

Probabilistic results summary : RESRAD Default

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## Probabilistic Input

Number of Sample Runs: 3000

Number	Name	Distribution	Parameters								
1	DENSCV	TRUNCATED NORMAL	1.51	.159	.001	.999					
2	VCZ	CONTINUOUS LOGARITHMIC4	5.E-8	0	.0007	.22	.005	.95	.2	1	
3	TPCZ	TRUNCATED NORMAL	.43	.06	.001	.999					
4	HCCZ	LOGUNIFORM	786	17000							
5	BCZ	TRUNCATED LOGNORMAL-N	-.0235	.216	.001	.999					
6	EVAPTR	UNIFORM	.5	.75							
7	WIND	BOUNDED LOGNORMAL-N	1.445	.2419	1.4	13					
8	RUNOFF	UNIFORM	.1	.8							
9	DENSAQ	TRUNCATED NORMAL	1.51	.16	.001	.999					
10	TPSZ	TRUNCATED NORMAL	.43	.06	.001	.999					
11	EPSZ	TRUNCATED NORMAL	.383	.061	.001	.999					
12	HCSZ	LOGUNIFORM	786	17000							
13	HGWT	BOUNDED LOGNORMAL-N	-5.11	1.77	.00007	.5					
14	DWIBWT	TRIANGULAR	6	10	30						
15	MLINH	CONTINUOUS LINEAR	8	0	0	.000008	.0151	.000016	.1365	.00003	.8119
16	DM	TRIANGULAR	0	.15	.6						
17	DROOT	UNIFORM	.3	4							
18	WLAM	TRIANGULAR	5.1	18	84						
19	YV(1)	TRUNCATED LOGNORMAL-N	.56	.48	.001	.999					
20	RWET(2)	TRIANGULAR	.06	.67	.95						
21	SHF3	UNIFORM	.15	.95							
22	SHF1	BOUNDED LOGNORMAL-N	-1.3	.59	.044	1					
23	VCV	CONTINUOUS LOGARITHMIC4	5.E-8	0	.0007	.22	.005	.95	.2	1	
24	TPUZ(1)	TRUNCATED NORMAL	.43	.06	.001	.999					
25	EPUZ(1)	TRUNCATED NORMAL	.383	.061	.001	.999					
26	HCUZ(1)	LOGUNIFORM	786	17000							
27	BUZ(1)	TRUNCATED LOGNORMAL-N	-.0253	.216	.001	.999					
28	BRTF(27,1)	LOGNORMAL-N	-2.53	.916291							
29	BRTF(27,2)	LOGNORMAL-N	-3.51	1.029619							
30	BRTF(27,3)	LOGNORMAL-N	-6.21	.7							
31	BRTF(55,1)	LOGNORMAL-N	-3.22	.993252							
32	BRTF(55,2)	LOGNORMAL-N	-3	.405465							
33	BRTF(55,3)	LOGNORMAL-N	-4.61	.47							
34	BRTF(28,1)	LOGNORMAL-N	-3	.916291							
35	BRTF(28,2)	LOGNORMAL-N	-5.3	.916291							
36	BRTF(28,3)	LOGNORMAL-N	-3.91	.69315							
37	BRTF(38,1)	LOGNORMAL-N	-1.2	.993252							
38	BRTF(38,2)	LOGNORMAL-N	-4.61	.405465							
39	BRTF(38,3)	LOGNORMAL-N	-6.21	.47							
40	DENSCZ	TRUNCATED NORMAL	1.51	.16	.001	.999					
41	DENSUZ(1)	TRUNCATED NORMAL	1.51	.16	.001	.999					

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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
Sr-90										
Min	0.00E+00	3.51E-02	3.51E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	7.95E+01	4.19E+01	4.19E+01	3.10E+01	1.69E+01	2.01E+00	5.60E-01	1.23E-01	5.52E-04	0.00E+00
Avg	1.08E+00	1.27E+00	1.26E+00	7.76E-01	3.15E-01	2.24E-02	5.01E-02	1.86E-02	2.00E-05	0.00E+00
Std	6.41E+00	2.33E+00	2.34E+00	1.48E+00	6.83E-01	7.45E-02	8.57E-02	2.28E-02	7.01E-05	0.00E+00
ΣALL										
Min	0.00E+00	3.51E-02	3.51E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	7.95E+01	4.19E+01	4.19E+01	3.10E+01	1.69E+01	2.01E+00	5.60E-01	1.23E-01	5.52E-04	0.00E+00
Avg	1.08E+00	1.27E+00	1.26E+00	7.76E-01	3.15E-01	2.24E-02	5.01E-02	1.86E-02	2.00E-05	0.00E+00
Std	6.41E+00	2.33E+00	2.34E+00	1.48E+00	6.83E-01	7.45E-02	8.57E-02	2.28E-02	7.01E-05	0.00E+00

ΣALL is total dose summed for all nuclides.

