

Probabilistic results summary : RESRAD Default

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## Probabilistic Input

Number of Sample Runs: 3000

Number	Name	Distribution	Parameters							
1	VCV	CONTINUOUS LOGARITHMIC4	5.E-8	0	.0007	.22	.005	.95	.2	1
2	DENSCZ	TRUNCATED NORMAL	1.52	.23	.001	.999				
3	VCZ	CONTINUOUS LOGARITHMIC4	5.E-8	0	.0007	.22	.005	.95	.2	1
4	TPCZ	TRUNCATED NORMAL	.425	.0867	.001	.999				
5	HCCZ	LOGUNIFORM	786	17000						
6	BCZ	BOUNDED LOGNORMAL-N	1.06	.66	.5	30				
7	EVAPTR	UNIFORM	.5	.75						
8	WIND	BOUNDED LOGNORMAL-N	1.445	.2419	1.4	13				
9	RUNOFF	UNIFORM	.1	.8						
10	DENSAQ	TRUNCATED NORMAL	1.51	.16	.001	.999				
11	TPSZ	TRUNCATED NORMAL	.43	.06	.001	.999				
12	EPSZ	TRUNCATED NORMAL	.383	.061	.001	.999				
13	HCSZ	LOGUNIFORM	786	17000						
14	HGWT	BOUNDED LOGNORMAL-N	-5.11	1.77	.00007	.5				
15	DWIBWT	TRIANGULAR	6	10	30					
16	MLINH	CONTINUOUS LINEAR	8	0	0	.000008	.0151	.000016	.1365	.00003 .8119
17	SHF3	UNIFORM	.15	.95						
18	SHF1	BOUNDED LOGNORMAL-N	-1.3	.59	.044	1				
19	DM	TRIANGULAR	0	.15	.6					
20	DROOT	UNIFORM	.3	4						
21	YV(1)	TRUNCATED LOGNORMAL-N	.56	.48	.001	.999				
22	WLAM	TRIANGULAR	5.1	18	84					
23	RWET(2)	TRIANGULAR	.06	.67	.95					
24	BRTF(27,1)	LOGNORMAL-N	-2.53	.916291						
25	BRTF(27,2)	LOGNORMAL-N	-3.51	1.029619						
26	BRTF(27,3)	LOGNORMAL-N	-6.21	.7						
27	BRTF(55,1)	LOGNORMAL-N	-3.22	.993252						
28	BRTF(55,2)	LOGNORMAL-N	-3	.405465						
29	BRTF(55,3)	LOGNORMAL-N	-4.61	.47						
30	BRTF(63,1)	LOGNORMAL-N	-6.21	1.098612						
31	BRTF(63,2)	LOGNORMAL-N	-6.21	1.029619						
32	BRTF(63,3)	LOGNORMAL-N	-9.72	.91629						
33	BRTF(1,1)	LOGNORMAL-N	1.57	1.098612						
34	BRTF(1,2)	LOGNORMAL-N	-4.42	1						
35	BRTF(1,3)	LOGNORMAL-N	-4.6	.9						
36	BRTF(28,1)	LOGNORMAL-N	-3	.916291						
37	BRTF(28,2)	LOGNORMAL-N	-5.3	.916291						
38	BRTF(28,3)	LOGNORMAL-N	-3.91	.69315						
39	BRTF(38,1)	LOGNORMAL-N	-1.2	.993252						
40	BRTF(38,2)	LOGNORMAL-N	-4.61	.405465						
41	BRTF(38,3)	LOGNORMAL-N	-6.21	.47						

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## Probabilistic Total Dose Summary

Nuclide (j)	Peak Time	Peak Dose	DOSE(j,t), mrem/yr							
			t= 0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	1.00E+03
Co-60										
Min	0.00E+00	6.02E-02	6.02E-02	5.28E-02	3.83E-02	1.07E-02	4.14E-05	8.09E-10	0.00E+00	0.00E+00
Max	2.97E+01	9.47E-01	9.47E-01	8.32E-01	6.41E-01	2.58E-01	4.31E-02	2.15E-05	7.99E-17	0.00E+00
Avg	1.21E-01	1.03E-01	1.02E-01	8.98E-02	6.90E-02	2.77E-02	7.86E-04	4.25E-07	2.05E-18	0.00E+00
Std	1.65E+00	5.40E-02	5.19E-02	4.56E-02	3.52E-02	1.50E-02	2.72E-03	1.57E-06	7.24E-18	0.00E+00
ΣALL										
Min	0.00E+00	6.02E-02	6.02E-02	5.28E-02	3.83E-02	1.07E-02	4.14E-05	8.09E-10	0.00E+00	0.00E+00
Max	2.97E+01	9.47E-01	9.47E-01	8.32E-01	6.41E-01	2.58E-01	4.31E-02	2.15E-05	7.99E-17	0.00E+00
Avg	1.21E-01	1.03E-01	1.02E-01	8.98E-02	6.90E-02	2.77E-02	7.86E-04	4.25E-07	2.05E-18	0.00E+00
Std	1.65E+00	5.40E-02	5.19E-02	4.56E-02	3.52E-02	1.50E-02	2.72E-03	1.57E-06	7.24E-18	0.00E+00

ΣALL is total dose summed for all nuclides.

