.0	
Maternal residence in Dover Township at child's birth: Yes No Unknown	9 28 2	23.1 71.8 5.1	84 73 2	52.8 45.9 1.3	
Mean year of birth	19	76	19	80	
Mean maternal age at child's birth	2	26 27		7	
Child was first live birth of mother: Yes No Unknown	8 24 7	20.5 61.5 18.0	65 91 3	40.9 57.2 1.9	
Mean birth weight in grams	33	61	33	52	

Table 40. Interview Study Case School Status at Time Matched Controls were Selected: Children Diagnosed Under Age 6

Case School Status at Toms River School District when Matched Controls were Selected (controls matched to projected first grade class of case)	Number of Cases
Number of cases enrolled in Toms River School District along with their controls	11
Number of cases who died prior to entering first grade	3
Number of cases who could not be identified as being enrolled in the Toms River School District along with their controls	3
Total cases diagnosed prior to school age (<6) with controls selected from the Toms River School District	17

 Table 41. Birth Records Study Summary of Case Ascertainment

Residential Location at Time of Diagnosis:	Cases (n=48)			
Dover Township Birth Cohort Subsequently Diagnosed with Cancer	Number	Percent		
Dover Township, Ocean County	41	85.4		
Ocean County, excluding Dover Township	5	10.4		
New Jersey, excluding Ocean County	1	2.1		
Outside of New Jersey	1	2.1		

Table 42. Birth Records Study Cases by Diagnosis Age and Cancer Type

Consor Type		Age at	5	Total	Percent		
Cancer Type	0 - 4	5 - 9	10 - 14	15 - 19	Cases by Type	of All Cancers	
Leukemia	7	4	3	2	16	33.3	
Sympathetic nervous system cancer	5	0	0	1	6	12.5	
Brain and central nervous system cancer	4	0	1	2	7	14.6	
All other cancers	7	1	5	6	19	39.6	
Total	23	5	9	11	48	100.0	

Table 43. Birth Records Study Residence with a Private Well in a Groundwater Region

	Cases (n=48)	Controls	(n=480)
Birth Residence with a Private Well in a Groundwater Region	Number	Percent	Number	Percent
A. Pleasant Plains Zone 1 Yes No	0 48	0.0 100.0	3 477	0.6 99.4
B. Reich Farm Plume Yes No	0 48	0.0 100.0	1 479	0.2 99.8
C. Ciba-Geigy Groundwater Plume Yes No	0 48	0.0 100.0	0 480	0.0 100.0
D. Silverton Wells Yes No	0 48	0.0 100.0	0 480	0.0 100.0
E. Silverton Road Yes No	0 48	0.0 100.0	0 480	0.0 100.0
F. North Gilford Park Yes No	0 48	0.0 100.0	3 477	0.6 99.4
G. Shelter Cove Yes No	0 48	0.0 100.0	0 480	0.0 100.0
H. Breton Harbors Yes No	1 47	2.1 97.9	7 473	1.5 98.5
I. North Maple Avenue Yes No	1 47	2.1 97.9	0 480	0.0 100.0
J. Beachwood and Veeder Yes No	0 48	0.0 100.0	3 477	0.6 99.4
K. Miscellaneous Street Segments Yes No	0 48	0.0 100.0	4 476	0.8 99.2

Table 44. Birth Records Study Analysis of Private Well Use in Any Groundwater Region

Cancer Type	Age of Diagnosis	Private Well in Any Groundwater Region	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
	0 through 19	No Yes	46 2	460 20	1.0 1.00	- 0.23 - 4.43
All Cancers	0 through 4	No Yes	22 1	221 9	1.0 1.12	- 0.13 - 9.75
	0 through 19	No Yes	15 1	152 8	1.0 1.26	- 0.15 - 10.3
Leukemia	0 through 4	No Yes	6 1	66 4	1.0 2.65	- 0.27 - 26.3
	0 through 19	No Yes	12 1	129 1	1.0 10.0	- 0.63 - 160
Nervous System	0 through 4	No Yes	9 0	90 0	1.0 -	-
Brain and Central	0 through 19	No Yes	7 0	69 1	1.0 0	-
Nervous System	0 through 4	No Yes	4 0	40 0	1.0 -	-
_	0 through 19	No Yes	19 0	179 11	1.0 0	- -
All Other Cancers	0 through 4	No Yes	7 0	65 5	1.0 0	-

Table 45. Birth Records Study Percent of Public Water Delivered by Source to Study Residences

	Cases (n	ı = 48)	Controls (n = 480)		
Well Field	Number	Percent	Number	Percent	
Anchorage <10% 10% - 49.9% 50%+	48 0 0	100.0 0.0 0.0	473 7 0	98.5 1.5 0.0	
Berkeley <10% 10% - 49.9% 50%+	46 2 0	95.8 4.2 0.0	466 10 4	97.1 2.1 0.8	
Brookside <10% 10% - 49.9% 50%+	33 10 5	68.8 20.8 10.4	386 56 38	80.4 11.7 7.9	
Holly Street <10% 10% - 49.9% 50%+	21 15 12	43.8 31.3 25.0	247 132 101	51.5 27.5 21.0	
Indian Head <10% 10% - 49.9% 50%+	43 5 0	89.6 10.4 0.0	435 34 11	90.6 7.1 2.3	
Parkway <10% 10% - 49.9% 50%+	21 12 15	43.8 25.0 31.3	221 100 159	46.0 20.8 33.1	
Route 70 <10% 10% - 49.9% 50%+	42 5 1	87.5 10.4 2.1	419 51 10	87.3 10.6 2.1	
Silver Bay <10% 10% - 49.9% 50%+	46 2 0	95.8 4.2 0.0	475 5 0	99.0 1.0 0.0	

	Cases (n	= 48)	Controls (n = 480)		
Well Field	Number	Percent	Number	Percent	
South Toms River <10% 10% - 49.9% 50%+	46 2 0	95.8 4.2 0.0	454 26 0	94.6 5.4 0.0	
Windsor <10% 10% - 49.9% 50%+	48 0 0	100.0 0.0 0.0	477 3 0	99.4 0.6 0.0	

Table 46a. Birth Records Study Analysis of Public Water Indices: All Cancers Combined

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
All Cancer Diagnosis Ages 0 through 19								
Brookside	<10	33	386	1.0	-			
	10 - 49.9	10	56	2.30	1.02 - 5.19			
	50+	5	38	1.92	0.53 - 6.95			
Holly Street	<10	21	247	1.0	-			
	10 - 49.9	15	132	1.38	0.67 - 2.85			
	50+	12	101	1.48	0.66 - 3.34			
Indian Head	<10	43	435	1.0	-			
	10 - 49.9	5	34	1.56	0.55 - 4.40			
	50+	0	11	0	-			
Parkway	<10	21	221	1.0	-			
	10 - 49.9	12	100	1.33	0.55 - 3.21			
	50+	15	159	1.04	0.44 - 2.43			
Route 70	<10	42	419	1.0	-			
	10 - 49.9	5	51	0.97	0.33 - 2.89			
	50+	1	10	0.99	0.12 - 8.19			

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
All Cancer Diagnosis Ages 0 through 4								
Brookside	<10	19	210	1.0	-			
	10 - 49.9	4	20	2.47	0.70 - 8.71			
	50+	0	0	-	-			
Holly Street	<10	12	134	1.0	-			
	10 - 49.9	8	63	1.48	0.54 - 4.06			
	50+	3	33	1.03	0.26 - 4.01			
Indian Head	<10	20	208	1.0	-			
	10 - 49.9	3	16	2.32	0.52 - 10.3			
	50+	0	6	0	-			
Parkway	<10	6	57	1.0	-			
	10 - 49.9	8	65	1.20	0.38 - 3.80			
	50+	9	108	0.79	0.27 - 2.34			
Route 70	<10	19	180	1.0	-			
	10 - 49.9	3	43	0.63	0.16 - 2.38			
	50+	1	7	1.34	0.15 - 11.9			

Table 46b. Birth Records Study Analysis of Public Water Indices: Leukemia

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Leukemia Diagnosis Ages 0 through 19								
Brookside	<10	11	130	1.0	-			
	10 - 49.9	3	22	1.80	0.43 - 7.56			
	50+	2	8	5.49	0.61 - 49.8			
Holly Street	<10	7	81	1.0	-			
	10 - 49.9	4	39	1.22	0.32 - 4.61			
	50+	5	40	1.61	0.40 - 6.41			
Indian Head	<10	15	148	1.0	-			
	10 - 49.9	1	5	2.03	0.22 - 18.5			
	50+	0	7	0	-			
Parkway	<10	6	72	1.0	-			
	10 - 49.9	4	28	1.90	0.43 - 8.45			
	50+	6	60	1.38	0.31 - 6.08			
Route 70	<10	12	135	1.0	-			
	10 - 49.9	3	22	1.93	0.38 - 9.65			
	50+	1	3	4.22	0.40 - 45.1			

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Leukemia Diagnosis Ages 0 through 4								
Brookside	<10	6	64	1.0	-			
	10 - 49.9	1	6	1.82	0.18 - 18.7			
	50+	0	0	-	-			
Holly Street	<10	4	43	1.0	-			
	10 - 49.9	2	19	1.14	0.18 - 7.34			
	50+	1	8	1.38	0.12 - 16.0			
Indian Head	<10	7	65	1.0	-			
	10 - 49.9	0	1	0	-			
	50+	0	4	0	-			
Parkway	<10	2	13	1.0	-			
	10 - 49.9	1	15	0.45	0.04 - 5.36			
	50+	4	42	0.65	0.12 - 3.65			
Route 70	<10	5	55	1.0	-			
	10 - 49.9	1	15	0.77	0.07 - 8.68			
	50+	1	0	-	-			

Table 46c. Birth Records Study Analysis of Public Water Indices: Nervous System Cancers

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval		
Nervous System Cancer Diagnosis Ages 0 through 19							
Brookside	<10	10	110	1.0	-		
	10 - 49.9	3	14	2.51	0.56 - 11.3		
	50+	0	6	0	-		
Holly Street	<10	6	61	1.0	-		
	10 - 49.9	4	47	0.86	0.22 - 3.33		
	50+	3	22	1.47	0.30 - 7.20		
Indian Head	<10	11	116	1.0	-		
	10 - 49.9	2	12	1.83	0.35 - 9.66		
	50+	0	2	0	-		
Parkway	<10	5	43	1.0	-		
	10 - 49.9	4	42	0.71	0.13 - 3.78		
	50+	4	45	0.68	0.14 - 3.28		
Route 70	<10	12	108	1.0	-		
	10 - 49.9	1	19	0.39	0.04 - 3.79		
	50+	0	3	0	-		

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Nervous System Cancer Diagnosis Ages 0 through 4								
Brookside	<10	8	84	1.0	-			
	10 - 49.9	1	6	1.82	0.18 - 18.7			
	50+	0	0	-	-			
Holly Street	<10	4	46	1.0	-			
	10 - 49.9	4	34	1.39	0.31 - 6.29			
	50+	1	10	1.17	0.11 - 11.9			
Indian Head	<10	7	79	1.0	-			
	10 - 49.9	2	9	2.84	0.45 - 18.1			
	50+	0	2	0	-			
Parkway	<10	2	16	1.0	-			
	10 - 49.9	4	36	0.91	0.13 - 6.14			
	50+	3	38	0.66	0.10 - 4.14			
Route 70	<10	8	68	1.0	-			
	10 - 49.9	1	19	0.39	0.04 - 3.79			
	50+	0	3	0	-			

Table 46d. Birth Records Study Analysis of Public Water Indices: Brain and Central Nervous System Cancers

Source Well Field Average Percent of Water		Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Brain and Central Nervous System Cancer Diagnosis Ages 0 through 19								
Brookside	5	56	1.0	-				
	2	8	3.30	0.42 - 25.8				
	0	6	0	-				
Holly Street	<10	3	29	1.0	-			
	10 - 49.9	1	28	0.36	0.04 - 3.57			
	50+	3	13	3.12	0.40 - 24.2			
Indian Head	<10	6	64	1.0	-			
	10 - 49.9	1	5	2.15	0.22 - 21.3			
	50+	0	1	0	-			
Parkway	<10	3	28	1.0	-			
	10 - 49.9	2	19	0.84	0.06 - 11.2			
	50+	2	23	0.71	0.06 - 8.38			
Route 70	<10	7	58	1.0	-			
	10 - 49.9	0	11	0	-			
	50+	0	1	0	-			