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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
Sr-90									
Min		4.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		9.95E-05	7.37E-05	4.01E-05	7.16E-06	5.50E-06	1.31E-06	5.89E-09	1.19E-39
Avg		2.25E-06	1.48E-06	7.13E-07	2.97E-07	7.94E-07	1.90E-07	2.02E-10	4.40E-43
Std		4.33E-06	2.99E-06	1.54E-06	5.78E-07	9.06E-07	2.38E-07	7.31E-10	0.00E+00
ΣALL									
Min		4.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		9.95E-05	7.37E-05	4.01E-05	7.16E-06	5.50E-06	1.31E-06	5.89E-09	1.19E-39
Avg		2.25E-06	1.48E-06	7.13E-07	2.97E-07	7.94E-07	1.90E-07	2.02E-10	4.40E-43
Std		4.33E-06	2.99E-06	1.54E-06	5.78E-07	9.06E-07	2.38E-07	7.31E-10	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
Sr-90									
Min		2.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.58E-02	1.29E-02	8.74E-03	2.21E-03	5.96E-06	1.01E-10	1.43E-26	0.00E+00
Avg		5.89E-03	3.67E-03	1.53E-03	1.19E-04	3.25E-08	9.04E-14	5.82E-30	0.00E+00
Std		2.14E-03	1.62E-03	1.02E-03	1.81E-04	2.35E-07	2.24E-12	0.00E+00	0.00E+00
ΣALL									
Min		2.29E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.58E-02	1.29E-02	8.74E-03	2.21E-03	5.96E-06	1.01E-10	1.43E-26	0.00E+00
Avg		5.89E-03	3.67E-03	1.53E-03	1.19E-04	3.25E-08	9.04E-14	5.82E-30	0.00E+00
Std		2.14E-03	1.62E-03	1.02E-03	1.81E-04	2.35E-07	2.24E-12	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
Sr-90									
Min		2.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		7.80E-05	5.43E-05	2.63E-05	3.71E-06	1.42E-08	2.74E-13	3.89E-29	0.00E+00
Avg		7.82E-06	4.84E-06	2.00E-06	1.47E-07	3.46E-11	1.52E-16	1.43E-32	0.00E+00
Std		6.41E-06	4.25E-06	2.11E-06	2.81E-07	3.60E-10	5.27E-15	0.00E+00	0.00E+00
ΣALL									
Min		2.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		7.80E-05	5.43E-05	2.63E-05	3.71E-06	1.42E-08	2.74E-13	3.89E-29	0.00E+00
Avg		7.82E-06	4.84E-06	2.00E-06	1.47E-07	3.46E-11	1.52E-16	1.43E-32	0.00E+00
Std		6.41E-06	4.25E-06	2.11E-06	2.81E-07	3.60E-10	5.27E-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): 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
Sr-90									
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
Sr-90									
Min		8.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		2.61E+01	1.93E+01	1.05E+01	1.25E+00	8.72E-04	6.08E-09	2.01E-25	0.00E+00
Avg		8.43E-01	5.17E-01	2.10E-01	1.50E-02	2.69E-06	4.50E-12	1.18E-28	0.00E+00
Std		1.57E+00	9.92E-01	4.58E-01	5.04E-02	2.42E-05	1.20E-10	0.00E+00	0.00E+00
ΣALL									
Min		8.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		2.61E+01	1.93E+01	1.05E+01	1.25E+00	8.72E-04	6.08E-09	2.01E-25	0.00E+00
Avg		8.43E-01	5.17E-01	2.10E-01	1.50E-02	2.69E-06	4.50E-12	1.18E-28	0.00E+00
