

Summary of Positive Findings from the In Utero Studies

Outcome	Exposure estimated from ATSDR's water modeling	Result	Results seen in other drinking water studies
Neural tube defects	any benzene exposure	OR ^c = 4.1 (95 % CI: 1.4-12.0)	OR = 2.05 (90% CI: 0.61-5.81) ¹
Neural tube defects	Trichloroethylene (TCE) exposure > 5 ppb ^a	OR = 2.4 (95 % CI: 0.6-9.6)	OR = 2.53 (90% CI: 0.91-6.37) ¹
Childhood leukemia and childhood non-Hodgkin's lymphoma (NHL)	any tetrachloroethylene (PCE) exposure	OR = 1.6 (95 % CI: 0.5-4.8)	OR = 2.06 (95% CI: 0.55-7.65) for leukemia ² OR ^b = 8.33 (95% CI: 0.73-94.67) for leukemia ³
Small for gestational age	highest TCE exposure	OR = 1.5 (95% CI: 1.2, 1.9)	OR = 1.55 (95% CI: 1.0-2.3) ^{4,5}

^a parts per billion

^b adjusted for socio-economic status, maternal smoking during pregnancy, maternal age at birth of child and breast-feeding

^c odds ratio

References

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Comparison of some of the findings in the mortality studies at Camp Lejeune with evidence on the effects of trichloroethylene (TCE) exposure from occupational studies of TCE workers.

Cancer	RR (95% CI) Camp Lejeune Marines vs Camp Pendleton Marines	RR (95% CI) Camp Lejeune Workers vs Camp Pendleton Workers	Results from occupational studies
Kidney	1.35 (0.84, 2.16)	1.92 (0.58, 6.34)	EPA meta-analysis, TCE and kidney cancer ¹ : Any exposure RR=1.27 (1.13, 1.43) [15 studies] Highest exposure group RR=1.58 (1.28, 1.96) [13 studies]
Liver	1.42 (0.92, 2.20)	0.62 (0.16, 2.45)	EPA meta-analysis, TCE and liver cancer ¹ : Any exposure RR=1.29 (1.07, 1.56) [9 studies] Highest exposure group RR=1.28 (0.93, 1.77) [8 studies] 3 Nordic cohort studies of TCE workers ² : Pooled SIR = 1.93 (1.19, 2.95)
Esophagus	1.43 (0.85, 2.38)	0.58 (0.15, 2.22)	3 Nordic cohort studies of TCE workers ² : Pooled SIR = 1.84 (0.65, 4.65) Aircraft maintenance workers exposed to TCE ³ : RR=1.88 (0.61, 5.79)
Hodgkin lymphoma	1.47 (0.71, 3.06)	Could not be evaluated	NCI meta-analysis, TCE and Hodgkin lymphoma ⁴ : TCE-exposure studies, RR=1.33 (0.87, 2.04) [8 studies] {subset of 5 mortality studies, RR=2.07 (1.13, 3.78)}
Multiple Myeloma	1.68 (0.76, 3.72)	1.84 (0.45, 7.58)	NCI meta-analysis, TCE and multiple myeloma ⁴ : TCE-exposure studies, RR=1.07 (0.86, 1.34) [10 studies] Case-control study ⁵ : Any TCE exposure: OR=1.7 (1.0, 2.7) Highest TCE exposure: OR=2.3 (1.1, 5.0)

Pancreas	1.36 (0.91, 2.02)	0.54 (0.24, 1.20)	Meta-analysis of TCE exposed workers ⁶ : RR=1.24 (0.79, 1.97) [5 studies] 3 Nordic cohort studies of TCE workers ² : Pooled SIR = 1.31 (0.93, 1.80)
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RR: Risk ratio (a risk ratio > 1.0 indicates a higher risk among the exposed compared to the unexposed)

CI: confidence interval

References

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