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Brain and Central Nervous System Cancer Diagnosis Ages 0 through 4								
Brookside	<10	4	38	1.0	-			
	10 - 49.9	0	2	0	-			
	50+	0	0	-	-			
Holly Street	<10	2	19	1.0	-			
	10 - 49.9	1	16	0.58	0.05 - 6.99			
	50+	1	5	1.92	0.14 - 26.1			
Indian Head	<10	3	36	1.0	-			
	10 - 49.9	1	3	4.50	0.28 - 71.9			
	50+	0	1	0	-			
Parkway	<10	1	6	1.0	-			
	10 - 49.9	2	16	0.76	0.05 - 11.2			
	50+	1	18	0.36	0.02 - 6.39			
Route 70	<10	4	28	1.0	-			
	10 - 49.9	0	11	0	-			
	50+	0	1	0	-			

Table 46e. Birth Records Study Analysis of Public Water Indices: All Other Cancers

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval				
	All Other Cancer Diagnosis Ages 0 through 19								
Brookside	<10	12	146	1.0	-				
	10 - 49.9	4	20	2.69	0.73 - 9.90				
	50+	3	24	1.82	0.31 - 10.6				
Holly Street	<10	8	105	1.0	-				
	10 - 49.9	7	46	2.17	0.69 - 6.84				
	50+	4	39	1.43	0.38 - 5.32				
Indian Head	<10	17	171	1.0	-				
	10 - 49.9	2	17	1.19	0.23 - 6.12				
	50+	0	2	0	-				
Parkway	<10	10	106	1.0	-				
	10 - 49.9	4	30	1.48	0.37 - 5.88				
	50+	5	54	1.03	0.26 - 4.10				
Route 70	<10	18	176	1.0	-				
	10 - 49.9	1	10	0.93	0.10 - 8.51				
	50+	0	4	0	-				

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval				
All Other Cancer Diagnosis Ages 0 through 4									
Brookside	<10	5	62	1.0	-				
	10 - 49.9	2	8	4.12	0.56 - 30.3				
	50+	0	0	-	-				
Holly Street	<10	4	45	1.0	-				
	10 - 49.9	2	10	2.33	0.33 - 16.6				
	50+	1	15	0.81	0.08 - 8.44				
Indian Head	<10 10 - 49.9 50+	6 1 0	64 6 0	1.0 2.16	- 0.13 - 35.1 -				
Parkway	<10	2	28	1.0	-				
	10 - 49.9	3	14	2.74	0.44 - 16.9				
	50+	2	28	0.92	0.12 - 7.32				
Route 70	<10	6	57	1.0	-				
	10 - 49.9	1	9	1.04	0.11 - 10.0				
	50+	0	4	0	-				

Table 47a. Birth Records Study Analysis of Public Water Indices by Sex: All Cancers Combined

Source	Average Percent of		N	/lale		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
		F	III Cancer [Diagnosi	s Ages 0 throu	ıgh 19			
Brookside	<10	14	171	1.0	-	19	215	1.0	-
	10 - 49.9	4	27	1.97	0.55 - 7.08	6	29	2.44	0.85 - 7.01
	50+	5	32	2.54	0.63 - 10.2	0	6	0	-
Holly Street	<10	9	111	1.0	-	12	136	1.0	-
	10 - 49.9	7	56	1.61	0.55 - 4.69	8	76	1.21	0.45 - 3.24
	50+	7	63	1.47	0.47 - 4.56	5	38	1.56	0.48 - 5.03
Indian Head	<10	21	205	1.0	-	22	230	1.0	-
	10 - 49.9	2	18	1.12	0.23 - 5.36	3	16	2.14	0.52 - 8.85
	50+	0	7	0	-	0	4	0	-
Parkway	<10	14	141	1.0	-	7	80	1.0	-
	10 - 49.9	4	40	1.03	0.24 - 4.46	8	60	1.55	0.51 - 4.71
	50+	5	49	1.05	0.26 - 4.22	10	110	1.05	0.36 - 3.08
Route 70	<10	21	208	1.0	-	21	211	1.0	-
	10 - 49.9	2	17	1.15	0.19 - 6.86	3	34	0.88	0.22 - 3.51
	50+	0	5	0	-	1	5	1.94	0.22 - 17.0

Source	Average Percent of		N	/lale		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
			All Cancer	Diagnos	is Ages 0 thro	ugh 4			
Brookside	<10	6	79	1.0	-	13	131	1.0	-
	10 - 49.9	3	11	5.92	0.84 - 41.9	1	9	1.12	0.13 - 9.23
	50+	0	0	-	-	0	0	-	-
Holly Street	<10	4	52	1.0	-	8	82	1.0	-
	10 - 49.9	3	22	1.85	0.37 - 9.17	5	41	1.33	0.36 - 4.85
	50+	2	16	1.77	0.27 - 11.6	1	17	0.59	0.07 - 5.17
Indian Head	<10	8	75	1.0	-	12	133	1.0	-
	10 - 49.9	1	10	1.00	0.10 - 9.96	2	6	5.39	0.67 - 43.1
	50+	0	5	0	-	0	1	0	-
Parkway	<10	2	26	1.0	-	4	31	1.0	-
	10 - 49.9	3	30	1.37	0.19 - 9.99	5	35	1.17	0.29 - 4.73
	50+	4	34	1.60	0.25 - 10.4	5	74	0.53	0.14 - 2.04
Route 70	<10	8	73	1.0	-	11	107	1.0	-
	10 - 49.9	1	13	0.66	0.07 - 6.54	2	30	0.62	0.12 - 3.23
	50+	0	4	0	-	1	3	3.01	0.31 - 29.5

Table 47b. Birth Records Study Analysis of Public Water Indices by Sex: Leukemia

Source	Average Percent of		IV	lale			Fe	emale	
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
		L	eukemia D	iagnosi	s Ages 0 thro	ugh 19			
Brookside	<10	4	53	1.0	-	7	77	1.0	-
	10 - 49.9	1	10	1.56	0.15 - 16.5	2	12	1.95	0.32 - 11.8
	50+	2	7	9.06	0.63 - 131	0	1	0	-
Holly Street	<10	4	37	1.0	-	3	44	1.0	-
	10 - 49.9	2	12	1.45	0.22 - 9.66	2	27	1.10	0.16 - 7.49
	50+	1	21	0.32	0.02 - 4.23	4	19	3.96	0.66 - 23.7
Indian Head	<10	6	63	1.0	-	9	85	1.0	-
	10 - 49.9	1	1	9.49	0.59 - 152	0	4	0	-
	50+	0	6	0	-	0	1	0	-
Parkway	<10	3	39	1.0	-	3	33	1.0	-
	10 - 49.9	1	11	3.15	0.12 - 85.3	3	17	1.85	0.36 - 9.54
	50+	3	20	5.83	0.20 - 169	3	40	0.74	0.12 - 4.35
Route 70	<10	6	59	1.0	-	6	76	1.0	-
	10 - 49.9	1	10	0.91	0.06 - 14.6	2	12	2.52	0.39 - 16.4
	50+	0	1	0	-	1	2	6.72	0.54 - 84.0

Source	Average Percent of		IV	lale		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
		I	_eukemia I	Diagnosi	is Ages 0 thro	ugh 4			
Brookside	<10	1	18	1.0	-	5	46	1.0	-
	10 - 49.9	1	2	-	-	0	4	0	-
	50+	0	0	-	-	0	0	-	-
Holly Street	<10	1	14	1.0	-	3	29	1.0	-
	10 - 49.9	1	3	3.67	0.23 - 59.6	1	16	0.55	0.05 - 6.37
	50+	0	3	0	-	1	5	2.24	0.15 - 32.6
Indian Head	<10	2	16	1.0	-	5	49	1.0	-
	10 - 49.9	0	0	-	-	0	1	0	-
	50+	0	4	0	-	0	0	-	-
Parkway	<10	0	3	-	-	2	10	1.0	-
	10 - 49.9	0	7	-	-	1	8	0.70	0.06 - 8.02
	50+	2	10	-	-	2	32	0.34	0.05 - 2.47
Route 70	<10	2	14	1.0	-	3	41	1.0	-
	10 - 49.9	0	6	0	-	1	9	1.97	0.16 - 24.9
	50+	0	0	-	-	1	0	-	-

Table 47c. Birth Records Study Analysis of Public Water Indices by Sex: Nervous System Cancers

Source	Average Percent of		IV	lale		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
		Nervou	ıs System C	ancer D	iagnosis Ages	s 0 throu	gh 19		
Brookside	<10	5	57	1.0	-	5	53	1.0	-
	10 - 49.9	2	7	3.11	0.49 - 19.6	1	7	1.68	0.12 - 22.9
	50+	0	6	0	-	0	0	-	-
Holly Street	<10	2	31	1.0	-	4	30	1.0	-
	10 - 49.9	2	21	1.67	0.21 - 13.6	2	26	0.59	0.10 - 3.65
	50+	3	18	3.07	0.38 - 25.2	0	4	0	-
Indian Head	<10	7	63	1.0	-	4	53	1.0	-
	10 - 49.9	0	6	0	-	2	6	5.39	0.67 - 43.1
	50+	0	1	0	-	0	1	0	-
Parkway	<10	4	32	1.0	-	1	11	1.0	-
	10 - 49.9	2	18	0.58	0.04 - 7.73	2	24	0.91	0.08 - 10.7
	50+	1	20	0.29	0.02 - 3.82	3	25	1.29	0.13 - 12.7
Route 70	<10	7	65	1.0	-	5	43	1.0	-
	10 - 49.9	0	5	0	-	1	14	0.54	0.05 - 6.34
	50+	0	0	-	-	0	3	0	-

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Source	Average Percent of		N	lale			Fe	emale	
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
		Nervo	us System (Cancer D	Diagnosis Age	s 0 throu	ıgh 4		
Brookside	<10	3	37	1.0	-	5	47	1.0	-
	10 - 49.9	1	3	5.16	0.28 - 96.2	0	3	0	-
	50+	0	0	-	-	0	0	-	-
Holly Street	<10	1	21	1.0	-	3	25	1.0	-
	10 - 49.9	2	13	3.85	0.30 - 50.3	2	21	0.83	0.12 - 5.96
	50+	1	6	4.87	0.20 - 119	0	4	0	-
Indian Head	<10	4	35	1.0	-	3	44	1.0	-
	10 - 49.9	0	4	0	-	2	5	9.34	0.75 - 117
	50+	0	1	0	-	0	1	0	-
Parkway	<10	1	7	1.0	-	1	9	1.0	-
	10 - 49.9	2	15	1.11	0.04 - 29.6	2	21	0.86	0.07 - 10.3
	50+	1	18	0.45	0.02 - 8.36	2	20	0.90	0.08 - 10.3
Route 70	<10	4	35	1.0	-	4	33	1.0	-
	10 - 49.9	0	5	0	-	1	14	0.54	0.05 - 6.34
	50+	0	0	-	-	0	3	0	-

Table 47d. Birth Records Study Analysis of Public Water Indices by Sex: Brain and Central Nervous System Cancers

Source	Average Percent of		ſ	Male		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Brain a	nd Centra	al Nervous	System	Cancer Diagno	sis Ages	0 through	19	
Brookside	<10	2	22	1.0	-	3	34	1.0	-
	10 - 49.9	1	2	4.58	0.27 - 78.0	1	6	2.32	0.12 - 43.3
	50+	0	6	0	-	0	0	-	-
Holly Street	<10 10 - 49.9 50+	0 0 3	8 12 10		- - -	3 1 0	21 16 3	1.0 0.46 0	- 0.04 - 4.81 -
Indian Head	<10	3	27	1.0	-	3	37	1.0	-
	10 - 49.9	0	3	0	-	1	2	6.71	0.40 - 113
	50+	0	0	-	-	0	1	0	-
Parkway	<10	2	20	1.0	-	1	8	1.0	-
	10 - 49.9	1	6	-	-	1	13	0.63	0.04 - 10.8
	50+	0	4	0	-	2	19	0.85	0.07 - 9.66
Route 70	<10	3	28	1.0	-	4	30	1.0	-
	10 - 49.9	0	2	0	-	0	9	0	-
	50+	0	0	-	-	0	1	0	-