Std		1.57E+00	9.92E-01	4.58E-01	5.04E-02	2.42E-05	1.20E-10	0.00E+00	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
Sr-90									
Min		4.82E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		5.89E+00	4.36E+00	2.37E+00	2.82E-01	1.08E-04	8.13E-10	6.99E-26	0.00E+00
Avg		1.63E-01	1.01E-01	4.10E-02	2.93E-03	5.35E-07	9.10E-13	3.36E-29	0.00E+00
Std		3.21E-01	2.06E-01	9.51E-02	1.02E-02	3.80E-06	1.92E-11	0.00E+00	0.00E+00
ΣALL									
Min		4.82E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		5.89E+00	4.36E+00	2.37E+00	2.82E-01	1.08E-04	8.13E-10	6.99E-26	0.00E+00
Avg		1.63E-01	1.01E-01	4.10E-02	2.93E-03	5.35E-07	9.10E-13	3.36E-29	0.00E+00
Std		3.21E-01	2.06E-01	9.51E-02	1.02E-02	3.80E-06	1.92E-11	0.00E+00	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
Sr-90									
Min		5.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.01E+01	7.34E+00	4.00E+00	4.76E-01	1.32E-04	2.13E-09	3.01E-25	0.00E+00
Avg		2.50E-01	1.54E-01	6.21E-02	4.35E-03	7.30E-07	1.49E-12	1.13E-28	0.00E+00
Std		5.26E-01	3.27E-01	1.47E-01	1.51E-02	4.99E-06	4.20E-11	0.00E+00	0.00E+00
ΣALL									
Min		5.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.01E+01	7.34E+00	4.00E+00	4.76E-01	1.32E-04	2.13E-09	3.01E-25	0.00E+00
Avg		2.50E-01	1.54E-01	6.21E-02	4.35E-03	7.30E-07	1.49E-12	1.13E-28	0.00E+00
Std		5.26E-01	3.27E-01	1.47E-01	1.51E-02	4.99E-06	4.20E-11	0.00E+00	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
Sr-90									
Min		2.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.98E-03	1.65E-03	1.14E-03	3.19E-04	1.22E-06	2.35E-11	3.34E-27	0.00E+00
Avg		1.15E-03	7.10E-04	2.93E-04	2.16E-05	5.10E-09	1.79E-14	1.39E-30	0.00E+00
Std		4.48E-04	3.32E-04	2.00E-04	3.34E-05	4.02E-08	5.12E-13	0.00E+00	0.00E+00
ΣALL									
Min		2.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.98E-03	1.65E-03	1.14E-03	3.19E-04	1.22E-06	2.35E-11	3.34E-27	0.00E+00
Avg		1.15E-03	7.10E-04	2.93E-04	2.16E-05	5.10E-09	1.79E-14	1.39E-30	0.00E+00
Std		4.48E-04	3.32E-04	2.00E-04	3.34E-05	4.02E-08	5.12E-13	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
Sr-90									
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	3.93E-01	9.17E-02	3.96E-04	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.66E-02	1.36E-02	1.46E-05	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.20E-02	1.66E-02	5.10E-05	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	3.93E-01	9.17E-02	3.96E-04	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.66E-02	1.36E-02	1.46E-05	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.20E-02	1.66E-02	5.10E-05	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
Sr-90									