Probabilistic results summary : RESRAD Default

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## Probabilistic Risk Summary

Nuclide (j)	t=	RISK(j,t)							
		0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	1.00E+03
Co-60									
Min		1.17E-06	1.03E-06	7.90E-07	2.22E-07	8.60E-10	1.68E-14	0.00E+00	0.00E+00
Max		2.47E-05	2.17E-05	1.67E-05	6.72E-06	8.84E-07	5.29E-10	1.97E-21	1.19E-39
Avg		2.30E-06	2.01E-06	1.55E-06	6.21E-07	1.83E-08	1.01E-11	4.98E-23	4.40E-43
Std		1.38E-06	1.21E-06	9.34E-07	3.94E-07	6.62E-08	3.88E-11	1.80E-22	0.00E+00
ΣALL									
Min		1.17E-06	1.03E-06	7.90E-07	2.22E-07	8.60E-10	1.68E-14	0.00E+00	0.00E+00
Max		2.47E-05	2.17E-05	1.67E-05	6.72E-06	8.84E-07	5.29E-10	1.97E-21	1.19E-39
Avg		2.30E-06	2.01E-06	1.55E-06	6.21E-07	1.83E-08	1.01E-11	4.98E-23	4.40E-43
Std		1.38E-06	1.21E-06	9.34E-07	3.94E-07	6.62E-08	3.88E-11	1.80E-22	0.00E+00

ΣALL is total risk summed for all nuclides.

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## Probabilistic Dose vs Pathway(i): Ground External

Nuclide (j)	t=	DOSE(i,j,t), mrem/yr							
		0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	1.00E+03
Co-60									
Min		1.12E-18	9.85E-19	7.57E-19	2.69E-19	1.51E-21	6.14E-26	0.00E+00	0.00E+00
Max		9.90E-18	6.86E-17	5.34E-15	2.22E-08	3.46E-02	1.97E-05	7.31E-17	0.00E+00
Avg		2.41E-18	2.46E-18	1.25E-17	1.51E-11	2.40E-04	1.95E-07	1.08E-18	0.00E+00
Std		9.27E-19	3.24E-18	1.60E-16	4.49E-10	2.32E-03	1.34E-06	6.15E-18	0.00E+00
ΣALL									
Min		1.12E-18	9.85E-19	7.57E-19	2.69E-19	1.51E-21	6.14E-26	0.00E+00	0.00E+00
Max		9.90E-18	6.86E-17	5.34E-15	2.22E-08	3.46E-02	1.97E-05	7.31E-17	0.00E+00
Avg		2.41E-18	2.46E-18	1.25E-17	1.51E-11	2.40E-04	1.95E-07	1.08E-18	0.00E+00
Std		9.27E-19	3.24E-18	1.60E-16	4.49E-10	2.32E-03	1.34E-06	6.15E-18	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

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## Probabilistic Dose vs Pathway(i): Inhalation (w/o Radon)

Nuclide (j)	t=	DOSE(i,j,t), mrem/yr							
		0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	1.00E+03
Co-60									
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-08	1.38E-11	4.70E-23	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-10	9.65E-14	4.90E-25	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E-09	7.41E-13	3.06E-24	0.00E+00
ΣALL									
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-08	1.38E-11	4.70E-23	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-10	9.65E-14	4.90E-25	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E-09	7.41E-13	3.06E-24	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

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## Probabilistic Dose vs Pathway(i): Radon (Water Ind.)

Nuclide (j)	t=	DOSE(i,j,t), mrem/yr							
		0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	1.00E+03
Co-60									
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ΣALL									
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

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## Probabilistic Dose vs Pathway(i): Plant (Water Ind.)

Nuclide (j)	t=	DOSE(i,j,t), mrem/yr							
		0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	1.00E+03
Co-60									
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		2.28E-01	2.00E-01	1.55E-01	6.29E-02	6.74E-03	2.84E-06	1.39E-17	0.00E+00
Avg		2.25E-03	2.01E-03	1.62E-03	8.37E-04	4.24E-05	2.68E-08	1.84E-19	0.00E+00
Std		1.12E-02	9.89E-03	7.77E-03	3.83E-03	2.60E-04	1.47E-07	7.23E-19	0.00E+00
ΣALL									
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		2.28E-01	2.00E-01	1.55E-01	6.29E-02	6.74E-03	2.84E-06	1.39E-17	0.00E+00
Avg		2.25E-03	2.01E-03	1.62E-03	8.37E-04	4.24E-05	2.68E-08	1.84E-19	0.00E+00
Std		1.12E-02	9.89E-03	7.77E-03	3.83E-03	2.60E-04	1.47E-07	7.23E-19	0.00E+00

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## Probabilistic Dose vs Pathway(i): Meat (Water Ind.)

