

NCI Radiation Risk Assessment Tool

Summary Report

Gender: Female
 Birth Year: 1990

NCI RadRAT version: 3.7
 Date of Run: 4/26/2012
 Time of Run: 4:48:08 PM

Advanced Settings:

Number of Iterations: 300

Random Number Seed: 99

User Defined Uncertainty Distribution: Constant =1

Current Year Setting: 2012

Exposure Information: [-] Click to Hide Exposure Information

Exposure Event	Exposure Year	Organ	Organ Dose (mGy)	Exposure Rate
1	2000	Oral Cavity and Pharynx	Constant (0.0238)	acute
1	2000	Esophagus	Constant (0.353)	acute
1	2000	Stomach	Constant (13.4)	acute
1	2000	Colon	Constant (10)	acute
1	2000	Rectum	Constant (6.21)	acute
1	2000	Liver	Constant (13)	acute
1	2000	Gallbladder	Constant (11)	acute
1	2000	Pancreas	Constant (11)	acute
1	2000	Lung	Constant (2.11)	acute
1	2000	Breast	Constant (0.904)	acute
1	2000	Ovary	Constant (9.72)	acute
1	2000	Uterus	Constant (9.72)	acute
1	2000	Bladder	Constant (3.07)	acute
1	2000	Kidney	Constant (14.1)	acute
1	2000	Thyroid	Constant (0.0476)	acute
1	2000	Leukemia	Constant (4.62)	acute

Risk Estimates:

Lifetime Risk of Developing Cancer of the Exposed Organs (chances in 100,000):

90% Uncertainty Range

	Lower Bound	Mean	Upper Bound
Excess Lifetime Risk*	50.6	101	187

* Risk from the time of exposure to the end of the expected lifetime

[Click here to hide](#) the Excess Lifetime Risk per cancer site

90% Uncertainty Range

Excess Lifetime Risk* by Cancer Site	Lower Bound	Mean	Upper Bound
Oral Cavity & Pharynx	0.00238	0.00982	0.0209
Esophagus	< 0	0.0778	0.225
Stomach	2.84	21.1	83
Colon	7.32	18.1	35.9
Rectum	< 0	1.48	4.35
Liver	0.589	6.22	23.5
Gallbladder	< 0	< 0	0.896
Pancreas	0.487	5.22	11.7
Lung	5.11	12.7	25.4
Breast	3.88	7.09	12.4
Ovary	1.73	8.03	18.5
Uterus	< 0	4.7	17.1
Bladder	1.82	5.82	12.5
Kidney	0.618	5.46	14.3
Thyroid	0.0573	0.249	0.61

* Risk from the time of exposure to the end of the expected lifetime

Future Risk of Developing Cancer of the Exposed Organs (chances in 100,000):

90% Uncertainty Range

	Lower Bound	Mean	Upper Bound
Excess Future Risk**	48.8	99.3	186

** Risk from the present time to the end of the expected lifetime

[Click here to hide](#) the Excess Future Risk per cancer site

90% Uncertainty Range

Excess Future Risk** by Cancer Site	Lower Bound	Mean	Upper Bound
Oral Cavity & Pharynx	0.00234	0.00965	0.0207
Esophagus	< 0	0.078	0.225
Stomach	2.83	21.1	83.2
Colon	7.33	18.2	36
Rectum	< 0	1.48	4.35
Liver	0.586	6.23	23.6
Gallbladder	< 0	< 0	0.898
Pancreas	0.489	5.23	11.7
Lung	5.13	12.7	25.4
Breast	3.88	7.1	12.4
Ovary	1.69	7.92	18
Uterus	< 0	4.7	17.1
Bladder	1.83	5.83	12.5
Kidney	0.618	5.45	14.2
Thyroid	0.0561	0.243	0.599

** Risk from the present time to the end of the expected lifetime

[Click here to hide](#) the Baseline Future and Total Future Risk

Future Risk of Developing Cancer of the Exposed Organs (chances in 100,000):

90% Uncertainty Range

	Lower Bound	Mean	Upper Bound
Baseline Future Risk**	37031	37787	38558
Total Future Risk**	37147	37886	38683

** Risk from the present time to the end of the expected lifetime

[Click here to hide](#) the Baseline Future Risk per cancer site

90% Uncertainty Range

Baseline Future Risk** by Cancer Site	Lower Bound	Mean	Upper Bound
Oral Cavity & Pharynx	655	686	717
Esophagus	232	250	268
Stomach	661	690	721
Colon	4170	4250	4320
Rectum	1430	1480	1520
Liver	328	349	371
Gallbladder	352	373	395
Pancreas	1270	1310	1360
Lung	6310	6400	6490
Breast	13200	13300	13500
Ovary	1400	1450	1490
Uterus	3210	3270	3340
Bladder	1160	1200	1240
Kidney	1010	1050	1090
Thyroid	1010	1050	1090

** Risk from the present time to the end of the expected lifetime

To return to the Main Inputs Page, click here:

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[Restart Calculator](#)