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
Sr-90									
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
Sr-90									
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	1.31E-01	3.22E-02	8.81E-05	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.95E-03	1.46E-03	1.56E-06	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.10E-03	2.19E-03	6.14E-06	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	1.31E-01	3.22E-02	8.81E-05	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.95E-03	1.46E-03	1.56E-06	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.10E-03	2.19E-03	6.14E-06	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
Sr-90									
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	6.64E-02	2.44E-02	9.58E-05	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-03	1.62E-03	1.74E-06	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.99E-03	2.26E-03	6.58E-06	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	6.64E-02	2.44E-02	9.58E-05	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.31E-03	1.62E-03	1.74E-06	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.99E-03	2.26E-03	6.58E-06	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
Sr-90									
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	1.06E-01	2.40E-02	1.02E-04	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.32E-03	1.92E-03	2.07E-06	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-02	2.79E-03	8.18E-06	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	1.06E-01	2.40E-02	1.02E-04	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.32E-03	1.92E-03	2.07E-06	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-02	2.79E-03	8.18E-06	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	1.08E-01	5.06E-02	8.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.050	1.38E-01	7.45E-02	1.80E-02	5.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.075	1.61E-01	8.89E-02	2.33E-02	1.18E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.100	1.84E-01	1.03E-01	2.96E-02	1.87E-04	4.96E-15	1.74E-26	0.00E+00	0.00E+00
0.125	2.03E-01	1.15E-01	3.56E-02	3.04E-04	5.00E-12	3.42E-20	0.00E+00	0.00E+00
0.150	2.27E-01	1.29E-01	4.07E-02	4.12E-04	6.97E-11	1.84E-17	0.00E+00	0.00E+00
0.175	2.53E-01	1.41E-01	4.59E-02	5.60E-04	2.44E-10	1.50E-15	0.00E+00	0.00E+00
0.200	2.72E-01	1.59E-01	5.09E-02	7.12E-04	6.88E-10	5.12E-14	0.00E+00	0.00E+00
0.225	2.92E-01	1.74E-01	5.70E-02	8.87E-04	1.48E-09	9.01E-13	0.00E+00	0.00E+00
0.250	3.14E-01	1.86E-01	6.23E-02	1.09E-03	3.81E-09	1.08E-11	0.00E+00	0.00E+00
0.275	3.31E-01	1.97E-01	6.72E-02	1.29E-03	8.18E-09	9.50E-11	0.00E+00	0.00E+00
0.300	3.56E-01	2.11E-01	7.43E-02	1.53E-03	1.68E-08	1.00E-09	0.00E+00	0.00E+00