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Source	Average Percent of		Ŋ	Male		Female			
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Brain a	nd Centr	al Nervous	s System	Cancer Diagno	osis Age	s 0 through	า 4	
Brookside	<10 10 - 49.9 50+	1 0 0	10 0 0	1.0 - -		3 0 0	28 2 0	1.0 0 -	
Holly Street	<10 10 - 49.9 50+	0 0 1	3 5 2		- - -	2 1 0	16 11 3	1.0 0.77 0	- 0.06 - 10.2 -
Indian Head	<10 10 - 49.9 50+	1 0 0	8 2 0	1.0 0 -	- - -	2 1 0	28 1 1	1.0 - 0	- - -
Parkway	<10 10 - 49.9 50+	0 1 0	0 6 4	- - -	- - -	1 1 1	6 10 14	1.0 0.61 0.46	- 0.03 - 11.0 0.03 - 7.64
Route 70	<10 10 - 49.9 50+	1 0 0	8 2 0	1.0 0 -	- - -	3 0 0	20 9 1	1.0 0 0	- - -

Table 47e. Birth Records Study Analysis of Public Water Indices by Sex: All Other Cancers

Source	Average Percent of		Ŋ	Male			Fe	emale	
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
		All	Other Cand	er Diagi	nosis Ages 0 th	rough 1	9		
Brookside	<10	5	61	1.0	-	7	85	1.0	-
	10 - 49.9	1	10	1.17	0.09 - 15.6	3	10	3.27	0.73 - 14.6
	50+	3	19	2.61	0.37 - 18.1	0	5	0	-
Holly Street	<10	3	43	1.0	-	5	62	1.0	-
	10 - 49.9	3	23	1.96	0.34 - 11.2	4	23	2.43	0.52 - 11.3
	50+	3	24	1.89	0.33 - 10.8	1	15	0.87	0.09 - 8.29
Indian Head	<10	8	79	1.0	-	9	92	1.0	-
	10 - 49.9	1	11	0.89	0.10 - 8.27	1	6	1.83	0.15 - 22.1
	50+	0	0	-	-	0	2	0	-
Parkway	<10	7	70	1.0	-	3	36	1.0	-
	10 - 49.9	1	11	0.92	0.09 - 9.47	3	19	2.00	0.32 - 12.6
	50+	1	9	1.11	0.10 - 12.9	4	45	1.11	0.20 - 6.32
Route 70	<10	8	84	1.0	-	10	92	1.0	-
	10 - 49.9	1	2	5.29	0.31 - 89.8	0	8	0	-
	50+	0	4	0	-	0	0	-	-

Source	Average Percent of		ין	Male			Fe	emale	
Well Field	Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
		All	Other Can	cer Diag	nosis Ages 0 th	nrough 4			
Brookside	<10 10 - 49.9 50+	2 1 0	24 6 0	1.0 2.89	- 0.10 - 80.2 -	3 1 0	38 2 0	1.0 5.00 -	- 0.45 - 55.1 -
Holly Street	<10 10 - 49.9 50+	2 0 1	17 6 7	1.0 0 1.12	- - 0.09 - 14.8	2 2 0	28 4 8	1.0 - 0	- - -
Indian Head	<10 10 - 49.9 50+	2 1 0	24 6 0	1.0 2.16	- 0.13 - 35.1 -	4 0 0	40 0 0	1.0 - -	- - -
Parkway	<10 10 - 49.9 50+	1 1 1	16 8 6	1.0 1.94 2.65	- 0.12 - 31.3 0.14 - 48.6	1 2 1	12 6 22	1.0 3.75 0.53	- 0.31 - 44.9 0.03 - 8.67
Route 70	<10 10 - 49.9 50+	2 1 0	24 2 4	1.0 5.29 0	- 0.31 - 89.8 -	4 0 0	33 7 0	1.0 0 -	- - -

Table 48a. Birth Records Study Analysis of Time-specific Public Water Indices: All Cancers Combined

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
	All Cancer Diagr	osis Ages 0	through 19		
Parkway (1982 and later)	<10 10 - 49.9 50+	33 8 7	345 56 79	1.0 2.04 1.23	- 0.56 - 7.36 0.33 - 4.60
Holly Street (prior to 1976)	<10 10 - 49.9 50+	37 4 7	389 44 47	1.0 1.51 2.73	- 0.32 - 7.05 0.62 - 12.0
	All Cancer Diag	nosis Ages 0	through 4		
Parkway (1982 and later)	<10 10 - 49.9 50+	11 7 5	111 51 68	1.0 1.44 0.74	- 0.38 - 5.43 0.18 - 3.00
Holly Street (prior to 1976)	<10 10 - 49.9 50+	23 0 0	230 0 0	1.0 - -	

Table 48b. Birth Records Study Analysis of Time-specific Public Water Indices: Leukemia

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
	Leukemia Diagn	osis Ages 0 t	through 19		
Parkway (1982 and later)	<10	10	113	1.0	-
	10 - 49.9	2	12	3.63	0.32 - 41.8
	50+	4	35	2.72	0.26 - 28.1
Holly Street (prior to 1976)	<10	14	130	1.0	-
	10 - 49.9	0	9	0	-
	50+	2	21	0.46	0.06 - 3.86
	Leukemia Diagr	nosis Ages 0	through 4		
Parkway (1982 and later)	<10	3	31	1.0	-
	10 - 49.9	1	9	1.20	0.07 - 19.8
	50+	3	30	1.09	0.11 - 10.8
Holly Street (prior to 1976)	<10	7	70	1.0	-
	10 - 49.9	0	0	-	-
	50+	0	0	-	-

Table 48c. Birth Records Study Analysis of Time-specific Public Water Indices: Nervous System Cancers

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Ner	vous System Cancer	Diagnosis A	ages 0 throug	h 19	
Parkway (1982 and later)	<10	8	72	1.0	-
	10 - 49.9	3	33	0.52	0.07 - 3.83
	50+	2	25	0.48	0.06 - 3.74
Holly Street (prior to 1976)	<10	11	114	1.0	-
	10 - 49.9	0	8	0	-
	50+	2	8	-	-
Ne	rvous System Cance	r Diagnosis A	Ages 0 throug	h 4	
Parkway (1982 and later)	<10	4	32	1.0	-
	10 - 49.9	3	33	0.52	0.07 - 3.83
	50+	2	25	0.48	0.06 - 3.74
Holly Street (prior to 1976)	<10	9	90	1.0	-
	10 - 49.9	0	0	-	-
	50+	0	0	-	-

Table 48d. Birth Records Study Analysis of Time-specific Public Water Indices: Brain and Central Nervous System Cancers

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Brain and Ce	ntral Nervous Syste	em Cancer Di	agnosis Ages	0 throu	gh 19
Parkway (1982 and later)	<10	5	44	1.0	-
	10 - 49.9	2	13	0.63	0.04 - 10.9
	50+	0	13	0	-
Holly Street (prior to 1976)	<10	5	54	1.0	-
	10 - 49.9	0	8	0	-
	50+	2	8	-	-
Brain and Co	entral Nervous Syst	em Cancer D	iagnosis Ages	0 throu	ıgh 4
Parkway (1982 and later)	<10	2	14	1.0	-
	10 - 49.9	2	13	0.63	0.04 - 10.9
	50+	0	13	0	-
Holly Street (prior to 1976)	<10	4	40	1.0	-
	10 - 49.9	0	0	-	-
	50+	0	0	-	-

Table 48e. Birth Records Study Analysis of Time-specific Public Water Indices: All Other Cancers Combined

Source Well Field	Average Percent of Water	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
	All Other Cancer Dia	agnosis Ages	0 through 19)	
Parkway (1982 and later)	<10	15	160	1.0	-
	10 - 49.9	3	11	4.47	0.45 - 44.2
	50+	1	19	0.94	0.05 - 18.4
Holly Street (prior to 1976)	<10	12	145	1.0	-
	10 - 49.9	4	27	6.24	0.60 - 64.8
	50+	3	18	7.48	0.65 - 86.4
	All Other Cancer Di	iagnosis Age	s 0 through 4		
Parkway (1982 and later)	<10	4	48	1.0	-
	10 - 49.9	3	9	4.58	0.46 - 45.4
	50+	0	13	0	-
Holly Street (prior to 1976)	<10	7	70	1.0	-
	10 - 49.9	0	0	-	-
	50+	0	0	-	-

Table 49a. Birth Records Study Analysis of Time-specific Public Water Indices by Sex: All Cancers Combined

	Average		N	/lale			F	emale		
	Percent of Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
	All Cancer Diagnosis Ages 0 through 19									
Holly Street (prior to 1976)	<10 10 - 49.9 50+	15 3 5	160 31 39	1.0 1.35 1.92	- 0.24 - 7.61 0.37 - 10.0	22 1 2	229 13 8	1.0 2.72 10.0	- 0.09 - 82.7 0.27 - 372	
Parkway (1982 and later)	<10 10 - 49.9 50+	19 2 2	189 22 19	1.0 0.84 0.98	- 0.09 - 8.16 0.10 - 9.19	14 6 5	156 34 60	1.0 3.21 1.46	- 0.61 - 17.1 0.26 - 8.14	
		Α	III Cancer [Diagnosi	s Ages 0 thro	ugh 4				
Holly Street (prior to 1976)	<10 10 - 49.9 50+	9 0 0	90 0 0	1.0 - -	- - -	14 0 0	140 0 0	1.0 - -	- - -	
Parkway (1982 and later)	<10 10 - 49.9 50+	5 2 2	49 22 19	1.0 0.84 0.98	- 0.09 - 8.16 0.10 - 9.19	6 5 3	62 29 49	1.0 1.96 0.65	- 0.36 - 10.7 0.10 - 4.01	

Table 49b. Birth Records Study Analysis of Time-specific Public Water Indices by Sex: Leukemia

	Average		N	/lale			Fe	emale	
Source Well Field	Percent of Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
		Le	eukemia D	iagnosis	Ages 0 throu	ıgh 19			
Holly Street (prior to 1976)	<10 10 - 49.9 50+	6 0 1	47 6 17	1.0 0 0.18	- - 0.01 - 2.52	8 0 1	83 3 4	1.0 0 -	- - -
Parkway (1982 and later)	<10 10 - 49.9 50+	6 0 1	62 2 6	1.0 0 -	- - -	4 2 3	51 10 29	1.0 3.90 2.15	- 0.34 - 45.2 0.19 - 24.1
		L	eukemia D	Diagnosi	s Ages 0 thro	ugh 4			
Holly Street (prior to 1976)	<10 10 - 49.9 50+	2 0 0	20 0 0	1.0 - -		5 0 0	50 0 0	1.0 - -	- - -
Parkway (1982 and later)	<10 10 - 49.9 50+	1 0 1	12 2 6	1.0 0 -	- - -	2 1 2	19 7 24	1.0 1.29 0.74	- 0.08 - 21.5 0.06 - 8.56

Table 49c. Birth Records Study Analysis of Time-specific Public Water Indices by Sex: Nervous System Cancers

	Average	Male			Female				
Source Well Field	Percent of Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
		Nervous	System Ca	ncer Dia	agnosis Ages	0 throug	h 19		
Holly Street (prior to 1976)	<10 10 - 49.9 50+	5 0 2	55 7 8	1.0 0 -	- - -	6 0 0	59 1 0	1.0 0 -	
Parkway (1982 and later)	<10 10 - 49.9 50+	5 1 1	45 15 10	1.0 0.22 0.36	- 0.01 - 7.42 0.01 - 9.97	3 2 1	27 18 15	1.0 0.80 0.50	- 0.07 - 9.49 0.03 - 8.09
		Nervous	s System Ca	ancer Di	agnosis Ages	0 throu	gh 4		
Holly Street (prior to 1976)	<10 10 - 49.9 50+	4 0 0	40 0 0	1.0 - -	- - -	5 0 0	50 0 0	1.0 - -	- - -
Parkway (1982 and later)	<10 10 - 49.9 50+	2 1 1	15 15 10	1.0 0.22 0.36	- 0.01 - 7.42 0.01 - 9.97	2 2 1	17 18 15	1.0 0.80 0.50	- 0.07 - 9.49 0.03 - 8.09

