

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
H-3										
Min	0.00E+00	1.37E-02	1.37E-02	1.32E-22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	5.47E-01	5.47E-01	4.07E-01	2.61E-01	9.34E-02	6.28E-03	6.77E-05	2.08E-11	0.00E+00
Avg	0.00E+00	1.35E-01	1.35E-01	9.29E-02	5.67E-02	1.64E-02	3.23E-04	6.46E-07	1.92E-14	0.00E+00
Std	0.00E+00	5.61E-02	5.61E-02	5.74E-02	4.57E-02	1.93E-02	7.25E-04	3.14E-06	4.51E-13	0.00E+00
ΣALL										
Min	0.00E+00	1.37E-02	1.37E-02	1.32E-22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	5.47E-01	5.47E-01	4.07E-01	2.61E-01	9.34E-02	6.28E-03	6.77E-05	2.08E-11	0.00E+00
Avg	0.00E+00	1.35E-01	1.35E-01	9.29E-02	5.67E-02	1.64E-02	3.23E-04	6.46E-07	1.92E-14	0.00E+00
Std	0.00E+00	5.61E-02	5.61E-02	5.74E-02	4.57E-02	1.93E-02	7.25E-04	3.14E-06	4.51E-13	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
H-3									
Min		4.13E-06	3.45E-25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		2.94E-04	2.80E-05	1.67E-05	5.79E-06	3.79E-07	4.02E-09	1.23E-15	1.19E-39
Avg		1.08E-05	6.22E-06	3.64E-06	1.02E-06	1.97E-08	3.89E-11	1.14E-18	4.40E-43
Std		8.97E-06	3.49E-06	2.81E-06	1.18E-06	4.38E-08	1.88E-10	2.68E-17	0.00E+00
ΣALL									
Min		4.13E-06	3.45E-25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		2.94E-04	2.80E-05	1.67E-05	5.79E-06	3.79E-07	4.02E-09	1.23E-15	1.19E-39
Avg		1.08E-05	6.22E-06	3.64E-06	1.02E-06	1.97E-08	3.89E-11	1.14E-18	4.40E-43
Std		8.97E-06	3.49E-06	2.81E-06	1.18E-06	4.38E-08	1.88E-10	2.68E-17	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
H-3									
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.

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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
H-3									
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	9.12E-07	1.18E-10	3.60E-25	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.96E-10	8.37E-14	2.42E-28	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-08	2.38E-12	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	9.12E-07	1.18E-10	3.60E-25	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.96E-10	8.37E-14	2.42E-28	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-08	2.38E-12	0.00E+00	0.00E+00

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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
H-3									
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
H-3									
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		3.78E-03	2.94E-03	2.13E-03	2.83E-03	2.33E-04	5.43E-07	3.58E-14	0.00E+00
Avg		1.09E-04	7.53E-05	4.62E-05	1.69E-05	5.64E-07	1.15E-09	2.55E-17	0.00E+00
Std		3.90E-04	2.92E-04	1.97E-04	1.01E-04	5.91E-06	1.55E-08	7.02E-16	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		3.78E-03	2.94E-03	2.13E-03	2.83E-03	2.33E-04	5.43E-07	3.58E-14	0.00E+00