0.325	3.81E-01	2.27E-01	8.02E-02	1.77E-03	3.14E-08	8.61E-09	0.00E+00	0.00E+00
0.350	4.07E-01	2.46E-01	8.76E-02	2.12E-03	5.32E-08	6.53E-08	0.00E+00	0.00E+00
0.375	4.34E-01	2.59E-01	9.52E-02	2.47E-03	9.54E-08	4.22E-07	0.00E+00	0.00E+00
0.400	4.59E-01	2.78E-01	1.02E-01	2.82E-03	1.57E-07	2.64E-06	0.00E+00	0.00E+00
0.425	4.90E-01	2.97E-01	1.10E-01	3.27E-03	2.94E-07	1.45E-05	0.00E+00	0.00E+00
0.450	5.22E-01	3.13E-01	1.17E-01	3.70E-03	4.88E-07	1.01E-04	0.00E+00	0.00E+00
0.475	5.63E-01	3.35E-01	1.27E-01	4.16E-03	8.75E-07	4.99E-04	0.00E+00	0.00E+00
0.500	6.02E-01	3.62E-01	1.36E-01	4.70E-03	1.57E-06	3.45E-03	0.00E+00	0.00E+00
0.525	6.47E-01	3.90E-01	1.46E-01	5.31E-03	3.27E-06	9.91E-03	0.00E+00	0.00E+00
0.550	6.89E-01	4.17E-01	1.62E-01	6.03E-03	6.75E-06	1.64E-02	0.00E+00	0.00E+00
0.575	7.55E-01	4.54E-01	1.76E-01	7.20E-03	1.60E-05	1.91E-02	0.00E+00	0.00E+00
0.600	8.16E-01	4.91E-01	1.87E-01	8.20E-03	5.04E-05	2.12E-02	0.00E+00	0.00E+00
0.625	8.70E-01	5.35E-01	2.04E-01	9.28E-03	2.64E-04	2.37E-02	0.00E+00	0.00E+00
0.650	9.34E-01	5.77E-01	2.23E-01	1.03E-02	5.29E-03	2.56E-02	0.00E+00	0.00E+00
0.675	1.01E+00	6.21E-01	2.44E-01	1.14E-02	2.76E-02	2.81E-02	0.00E+00	0.00E+00
0.700	1.10E+00	6.77E-01	2.66E-01	1.33E-02	5.54E-02	3.00E-02	0.00E+00	0.00E+00
0.725	1.19E+00	7.33E-01	2.90E-01	1.55E-02	7.46E-02	3.20E-02	0.00E+00	0.00E+00
0.750	1.29E+00	7.95E-01	3.20E-01	1.77E-02	9.09E-02	3.44E-02	0.00E+00	0.00E+00
0.775	1.42E+00	8.69E-01	3.52E-01	2.00E-02	1.05E-01	3.66E-02	2.87E-29	0.00E+00
0.800	1.54E+00	9.74E-01	3.87E-01	2.28E-02	1.18E-01	3.92E-02	1.80E-24	0.00E+00
0.825	1.75E+00	1.10E+00	4.44E-01	2.76E-02	1.30E-01	4.21E-02	1.64E-20	0.00E+00
0.850	1.99E+00	1.21E+00	5.11E-01	3.34E-02	1.43E-01	4.51E-02	5.64E-17	0.00E+00
0.875	2.26E+00	1.42E+00	5.89E-01	4.04E-02	1.56E-01	4.81E-02	9.89E-12	0.00E+00
0.900	2.73E+00	1.66E+00	6.94E-01	5.18E-02	1.79E-01	5.15E-02	5.75E-07	0.00E+00
0.925	3.32E+00	2.07E+00	8.68E-01	6.59E-02	2.04E-01	5.63E-02	1.38E-04	0.00E+00
0.950	4.31E+00	2.71E+00	1.09E+00	9.37E-02	2.36E-01	6.29E-02	1.95E-04	0.00E+00
0.975	6.69E+00	4.04E+00	1.66E+00	1.47E-01	2.85E-01	7.22E-02	2.65E-04	0.00E+00
1.000	4.19E+01	3.10E+01	1.69E+01	2.01E+00	5.60E-01	1.23E-01	5.52E-04	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	1.232E+00
2	0.000E+00	1.280E+00
3	0.000E+00	1.278E+00

Title : RESRAD Default

Input File : ZION SOIL 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
Density of cover material	15	0.03	15	0.02	24	0.03	24	0.01
Contaminated zone erosion rate	7	-0.05	7	-0.03	6	-0.10	6	-0.02
Contaminated zone total porosity	22	0.02	22	0.01	16	-0.05	16	-0.01
Contaminated zone hydraulic conductivity	20	-0.02	20	-0.01	26	0.03	26	0.01