Nuclide (j)	t=	DOSE(i,j,t), mrem/yr							
		0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	1.00E+03
Co-60									
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		4.65E-01	4.09E-01	3.16E-01	1.28E-01	8.43E-03	7.54E-06	3.82E-17	0.00E+00
Avg		1.70E-03	1.53E-03	1.23E-03	6.50E-04	3.54E-05	2.32E-08	1.57E-19	0.00E+00
Std		1.28E-02	1.14E-02	8.92E-03	4.43E-03	2.99E-04	1.96E-07	1.09E-18	0.00E+00
ΣALL									
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		4.65E-01	4.09E-01	3.16E-01	1.28E-01	8.43E-03	7.54E-06	3.82E-17	0.00E+00
Avg		1.70E-03	1.53E-03	1.23E-03	6.50E-04	3.54E-05	2.32E-08	1.57E-19	0.00E+00
Std		1.28E-02	1.14E-02	8.92E-03	4.43E-03	2.99E-04	1.96E-07	1.09E-18	0.00E+00

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## Probabilistic Dose vs Pathway(i): Milk (Water Ind.)

Nuclide (j)	t=	DOSE(i,j,t), mrem/yr							
		0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	1.00E+03
Co-60									
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.56E-01	1.37E-01	1.06E-01	4.30E-02	2.64E-03	1.22E-06	4.63E-18	0.00E+00
Avg		6.83E-04	6.08E-04	4.84E-04	2.42E-04	1.21E-05	7.87E-09	5.34E-20	0.00E+00
Std		4.62E-03	4.06E-03	3.15E-03	1.41E-03	9.04E-05	5.33E-08	2.43E-19	0.00E+00
ΣALL									
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.56E-01	1.37E-01	1.06E-01	4.30E-02	2.64E-03	1.22E-06	4.63E-18	0.00E+00
Avg		6.83E-04	6.08E-04	4.84E-04	2.42E-04	1.21E-05	7.87E-09	5.34E-20	0.00E+00
Std		4.62E-03	4.06E-03	3.15E-03	1.41E-03	9.04E-05	5.33E-08	2.43E-19	0.00E+00

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## Probabilistic Dose vs Pathway(i): Soil Ingestion

Nuclide (j)	t=	DOSE(i,j,t), mrem/yr							
		0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	1.00E+03
Co-60									
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.73E-06	6.91E-10	2.60E-21	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.91E-08	1.45E-11	7.71E-23	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-07	9.50E-11	4.13E-22	0.00E+00	0.00E+00
ΣALL									
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.73E-06	6.91E-10	2.60E-21	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.91E-08	1.45E-11	7.71E-23	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-07	9.50E-11	4.13E-22	0.00E+00	0.00E+00

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## Probabilistic Dose vs Pathway(i): Water Ingestion

Nuclide (j)	t=	DOSE(i,j,t), mrem/yr							
		0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	1.00E+03
Co-60									
Min		5.26E-02	4.36E-02	2.99E-02	7.97E-03	2.52E-05	3.32E-10	0.00E+00	0.00E+00
Max		5.40E-02	4.73E-02	3.64E-02	1.45E-02	2.63E-04	1.05E-07	3.95E-19	0.00E+00
Avg		5.39E-02	4.72E-02	3.62E-02	1.43E-02	2.51E-04	9.54E-08	3.19E-19	0.00E+00
Std		8.08E-05	2.24E-04	4.00E-04	4.43E-04	2.35E-05	1.61E-08	9.75E-20	0.00E+00
ΣALL									
Min		5.26E-02	4.36E-02	2.99E-02	7.97E-03	2.52E-05	3.32E-10	0.00E+00	0.00E+00
Max		5.40E-02	4.73E-02	3.64E-02	1.45E-02	2.63E-04	1.05E-07	3.95E-19	0.00E+00
Avg		5.39E-02	4.72E-02	3.62E-02	1.43E-02	2.51E-04	9.54E-08	3.19E-19	0.00E+00
Std		8.08E-05	2.24E-04	4.00E-04	4.43E-04	2.35E-05	1.61E-08	9.75E-20	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default

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## Probabilistic Dose vs Pathway(i): Fish Ingestion

Nuclide (j)	t=	DOSE(i,j,t), mrem/yr							
		0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	1.00E+03
Co-60									
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ΣALL									
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default

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## Probabilistic Dose vs Pathway(i): Radon (Water Dep.)