Avg		1.09E-04	7.53E-05	4.62E-05	1.69E-05	5.64E-07	1.15E-09	2.55E-17	0.00E+00
Std		3.90E-04	2.92E-04	1.97E-04	1.01E-04	5.91E-06	1.55E-08	7.02E-16	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
H-3									
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		4.34E-04	3.38E-04	2.43E-04	3.13E-04	2.63E-05	6.15E-08	4.05E-15	0.00E+00
Avg		1.28E-05	8.70E-06	5.29E-06	1.91E-06	6.41E-08	1.30E-10	2.88E-18	0.00E+00
Std		4.53E-05	3.36E-05	2.25E-05	1.14E-05	6.70E-07	1.76E-09	7.94E-17	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		4.34E-04	3.38E-04	2.43E-04	3.13E-04	2.63E-05	6.15E-08	4.05E-15	0.00E+00
Avg		1.28E-05	8.70E-06	5.29E-06	1.91E-06	6.41E-08	1.30E-10	2.88E-18	0.00E+00
Std		4.53E-05	3.36E-05	2.25E-05	1.14E-05	6.70E-07	1.76E-09	7.94E-17	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
H-3									
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		3.43E-03	2.67E-03	1.92E-03	2.48E-03	2.08E-04	4.86E-07	3.20E-14	0.00E+00
Avg		1.01E-04	6.88E-05	4.18E-05	1.51E-05	5.06E-07	1.03E-09	2.28E-17	0.00E+00
Std		3.58E-04	2.65E-04	1.78E-04	8.97E-05	5.29E-06	1.39E-08	6.28E-16	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		3.43E-03	2.67E-03	1.92E-03	2.48E-03	2.08E-04	4.86E-07	3.20E-14	0.00E+00
Avg		1.01E-04	6.88E-05	4.18E-05	1.51E-05	5.06E-07	1.03E-09	2.28E-17	0.00E+00
Std		3.58E-04	2.65E-04	1.78E-04	8.97E-05	5.29E-06	1.39E-08	6.28E-16	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
H-3									
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	3.17E-09	4.10E-13	1.91E-27	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.85E-12	2.57E-16	9.90E-31	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.23E-11	8.11E-15	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	3.17E-09	4.10E-13	1.91E-27	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.85E-12	2.57E-16	9.90E-31	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.23E-11	8.11E-15	0.00E+00	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

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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
H-3									
Min		1.02E-02	3.52E-23	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		2.87E-01	2.13E-01	1.47E-01	5.67E-02	4.04E-03	4.66E-05	1.43E-11	0.00E+00
Avg		8.89E-02	6.12E-02	3.74E-02	1.09E-02	2.16E-04	4.35E-07	1.31E-14	0.00E+00
Std		3.34E-02	3.63E-02	2.95E-02	1.27E-02	4.85E-04	2.12E-06	3.10E-13	0.00E+00
ΣALL									
Min		1.02E-02	3.52E-23	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		2.87E-01	2.13E-01	1.47E-01	5.67E-02	4.04E-03	4.66E-05	1.43E-11	0.00E+00
Avg		8.89E-02	6.12E-02	3.74E-02	1.09E-02	2.16E-04	4.35E-07	1.31E-14	0.00E+00
Std		3.34E-02	3.63E-02	2.95E-02	1.27E-02	4.85E-04	2.12E-06	3.10E-13	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
