

REPOSITORY PNINL  
 COLLECTION Marshall Islands  
 BOX No. 5685  
 FOLDER Calculations

30 year dose - 3000 man-rem  
 pop - 550

Total Man-rem =  $\frac{1650,000 \text{ man-rem}}{10^6} = 1650 \text{ person-rem}$

409865

Risk Coefficients	Relative	Absolute
BEIR - I	$\sqrt{310/10^6} \text{ person-rem}$	$95/10^6 \text{ person-rem}$
BEIR - E (from BEIR III)	568	115
BEIR - III	182	67

Cancer death

BEIR I  $\frac{310 \times 1650}{10^6} = \frac{511,500}{10^6} = 0.5$       $\frac{95 \times 1650}{10^6} = \frac{156,750}{10^6}$   
 $\frac{160 \times 1650}{10^6} = \frac{264,000}{10^6} = 0.26$      **(0.16)**  
 $\frac{458 \times 1650}{10^6} = \frac{755,700}{10^6} = 0.76$

a. Based on 15%  
 Cancer incidence  
 (3 years - 30yo)  $83 \times 0.009 \times 3 = 0.996$   
 .012

b. Based on 10%  
 Cancer incidence  $55 \times 0.009 \times 3 = 0.66$

BEIR I (from BEIR III)	$\frac{568 \times 1650}{10^6} = 0.937200$	$\frac{175 \times 1650}{10^6} = 0.189750$
BEIR III	$\frac{182 \times 1650}{10^6} = 0.300300$	$\frac{67 \times 1650}{10^6} = 0.11055$