Nuclide (j)	t=	DOSE(i,j,t), mrem/yr							
		0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	1.00E+03
Co-60									
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ΣALL									
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default

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## Probabilistic Dose vs Pathway(i): Plant (Water Dep.)

Nuclide (j)	t=	DOSE(i,j,t), mrem/yr							
		0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	1.00E+03
Co-60									
Min		9.25E-04	8.11E-04	6.23E-04	2.48E-04	1.74E-06	3.25E-11	0.00E+00	0.00E+00
Max		2.74E-02	2.40E-02	1.84E-02	7.26E-03	1.28E-04	5.09E-08	1.91E-19	0.00E+00
Avg		5.13E-03	4.49E-03	3.44E-03	1.36E-03	2.39E-05	9.07E-09	3.03E-20	0.00E+00
Std		2.92E-03	2.56E-03	1.96E-03	7.77E-04	1.39E-05	5.46E-09	2.03E-20	0.00E+00
ΣALL									
Min		9.25E-04	8.11E-04	6.23E-04	2.48E-04	1.74E-06	3.25E-11	0.00E+00	0.00E+00
Max		2.74E-02	2.40E-02	1.84E-02	7.26E-03	1.28E-04	5.09E-08	1.91E-19	0.00E+00
Avg		5.13E-03	4.49E-03	3.44E-03	1.36E-03	2.39E-05	9.07E-09	3.03E-20	0.00E+00
Std		2.92E-03	2.56E-03	1.96E-03	7.77E-04	1.39E-05	5.46E-09	2.03E-20	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default

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## Probabilistic Dose vs Pathway(i): Meat (Water Dep.)

Nuclide (j)	t=	DOSE(i,j,t), mrem/yr							
		0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	1.00E+03
Co-60									
Min		3.90E-04	3.42E-04	2.62E-04	1.04E-04	1.62E-06	3.13E-11	0.00E+00	0.00E+00
Max		7.85E-01	6.88E-01	5.28E-01	2.09E-01	3.72E-03	1.42E-06	4.67E-18	0.00E+00
Avg		3.00E-02	2.63E-02	2.02E-02	7.97E-03	1.40E-04	5.33E-08	1.79E-19	0.00E+00
Std		4.17E-02	3.66E-02	2.80E-02	1.11E-02	1.97E-04	7.61E-08	2.65E-19	0.00E+00
ΣALL									
Min		3.90E-04	3.42E-04	2.62E-04	1.04E-04	1.62E-06	3.13E-11	0.00E+00	0.00E+00
Max		7.85E-01	6.88E-01	5.28E-01	2.09E-01	3.72E-03	1.42E-06	4.67E-18	0.00E+00
Avg		3.00E-02	2.63E-02	2.02E-02	7.97E-03	1.40E-04	5.33E-08	1.79E-19	0.00E+00
Std		4.17E-02	3.66E-02	2.80E-02	1.11E-02	1.97E-04	7.61E-08	2.65E-19	0.00E+00

ΣALL is total pathway dose summed for all nuclides.



Probabilistic results summary : RESRAD Default

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## Probabilistic Dose vs Pathway(i): Milk (Water Dep.)

Nuclide (j)	t=	DOSE(i,j,t), mrem/yr							
		0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	1.00E+03
Co-60									
Min		4.99E-04	4.37E-04	3.36E-04	1.33E-04	2.28E-06	4.46E-11	0.00E+00	0.00E+00
Max		8.04E-02	6.91E-02	5.09E-02	1.85E-02	3.35E-04	1.33E-07	4.93E-19	0.00E+00
Avg		8.68E-03	7.60E-03	5.83E-03	2.30E-03	4.04E-05	1.53E-08	5.11E-20	0.00E+00
Std		7.17E-03	6.28E-03	4.81E-03	1.89E-03	3.32E-05	1.28E-08	4.60E-20	0.00E+00
ΣALL									
Min		4.99E-04	4.37E-04	3.36E-04	1.33E-04	2.28E-06	4.46E-11	0.00E+00	0.00E+00
Max		8.04E-02	6.91E-02	5.09E-02	1.85E-02	3.35E-04	1.33E-07	4.93E-19	0.00E+00
Avg		8.68E-03	7.60E-03	5.83E-03	2.30E-03	4.04E-05	1.53E-08	5.11E-20	0.00E+00
Std		7.17E-03	6.28E-03	4.81E-03	1.89E-03	3.32E-05	1.28E-08	4.60E-20	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default

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## Cumulative Probability Summary for: Total Dose Over Pathways