H-3									
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
H-3									
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
H-3									
Min		2.83E-04	9.26E-25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.30E-01	9.65E-02	5.35E-02	1.75E-02	7.98E-04	5.72E-06	1.76E-12	0.00E+00
Avg		1.47E-02	1.02E-02	6.20E-03	1.76E-03	3.27E-05	6.20E-08	1.71E-15	0.00E+00
Std		1.02E-02	8.40E-03	6.02E-03	2.28E-03	7.54E-05	3.02E-07	3.89E-14	0.00E+00
ΣALL									
Min		2.83E-04	9.26E-25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.30E-01	9.65E-02	5.35E-02	1.75E-02	7.98E-04	5.72E-06	1.76E-12	0.00E+00
Avg		1.47E-02	1.02E-02	6.20E-03	1.76E-03	3.27E-05	6.20E-08	1.71E-15	0.00E+00
Std		1.02E-02	8.40E-03	6.02E-03	2.28E-03	7.54E-05	3.02E-07	3.89E-14	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
H-3									
Min		6.12E-04	1.23E-23	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		2.16E-02	1.61E-02	1.04E-02	3.78E-03	2.60E-04	2.86E-06	8.78E-13	0.00E+00
Avg		5.66E-03	3.88E-03	2.37E-03	6.87E-04	1.35E-05	2.71E-08	8.05E-16	0.00E+00
Std		2.27E-03	2.36E-03	1.89E-03	8.04E-04	3.03E-05	1.32E-07	1.90E-14	0.00E+00
ΣALL									
Min		6.12E-04	1.23E-23	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		2.16E-02	1.61E-02	1.04E-02	3.78E-03	2.60E-04	2.86E-06	8.78E-13	0.00E+00
Avg		5.66E-03	3.88E-03	2.37E-03	6.87E-04	1.35E-05	2.71E-08	8.05E-16	0.00E+00
Std		2.27E-03	2.36E-03	1.89E-03	8.04E-04	3.03E-05	1.32E-07	1.90E-14	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
H-3									
Min		2.63E-03	8.40E-23	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.09E-01	8.11E-02	5.06E-02	1.77E-02	1.18E-03	1.25E-05	3.84E-12	0.00E+00
Avg		2.55E-02	1.74E-02	1.06E-02	3.07E-03	6.00E-05	1.20E-07	3.54E-15	0.00E+00
Std		1.07E-02	1.09E-02	8.60E-03	3.62E-03	1.35E-04	5.82E-07	8.35E-14	0.00E+00
ΣALL									
Min		2.63E-03	8.40E-23	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.09E-01	8.11E-02	5.06E-02	1.77E-02	1.18E-03	1.25E-05	3.84E-12	0.00E+00
Avg		2.55E-02	1.74E-02	1.06E-02	3.07E-03	6.00E-05	1.20E-07	3.54E-15	0.00E+00
Std		1.07E-02	1.09E-02	8.60E-03	3.62E-03	1.35E-04	5.82E-07	8.35E-14	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	3.44E-02	1.96E-05	5.08E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.050	4.52E-02	4.73E-04	5.60E-08	1.17E-21	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.075	5.57E-02	2.57E-03	5.11E-06	1.88E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.100	6.52E-02	6.33E-03	5.12E-05	2.03E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.125	7.45E-02	1.10E-02	2.31E-04	2.72E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.150	8.20E-02	1.76E-02	7.27E-04	1.09E-08	9.60E-30	0.00E+00	0.00E+00	0.00E+00
