

Table 1 of *Spoken Risk Estimates* based on BCIK-14

risk Coefficients. These were calculated for comparison

purposes only & were not used in the BCIK book

The highest ~~value~~ estimates ^{for cancer risk result} ~~result~~ from using the

linear relative risk model and are about the same

as those given in Table 2 for the relative risk model, 7.

lowest estimates result from the linear - quadratic

ESTIMATED RADIATION DOSES TO RESIDENTS OF
ENEU AND/OR BIKINI ISLANDS ASSUMING VARIOUS LIVING PATTERNS*

Residence Island	Years on/ Years off	Time on Eneu (%)	Time on Bikini (%)	Imported Food (50% of Diet)	Maximum Annual Dose (Millirem)** to Bone Marrow	Whole Body
Bikini	Permanent	0	100	No	6200	44,000
Bikini	Permanent	0	100	Yes	3300	24,000
Eneu	Permanent	100	0	No	780	5,400
Eneu	Permanent	100	0	Yes	390	2,800
Eneu	Permanent	90	10	No	830	5,900
Eneu	Permanent	90	10	Yes	440	3,200
Eneu	1/1	100	0	No	540	2,800
Eneu	1/1	100	0	Yes	280	1,400
Eneu	1/1	90	10	No	590	3,000
Eneu	1/1	90	10	Yes	330	1,600
Eneu	1/2	100	0	No	540	1,900
Eneu	1/2	100	0	Yes	280	900
Eneu	1/2	90	10	No	590	2,000
Eneu	1/2	90	10	Yes	330	1,100
Eneu	1/3	100	0	No	540	1,500
Eneu	1/3	100	0	Yes	280	700
Eneu	1/3	90	10	No	590	1,600
Eneu	1/3	90	10	Yes	330	800

* Doses are rounded off.

** Federal Radiation Council exposure limit is 500 millirem per year to the maximum exposed. Numerical value given is three times the average.

Federal Radiation Council exposure limit is an average of 5,000 millirem to a population. These values are best estimates based upon the most complete information available. Further average values based upon averaged parameters (e.g., soil concentration of radionuclides, of radionuclides, diet); any specific individual might receive radiation exposure higher amount of various foods consumed, etc. (No claim on table.)

182

7.6.9

Risk Estimates based on BEIR-III

Total Person rem	Cancer Risk		30-yr Whole body dose (rem)	Birth D (5-75/1)
	Relative L-Q	Absolute L-L		
3054	.556	.483	2.8	.01
6108	1.11	.965	5.4	.01
25450	4.63	4.02	24.0	.01
47846	8.71	7.56	44.0	.01
3461	.63	.547	3.2	.01
6617	1.20	1.05	5.9	.01
957	.174	.15	1.4	.01
1978	.36	.313	2.8	.01
1085	.197	.17	1.6	.01
2105	.383	.33	3.0	.01
446	.081	.0705	.96	.01
910	.166	.144	1.9	.01
520	.095	.082	1.1	.01
953	.173	.151	2.0	.01

*Risk coefficient

182×10^{-6} man rem

eg 2.8 rem x 5 x 139

40.6

* *

those ~~values~~ for the absolute model in
Table 7. Thus, as far as ~~the~~ estimates
of cancer risk are concerned, those obtained
using ^{risk coefficients from} BEIR I ~~are~~ are in the same
general range as those obtained using ^{risk coefficients from} BEIR III.

~~The~~
Risk estimates for birth defects obtained using
the risk factor from BEIR-I give values
about 3 times those obtained using the ~~range~~
~~range~~ ~~of~~ ~~the~~ ~~range~~ ^{value} of the range of
risk ~~coefficients~~ ^{factors} given in BEIR-III. If
-BEIR-III ~~values~~ risk factors for birth
defects ~~are more reasonable than~~ represent ~~an~~
~~important~~ ~~more~~ ~~important~~ more enlightened
assessment of the potential consequence of radiation
exposure than the ~~values~~ ^{factor} taken from BEIR-1
for overall health defects, then the estimates ~~included~~
given in the Risk book ~~are~~ may be
conservative by a factor of 3.

2600

72.36 rem

2200

400 maki

2600

56.20 rem

430

400 maki

1600

128.56

128.56

1.2976

1500

400 maki

) 99

128.56

1.3rem per person

13	6015	11	810		
14	6033	27	2000		
15	6007	35	300		
16	6008	32	1400		
17	6071	32	350		
18	863	27	1200		
19	6086	46	2100	X	
20	6067	32	1700		
21	6073	24	1400		
22	6072	20	460		
23	6119	17	1700		
24	864	51	1900	X	
25	966	56	3200	X	highest value
26	6009	6	2200		
27	6049	8	1900		
28	6042	7	580		
29	6614	5	1500		
30	6012	7	2400		
31	6016	10	2400		
32	6013	5	1600		
33	6005	38	700		
34	6135	35	500		
35	6125	35	2100		
36	6067	56	1700	X	
37	6002	65	670	X	
38	6006	37	490		
39	6096	48	1100	X	
40	80	69	330	X	
	6017	49	2300	X	

6058	56	1500
6004	28	200
6018	34	1900
6126	35	1400
6003	22	1700
6023	8	1500
6131	14	1800
6011	11	1400
6133	11	2800

Total for 39 under age 40 53,230 $\bar{x} = 1364.87$ mm 1.37 mm
 Total for all males 50 70,530 $\bar{x} = 1410.6$ mm 1.41 mm

over 40 $\frac{11}{50}$

Female

COLUMN	WRITE	1	2	3	4
		identifical #	age	total whole body dose	
1		6111	32	250	
2		6097	19	950	
3		6115	43	1600	X
4		6109	15	760	
5		6091	13	1300	
6		6046	43	600	X
7		6061	32	1400	
8		6122	70	1600	X
9		6030	10	1600	✓
10		6129	13	850	
11		6027	6	1200	
12		6010	8	2000	
13		6105	5	1500	
14		6059	19	400	
15		6124	54	390	X
16		6058	18	1200	
17		6036	27	340	
18		6110	32	1400	
19		6051	19	1200	
20		6092	8	2400	highest value
21		6080	7	310	
22		6038	6	1400	
23		6103	9	1600	
24		6028	7	1800	
25		6044	6	2200	
26		6062	21	1100	
27		6034	46	1800	X
28		865	45	1300	X
29		6050	22	710	
30		6094	10	2100	
31		6112	35	420	
32		6035	20	1400	
33		6045	28	270	
34		6108	24	730	
35		6063	24	1100	
36		525	37	470	
37		934	43	2100	✓
38		6106	6	1100	
39		6025	5	1300	
40		6113	25	880	
		6060	22	790	

6032	32	1400	1
6123	50	1000	X
6098	16	720	
6065	19	910	
6114	32	290	
6064	30	1300	
6081	9	610	
6048	13	660	

total 41 under
 age 40
 44320
 average = 1080.98 mm
 total for all ⁴⁹ females
 54710
 average = 1116.53 mm

over 40, $\frac{8}{49}$

Total Males + female
 54.7 mm
 70.5
 125.2