Cumulative Probability	Dose(t), mrem/yr							
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	1.00E+03
0.025	6.45E-02	5.65E-02	4.32E-02	1.69E-02	2.76E-04	7.24E-08	4.93E-20	0.00E+00
0.050	6.63E-02	5.81E-02	4.45E-02	1.75E-02	3.02E-04	9.78E-08	1.28E-19	0.00E+00
0.075	6.78E-02	5.94E-02	4.55E-02	1.79E-02	3.13E-04	1.11E-07	2.26E-19	0.00E+00
0.100	6.91E-02	6.05E-02	4.64E-02	1.83E-02	3.20E-04	1.18E-07	2.95E-19	0.00E+00
0.125	7.04E-02	6.17E-02	4.72E-02	1.87E-02	3.27E-04	1.23E-07	3.46E-19	0.00E+00
0.150	7.15E-02	6.26E-02	4.81E-02	1.90E-02	3.34E-04	1.26E-07	3.93E-19	0.00E+00
0.175	7.26E-02	6.36E-02	4.88E-02	1.93E-02	3.40E-04	1.29E-07	4.26E-19	0.00E+00
0.200	7.37E-02	6.45E-02	4.94E-02	1.96E-02	3.46E-04	1.32E-07	4.46E-19	0.00E+00
0.225	7.47E-02	6.54E-02	5.02E-02	1.99E-02	3.51E-04	1.34E-07	4.61E-19	0.00E+00
0.250	7.58E-02	6.64E-02	5.10E-02	2.02E-02	3.57E-04	1.37E-07	4.75E-19	0.00E+00
0.275	7.69E-02	6.74E-02	5.17E-02	2.05E-02	3.64E-04	1.40E-07	4.89E-19	0.00E+00
0.300	7.81E-02	6.84E-02	5.25E-02	2.08E-02	3.69E-04	1.42E-07	5.00E-19	0.00E+00
0.325	7.90E-02	6.92E-02	5.31E-02	2.11E-02	3.73E-04	1.45E-07	5.13E-19	0.00E+00
0.350	8.01E-02	7.01E-02	5.38E-02	2.13E-02	3.79E-04	1.47E-07	5.25E-19	0.00E+00
0.375	8.13E-02	7.11E-02	5.47E-02	2.16E-02	3.85E-04	1.50E-07	5.36E-19	0.00E+00
0.400	8.25E-02	7.23E-02	5.55E-02	2.20E-02	3.91E-04	1.52E-07	5.47E-19	0.00E+00
0.425	8.38E-02	7.34E-02	5.63E-02	2.23E-02	3.97E-04	1.54E-07	5.59E-19	0.00E+00
0.450	8.54E-02	7.48E-02	5.74E-02	2.27E-02	4.04E-04	1.57E-07	5.70E-19	0.00E+00
0.475	8.67E-02	7.60E-02	5.83E-02	2.31E-02	4.12E-04	1.60E-07	5.85E-19	0.00E+00
0.500	8.80E-02	7.71E-02	5.92E-02	2.35E-02	4.20E-04	1.64E-07	5.97E-19	0.00E+00
0.525	8.94E-02	7.83E-02	6.01E-02	2.38E-02	4.26E-04	1.67E-07	6.11E-19	0.00E+00
0.550	9.10E-02	7.97E-02	6.13E-02	2.43E-02	4.34E-04	1.70E-07	6.28E-19	0.00E+00
0.575	9.27E-02	8.12E-02	6.23E-02	2.47E-02	4.43E-04	1.73E-07	6.43E-19	0.00E+00
0.600	9.45E-02	8.28E-02	6.36E-02	2.53E-02	4.51E-04	1.77E-07	6.60E-19	0.00E+00
0.625	9.67E-02	8.48E-02	6.51E-02	2.59E-02	4.62E-04	1.81E-07	6.84E-19	0.00E+00
0.650	9.87E-02	8.65E-02	6.64E-02	2.64E-02	4.76E-04	1.87E-07	7.06E-19	0.00E+00
0.675	1.01E-01	8.80E-02	6.75E-02	2.68E-02	4.83E-04	1.91E-07	7.35E-19	0.00E+00
0.700	1.03E-01	9.00E-02	6.92E-02	2.75E-02	4.97E-04	1.97E-07	7.75E-19	0.00E+00
0.725	1.06E-01	9.31E-02	7.14E-02	2.84E-02	5.14E-04	2.05E-07	8.09E-19	0.00E+00
0.750	1.10E-01	9.66E-02	7.42E-02	2.96E-02	5.37E-04	2.13E-07	8.53E-19	0.00E+00
0.775	1.14E-01	1.00E-01	7.69E-02	3.07E-02	5.56E-04	2.22E-07	8.99E-19	0.00E+00
0.800	1.18E-01	1.04E-01	7.96E-02	3.17E-02	5.79E-04	2.33E-07	9.58E-19	0.00E+00
0.825	1.23E-01	1.08E-01	8.26E-02	3.30E-02	6.04E-04	2.44E-07	1.06E-18	0.00E+00
0.850	1.28E-01	1.12E-01	8.62E-02	3.46E-02	6.40E-04	2.62E-07	1.17E-18	0.00E+00
0.875	1.36E-01	1.19E-01	9.15E-02	3.67E-02	6.91E-04	2.86E-07	1.32E-18	0.00E+00
0.900	1.46E-01	1.28E-01	9.90E-02	4.01E-02	7.57E-04	3.21E-07	1.62E-18	0.00E+00
0.925	1.60E-01	1.40E-01	1.08E-01	4.39E-02	8.79E-04	3.77E-07	2.13E-18	0.00E+00
0.950	1.85E-01	1.63E-01	1.25E-01	5.16E-02	1.08E-03	5.34E-07	3.86E-18	0.00E+00
0.975	2.30E-01	2.03E-01	1.56E-01	6.64E-02	1.70E-03	1.92E-06	2.81E-17	0.00E+00
1.000	9.47E-01	8.32E-01	6.41E-01	2.58E-01	4.31E-02	2.15E-05	7.99E-17	0.00E+00