0.175	8.67E-02	2.63E-02	1.90E-03	2.08E-07	8.53E-25	0.00E+00	0.00E+00	0.00E+00
0.200	9.08E-02	3.54E-02	4.02E-03	1.87E-06	5.17E-21	0.00E+00	0.00E+00	0.00E+00
0.225	9.56E-02	4.30E-02	7.10E-03	9.83E-06	3.96E-18	0.00E+00	0.00E+00	0.00E+00
0.250	1.00E-01	5.06E-02	9.94E-03	3.39E-05	5.34E-16	0.00E+00	0.00E+00	0.00E+00
0.275	1.04E-01	5.77E-02	1.43E-02	9.59E-05	4.50E-14	0.00E+00	0.00E+00	0.00E+00
0.300	1.07E-01	6.33E-02	1.93E-02	2.26E-04	8.74E-13	3.05E-29	0.00E+00	0.00E+00
0.325	1.11E-01	6.90E-02	2.46E-02	4.60E-04	1.05E-11	1.93E-26	0.00E+00	0.00E+00
0.350	1.14E-01	7.42E-02	2.87E-02	8.33E-04	1.41E-10	7.22E-24	0.00E+00	0.00E+00
0.375	1.17E-01	7.87E-02	3.28E-02	1.43E-03	1.25E-09	1.04E-21	0.00E+00	0.00E+00
0.400	1.20E-01	8.22E-02	3.78E-02	2.04E-03	4.54E-09	3.12E-20	0.00E+00	0.00E+00
0.425	1.23E-01	8.59E-02	4.22E-02	2.95E-03	2.02E-08	1.34E-18	0.00E+00	0.00E+00
0.450	1.26E-01	8.94E-02	4.80E-02	4.07E-03	9.00E-08	5.98E-17	0.00E+00	0.00E+00
0.475	1.29E-01	9.31E-02	5.27E-02	5.60E-03	2.46E-07	7.40E-16	0.00E+00	0.00E+00
0.500	1.32E-01	9.70E-02	5.74E-02	7.39E-03	7.73E-07	1.10E-14	0.00E+00	0.00E+00
0.525	1.35E-01	1.01E-01	6.11E-02	9.23E-03	1.88E-06	1.30E-13	0.00E+00	0.00E+00
0.550	1.38E-01	1.04E-01	6.46E-02	1.14E-02	4.31E-06	8.46E-13	0.00E+00	0.00E+00
0.575	1.40E-01	1.07E-01	6.83E-02	1.40E-02	9.37E-06	5.23E-12	0.00E+00	0.00E+00
0.600	1.43E-01	1.10E-01	7.21E-02	1.58E-02	1.76E-05	2.63E-11	0.00E+00	0.00E+00
0.625	1.46E-01	1.13E-01	7.56E-02	1.80E-02	3.10E-05	1.12E-10	3.33E-29	0.00E+00
0.650	1.49E-01	1.17E-01	7.87E-02	2.05E-02	4.94E-05	3.38E-10	1.26E-27	0.00E+00
0.675	1.53E-01	1.20E-01	8.11E-02	2.30E-02	7.75E-05	1.08E-09	3.61E-26	0.00E+00
0.700	1.57E-01	1.23E-01	8.44E-02	2.55E-02	1.15E-04	2.73E-09	5.20E-25	0.00E+00
0.725	1.61E-01	1.27E-01	8.72E-02	2.77E-02	1.78E-04	7.49E-09	1.05E-23	0.00E+00
0.750	1.65E-01	1.30E-01	9.06E-02	3.00E-02	2.36E-04	1.66E-08	1.30E-22	0.00E+00
0.775	1.70E-01	1.34E-01	9.38E-02	3.26E-02	3.23E-04	3.72E-08	1.47E-21	0.00E+00
0.800	1.76E-01	1.38E-01	9.74E-02	3.48E-02	4.37E-04	7.44E-08	1.40E-20	0.00E+00
0.825	1.82E-01	1.44E-01	1.01E-01	3.78E-02	5.74E-04	1.50E-07	1.26E-19	0.00E+00
0.850	1.88E-01	1.49E-01	1.05E-01	4.01E-02	7.31E-04	2.59E-07	6.08E-19	0.00E+00
0.875	1.97E-01	1.56E-01	1.11E-01	4.28E-02	8.74E-04	4.48E-07	4.06E-18	0.00E+00
0.900	2.04E-01	1.63E-01	1.16E-01	4.62E-02	1.11E-03	8.26E-07	2.51E-17	0.00E+00
0.925	2.14E-01	1.72E-01	1.23E-01	5.00E-02	1.47E-03	1.74E-06	2.18E-16	0.00E+00
0.950	2.30E-01	1.84E-01	1.34E-01	5.38E-02	1.98E-03	3.46E-06	2.00E-15	0.00E+00
0.975	2.58E-01	2.05E-01	1.48E-01	6.13E-02	2.53E-03	7.26E-06	1.57E-14	0.00E+00
1.000	5.47E-01	4.07E-01	2.61E-01	9.34E-02	6.28E-03	6.77E-05	2.08E-11	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	1.352E-01
2	0.000E+00	1.348E-01
3	0.000E+00	1.349E-01