Contaminated zone b parameter	11	0.04	11	0.02	38	0.00	38	0.00
Evapotranspiration coefficient	16	0.03	16	0.02	11	0.07	11	0.02
Wind Speed	34	0.01	34	0.00	12	0.06	12	0.01
Runoff coefficient	12	0.03	12	0.02	4	0.16	4	0.04
Density of saturated zone	24	0.02	24	0.01	18	0.04	18	0.01
Saturated zone total porosity	13	0.03	13	0.02	13	0.05	13	0.01
Saturated zone effective porosity	31	-0.01	31	-0.01	27	-0.02	27	-0.01
Saturated zone hydraulic conductivity	41	0.00	41	0.00	22	-0.03	22	-0.01
Saturated zone hydraulic gradient	35	0.01	35	0.00	14	0.05	14	0.01
Well pump intake depth	14	-0.03	14	-0.02	19	-0.04	19	-0.01
Mass loading for inhalation	28	-0.01	28	-0.01	32	0.01	32	0.00
Depth of soil mixing layer	17	-0.03	17	-0.01	9	-0.08	9	-0.02
Depth of roots	2	-0.53	2	-0.37	2	-0.90	2	-0.51
Weathering removal constant of all vegetation	8	-0.04	8	-0.03	34	-0.01	34	0.00
Wet weight crop yield of fruit, grain and non-leafy vegetables	23	0.02	23	0.01	37	0.00	37	0.00
Wet foliar interception fraction of leafy vegetables	30	0.01	30	0.01	29	-0.01	29	0.00
Indoor dust filtration factor	9	0.04	9	0.02	41	0.00	41	0.00
External gamma shielding factor	18	-0.02	18	-0.01	39	0.00	39	0.00
Cover erosion rate	29	0.01	29	0.01	31	-0.01	31	0.00
Total Porosity of Unsaturated zone 1	21	0.02	21	0.01	40	0.00	40	0.00
Effective Porosity of Unsaturated zone 1	10	0.04	10	0.02	15	0.05	15	0.01
Hydraulic Conductivity of Unsaturated zone 1	37	0.01	36	0.00	30	-0.01	30	0.00
b Parameter of Unsaturated zone 1	25	0.02	26	0.01	10	0.07	10	0.02
Plant transfer factor for Co	33	-0.01	33	-0.01	33	0.01	33	0.00
Meat transfer factor for Co	26	0.02	25	0.01	21	0.03	21	0.01
Milk transfer factor for Co	38	0.00	38	0.00	23	0.03	23	0.01
Plant transfer factor for Cs	19	0.02	19	0.01	25	-0.03	25	-0.01
Meat transfer factor for Cs	6	0.05	6	0.03	35	0.01	35	0.00
Milk transfer factor for Cs	36	0.01	37	0.00	17	0.04	17	0.01
Plant transfer factor for Ni	40	0.00	40	0.00	8	0.08	8	0.02
Meat transfer factor for Ni	32	-0.01	32	-0.01	28	-0.01	28	0.00
Milk transfer factor for Ni	27	-0.02	27	-0.01	20	0.03	20	0.01
Plant transfer factor for Sr	1	0.76	1	0.71	1	0.96	1	0.82
Meat transfer factor for Sr	4	0.09	4	0.05	5	0.15	5	0.04
Milk transfer factor for Sr	3	0.12	3	0.07	3	0.32	3	0.08
Density of contaminated zone	5	-0.07	5	-0.04	7	0.10	7	0.02
Density of Unsaturated zone 1	39	0.00	39	0.00	36	0.00	36	0.00
R-SQUARE		0.66		0.66		0.94		0.94

-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 SOIL 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
Density of cover material	38	0.00	38	0.00	32	-0.01	32	0.00
Contaminated zone erosion rate	12	-0.04	12	-0.03	12	-0.06	12	-0.01