Probabilistic results summary : RESRAD Default

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Peak of the mean dose (averaged over observations) at graphical times

Repetition	Time of peak mean dose	Peak mean dose
	Years	mrem/yr
1	0.000E+00	1.020E-01
2	0.000E+00	1.030E-01
3	0.000E+00	1.023E-01

Title : RESRAD Default  
 Input File : ZION BFM SENSITIVITY.RAD

## Coefficients for peak All Pathways Dose

Coefficient =	PCC		SRC		PRCC		SRRC	
Repetition =	1		1		1		1	
Description of Probabilistic Variable	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff
Cover erosion rate	2	0.36	2	0.19	41	0.00	41	0.00
Density of contaminated zone	28	0.02	28	0.01	37	0.01	37	0.00
Contaminated zone erosion rate	16	-0.04	16	-0.02	40	0.00	40	0.00
Contaminated zone total porosity	37	0.01	37	0.00	28	0.02	28	0.01
Contaminated zone hydraulic conductivity	10	-0.06	10	-0.03	35	-0.01	35	0.00
Contaminated zone b parameter	38	0.00	38	0.00	22	-0.03	22	-0.01
Evapotranspiration coefficient	18	0.03	18	0.02	29	0.02	29	0.01
Wind Speed	34	-0.01	34	-0.01	12	0.05	12	0.02
Runoff coefficient	15	0.05	15	0.02	8	0.07	8	0.03
Density of saturated zone	41	0.00	41	0.00	24	0.03	24	0.01
Saturated zone total porosity	25	0.02	25	0.01	26	-0.03	26	-0.01
Saturated zone effective porosity	40	0.00	40	0.00	17	-0.04	17	-0.02
Saturated zone hydraulic conductivity	26	0.02	26	0.01	23	0.03	23	0.01
Saturated zone hydraulic gradient	20	0.03	20	0.01	14	0.04	14	0.02
Well pump intake depth	35	-0.01	35	0.00	20	-0.04	20	-0.01
Mass loading for inhalation	19	0.03	19	0.01	27	0.02	27	0.01
Indoor dust filtration factor	39	0.00	39	0.00	25	-0.03	25	-0.01
External gamma shielding factor	33	-0.01	33	-0.01	10	-0.06	10	-0.02
Depth of soil mixing layer	36	-0.01	36	0.00	30	-0.02	30	-0.01
Depth of roots	5	0.29	5	0.15	4	0.33	4	0.14
Wet weight crop yield of fruit, grain and non-leafy vegetables	7	-0.08	7	-0.04	6	-0.12	6	-0.05
Weathering removal constant of all vegetation	3	-0.33	3	-0.17	2	-0.61	2	-0.30
Wet foliar interception fraction of leafy vegetables	11	0.05	11	0.03	5	0.13	5	0.05
Plant transfer factor for Co	6	0.19	6	0.10	7	0.12	7	0.05
Meat transfer factor for Co	1	0.85	1	0.80	1	0.90	1	0.81
Milk transfer factor for Co	4	0.31	4	0.16	3	0.56	3	0.27
Plant transfer factor for Cs	23	-0.02	22	-0.01	15	0.04	15	0.02
Meat transfer factor for Cs	17	0.04	17	0.02	31	-0.01	31	-0.01
Milk transfer factor for Cs	24	-0.02	24	-0.01	16	0.04	16	0.02
Plant transfer factor for Eu	14	-0.05	14	-0.02	11	-0.06	11	-0.02
Meat transfer factor for Eu	13	0.05	13	0.02	9	0.07	9	0.03
Milk transfer factor for Eu	29	-0.02	29	-0.01	19	-0.04	19	-0.01
Plant transfer factor for H	22	-0.02	23	-0.01	18	-0.04	18	-0.01
Meat transfer factor for H	8	0.08	8	0.04	34	0.01	34	0.00
Milk transfer factor for H	27	0.02	27	0.01	39	-0.01	39	0.00
Plant transfer factor for Ni	9	0.06	9	0.03	13	0.05	13	0.02
Meat transfer factor for Ni	21	-0.02	21	-0.01	32	-0.01	32	-0.01
Milk transfer factor for Ni	31	0.01	31	0.01	21	0.03	21	0.01
Plant transfer factor for Sr	30	0.02	30	0.01	36	-0.01	36	0.00
Meat transfer factor for Sr	12	-0.05	12	-0.02	33	-0.01	33	-0.01
Milk transfer factor for Sr	32	-0.01	32	-0.01	38	0.01	38	0.00
R-SQUARE		0.77		0.77		0.85		0.85

