

Table 10.
The Estimated Risk of Childhood Leukemia Associated with Blood Levels of Volatile Organic Compounds ($\mu\text{g/L}$)^{*} for Case Children and Families Compared with Control Children and Families Living in Churchill County

VOC [‡]	Case vs. Comparison (Child)		Case vs. Comparison (Families) [†]	
	Odds Ratio [§]	P-Value	Odds Ratio [§]	P-Value
1,4-Dichlorobenzene	NC [¶]	NC	1.33	0.28
Ethylbenzene	2.67	0.04	1.14	0.56
m-/p-Xylene	0.80	0.74	0.87	0.60
O-Xylene	1.45	0.47	1.01	0.98
Styrene	1.21	0.62	1.25	0.30
Tetrachloroethylene	0.32	0.19	0.38	0.01
Toluene	0.77	0.70	1.12	0.67

- * Nanogram per gram lipid
- † Family members include children and their parents/guardians.
- ‡ Volatile organic compounds
- § The estimated relative risk of leukemia associated with one standard error of the geometric mean increase in the blood or urine level of each chemical. Odds ratios are not reported if fewer than 60% of cases and controls had detectable levels of the chemical in their blood or urine.
- || The P-value estimates the probability that the deviation of the odds ratio from 1.0 (no difference in risk) is due to chance. A P-value less than 0.05 suggests that chance is unlikely to explain the deviation.
- ¶ Not calculated. Less than 60% of the study population had detectable levels of this chemical.

The VOCs that were analyzed in the Churchill County investigation but that were detected in fewer than 60% of the participants were:

Trichloroethylene
 Benzene
 Carbon tetrachloride
 1,1,1-Trichloroethane
 2,5-Dimethylfuran