Table 49d. Birth Records Study Analysis of Time-specific Public Water Indices by Sex: Brain and Central Nervous System Cancers

	Average	Male			Female				
Source Well Field	Percent of Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
	Brain and	l Central	Nervous S	System C	Cancer Diagno	sis Ages	0 through	า 19	
Holly Street (prior to 1976)	<10 10 - 49.9 50+	1 0 2	15 7 8	1.0 0 -	- - -	4 0 0	39 1 0	1.0 0 -	- - -
Parkway (1982 and later)	<10 10 - 49.9 50+	2 1 0	20 6 4	1.0 - 0	- - -	3 1 0	24 7 9	1.0 0.63 0	- 0.04 - 10.9 -
	Brain an	d Centra	l Nervous	System	Cancer Diagn	osis Age	s 0 throug	h 4	
Holly Street (prior to 1976)	<10 10 - 49.9 50+	1 0 0	10 0 0	1.0 - -	- - -	3 0 0	30 0 0	1.0 - -	- - -
Parkway (1982 and later)	<10 10 - 49.9 50+	0 1 0	0 6 4	- - -	- - -	2 1 0	14 7 9	1.0 0.63 0	- 0.04 - 10.9 -

Table 49e. Birth Records Study Analysis of Time-specific Public Water Indices by Sex: All Other Cancers

	Average		N	/lale			Fe	emale	
Source Well Field	Percent of Water	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI
		All O	ther Cance	er Diagn	osis Ages 0 th	rough 1	9		
Holly Street (prior to 1976)	<10 10 - 49.9 50+	4 3 2	58 18 14	1.0 5.50 5.28	- 0.48 - 62.9 0.37 - 75.9	8 1 1	87 9 4	1.0 - -	
Parkway (1982 and later)	<10 10 - 49.9 50+	8 1 0	82 5 3	1.0 2.16 0	- 0.13 - 34.6 -	7 2 1	78 6 16	1.0 - -	- - -
		AII C	Other Canc	er Diagr	nosis Ages 0 tl	hrough 4	1		
Holly Street (prior to 1976)	<10 10 - 49.9 50+	3 0 0	30 0 0	1.0 - -	- - -	4 0 0	40 0 0	1.0 - -	- - -
Parkway (1982 and later)	<10 10 - 49.9 50+	2 1 0	22 5 3	1.0 2.16 0	- 0.13 - 34.6 -	2 2 0	26 4 10	1.0 - 0	- - -

Table 50. Birth Records Study Average Point Source Airborne Gas Emission Exposure

_	Cases (n	= 48)	Controls (n = 480)
Exposure	Number	Percent	Number	Percent
Toms River Ciba-Geigy Chemical Plant Airborne Gas Emissions (relative air impact units) <1.50 1.50 - 3.04 >3.04	23 12 13	47.9 25.0 27.1	240 120 120	50.0 25.0 25.0
Oyster Creek Nuclear Generating Station Airborne Gas Emissions (fCi/m³) <0.065 0.065 - 0.44 >0.44	23 15 10	47.9 31.3 20.8	242 117 121	50.4 24.4 25.2

Note: Cut points are set at the 50th and 75th percentiles among controls.

Table 51a. Birth Records Study Analysis of Point Source Air Emission Estimates (See Table 50 for exposure level units): All Cancers Combined

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
	All Cancer Diagr	nosis Ages 0 t	through 19		
Ciba-Geigy Gas	<1.50	23	240	1.0	-
	1.50 - 3.04	12	120	1.05	0.50 - 2.22
	>3.04	13	120	1.14	0.54 - 2.41
Oyster Creek Gas	<0.065	23	242	1.0	-
	0.065 - 0.44	15	117	1.48	0.50 - 4.40
	>0.44	10	121	0.62	0.12 - 3.27
	All Cancer Diag	nosis Ages 0	through 4		
Ciba-Geigy Gas	<1.50	9	136	1.0	-
	1.50 - 3.04	7	51	2.28	0.77 - 6.76
	>3.04	7	43	2.95	0.92 - 9.45
Oyster Creek Gas	<0.065	12	142	1.0	-
	0.065 - 0.44	9	62	2.28	0.64 -8.15
	>0.44	2	26	0.92	0.07 - 13.0

Table 51b. Birth Records Study Analysis of Point Source Air Emission Estimates (See Table 50 for exposure level units): Leukemia

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
	Leukemia Diagn	osis Ages 0 t	hrough 19		
Ciba-Geigy Gas	<1.50	7	74	1.0	-
	1.50 - 3.04	3	38	0.84	0.20 - 3.49
	>3.04	6	48	1.34	0.41 - 4.36
Oyster Creek Gas	<0.065	8	86	1.0	-
	0.065 - 0.44	5	42	1.67	0.25 - 11.3
	>0.44	3	32	1.24	0.06 - 25.5
	Leukemia Diag	nosis Ages 0	through 4		
Ciba-Geigy Gas	<1.50	2	38	1.0	-
	1.50 - 3.04	2	17	2.09	0.28 - 15.7
	>3.04	3	15	3.94	0.57 - 27.3
Oyster Creek Gas	<0.065	4	52	1.0	-
	0.065 - 0.44	3	17	4.18	0.37 - 47.7
	>0.44	0	1	0	-

Table 51c. Birth Records Study Analysis of Point Source Air Emission Estimates (See Table 50 for exposure level units): Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Nerv	ous System Cancer	Diagnosis A	ges 0 throug	h 19	
Ciba-Geigy Gas	<1.50	5	74	1.0	-
	1.50 - 3.04	4	36	1.95	0.45 - 8.50
	>3.04	4	20	3.57	0.76 - 16.8
Oyster Creek Gas	<0.065	6	64	1.0	-
	0.065 - 0.44	5	36	1.66	0.25 - 10.9
	>0.44	2	30	-	-
Ner	vous System Cance	r Diagnosis <i>I</i>	Ages 0 throug	h 4	
Ciba-Geigy Gas	<1.50	5	61	1.0	-
	1.50 - 3.04	1	21	0.66	0.07 - 6.23
	>3.04	3	8	4.35	0.85 - 22.4
Oyster Creek Gas	<0.065	4	53	1.0	-
	0.065 - 0.44	4	22	4.69	0.44 - 50.0
	>0.44	1	15	-	-

Table 51d. Birth Records Study Analysis of Point Source Air Emission Estimates (See Table 50 for exposure level units): Brain and Central Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Brain and Cer	ntral Nervous Syste	em Cancer Di	agnosis Ages	0 throu	gh 19
Ciba-Geigy Gas	<1.50	2	32	1.0	-
	1.50 - 3.04	3	21	2.25	0.36 - 14.2
	>3.04	2	17	1.94	0.25 - 15.4
Oyster Creek Gas	<0.065	4	30	1.0	-
	0.065 - 0.44	2	24	0.45	0.06 - 3.56
	>0.44	1	16	-	-
Brain and Ce	ntral Nervous Syst	em Cancer D	iagnosis Ages	0 throu	ıgh 4
Ciba-Geigy Gas	<1.50	2	23	1.0	-
	1.50 - 3.04	1	11	1.04	0.09 - 11.7
	>3.04	1	6	1.84	0.16 - 21.7
Oyster Creek Gas	<0.065	2	19	1.0	-
	0.065 - 0.44	2	16	1.19	0.10 - 14.4
	>0.44	0	5	0	-

Table 51e. Birth Records Study Analysis of Point Source Air Emission Estimates (See Table 50 for exposure level units): All Other Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
A	II Other Cancers Di	agnosis Age	s 0 through 1	9	
Ciba-Geigy Gas	<1.50	11	92	1.0	-
	1.50 - 3.04	5	46	0.87	0.28 - 2.68
	>3.04	3	52	0.47	0.12 - 1.80
Oyster Creek Gas	<0.065	9	92	1.0	-
	0.065 - 0.44	5	39	1.27	0.20 - 8.08
	>0.44	5	59	0.59	0.05 - 7.47
Į.	All Other Cancers D	iagnosis Age	es 0 through 4	ļ	
Ciba-Geigy Gas	<1.50	2	37	1.0	-
	1.50 - 3.04	4	13	7.55	0.79 - 72.0
	>3.04	1	20	1.34	0.08 - 23.2
Oyster Creek Gas	<0.065	4	37	1.0	-
	0.065 - 0.44	2	23	0.73	0.09 - 5.93
	>0.44	1	10	0.78	0.02 - 24.9

Table 52a. Birth Records Study Analysis of Point Source Air Emission Estimates (See Table 50 for exposure level units) by Sex: All Cancers Combined

Exposure Factor	Exposure Level		ſ	Male		Female					
-	,	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI		
All Cancer Diagnosis Ages 0 through 19											
Ciba-Geigy Gas	<1.50	10	105	1.0	-	13	135	1.0	-		
	1.50 - 3.04	6	62	1.02	0.35 - 2.97	6	58	1.08	0.38 - 3.07		
	>3.04	7	63	1.18	0.41 - 3.42	6	57	1.10	0.39 - 3.16		
Oyster Creek Gas	<0.065	13	124	1.0	-	10	118	1.0	-		
	0.065 - 0.44	6	52	0.70	0.13 - 3.63	9	65	2.55	0.57 - 11.3		
	>0.44	4	54	0.26	0.02 - 2.79	6	67	1.19	0.11 - 12.6		
		All Ca	ncer Diag	nosis Ag	es 0 through 4	,					
Ciba-Geigy Gas	<1.50	4	52	1.0	-	5	84	1.0	-		
	1.50 - 3.04	4	18	2.78	0.65 - 11.9	3	33	2.01	0.39 - 10.3		
	>3.04	1	20	0.58	0.06- 5.99	6	23	6.07	1.34 - 27.4		
Oyster Creek Gas	<0.065	4	49	1.0	-	8	93	1.0	-		
	0.065 - 0.44	3	23	2.47	0.25 - 24.4	6	39	2.27	0.50 - 10.4		
	>0.44	2	18	4.01	0.07 - 231	0	8	0	-		

Table 52b. Birth Records Study Analysis of Point Source Air Emission Estimates (See Table 50 for exposure level units) by Sex: Leukemia

Exposure Factor	Exposure Level		ſ	Male		Female					
	,	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI		
Leukemia Diagnosis Ages 0 through 19											
Ciba-Geigy Gas	<1.50	3	27	1.0	-	4	47	1.0	-		
	1.50 - 3.04	1	19	0.47	0.04 - 5.03	2	19	1.26	0.20 - 7.75		
	>3.04	3	24	1.16	0.19 - 7.08	3	24	1.47	0.31 - 7.00		
Oyster Creek Gas	<0.065	3	34	1.0	-	5	52	1.0	-		
	0.065 - 0.44	3	21	1.69	0.15 - 19.0	2	21	1.48	0.06 - 38.0		
	>0.44	1	15	0.49	0.01 - 26.3	2	17	3.30	0.04 - 268		
		Leuk	emia Diag	nosis Aç	ges 0 through	4					
Ciba-Geigy Gas	<1.50	1	10	1.0	-	1	28	1.0	-		
	1.50 - 3.04	1	4	2.65	0.16 - 44.9	1	13	2.04	0.12 - 35.4		
	>3.04	0	6	0	-	3	9	7.78	0.78 - 77.4		
Oyster Creek Gas	<0.065	0	10	-	-	4	42	1.0	-		
	0.065 - 0.44	2	10	-	-	1	7	1.73	0.08 - 38.2		
	>0.44	0	0	-	-	0	1	0	-		

Table 52c. Birth Records Study Analysis of Point Source Air Emission Estimates (See Table 50 for exposure level units) by Sex: Nervous System Cancers