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Title : RESRAD Default  
 Input File : ZION BFM SENSITIVITY.RAD

## Coefficients for peak All Pathways Dose

Coefficient =	PCC		SRC		PRCC		SRRC	
Repetition =	2		2		2		2	
Description of Probabilistic Variable	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff
Cover erosion rate	5	0.23	5	0.12	21	0.03	21	0.01
Density of contaminated zone	21	-0.02	21	-0.01	10	-0.06	10	-0.03
Contaminated zone erosion rate	14	-0.03	14	-0.02	28	-0.01	28	0.00
Contaminated zone total porosity	41	0.00	41	0.00	12	0.05	12	0.02
Contaminated zone hydraulic conductivity	9	-0.04	9	-0.02	38	0.00	38	0.00
Contaminated zone b parameter	8	-0.06	8	-0.03	15	-0.04	15	-0.02
Evapotranspiration coefficient	17	0.03	17	0.01	23	-0.02	23	-0.01
Wind Speed	11	-0.04	11	-0.02	19	0.03	19	0.01
Runoff coefficient	24	-0.02	24	-0.01	11	0.05	11	0.02
Density of saturated zone	40	0.00	40	0.00	29	0.01	29	0.00
Saturated zone total porosity	35	-0.01	35	0.00	40	0.00	40	0.00
Saturated zone effective porosity	18	0.03	18	0.01	24	-0.02	24	-0.01
Saturated zone hydraulic conductivity	25	-0.02	26	-0.01	34	0.01	34	0.00
Saturated zone hydraulic gradient	23	-0.02	23	-0.01	14	0.04	14	0.02
Well pump intake depth	13	0.04	13	0.02	16	-0.03	16	-0.01
Mass loading for inhalation	38	0.00	38	0.00	25	0.02	25	0.01
Indoor dust filtration factor	20	-0.03	20	-0.01	13	-0.05	13	-0.02
External gamma shielding factor	32	-0.01	32	-0.01	20	0.03	20	0.01
Depth of soil mixing layer	16	-0.03	16	-0.01	30	-0.01	30	0.00
Depth of roots	3	0.27	3	0.14	4	0.30	4	0.13
Wet weight crop yield of fruit, grain and non-leafy vegetables	7	-0.07	7	-0.03	5	-0.12	5	-0.05
Weathering removal constant of all vegetation	2	-0.29	2	-0.15	2	-0.58	2	-0.29
Wet foliar interception fraction of leafy vegetables	28	0.02	28	0.01	7	0.10	7	0.04
Plant transfer factor for Co	6	0.15	6	0.07	6	0.11	6	0.05
Meat transfer factor for Co	1	0.86	1	0.82	1	0.89	1	0.80
Milk transfer factor for Co	4	0.24	4	0.12	3	0.54	3	0.27
Plant transfer factor for Cs	26	0.02	25	0.01	39	0.00	39	0.00
Meat transfer factor for Cs	12	0.04	12	0.02	22	0.03	22	0.01
Milk transfer factor for Cs	39	0.00	39	0.00	8	-0.08	8	-0.03
Plant transfer factor for Eu	10	0.04	10	0.02	41	0.00	41	0.00
Meat transfer factor for Eu	34	0.01	34	0.00	9	0.07	9	0.03
Milk transfer factor for Eu	37	0.00	37	0.00	17	0.03	17	0.01
Plant transfer factor for H	15	-0.03	15	-0.01	27	0.01	27	0.01
Meat transfer factor for H	22	0.02	22	0.01	32	-0.01	32	0.00
Milk transfer factor for H	19	-0.03	19	-0.01	36	-0.01	36	0.00
Plant transfer factor for Ni	31	-0.01	31	-0.01	33	0.01	33	0.00
Meat transfer factor for Ni	29	0.01	29	0.01	37	0.01	37	0.00
Milk transfer factor for Ni	27	-0.02	27	-0.01	18	-0.03	18	-0.01
Plant transfer factor for Sr	36	0.00	36	0.00	35	-0.01	35	0.00
Meat transfer factor for Sr	33	-0.01	33	0.00	31	-0.01	31	0.00
Milk transfer factor for Sr	30	0.01	30	0.01	26	0.02	26	0.01
R-SQUARE		0.76		0.76		0.83		0.83

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.