Contaminated zone total porosity	13	-0.04	14	-0.02	14	0.05	14	0.01
Contaminated zone hydraulic conductivity	6	-0.06	6	-0.04	36	0.01	36	0.00
Contaminated zone b parameter	29	-0.01	29	-0.01	38	0.00	38	0.00
Evapotranspiration coefficient	7	0.06	7	0.04	7	0.12	7	0.03
Wind Speed	35	0.00	35	0.00	28	0.02	28	0.00
Runoff coefficient	41	0.00	41	0.00	5	0.16	5	0.04
Density of saturated zone	30	-0.01	30	-0.01	19	-0.04	19	-0.01
Saturated zone total porosity	37	0.00	37	0.00	17	0.04	17	0.01
Saturated zone effective porosity	32	0.01	32	0.00	23	0.02	23	0.01
Saturated zone hydraulic conductivity	17	-0.03	17	-0.02	39	0.00	39	0.00
Saturated zone hydraulic gradient	10	0.05	10	0.03	40	0.00	40	0.00
Well pump intake depth	28	0.01	28	0.01	10	-0.07	10	-0.02
Mass loading for inhalation	11	-0.05	11	-0.03	29	0.02	29	0.00
Depth of soil mixing layer	23	-0.02	23	-0.01	6	-0.15	6	-0.04
Depth of roots	2	-0.47	2	-0.31	2	-0.90	2	-0.51
Weathering removal constant of all vegetation	4	-0.08	4	-0.05	21	-0.03	21	-0.01
Wet weight crop yield of fruit, grain and non-leafy vegetables	33	0.01	33	0.00	25	0.02	25	0.01
Wet foliar interception fraction of leafy vegetables	20	-0.02	21	-0.01	15	-0.04	15	-0.01
Indoor dust filtration factor	36	0.00	36	0.00	41	0.00	41	0.00
External gamma shielding factor	14	-0.04	13	-0.02	16	0.04	16	0.01
Cover erosion rate	22	-0.02	22	-0.01	24	-0.02	24	-0.01
Total Porosity of Unsaturated zone 1	39	0.00	39	0.00	27	-0.02	27	-0.01
Effective Porosity of Unsaturated zone 1	15	0.04	15	0.02	11	-0.07	11	-0.02
Hydraulic Conductivity of Unsaturated zone 1	19	-0.02	19	-0.01	34	0.01	34	0.00
b Parameter of Unsaturated zone 1	18	-0.03	18	-0.01	26	0.02	26	0.01
Plant transfer factor for Co	26	0.02	26	0.01	13	0.06	13	0.01
Meat transfer factor for Co	16	0.03	16	0.02	20	-0.04	20	-0.01
Milk transfer factor for Co	24	0.02	24	0.01	31	0.01	31	0.00
Plant transfer factor for Cs	8	-0.06	8	-0.04	35	-0.01	35	0.00
Meat transfer factor for Cs	40	0.00	40	0.00	22	0.03	22	0.01
Milk transfer factor for Cs	27	-0.01	27	-0.01	18	-0.04	18	-0.01
Plant transfer factor for Ni	31	-0.01	31	-0.01	30	0.01	30	0.00
Meat transfer factor for Ni	21	0.02	20	0.01	8	-0.08	8	-0.02
Milk transfer factor for Ni	34	0.01	34	0.00	33	0.01	33	0.00
Plant transfer factor for Sr	1	0.78	1	0.73	1	0.96	1	0.81
Meat transfer factor for Sr	3	0.11	3	0.07	4	0.16	4	0.04
Milk transfer factor for Sr	5	0.08	5	0.04	3	0.36	3	0.10
Density of contaminated zone	9	0.06	9	0.03	9	0.08	9	0.02
Density of Unsaturated zone 1	25	0.02	25	0.01	37	-0.01	37	0.00
R-SQUARE		0.67		0.67		0.94		0.94

-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 SOIL 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
Density of cover material	6	-0.06	6	-0.04	15	0.04	15	0.01