Exposure Factor	Exposure Level		N	/lale		Female					
	•	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI		
Nervous System Cancer Diagnosis Ages 0 through 19											
Ciba-Geigy Gas	<1.50	2	37	1.0	-	3	37	1.0	-		
	1.50 - 3.04	3	21	3.23	0.44 - 23.6	1	15	0.92	0.08 - 10.4		
	>3.04	2	12	4.20	0.42 - 42.3	2	8	3.13	0.41 - 24.1		
Oyster Creek Gas	<0.065	4	36	1.0	-	2	28	1.0	-		
	0.065 - 0.44	2	19	0.46	0.03 - 8.28	3	17	3.62	0.30 - 44.2		
	>0.44	1	15	-	-	1	15	-	-		
	Nerv	ous Syst	em Cancer	Diagno	osis Ages 0 th	rough 4					
Ciba-Geigy Gas	<1.50	2	28	1.0	-	3	33	1.0	-		
	1.50 - 3.04	1	9	1.74	0.14 - 21.8	0	12	0	-		
	>3.04	1	3	4.64	0.32 - 67.6	2	5	3.99	0.52 - 30.5		
Oyster Creek Gas	<0.065	2	25	1.0	-	2	28	1.0	-		
	0.065 - 0.44	1	5	-	-	3	17	3.62	0.30 - 44.2		
	>0.44	1	10	-	-	0	5	0	-		

Table 52d. Birth Records Study Analysis of Point Source Air Emission Estimates (See Table 50 for exposure level units) by Sex: Brain and Central Nervous System Cancers

Exposure Factor	Exposure Level		N	/lale		Female				
		Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
Brain and Central Nervous System Cancer Diagnosis Ages 0 through 19										
Ciba-Geigy Gas	<1.50 1.50 - 3.04 >3.04	0 2 1	12 9 9	- - -	- - -	2 1 1	20 12 8	1.0 0.84 1.23	- 0.07 - 9.64 0.11 - 14.4	
Oyster Creek Gas	<0.065 0.065 - 0.44 >0.44	3 0 0	21 8 1	1.0 0 0	- - -	1 2 1	9 16 15	1.0 1.19 -	- 0.10 - 14.4 -	
	Brain and Ce	ntral Ne	rvous Syst	em Can	er Diagnosis	Ages 0	through 4			
Ciba-Geigy Gas	<1.50 1.50 - 3.04 >3.04	0 1 0	7 2 1	- - -		2 0 1	16 9 5	1.0 0 1.56	- - 0.13 - 18.6	
Oyster Creek Gas	<0.065 0.065 - 0.44 >0.44	1 0 0	10 0 0	1.0 - -		1 2 0	9 16 5	1.0 1.19 0	- 0.10 - 14.4 -	

Table 52e. Birth Records Study Analysis of Point Source Air Emission Estimates (See Table 50 for exposure level units) by Sex: All Other Cancers

Exposure Factor	Exposure Level		ı	Male			F	emale		
-	P	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
All Other Cancer Diagnosis Ages 0 through 19										
Ciba-Geigy Gas	<1.50 1.50 - 3.04 >3.04	5 2 2	41 22 27	1.0 0.75 0.61	- 0.14 - 4.04 0.11 - 3.34	6 3 1	51 24 25	1.0 0.97 0.31	- 0.21 - 4.47 0.03 - 2.98	
Oyster Creek Gas	<0.065 0.065 - 0.44 >0.44	6 1 2	54 12 24	1.0 - -		3 4 3	38 27 35	1.0 2.66 0.85	- 0.26 - 27.1 0.02 - 35.9	
		All Othe	er Cancer D	Diagnosis	s Ages 0 throu	gh 4				
Ciba-Geigy Gas	<1.50 1.50 - 3.04 >3.04	1 2 0	14 5 11	1.0 5.27 0	- 0.44 - 63.2 -	1 2 1	23 8 9	1.0 - -		
Oyster Creek Gas	<0.065 0.065 - 0.44 >0.44	2 0 1	14 8 8	1.0 0 -	- - -	2 2 0	23 15 2	1.0 1.62 0	- 0.13 - 19.7 -	

Table 53. Birth Records Study Proximity to Sites of Concern

	Cases (r	n = 48)	Controls (ı	n = 480)
Sites of Concern	Number	Percent	Number	Percent
Birth Residence Within ½ mile of Ciba-Geigy Yes No	5 43	10.4 89.6	33 447	6.9 93.1
Birth Residence Within ½ mile of Ciba-Geigy Pipeline Yes No	9 39	18.8 81.3	86 394	17.9 82.1
Birth Residence Within ½ mile of a Break in Ciba-Geigy Pipeline* Yes No	2 46	4.2 95.8	7 473	1.5 98.5
Birth Residence Within ½ mile of Toms River Section Yes No	5 43	10.4 89.6	28 452	5.8 94.2
Birth Residence Within ½ mile of Reich Farm Yes No	0 48	0.0 100.0	3 477	0.6 99.4
Birth Residence Within ½ mile of Dover Township Municipal Landfill Yes No	0 48	0.0 100.0	1 479	0.2 99.8
Birth Residence Within ½ mile of Ocean County Landfill Yes No	0 48	0.0 100.0	1 479	0.2 99.8
Birth Residence Within ½ mile of Toms River Coal Gas Site Yes No	2 46	4.2 95.8	4 476	0.8 99.2

 $^{^{\}ast}$ This index only includes birth residences within $1\!\!/_{\!2}$ mile of a pipeline break during or after the year a break occurred.

Table 54a. Birth Records Study Analysis of Proximity to Sites of Concern: All Cancers Combined

Site of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
All Car	cer Diagno	sis Ages 0 th	rough 19		
Birth Residence Within ½ mile of Ciba-	No	43	447	1.0	-
Geigy	Yes	5	33	1.64	0.58 - 4.65
Birth Residence Within ½ mile of Ciba-	No	39	396	1.0	-
Geigy Pipeline	Yes	9	84	1.09	0.50 - 2.36
Birth Residence Within ½ mile of a Break in Ciba-Geigy Pipeline	No	46	473	1.0	-
	Yes	2	7	3.20	0.59 - 17.3
Birth Residence Within ½ mile of Toms	No	43	452	1.0	-
River Section	Yes	5	28	1.86	0.69 - 5.01
Birth Residence Within ½ mile of Reich Farm	No	48	477	1.0	-
	Yes	0	3	0	-
Birth Residence Within ½ mile of Dover Township Municipal Landfill	No Yes	48 0	479 1	1.0 0	-
Birth Residence Within ½ mile of Ocean County Landfill	No	48	479	1.0	-
	Yes	0	1	0	-
Birth Residence Within ½ mile of Toms	No	46	476	1.0	-
River Coal Gas Site	Yes	2	4	5.65	0.92 - 34.6

Site of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
All Ca	ncer Diagno	sis Ages 0 th	rough 4		
Birth Residence Within ½ mile of Ciba-	No	21	218	1.0	-
Geigy	Yes	2	12	1.89	0.34 - 10.5
Birth Residence Within ½ mile of Ciba-	No	18	197	1.0	-
Geigy Pipeline	Yes	5	33	1.65	0.58 - 4.74
Birth Residence Within ½ mile of a Break in Ciba-Geigy Pipeline	No	23	224	1.0	-
	Yes	0	6	0	-
Birth Residence Within ½ mile of Toms	No	21	221	1.0	-
River Section	Yes	2	9	2.27	0.48 - 10.8
Birth Residence Within ½ mile of Reich Farm	No Yes	23 0	230 0	1.0 -	-
Birth Residence Within ½ mile of Dover Township Municipal Landfill	No	23	230	1.0	-
	Yes	0	0	-	-
Birth Residence Within ½ mile of Ocean County Landfill	No Yes	23 0	229 1	1.0 0	-
Birth Residence Within ½ mile of Toms	No	22	229	1.0	-
River Coal Gas Site	Yes	1	1	10.0	0.63 - 160

Table 54b. Birth Records Study Analysis of Proximity to Sites of Concern: Leukemia

Site of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Leuker	mia Diagno:	sis Ages 0 th	rough 19		
Birth Residence Within ½ mile of Ciba-	No	14	146	1.0	-
Geigy	Yes	2	14	1.51	0.30 - 7.48
Birth Residence Within ½ mile of Ciba-	No	14	126	1.0	-
Geigy Pipeline	Yes	2	34	0.52	0.11 - 2.44
Birth Residence Within ½ mile of a Break in Ciba-Geigy Pipeline	No	15	157	1.0	-
	Yes	1	3	3.33	0.35 - 32.0
Birth Residence Within ½ mile of Toms	No	14	148	1.0	-
River Section	Yes	2	12	1.75	0.36 - 8.62
Birth Residence Within ½ mile of Reich Farm	No Yes	16 0	159 1	1.0 0	-
Birth Residence Within ½ mile of Dover Township Municipal Landfill	No Yes	16 0	160 0	1.0	-
Birth Residence Within ½ mile of Ocean County Landfill	No	16	160	1.0	-
	Yes	0	0	-	-
Birth Residence Within ½ mile of Toms	No	15	157	1.0	-
River Coal Gas Site	Yes	1	3	3.75	0.33 - 43.1

Site of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Leuke	mia Diagno	sis Ages 0 th	rough 4		
Birth Residence Within ½ mile of Ciba-Geigy	No Yes	6 1	66 4	1.0 4.18	- 0.20 - 87.4
Birth Residence Within ½ mile of Ciba- Geigy Pipeline	No Yes	6 1	54 16	1.0 0.57	- 0.07 - 4.98
Birth Residence Within ½ mile of a Break in Ciba-Geigy Pipeline	No Yes	7 0	68 2	1.0 0	-
Birth Residence Within ½ mile of Toms River Section	No Yes	6 1	67 3	1.0 3.75	- 0.33 - 43.1
Birth Residence Within ½ mile of Reich Farm	No Yes	7 0	70 0	1.0	-
Birth Residence Within ½ mile of Dover Township Municipal Landfill	No Yes	7 0	70 0	1.0	-
Birth Residence Within ½ mile of Ocean County Landfill	No Yes	7 0	70 0	1.0	-
Birth Residence Within ½ mile of Toms River Coal Gas Site	No Yes	7 0	69 1	1.0 0	-

Table 54c. Birth Records Study Analysis of Proximity to Sites of Concern: Nervous System Cancers

Site of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval					
Nervous Syste	Nervous System Cancer Diagnosis Ages 0 through 19									
Birth Residence Within ½ mile of Ciba- Geigy	No Yes	11 2	123 7	1.0 3.91	- 0.59 - 26.1					
Birth Residence Within ½ mile of Ciba- Geigy Pipeline	No Yes	11 2	109 21	1.0 0.94	- 0.19 - 4.59					
Birth Residence Within ½ mile of a Break in Ciba-Geigy Pipeline	No Yes	13 0	126 4	1.0 0	-					
Birth Residence Within ½ mile of Toms River Section	No Yes	11 2	122 8	1.0 2.65	- 0.52 - 13.4					
Birth Residence Within ½ mile of Reich Farm	No Yes	13 0	129 1	1.0 0	-					
Birth Residence Within ½ mile of Dover Township Municipal Landfill	No Yes	13 0	130 0	1.0	-					
Birth Residence Within ½ mile of Ocean County Landfill	No Yes	13 0	129 1	1.0 0	-					
Birth Residence Within ½ mile of Toms River Coal Gas Site	No Yes	12 1	129 1	1.0 10.0	- 0.63 - 160					

Table 54: page 5 of 10

Site of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Nervous Syst	tem Cancer	Diagnosis Ag	jes 0 through	4	
Birth Residence Within ½ mile of Ciba- Geigy	No Yes	8 1	87 3	1.0 3.75	- 0.33 - 43.1
Birth Residence Within ½ mile of Ciba- Geigy Pipeline	No Yes	8 1	78 12	1.0 0.82	- 0.10 - 6.97
Birth Residence Within ½ mile of a Break in Ciba-Geigy Pipeline	No Yes	9 0	86 4	1.0 0	-
Birth Residence Within ½ mile of Toms River Section	No Yes	8 1	86 4	1.0 2.50	- 0.28 - 22.4
Birth Residence Within ½ mile of Reich Farm	No Yes	9 0	90 0	1.0	-
Birth Residence Within ½ mile of Dover Township Municipal Landfill	No Yes	9 0	90 0	1.0	
Birth Residence Within ½ mile of Ocean County Landfill	No Yes	9 0	89 1	1.0 0	-
Birth Residence Within ½ mile of Toms River Coal Gas Site	No Yes	8 1	90 0	1.0 -	-

Table 54d. Birth Records Study Analysis of Proximity to Sites of Concern: Brain and Central Nervous System Cancers