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

## Coefficients for peak All Pathways Dose

Coefficient =	PCC		SRC		PRCC		SRRC	
	1		1		1		1	
Repetition =	1		1		1		1	
Description of Probabilistic Variable	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff
Cover erosion rate	23	0.02	23	0.01	25	0.02	25	0.01
Density of contaminated zone	3	0.63	3	0.41	3	0.72	3	0.45
Contaminated zone erosion rate	15	0.03	15	0.02	27	-0.02	27	-0.01
Contaminated zone total porosity	1	-0.74	1	-0.55	1	-0.77	1	-0.52
Contaminated zone hydraulic conductivity	27	-0.01	27	-0.01	20	0.03	20	0.01
Contaminated zone b parameter	17	-0.03	17	-0.02	11	-0.04	11	-0.02
Evapotranspiration coefficient	33	-0.01	33	-0.01	28	-0.02	28	-0.01
Wind Speed	39	0.00	39	0.00	21	0.03	21	0.01
Runoff coefficient	9	0.04	9	0.02	17	0.03	17	0.01
Density of saturated zone	7	0.05	8	0.03	6	0.07	6	0.03
Saturated zone total porosity	25	-0.02	25	-0.01	13	-0.04	13	-0.02
Saturated zone effective porosity	24	-0.02	24	-0.01	19	-0.03	19	-0.01
Saturated zone hydraulic conductivity	4	-0.47	4	-0.27	4	-0.54	4	-0.27
Saturated zone hydraulic gradient	2	-0.65	2	-0.44	2	-0.76	2	-0.51
Well pump intake depth	18	-0.03	18	-0.02	31	0.01	31	0.01
Mass loading for inhalation	26	-0.02	26	-0.01	15	0.04	15	0.02
Indoor dust filtration factor	34	0.01	34	0.00	32	-0.01	32	-0.01
External gamma shielding factor	35	0.01	35	0.00	41	0.00	41	0.00
Depth of soil mixing layer	28	0.01	29	0.01	22	-0.03	22	-0.01
Depth of roots	6	0.05	6	0.03	38	0.00	38	0.00
Wet weight crop yield of fruit, grain and non-leafy vegetables	41	0.00	41	0.00	36	0.01	36	0.00
Weathering removal constant of all vegetation	30	0.01	30	0.01	35	0.01	35	0.00
Wet foliar interception fraction of leafy vegetables	37	0.00	37	0.00	26	0.02	26	0.01
Plant transfer factor for Co	8	0.05	7	0.03	9	0.06	9	0.03
Meat transfer factor for Co	20	0.02	20	0.01	14	0.04	14	0.02
Milk transfer factor for Co	22	-0.02	22	-0.01	5	-0.08	5	-0.03
Plant transfer factor for Cs	5	0.06	5	0.03	34	-0.01	34	0.00
Meat transfer factor for Cs	19	-0.03	19	-0.01	18	-0.03	18	-0.01
Milk transfer factor for Cs	32	-0.01	32	-0.01	37	-0.01	37	0.00
Plant transfer factor for Eu	16	-0.03	16	-0.02	40	0.00	40	0.00
Meat transfer factor for Eu	21	0.02	21	0.01	12	0.04	12	0.02
Milk transfer factor for Eu	13	-0.03	13	-0.02	29	-0.02	29	-0.01
Plant transfer factor for H	40	0.00	40	0.00	39	0.00	39	0.00
Meat transfer factor for H	29	0.01	28	0.01	7	0.07	7	0.03
Milk transfer factor for H	31	0.01	31	0.01	23	0.03	23	0.01
Plant transfer factor for Ni	38	0.00	38	0.00	33	0.01	33	0.00
Meat transfer factor for Ni	11	0.04	11	0.02	24	0.02	24	0.01
Milk transfer factor for Ni	12	0.04	12	0.02	30	0.01	30	0.01
Plant transfer factor for Sr	36	-0.01	36	0.00	8	0.06	8	0.03