Title : RESRAD Default  
 Input File : ZION BFM SENSITIVITY.RAD

## Coefficients for peak All Pathways Dose

Coefficient =	PCC		SRC		PRCC		SRRC	
Repetition =	3		3		3		3	
Description of Probabilistic Variable	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff
Cover erosion rate	2	0.41	2	0.22	22	0.03	22	0.01
Density of contaminated zone	16	0.03	16	0.01	16	0.03	16	0.01
Contaminated zone erosion rate	10	-0.04	10	-0.02	20	-0.03	20	-0.01
Contaminated zone total porosity	33	0.01	33	0.00	34	0.00	34	0.00
Contaminated zone hydraulic conductivity	41	0.00	41	0.00	40	0.00	40	0.00
Contaminated zone b parameter	29	-0.01	29	-0.01	29	-0.02	29	-0.01
Evapotranspiration coefficient	40	0.00	40	0.00	33	-0.01	33	0.00
Wind Speed	8	0.06	8	0.03	17	-0.03	17	-0.01
Runoff coefficient	25	-0.02	25	-0.01	24	0.03	24	0.01
Density of saturated zone	32	0.01	32	0.00	36	0.00	36	0.00
Saturated zone total porosity	34	0.01	34	0.00	27	-0.02	27	-0.01
Saturated zone effective porosity	21	0.02	21	0.01	41	0.00	41	0.00
Saturated zone hydraulic conductivity	12	-0.04	12	-0.02	35	0.00	35	0.00
Saturated zone hydraulic gradient	35	0.01	35	0.00	7	0.09	7	0.03
Well pump intake depth	36	0.00	36	0.00	10	-0.06	10	-0.03
Mass loading for inhalation	13	-0.03	13	-0.02	13	-0.04	13	-0.02
Indoor dust filtration factor	37	0.00	37	0.00	37	0.00	37	0.00
External gamma shielding factor	39	0.00	39	0.00	19	0.03	19	0.01
Depth of soil mixing layer	24	-0.02	24	-0.01	30	-0.02	30	-0.01
Depth of roots	5	0.27	5	0.13	4	0.29	4	0.12
Wet weight crop yield of fruit, grain and non-leafy vegetables	7	-0.06	7	-0.03	5	-0.12	5	-0.05
Weathering removal constant of all vegetation	3	-0.33	3	-0.17	2	-0.56	2	-0.28
Wet foliar interception fraction of leafy vegetables	18	0.03	18	0.01	9	0.07	9	0.03
Plant transfer factor for Co	6	0.20	6	0.10	6	0.09	6	0.04
Meat transfer factor for Co	1	0.86	1	0.81	1	0.89	1	0.81
Milk transfer factor for Co	4	0.31	4	0.16	3	0.55	3	0.27
Plant transfer factor for Cs	9	0.04	9	0.02	14	0.04	14	0.02
Meat transfer factor for Cs	17	0.03	17	0.01	8	0.08	8	0.03
Milk transfer factor for Cs	38	0.00	38	0.00	23	-0.03	23	-0.01
Plant transfer factor for Eu	26	-0.02	26	-0.01	25	0.03	25	0.01
Meat transfer factor for Eu	15	-0.03	15	-0.01	21	0.03	21	0.01
Milk transfer factor for Eu	20	-0.02	20	-0.01	18	0.03	18	0.01
Plant transfer factor for H	30	-0.01	30	0.00	39	0.00	39	0.00
Meat transfer factor for H	14	-0.03	14	-0.02	31	0.01	31	0.01
Milk transfer factor for H	23	-0.02	22	-0.01	12	0.05	12	0.02
Plant transfer factor for Ni	31	0.01	31	0.00	15	-0.04	15	-0.02
Meat transfer factor for Ni	11	-0.04	11	-0.02	26	0.02	26	0.01
Milk transfer factor for Ni	27	0.01	27	0.01	28	-0.02	28	-0.01
Plant transfer factor for Sr	28	-0.01	28	-0.01	32	-0.01	32	0.00
Meat transfer factor for Sr	22	-0.02	23	-0.01	38	0.00	38	0.00
Milk transfer factor for Sr	19	0.02	19	0.01	11	0.06	11	0.02
R-SQUARE		0.77		0.77		0.84		0.84

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.