Site of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Brain and Central Ner	vous System	Cancer Diag	nosis Ages 0	through	n 19
Birth Residence Within ½ mile of Ciba-Geigy	No Yes	5 2	66 4	1.0	- -
Birth Residence Within ½ mile of Ciba- Geigy Pipeline	No Yes	6 1	55 15	1.0 0.60	- 0.07 - 5.53
Birth Residence Within ½ mile of a Break in Ciba-Geigy Pipeline	No Yes	7 0	66 4	1.0 0	- -
Birth Residence Within ½ mile of Toms River Section	No Yes	6 1	65 5	1.0 2.15	- 0.22 - 21.3
Birth Residence Within ½ mile of Reich Farm	No Yes	7 0	69 1	1.0 0	-
Birth Residence Within ½ mile of Dover Township Municipal Landfill	No Yes	7 0	70 0	1.0 -	-
Birth Residence Within ½ mile of Ocean County Landfill	No Yes	7 0	69 1	1.0 0	-
Birth Residence Within ½ mile of Toms River Coal Gas Site	No Yes	7 0	70 0	1.0 -	-

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Site of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Brain and Central Nei	vous Syster	n Cancer Dia	gnosis Ages 0	througl	h 4
Birth Residence Within ½ mile of Ciba- Geigy	No Yes	3 1	39 1	1.0 -	-
Birth Residence Within ½ mile of Ciba- Geigy Pipeline	No Yes	4 0	32 8	1.0 0	-
Birth Residence Within ½ mile of a Break in Ciba-Geigy Pipeline	No Yes	4 0	36 4	1.0 0	-
Birth Residence Within ½ mile of Toms River Section	No Yes	4 0	38 2	1.0 0	-
Birth Residence Within ½ mile of Reich Farm	No Yes	4 0	40 0	1.0 -	-
Birth Residence Within ½ mile of Dover Township Municipal Landfill	No Yes	4 0	40 0	1.0 -	-
Birth Residence Within ½ mile of Ocean County Landfill	No Yes	4 0	39 1	1.0 0	-
Birth Residence Within ½ mile of Toms River Coal Gas Site	No Yes	4 0	40 0	1.0 -	-

Table 54e. Birth Records Study Analysis of Proximity to Sites or Concern: All Other Cancers

Site of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
All Other	Cancer Diag	nosis Ages 0	through 19		
Birth Residence Within ½ mile of Ciba-	No	18	178	1.0	-
Geigy	Yes	1	12	0.81	0.09 - 7.23
Birth Residence Within ½ mile of Ciba-	No	14	161	1.0	-
Geigy Pipeline	Yes	5	29	2.05	0.66 - 6.41
Birth Residence Within ½ mile of a Break in Ciba-Geigy Pipeline	No Yes	18 1	190 0	1.0 -	-
Birth Residence Within ½ mile of Toms	No	18	182	1.0	-
River Section	Yes	1	8	1.26	0.15 - 10.3
Birth Residence Within ½ mile of Reich Farm	No Yes	19 0	189 1	1.0 0	-
Birth Residence Within ½ mile of Dover Township Municipal Landfill	No	19	189	1.0	-
	Yes	0	1	0	-
Birth Residence Within ½ mile of Ocean County Landfill	No Yes	19 0	190 0	1.0	-
Birth Residence Within ½ mile of Toms	No	19	190	1.0	-
River Coal Gas Site	Yes	0	0	-	-

Site of Concern	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
All Other	Cancer Dia	gnosis Ages (0 through 4		
Birth Residence Within ½ mile of Ciba- Geigy	No Yes	7 0	65 5	1.0 0	- -
Birth Residence Within ½ mile of Ciba- Geigy Pipeline	No Yes	4 3	65 5	1.0 10.2	- 1.61 - 64.5
Birth Residence Within ½ mile of a Break in Ciba-Geigy Pipeline	No Yes	7 0	70 0	1.0 -	-
Birth Residence Within ½ mile of Toms River Section	No Yes	7 0	68 2	1.0 0	-
Birth Residence Within ½ mile of Reich Farm	No Yes	7 0	70 0	1.0	-
Birth Residence Within ½ mile of Dover Township Municipal Landfill	No Yes	7 0	70 0	1.0	-
Birth Residence Within ½ mile of Ocean County Landfill	No Yes	7 0	70 0	1.0	-
Birth Residence Within ½ mile of Toms River Coal Gas Site	No Yes	7 0	70 0	1.0	-

Table 55a. Birth Records Study Analysis of Proximity to Sites of Concern by Sex: All Cancers Combined

au 50			ין	Male		Female					
Sites of Concern	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI		
	All Cancer Diagnosis Ages 0 through 19										
Birth residence within ½ mile of Ciba-Geigy	No Yes	20 3	207 23	1.0 1.39	- 0.36 - 5.42	23 2	240 10	1.0 2.11	- 0.43 - 10.4		
Birth residence within ½ mile of Ciba-Geigy Pipeline	No Yes	21 2	189 41	1.0 0.42	- 0.09 - 1.92	18 7	207 43	1.0 1.88	- 0.74 - 4.80		
Birth residence within ½ mile of a Break in Ciba-Geigy Pipeline	No Yes	23 0	226 4	1.0 0	-	23 2	247 3	1.0 6.67	- 1.11 - 39.9		
Birth residence within ½ mile of Toms River Section	No Yes	20 3	213 17	1.0 1.85	- 0.51 - 6.76	23 2	239 11	1.0 1.86	- 0.40 - 8.75		
	_	All Car	cer Diagn	osis Age	s 0 through 4				_		
Birth residence within ½ mile of Ciba-Geigy	No Yes	9 0	80 10	1.0 0	-	12 2	138 2	1.0 15.7	- 1.38 -179		
Birth residence within ½ mile of Ciba-Geigy Pipeline	No Yes	7 2	79 11	1.0 2.03	- 0.38 - 10.8	11 3	118 22	1.0 1.46	- 0.38 - 5.65		
Birth residence within ½ mile of a Break in Ciba-Geigy Pipeline	No Yes	9 0	86 4	1.0 0	-	14 0	138 2	1.0 0	-		
Birth residence within ½ mile of Toms River Section	No Yes	9 0	85 5	1.0 0	-	12 2	136 4	1.0 5.65	- 0.92 - 34.6		

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Table 55b. Birth Records Study Analysis of Proximity to Sites of Concern by Sex: Leukemia

	_		I.	/lale			Fe	male		
Sites of Concern	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
Leukemia Diagnosis Ages 0 through 19										
Birth residence within ½ mile of Ciba-Geigy	No Yes	6 1	61 9	1.0 1.13	- 0.12 - 10.6	8 1	85 5	1.0 2.15	- 0.22 - 21.3	
Birth residence within ½ mile of Ciba-Geigy Pipeline	No Yes	7 0	56 14	1.0 0	1 1	7 2	70 20	1.0 1.00	- 0.20 - 5.03	
Birth residence within ½ mile of a Break in Ciba-Geigy Pipeline	No Yes	7 0	69 1	1.0 0	1 1	8 1	88 2	1.0 5.00	- 0.45 - 55.1	
Birth residence within ½ mile of Toms River Section	No Yes	6 1	64 6	1.0 1.78	- 0.18 - 17.4	8 1	84 6	1.0 1.73	- 0.19 - 16.0	
	_	Leuken	nia Diagno	sis Ages	0 through 4		_		_	
Birth residence within ½ mile of Ciba-Geigy	No Yes	2 0	16 4	1.0 0	-	4 1	50 0	1.0 -	-	
Birth residence within ½ mile of Ciba-Geigy Pipeline	No Yes	2 0	16 4	1.0 0	1 1	4 1	38 12	1.0 0.79	- 0.08 - 7.72	
Birth residence within ½ mile of a Break in Ciba-Geigy Pipeline	No Yes	2 0	19 1	1.0 0	-	5 0	49 1	1.0 0	- -	
Birth residence within ½ mile of Toms River Section	No Yes	2 0	19 1	1.0 0	-	4 1	48 2	1.0 6.71	- 0.40 - 113	

Table 55c. Birth Records Study Analysis of Proximity to Sites of Concern by Sex: Nervous System Cancers

	1_		N	/lale			Fe	male			
Sites of Concern	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI		
	Nervous System Cancer Diagnosis Ages 0 through 19										
Birth residence within ½ mile of Ciba-Geigy	No Yes	6 1	65 5	1.0 2.55	- 0.19 - 34.6	5 1	58 2	1.0 6.71	- 0.40 - 113		
Birth residence within ½ mile of Ciba-Geigy Pipeline	No Yes	6 1	59 11	1.0 0.90	- 0.10 - 7.99	5 1	50 10	1.0 1.00	- 0.10 - 9.96		
Birth residence within ½ mile of a Break in Ciba-Geigy Pipeline	No Yes	7 0	67 3	1.0 0	- -	6 0	59 1	1.0 0	- -		
Birth residence within ½ mile of Toms River Section	No Yes	6 1	64 6	1.0 1.73	- 0.19 - 16.0	5 1	58 2	1.0 5.00	- 0.45 - 55.1		
	Nervo	us Syste	m Cancer	Diagnos	is Ages 0 thro	ugh 4			_		
Birth residence within ½ mile of Ciba-Geigy	No Yes	4 0	39 1	1.0 0	-	4 1	48 2	1.0 6.71	- 0.40 - 113		
Birth residence within ½ mile of Ciba-Geigy Pipeline	No Yes	3 1	34 6	1.0 1.90	- 0.17 - 21.5	5 0	44 6	1.0 0	-		
Birth residence within ½ mile of a Break in Ciba-Geigy Pipeline	No Yes	4 0	37 3	1.0 0	- -	5 0	49 1	1.0 0	- -		
Birth residence within ½ mile of Toms River Section	No Yes	4 0	38 2	1.0 0	-	4 1	48 2	1.0 5.00	- 0.45 - 55.1		

Table 55: page 3 of 5

Table 55d. Birth Records Study Analysis of Proximity to Sites of Concern by Sex: Brain and Central Nervous System Cancers

	_		N	/lale		Female					
Sites of Concern	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI		
Brain and Central Nervous System Cancer Diagnosis Ages 0 through 19											
Birth residence within ½ mile of Ciba-Geigy	No Yes	2 1	27 3	1.0 -		3 1	39 1	1.0 -	- -		
Birth residence within ½ mile of Ciba-Geigy Pipeline	No Yes	3 0	23 7	1.0 0		3 1	32 8	1.0 1.35	- 0.12 - 15.8		
Birth residence within ½ mile of a Break in Ciba-Geigy Pipeline	No Yes	3 0	27 3	1.0 0	1 1	4 0	39 1	1.0 0	-		
Birth residence within ½ mile of Toms River Section	No Yes	2 1	26 4	1.0 2.86	- 0.25 - 32.6	4 0	39 1	1.0 0	-		
Bra	in and Cent	ral Nerv	ous Syster	n Cancei	Diagnosis A	ges 0 thi	rough 4				
Birth residence within ½ mile of Ciba-Geigy	No Yes	1 0	10 0	1.0 -		2 1	29 1	1.0 -	-		
Birth residence within ½ mile of Ciba-Geigy Pipeline	No Yes	1 0	6 4	1.0 0	-	3 0	26 4	1.0 0	-		
Birth residence within ½ mile of a Break in Ciba-Geigy Pipeline	No Yes	1 0	7 3	1.0 0	-	3	29 1	1.0 0	-		
Birth residence within ½ mile of Toms River Section	No Yes	1 0	9 1	1.0 0	-	3 0	29 1	1.0 0	-		

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Table 55e. Birth Records Study Analysis of Proximity to Sites of Concern by Sex: All Other Cancers

