

## Table of Approximate Cancer Risks Based on Concentrations Long-Term Exposure to Ethylene Oxide

Chart settings are: 33-year exposure over a 78-year life incorporating Age  
Dependent Adjustment Factors

Includes: Infants (2 yrs.), Adolescents (14 yrs.), Adults (17 yrs.)

Initial entry in µg/m3 (micrograms per cubic meter). ppm parts per million, ppb parts  
per billion, ppt parts per trillion

(Last 2 rows/section-same value (rounded) displayed in Excel's scientific notation.)

Step µg/m3	Same concentration of EtO just represented in different units.				Total Risk/Million
	µg/m3	= ppm	= ppb	= ppt	
0.001	0.001	0.000000555	0.001	0.56	3
	0.002	0.000001110	0.001	1.11	6
	0.003	0.000001665	0.002	1.67	9
	0.004	0.000002220	0.002	2.22	12
	0.005	0.000002775	0.003	2.78	15
	0.006	0.000003330	0.003	3.33	18
	0.007	0.000003885	0.004	3.89	21
	0.008	0.000004440	0.004	4.44	24
Same value in Scientific	0.009	0.000004995	0.005	5.00	27
	9.00E-03	0.000004995	0.005	5.00	27
0.01	0.01	0.000005550	0.006	5.55	30
	0.02	0.000011101	0.011	11.10	61
	0.03	0.000016651	0.017	16.65	91
	0.04	0.000022201	0.022	22.20	121
	0.05	0.000027751	0.028	27.75	151
	0.06	0.000033302	0.033	33.30	182
	0.07	0.000038852	0.039	38.85	212
	0.08	0.000044402	0.044	44.40	242
Same value in Scientific	0.09	0.000049952	0.050	49.95	273
	9.00E-02	0.000049952	0.050	49.95	273
0.1	0.1	0.000055503	0.056	55.50	303
	0.2	0.000111005	0.111	111.01	606
	0.3	0.000166508	0.167	166.51	909
	0.4	0.000222010	0.222	222.01	1,211
	0.5	0.000277513	0.278	277.51	1,514
	0.6	0.000333016	0.333	333.02	1,817
	0.7	0.000388518	0.389	388.52	2,120
	0.8	0.000444021	0.444	444.02	2,423
Same value in Scientific	0.9	0.000499523	0.500	499.52	2,726
	9.00E-01	0.000499523	0.500	499.52	2,726
1	1	0.000555026	0.555	555.03	3,028
	2	0.001110052	1.110	1,110.05	6,057
	3	0.001665078	1.665	1,665.08	9,085
	4	0.002220104	2.220	2,220.10	12,113
	5	0.002775129	2.775	2,775.13	15,142
	6	0.003330155	3.330	3,330.16	18,170
	7	0.003885181	3.885	3,885.18	21,198
	8	0.004440207	4.440	4,440.21	24,227
Same value in Scientific	9	0.004995233	4.995	4,995.23	27,255
	9.00E+00	0.004995233	4.995	4,995.23	27,255
10	10	0.005550259	5.550	5,550.26	30,283
	20	0.011100518	11.101	11,100.52	60,567
	30	0.016650776	16.651	16,650.78	90,850
	40	0.022201035	22.201	22,201.04	121,133
	50	0.027751294	27.751	27,751.29	151,417
	60	0.033301553	33.302	33,301.55	181,700
	70	0.038851811	38.852	38,851.81	211,983
	80	0.044402070	44.402	44,402.07	242,267
Same value in Scientific	90	0.049952329	49.952	49,952.33	272,550
	9.00E+01	0.049952329	49.952	49,952.33	272,550
100	100	0.055502588	55.503	55,502.59	302,833
	200	0.111005176	111.005	111,005.18	605,667
	300	0.166507764	166.508	166,507.76	908,500

Any concentration above 300 µg/m3 exceeds 1,000,000 cancers in a million  
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