Meat transfer factor for Sr	14	-0.03	14	-0.02	16	-0.03	16	-0.01
Milk transfer factor for Sr	10	0.04	10	0.02	10	0.06	10	0.02
R-SQUARE		0.75		0.75		0.81		0.81

-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	39	0.00	39	0.00	10	0.04	10	0.02
Density of contaminated zone	3	0.62	3	0.40	3	0.70	3	0.43
Contaminated zone erosion rate	34	0.01	34	0.00	27	-0.01	27	-0.01
Contaminated zone total porosity	1	-0.73	1	-0.54	2	-0.76	2	-0.51
Contaminated zone hydraulic conductivity	11	-0.04	11	-0.02	14	-0.03	14	-0.01
Contaminated zone b parameter	8	-0.05	8	-0.03	23	-0.02	23	-0.01
Evapotranspiration coefficient	41	0.00	41	0.00	22	-0.02	22	-0.01
Wind Speed	21	0.03	21	0.01	26	0.02	26	0.01
Runoff coefficient	7	0.06	7	0.03	17	0.03	17	0.01
Density of saturated zone	18	-0.03	18	-0.01	39	0.00	39	0.00
Saturated zone total porosity	29	0.02	28	0.01	18	0.03	18	0.01
Saturated zone effective porosity	24	-0.02	24	-0.01	5	0.06	5	0.03
Saturated zone hydraulic conductivity	4	-0.49	4	-0.29	4	-0.53	4	-0.28
Saturated zone hydraulic gradient	2	-0.68	2	-0.47	1	-0.77	1	-0.53
Well pump intake depth	27	0.02	27	0.01	19	-0.03	19	-0.01
Mass loading for inhalation	20	-0.03	20	-0.01	38	0.00	38	0.00
Indoor dust filtration factor	10	0.05	10	0.02	20	0.02	20	0.01
External gamma shielding factor	33	0.01	33	0.01	24	-0.02	24	-0.01
Depth of soil mixing layer	5	0.08	5	0.04	9	-0.04	9	-0.02
Depth of roots	38	0.01	38	0.00	37	0.00	37	0.00
Wet weight crop yield of fruit, grain and non-leafy vegetables	40	0.00	40	0.00	28	0.01	28	0.01
Weathering removal constant of all vegetation	30	0.02	30	0.01	33	-0.01	33	0.00
Wet foliar interception fraction of leafy vegetables	16	-0.03	16	-0.02	25	-0.02	25	-0.01
Plant transfer factor for Co	25	0.02	25	0.01	6	0.05	6	0.02
Meat transfer factor for Co	32	0.01	32	0.01	32	-0.01	32	0.00
Milk transfer factor for Co	15	-0.03	15	-0.02	7	-0.05	7	-0.02
Plant transfer factor for Cs	31	0.01	31	0.01	16	0.03	16	0.01
Meat transfer factor for Cs	26	0.02	26	0.01	41	0.00	41	0.00
Milk transfer factor for Cs	36	0.01	36	0.00	29	-0.01	29	0.00
Plant transfer factor for Eu	13	-0.04	13	-0.02	31	-0.01	31	0.00
Meat transfer factor for Eu	19	0.03	19	0.01	40	0.00	40	0.00
Milk transfer factor for Eu	12	-0.04	12	-0.02	11	-0.04	11	-0.02
Plant transfer factor for H	17	0.03	17	0.02	8	0.05	8	0.02
Meat transfer factor for H	37	-0.01	37	0.00	36	0.00	36	0.00
Milk transfer factor for H	23	-0.02	23	-0.01	12	0.03	12	0.01
Plant transfer factor for Ni	6	-0.07	6	-0.04	34	-0.01	34	0.00
Meat transfer factor for Ni	22	0.03	22	0.01	35	-0.01	35	0.00
Milk transfer factor for Ni	9	-0.05	9	-0.02	15	0.03	15	0.01
Plant transfer factor for Sr	14	-0.04	14	-0.02	13	-0.03	13	-0.01
Meat transfer factor for Sr	35	-0.01	35	0.00	30	0.01	30	0.00
Milk transfer factor for Sr	28	0.02	29	0.01	21	0.02	21	0.01