	_			Male			Fe	male		
Sites of Concern	Exposure Level	Cases	Controls	Odds Ratio	95% CI	Cases	Controls	Odds Ratio	95% CI	
All Other Cancer Diagnosis Ages 0 through 19										
Birth residence within ½ mile of Ciba-Geigy	No Yes	8 1	81 9	1.0 1.14	- 0.11 - 11.8	10 0	97 3	1.0 0	-	
Birth residence within ½ mile of Ciba-Geigy Pipeline	No Yes	8 1	74 16	1.0 0.57	- 0.06 - 4.99	6 4	87 13	1.0 5.02	- 1.08 - 23.3	
Birth residence within ½ mile of a Break in Ciba-Geigy Pipeline	No Yes	9	90 0	1.0 -		9 1	100 0	1.0 -	-	
Birth residence within ½ mile of Toms River Section	No Yes	8 1	85 5	1.0 2.07	- 0.23 - 18.9	10 0	97 3	1.0 0	-	
	Al	I Other	Cancer Dia	ignosis <i>A</i>	Ages 0 through	4	_			
Birth residence within ½ mile of Ciba-Geigy	No Yes	3 0	25 5	1.0 0	-	4 0	40 0	1.0 -	-	
Birth residence within ½ mile of Ciba-Geigy Pipeline	No Yes	2 1	29 1	1.0 10.0	- 0.63 - 160	2 2	36 4	1.0 10.3	- 0.87 - 124	
Birth residence within ½ mile of a Break in Ciba-Geigy Pipeline	No Yes	3 0	30 0	1.0 -	- -	4 0	40 0	1.0 -	- -	
Birth residence within ½ mile of Toms River Section	No Yes	3 0	28 2	1.0 0	-	4 0	40 0	1.0 -	- -	

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Table 56. Significant (p<.01) Correlation Coefficients Among Select Environmental Indices for Birth Records Study Subjects

	Time-adjusted Parkway Well Field	Time-adjusted Holly Well Field	Ciba-Geigy Ambient Gas
Time-specific Holly Well Field	23		
Ciba-Geigy Ambient Gas	16	.24	
Oyster Creek Ambient Gas	28		
Indian Head Well Field			.56
Route 70 Well Field	.15	15	.21
South Toms River Well Field			15
Brookside Well Field	20		17
Proximity to Ciba-Geigy	12	.22	.71
Proximity to Toms River		.20	.40
Proximity to Coal Gas Site		.15	

Table 57. Birth Records Study Demographic, Pregnancy, and Birth Characteristics

	Cases (r	n=48)	Controls (n=480)
Characteristic	Number	Percent	Number	Percent
Sex of child: Female Male	25 23	52.0 48.0	250 230	52.0 48.0
Year of birth of child: 1964 - 69 1970 - 74 1975 - 79 1980 - 84 1985 - 89 1990 - 96	7 5 10 14 9 3	14.6 10.4 20.8 29.2 18.7 6.3	70 50 100 130 100 30	14.6 10.4 20.8 29.2 18.7 6.3
Year of case diagnosis: 1979 - 84 1985 - 90 1991 - 96	12 22 14	25.0 45.8 29.2		
Race of child's mother: White Non-white Unknown	48 0 0	100.0 0.0 0.0	467 12 1	97.3 2.5 0.2
Mother's age at child's birth: <20 years 20 - 34 years >34 years	3 41 4	6.3 85.4 8.3	39 403 38	8.1 84.0 7.9
Mother's educational level: < 12 years 12-15 years 16+ years Unknown	8 26 9 5	16.7 54.2 18.8 10.4	66 286 84 44	13.8 59.6 17.5 9.2
Race of child's father: White Non-white Unknown	47 1 0	97.9 2.1 0.0	450 12 18	93.8 2.5 3.8

	Cases (r	n=48)	Controls (n=480)
Characteristic	Number	Percent	Number	Percent
Father's age at child's birth: < 20 years 20 - 34 years > 34 years Unknown	1	2.1	13	2.7
	37	77.1	363	75.6
	10	20.8	88	18.3
	0	0.0	16	3.3
Father's educational level: < 12 years 12-15 years 16+ years Unknown	6	12.5	51	10.6
	28	58.3	239	49.8
	9	18.8	127	26.5
	5	10.4	63	13.1
Number of mother's previous live births still living: None 1 - 4 > 4	9 38 1	18.8 79.2 2.1	187 279 14	39.0 58.1 2.9
Number of mother's previous live births now deceased: None 1+	47 1	97.9 2.1	468 12	97.5 2.5
Terminations (all causes) and stillborns of mother: None 1+ Unknown	39	79.6	361	73.7
	6	12.2	89	18.2
	4	8.2	40	8.2
Total number of known pregnancies of mother: 1 2 - 4 5+	8	16.7	157	32.7
	37	77.1	277	57.7
	3	6.3	46	9.6
Any complications of pregnancy for this pregnancy: Yes No Unknown	11	22.9	84	17.5
	33	68.8	349	72.7
	4	8.3	47	9.8

	Cases (r	n=48)	Controls (n=480)
Characteristic	Number	Percent	Number	Percent
Any complications of labor or delivery for this pregnancy: Yes No Unknown	10	20.8	126	26.3
	34	70.8	307	64.0
	4	8.3	47	9.8
Any abnormal conditions of child: Yes No Unknown	1	2.1	11	2.3
	35	72.9	372	77.5
	12	25.0	97	20.2
Any congenital malformations of child: Yes No Unknown	2	4.2	4	0.8
	35	72.9	375	78.1
	11	22.9	101	21.0
Adequacy of prenatal care utilization for this pregnancy: Inadequate Intermediate Adequate Adequate plus Unknown	2	4.2	50	10.4
	16	33.3	111	23.1
	16	33.3	222	46.3
	10	20.8	53	11.0
	4	8.3	44	9.2
Delivery method* of child: Vaginal C-section Unknown	5	10.4	46	9.6
	1	2.1	14	2.9
	42	87.5	420	87.5
Mother's weight gain* during this pregnancy: <31 lbs 31+ lbs Unknown	2 3 43	4.2 6.3 89.6	32 22 426	6.7 4.6 88.8

	Cases (r	=48)	Controls (n=480)
Characteristic	Number	Percent	Number	Percent
Pregnancy duration of child: < 37 weeks 37 - 44 weeks > 44 weeks Unknown	4	8.3	26	5.4
	42	87.5	445	92.7
	2	4.2	7	1.5
	0	0.0	2	0.4
Birth weight of child: <2500 grams 2500 - 3999 grams > 3999 grams	1 38 9	2.1 79.2 18.8	22 400 58	4.6 83.3 12.1
Child was first live birth of mother: Yes No	9	18.8	187	39.0
	39	81.3	293	61.0
Child's five minute Apgar* score: Lower (0-7) Higher (8+) Unknown	2	4.2	4	0.8
	27	56.3	291	60.6
	19	39.6	185	38.5

^{*} Note: Information on weight gain, five minute Apgar score, and delivery method was not collected on birth certificates until 1989 onward.

Table 58a. Birth Records Study Analysis of Demographic, Pregnancy and Birth Characteristics: All Cancers Combined

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
	All Cancer Diagr	nosis Ages 0	through 19		
Birth weight (grams) of child	2500-3999	38	400	1.0	-
	<2500	1	22	0.47	0.06 - 3.67
	>3999	9	58	1.60	0.75 - 3.44
Mother's age (years) at child's birth	20-34	41	403	1.0	-
	<20	3	39	0.76	0.23 - 2.54
	>34	4	38	1.04	0.35 - 3.08
Mother's educational level (years)	12-15	26	286	1.0	-
	<12	8	66	1.31	0.55 - 3.12
	>15	9	84	1.15	0.52 - 2.55
Father's age (years) at child's birth	20-34	37	363	1.0	-
	<20	1	13	0.76	0.10 - 6.01
	>34	10	88	1.13	0.54 - 2.37
Father's educational level (years)	12-15	28	239	1.0	-
	<12	6	51	1.02	0.39 - 2.71
	>15	9	127	0.58	0.27 - 1.29
Child was first live birth of mother	No	39	293	1.0	-
	Yes	9	187	0.35	0.16 - 0.75
Adequacy of prenatal care utilization for this pregnancy	Adequate	26	275	1.0	-
	Less than adequate	18	161	1.19	0.62 - 2.26
Any complications of pregnancy for this pregnancy	No	33	349	1.0	-
	Yes	11	84	1.39	0.66 - 2.90

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Any complications of labor or delivery for this pregnancy	No	34	307	1.0	-			
	Yes	10	126	0.69	0.33 - 1.47			
Any spontaneous or induced terminations of mother	No	39	361	1.0	-			
	Yes	6	89	0.52	0.20 - 1.36			
Any congenital malformations of child	No	35	375	1.0	-			
	Yes	2	4	5.65	0.92 - 34.6			
Any abnormal conditions of child	No	35	363	1.0	-			
	Yes	1	11	0.80	0.10 - 6.59			
	All Cancer Diagnosis Ages 0 through 4							
Birth weight (grams) of child	2500-3999	17	189	1.0	-			
	<2500	1	11	1.00	0.12 - 8.38			
	>3999	5	30	1.81	0.64 - 5.15			
Mother's age (years) at child's birth	20-34	18	192	1.0	-			
	<20	2	17	1.24	0.27 - 5.75			
	>34	3	21	1.52	0.41 - 5.59			
Mother's educational level (years)	12-15	11	159	1.0	-			
	<12	4	17	3.35	0.92 - 12.2			
	>15	7	52	1.90	0.69 - 5.24			
Father's age (years) at child's birth	20-34	16	172	1.0	-			
	<20	0	5	0	-			
	>34	7	47	1.59	0.62 - 4.05			
Father's educational level (years)	12-15	14	129	1.0	-			
	<12	2	11	1.73	0.35 - 8.47			
	>15	6	78	0.67	0.25 - 1.85			

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child was first live birth of mother	No	17	125	1.0	-
	Yes	6	105	0.43	0.16 - 1.11
Adequacy of prenatal care utilization for this pregnancy	Adequate	13	147	1.0	-
	Less than adequate	10	80	1.42	0.59 - 3.46
Any complications of pregnancy for this pregnancy	No	16	189	1.0	-
	Yes	7	38	2.15	0.83 - 5.54
Any complications of labor or delivery for this pregnancy	No	16	151	1.0	-
	Yes	7	76	0.86	0.33 - 2.22
Any spontaneous or induced terminations of mother	No	19	178	1.0	-
	Yes	4	52	0.72	0.23 - 2.21
Any congenital malformations of child	No	20	219	1.0	-
	Yes	2	4	5.65	0.92 - 34.6
Any abnormal conditions of child	No Yes	21 0	215 3	1.0 0	-

Table 58b. Birth Records Study Analysis of Demographic, Pregnancy and Birth Characteristics: Leukemia

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
	Leukemia Diagr	nosis Ages 0	through 19		
Birth weight (grams) of child	2500-3999	12	126	1.0	-
	<2500	0	14	0	-
	>3999	4	20	1.97	0.60 - 6.41
Mother's age (years) at child's birth	20-34	13	137	1.0	-
	<20	3	12	2.48	0.66 - 9.34
	>34	0	11	0	-
Mother's educational level (years)	12-15	9	96	1.0	-
	<12	4	19	2.26	0.62 - 8.22
	>15	1	25	0.42	0.05 - 3.51
Father's age (years) at child's birth	20-34	14	119	1.0	-
	<20	1	6	1.46	0.17 - 12.8
	>34	1	28	0.30	0.04 - 2.37
Father's educational level (years)	12-15	9	96	1.0	-
	<12	4	19	1.22	0.24 - 6.10
	>15	1	25	0.36	0.07 - 1.74
Child was first live birth of mother	No	12	96	1.0	-
	Yes	4	64	0.50	0.15 - 1.62
Adequacy of prenatal care utilization for this pregnancy	Adequate	5	92	1.0	-
	Less than adequate	9	47	3.81	1.16 - 12.5
Any complications of pregnancy for this pregnancy	No	11	112	1.0	-
	Yes	3	25	1.21	0.32 - 4.62

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Any complications of labor or delivery for this pregnancy	No	9	90	1.0	-
	Yes	5	47	1.05	0.33 - 3.37
Any spontaneous or induced terminations of mother	No	14	117	1.0	-
	Yes	1	33	0.25	0.03 - 2.00
Any congenital malformations of child	No Yes	11 1	123 0	1.0 -	-
Any abnormal conditions of child	No Yes	12 0	117 5	1.0 0	-
	Leukemia Diag	nosis Ages 0	through 4		
Birth weight (grams) of child	2500-3999	4	57	1.0	-
	<2500	0	6	0	-
	>3999	3	7	5.66	1.07 - 29.9
Mother's age (years) at child's birth	20-34	5	61	1.0	-
	<20	2	5	4.16	0.74 - 23.3
	>34	0	4	0	-
Mother's educational level (years)	12-15	3	50	1.0	-
	<12	3	6	8.33	1.23 - 56.6
	>15	1	14	1.21	0.10 - 14.7
Father's age (years) at child's birth	20-34	6	51	1.0	-
	<20	0	3	0	-
	>34	1	13	0.64	0.07 - 5.86
Father's educational level (years)	12-15	4	41	1.0	-
	<12	2	2	7.39	0.98 - 55.8
	>15	1	22	0.43	0.04 - 4.32