Contaminated zone erosion rate	34	0.01	34	0.00	9	-0.07	9	-0.02
Contaminated zone total porosity	22	0.02	22	0.01	37	-0.01	37	0.00
Contaminated zone hydraulic conductivity	21	-0.02	21	-0.01	22	0.02	22	0.01
Contaminated zone b parameter	18	-0.03	18	-0.02	16	-0.04	16	-0.01
Evapotranspiration coefficient	9	0.04	9	0.03	8	0.12	8	0.03
Wind Speed	35	0.01	35	0.00	24	-0.02	24	-0.01
Runoff coefficient	28	0.02	28	0.01	4	0.24	4	0.06
Density of saturated zone	15	0.03	15	0.02	39	0.00	39	0.00
Saturated zone total porosity	33	0.01	33	0.01	17	-0.04	17	-0.01
Saturated zone effective porosity	11	0.04	11	0.03	28	0.02	28	0.00
Saturated zone hydraulic conductivity	25	-0.02	25	-0.01	25	0.02	25	0.01
Saturated zone hydraulic gradient	38	0.00	38	0.00	27	-0.02	27	0.00
Well pump intake depth	8	-0.05	8	-0.03	41	0.00	41	0.00
Mass loading for inhalation	24	-0.02	24	-0.01	18	-0.03	18	-0.01
Depth of soil mixing layer	40	0.00	40	0.00	6	-0.22	6	-0.05
Depth of roots	2	-0.51	2	-0.35	2	-0.90	2	-0.52
Weathering removal constant of all vegetation	27	-0.02	27	-0.01	38	-0.01	38	0.00
Wet weight crop yield of fruit, grain and non-leafy vegetables	37	0.01	37	0.00	19	0.03	19	0.01
Wet foliar interception fraction of leafy vegetables	36	-0.01	36	0.00	13	-0.05	13	-0.01
Indoor dust filtration factor	10	0.04	10	0.03	29	0.02	29	0.00
External gamma shielding factor	20	0.03	20	0.02	21	0.02	21	0.01
Cover erosion rate	29	0.01	29	0.01	12	-0.05	12	-0.01
Total Porosity of Unsaturated zone 1	19	-0.03	19	-0.02	33	0.01	33	0.00
Effective Porosity of Unsaturated zone 1	30	-0.01	31	-0.01	11	0.06	11	0.01
Hydraulic Conductivity of Unsaturated zone 1	7	0.06	7	0.03	10	-0.06	10	-0.01
b Parameter of Unsaturated zone 1	23	0.02	23	0.01	35	0.01	35	0.00
Plant transfer factor for Co	31	-0.01	30	-0.01	20	-0.02	20	-0.01
Meat transfer factor for Co	16	-0.03	16	-0.02	14	0.04	14	0.01
Milk transfer factor for Co	39	0.00	39	0.00	31	0.02	31	0.00
Plant transfer factor for Cs	26	-0.02	26	-0.01	26	-0.02	26	0.00
Meat transfer factor for Cs	32	0.01	32	0.01	23	-0.02	23	-0.01
Milk transfer factor for Cs	5	0.07	5	0.04	40	0.00	40	0.00
Plant transfer factor for Ni	13	0.04	13	0.02	34	-0.01	34	0.00
Meat transfer factor for Ni	41	0.00	41	0.00	30	-0.02	30	0.00
Milk transfer factor for Ni	14	-0.04	14	-0.02	36	-0.01	36	0.00
Plant transfer factor for Sr	1	0.76	1	0.71	1	0.96	1	0.82
Meat transfer factor for Sr	4	0.11	4	0.06	5	0.23	5	0.06
Milk transfer factor for Sr	3	0.11	3	0.07	3	0.32	3	0.08
Density of contaminated zone	12	0.04	12	0.02	7	0.12	7	0.03
Density of Unsaturated zone 1	17	-0.03	17	-0.02	32	0.01	32	0.00
R-SQUARE		0.65		0.65		0.94		0.94

-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.