R-SQUARE		0.74		0.74		0.81		0.81

-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	28	0.01	28	0.01	8	0.06	7	0.03
Density of contaminated zone	3	0.63	3	0.42	3	0.73	3	0.45
Contaminated zone erosion rate	29	0.01	29	0.01	18	0.03	18	0.01
Contaminated zone total porosity	1	-0.71	1	-0.53	2	-0.76	2	-0.51
Contaminated zone hydraulic conductivity	5	-0.05	5	-0.02	23	-0.02	23	-0.01
Contaminated zone b parameter	18	-0.02	17	-0.01	33	-0.01	33	0.00
Evapotranspiration coefficient	30	-0.01	30	-0.01	26	0.01	26	0.01
Wind Speed	32	-0.01	32	0.00	31	-0.01	31	0.00
Runoff coefficient	39	0.00	39	0.00	36	-0.01	36	0.00
Density of saturated zone	12	0.03	12	0.02	14	-0.04	14	-0.02
Saturated zone total porosity	40	0.00	40	0.00	22	-0.02	22	-0.01
Saturated zone effective porosity	15	0.02	15	0.01	9	0.06	9	0.02
Saturated zone hydraulic conductivity	4	-0.47	4	-0.28	4	-0.53	4	-0.27
Saturated zone hydraulic gradient	2	-0.65	2	-0.45	1	-0.77	1	-0.52
Well pump intake depth	6	0.04	6	0.02	34	0.01	34	0.00
Mass loading for inhalation	37	0.00	37	0.00	16	-0.03	16	-0.01
Indoor dust filtration factor	31	0.01	31	0.01	21	0.02	21	0.01
External gamma shielding factor	17	0.02	18	0.01	32	0.01	32	0.00
Depth of soil mixing layer	34	-0.01	34	0.00	41	0.00	41	0.00
Depth of roots	16	0.02	16	0.01	13	0.04	13	0.02
Wet weight crop yield of fruit, grain and non-leafy vegetables	20	0.02	20	0.01	20	-0.03	20	-0.01
Weathering removal constant of all vegetation	23	0.02	23	0.01	24	-0.02	24	-0.01
Wet foliar interception fraction of leafy vegetables	22	-0.02	22	-0.01	35	-0.01	35	0.00
Plant transfer factor for Co	27	-0.01	27	-0.01	10	-0.06	10	-0.02
Meat transfer factor for Co	41	0.00	41	0.00	19	0.03	19	0.01
Milk transfer factor for Co	8	0.04	8	0.02	12	0.04	12	0.02
Plant transfer factor for Cs	35	-0.01	35	0.00	37	0.00	37	0.00
Meat transfer factor for Cs	21	0.02	21	0.01	11	-0.05	11	-0.02
Milk transfer factor for Cs	13	-0.03	13	-0.01	28	-0.01	28	0.00
Plant transfer factor for Eu	7	-0.04	7	-0.02	30	-0.01	30	0.00
Meat transfer factor for Eu	38	0.00	38	0.00	17	0.03	17	0.01
Milk transfer factor for Eu	14	-0.03	14	-0.01	15	-0.03	15	-0.01
Plant transfer factor for H	33	-0.01	33	0.00	40	0.00	40	0.00
Meat transfer factor for H	10	0.04	10	0.02	6	-0.06	6	-0.03
Milk transfer factor for H	19	0.02	19	0.01	7	0.06	8	0.03
Plant transfer factor for Ni	9	0.04	9	0.02	27	0.01	27	0.00
Meat transfer factor for Ni	24	0.02	24	0.01	39	0.00	39	0.00
Milk transfer factor for Ni	11	-0.03	11	-0.02	38	0.00	38	0.00
Plant transfer factor for Sr	26	0.02	25	0.01	5	0.07	5	0.03
Meat transfer factor for Sr	25	0.02	26	0.01	29	0.01	29	0.00
Milk transfer factor for Sr	36	0.00	36	0.00	25	0.01	25	0.01
R-SQUARE		0.73		0.73		0.82		0.82

-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.