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child was first live birth of mother	No	5	33	1.0	-
	Yes	2	37	0.37	0.07 - 1.99
Adequacy of prenatal care utilization for this pregnancy	Adequate	1	49	1.0	-
	Less than adequate	6	20	16.6	1.79 - 154
Any complications of pregnancy for this pregnancy	No	5	51	1.0	-
	Yes	2	16	1.28	0.23 - 7.21
Any complications of labor or delivery for this pregnancy	No Yes	4 3	41 26	1.0 1.17	- 0.24 - 5.61
Any spontaneous or induced terminations of mother	No	6	55	1.0	-
	Yes	1	15	0.60	0.07 - 5.53
Any congenital malformations of child	No Yes	6 1	70 0	1.0	- -
Any abnormal conditions of child	No Yes	7 0	67 2	1.0 0	-

Table 58c. Birth Records Study Analysis of Demographic, Pregnancy and Birth Characteristics: Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Ne	rvous System Cance	r Diagnosis <i>F</i>	Ages 0 throug	h 19	
Birth weight (grams) of child	2500-3999	10	111	1.0	-
	<2500	1	1	10.3	0.64 - 167
	>3999	2	18	1.22	0.26 - 5.73
Mother's age (years) at child's birth	20-34	11	105	1.0	-
	<20	0	9	0	-
	>34	2	16	1.24	0.25 - 6.15
Mother's educational level (years)	12-15	6	80	1.0	-
	<12	1	18	0.41	0.29 - 5.86
	>15	5	30	2.03	0.60 - 6.88
Father's age (years) at child's birth	20-34	10	98	1.0	-
	<20	0	2	0	-
	>34	3	28	1.07	0.28 - 4.17
Father's educational level (years)	12-15	6	65	1.0	-
	<12	2	19	1.08	0.17 - 6.86
	>15	4	42	0.99	0.27 - 3.65
Child was first live birth of mother	No	10	78	1.0	-
	Yes	3	52	0.44	0.11 - 1.71
Adequacy of prenatal care utilization for this pregnancy	Adequate	12	79	1.0	-
	Less than adequate	1	49	0.12	0.01 - 0.95
Any complications of pregnancy for this pregnancy	No	8	108	1.0	-
	Yes	5	21	3.21	0.96 - 10.7

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Any complications of labor or delivery for this pregnancy	No	10	92	1.0	-
	Yes	3	37	0.73	0.18 - 2.94
Any spontaneous or induced terminations of mother	No	12	104	1.0	-
	Yes	1	26	0.33	0.04 - 2.66
Any congenital malformations of child	No Yes	12 0	112 3	1.0 0	
Any abnormal conditions of child	No	11	107	1.0	-
	Yes	1	3	3.20	0.28 - 36.7
N	ervous System Cance	er Diagnosis	Ages 0 throug	jh 4	
Birth weight (grams) of child	2500-3999	7	76	1.0	-
	<2500	1	1	9.77	0.60 - 158
	>3999	1	13	0.85	0.10 - 7.09
Mother's age (years) at child's birth	20-34	7	76	1.0	-
	<20	0	4	0	-
	>34	2	10	2.24	0.40 - 12.4
Mother's educational level (years)	12-15	4	62	1.0	-
	<12	O	3	0	-
	>15	4	24	2.18	0.54 - 8.84
Father's age (years) at child's birth	20-34	6	71	1.0	-
	<20	0	0	-	-
	>34	3	19	1.83	0.43 - 7.83
Father's educational level (years)	12-15	5	49	1.0	-
	<12	0	5	0	-
	>15	3	34	0.85	0.19 - 3.71

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child was first live birth of mother	No	6	54	1.0	-
	Yes	3	36	0.76	0.18 - 3.14
Adequacy of prenatal care utilization for this pregnancy	Adequate Less than adequate	9 0	55 33	1.0 0	-
Any complications of pregnancy for this pregnancy	No	5	79	1.0	-
	Yes	4	11	4.94	1.26 - 19.4
Any complications of labor or delivery for this pregnancy	No	6	61	1.0	-
	Yes	3	29	1.06	0.24 - 4.72
Any spontaneous or induced terminations of mother	No	8	70	1.0	-
	Yes	1	20	0.43	0.05 - 3.70
Any congenital malformations of child	No Yes	9 0	87 3	1.0 0	-
Any abnormal conditions of child	No Yes	9 0	84 1	1.0 0	-

Table 58d. Birth Records Study Analysis of Demographic, Pregnancy and Birth Characteristics: Brain and Central Nervous System Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Brain and C	entral Nervous Syste	em Cancer Di	agnosis Ages	0 through 1	9
Birth weight (grams) in child	2500-3999	5	63	1.0	-
	<2500	1	0	-	-
	>3999	1	7	1.73	0.19 - 16.0
Mother's age (years) at child's birth	20-34	7	55	1.0	-
	<20	0	6	0	-
	>34	0	9	0	-
Mother's educational level (years)	12-15	4	43	1.0	-
	<12	0	14	0	-
	>15	2	13	1.81	0.29 - 11.3
Father's age (years) at child's birth	20-34	7	51	1.0	-
	<20	0	2	0	-
	>34	0	16	0	-
Father's educational level (years)	12-15	3	36	1.0	-
	<12	1	12	0.83	0.06 - 11.7
	>15	2	20	1.14	0.18 - 7.35
Child was first live birth on mother	No	5	44	1.0	-
	Yes	2	26	0.67	0.12 - 3.80
Adequacy of prenatal care utilization for this pregnancy	Adequate	6	37	1.0	-
	Less than adequate	1	32	0.20	0.02 - 1.74
Any complications of pregnancy for this pregnancy	No	4	56	1.0	-
	Yes	3	13	3.36	0.66 - 17.2

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Any complications of labor or delivery for this pregnancy	No	9	90	1.0	-
	Yes	5	47	1.14	0.21 - 6.28
Any spontaneous or induced terminations of mother	No	6	56	1.0	-
	Yes	1	14	0.66	0.07 - 6.11
Any congenital malformations of child	No Yes	7 0	60 2	1.0 0	
Any abnormal conditions of child	No	6	60	1.0	-
	Yes	1	2	5.29	0.32 - 86.9
Brain and (Central Nervous Syst	em Cancer D	iagnosis Ages	o through 4	1
Birth weight (grams) of child	2500-3999	3	36	1.0	-
	<2500	1	0	-	-
	>3999	0	4	0	-
Mother's age (years) at child's birth	20-34	4	34	1.0	-
	<20	0	2	0	-
	>34	0	4	0	-
Mother's educational level (years)	12-15	2	30	1.0	-
	<12	0	0	-	-
	>15	1	10	1.15	0.10 - 12.8
Father's age (years) at child's birth	20-34	4	33	1.0	-
	<20	0	0	-	-
	>34	0	7	0	-
Father's educational level (years)	12-15	2	22	1.0	-
	<12	0	1	0	-
	>15	1	16	0.59	0.05 - 6.70

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child was first live birth of mother	No	2	22	1.0	-
	Yes	2	18	1.22	0.16 - 9.25
Adequacy of prenatal care utilization for this pregnancy	Adequate Less than adequate	4 0	23 16	1.0 0	-
Any complications of pregnancy for this pregnancy	No	2	36	1.0	-
	Yes	2	4	6.71	0.91 - 49.5
Any complications of labor or delivery for this pregnancy	No	2	29	1.0	-
	Yes	2	11	2.56	0.33 - 19.7
Any spontaneous or induced terminations of mother	No	3	32	1.0	-
	Yes	1	8	1.39	0.11 - 18.2
Any congenital malformations of child	No Yes	4 0	38 2	1.0 0	-
Any abnormal conditions of child	No Yes	4 0	40 0	1.0	-

Table 58e. Birth Records Study Analysis of Demographic, Pregnancy and Birth Characteristics: All Other Cancers

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval		
All Other Cancer Diagnosis Ages 0 through 19							
Birth weight (grams) of child	2500-3999	16	163	1.0	-		
	<2500	0	7	0	-		
	>3999	3	20	1.56	0.41 - 5.98		
Mother's age (years) at child's birth	20-34	17	161	1.0	-		
	<20	0	18	0	-		
	>34	2	11	1.77	0.35 - 8.91		
Mother's educational level (years)	12-15	11	110	1.0	-		
	<12	3	29	1.03	0.27 - 3.93		
	>15	3	29	1.04	0.27 - 3.99		
Father's age (years) at child's birth	20-34	13	98	1.0	-		
	<20	0	2	0	-		
	>34	6	32	2.19	0.76 - 6.35		
Father's educational level (years)	12-15	12	97	1.0	-		
	<12	2	19	0.85	0.17 - 4.25		
	>15	3	44	0.52	0.14 - 2.00		
Child was first live birth of mother	No	17	119	1.0	-		
	Yes	2	71	0.18	0.04 - 0.83		
Adequacy of prenatal care utilization for this pregnancy	Adequate	9	104	1.0	-		
	Less than adequate	8	65	1.41	0.53 - 3.75		
Any complications of pregnancy for this pregnancy	No	14	129	1.0	-		
	Yes	3	38	0.71	0.19 - 2.70		

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval			
Any complications of labor or delivery for this pregnancy	No	15	125	1.0	-			
	Yes	2	43	0.37	0.08 - 1.73			
Any spontaneous or induced terminations of mother	No	14	144	1.0	-			
	Yes	3	28	1.09	0.30 - 3.99			
Any congenital malformations of child	No Yes	12 1	140 1	1.0 0	-			
Any abnormal conditions of child	No Yes	12 0	139 3	1.0 0	-			
	All Other Cancer Diagnosis Ages 0 through 4							
Birth weight (grams) of child	2500-3999	6	56	1.0	-			
	<2500	0	4	0	-			
	>3999	1	10	0.93	0.10 - 8.62			
Mother's age (years) at child's birth	20-34	6	55	1.0	-			
	<20	0	8	0	-			
	>34	1	7	1.32	0.15 - 12.1			
Mother's educational level (years)	12-15	4	47	1.0	-			
	<12	1	8	1.59	0.14 - 18.4			
	>15	2	14	1.74	0.27 - 11.1			
Father's age (years) at child's birth	20-34	4	50	1.0	-			
	<20	0	2	0	-			
	>34	3	15	2.41	0.51 - 11.3			
Father's educational level (years)	12-15	5	39	1.0	-			
	<12	0	4	0	-			
	>15	2	22	0.66	0.11 - 3.86			

Exposure Factor	Exposure Level	Number of Cases	Number of Controls	Odds Ratio	95% Confidence Interval
Child was first live birth of mother	No	6	38	1.0	-
	Yes	1	32	0.19	0.02 - 1.72
Adequacy of prenatal care utilization for this pregnancy	Adequate	3	43	1.0	-
	Less than adequate	4	27	2.07	0.44 - 9.72
Any complications of pregnancy for this pregnancy	No	6	59	1.0	-
	Yes	1	11	0.89	0.10 - 8.10
Any complications of labor or delivery for this pregnancy	No	6	49	1.0	-
	Yes	1	21	0.36	0.04 - 3.41
Any spontaneous or induced terminations of mother	No	5	53	1.0	-
	Yes	2	17	1.23	0.23 - 6.65
Any congenital malformations of child	No Yes	5 1	62 1	1.0 0	-
Any abnormal conditions of child	No Yes	5 0	64 0	1.0 -	-

Table 59. Birth Records Study Exposure to Tobacco Smoke and Alcohol

	Cases (n	=48)	Controls (n=480)		
Characteristic	Number	Percent	Number	Percent	
Mother used tobacco* during					
pregnancy:					
Yes	1	2.1	5	1.0	
No	4	8.3	52	10.8	
Unknown	43	89.6	423	88.1	
Mother consumed any					
alcohol* during pregnancy:					
Yes	0	0.0	0	0.0	
No	5	10.4	58	12.1	
Unknown	43	89.6	422	87.9	

^{*} Information on tobacco and alcohol use was not collected on birth certificates until 1989 onward.