

Table 2. Summary of Estimated Radiation Dose Equivalents for

born

Location	Date	Test(s) with Potential of Causing Radiation Exposures at Location		Date	Postulated Thyroid Dose Equivalent from Inhalation (mrad) ^a	Postulated Thyroid Dose Equivalent from Milk Ingestion (rad)	Milk Shed Potentially Affected by Fallout
		Test Name	Operation or Series				
Las Vegas, NV	7/53-3/56		NONE		--	--	--
	1/57-8/61	Boltzman	Plumbbob	5/28/57	<1	--	--
		Franklin	Plumbbob	6/2/57	13	--	--
		Lassen	Plumbbob	6/5/57	2.0	--	--
		Wilson	Plumbbob	6/18/57	2.2	--	--
		Priscilla	Plumbbob	6/24/57	<1	--	--
		Hood	Plumbbob	7/5/57	<1	--	--
		Diablo	Plumbbob	7/15/57	<1	--	--
		John	Plumbbob	7/19/57	1.1	--	--
		Kepler	Plumbbob	7/24/57	<1	--	--
		Owens	Plumbbob	7/25/57	<1	--	--
		Stokes	Plumbbob	8/7/57	<1	--	--
		Shasta	Plumbbob	8/18/57	<1	--	--
		Doppler	Plumbbob	8/23/57	<1	--	--
		Franklin Prime	Plumbbob	8/30/57	<1	--	--
		Smoky	Plumbbob	8/31/57	6	--	--

Table 2. Summary of Estimated Radiation Dose Equivalents for

born

(Continued)

Location	Date	Test(s) with Potential of Causing Radiation Exposures at Location			Postulated Thyroid Dose Equivalent from Inhalation (mrad) ^a	Postulated Thyroid Dose Equivalent from Milk Ingestion (rad)	Milk Shed Potentially Affected by Fallout
		Test Name	Operation or Series	Date			
		Galileo	Plumbbob	9/2/57	15	--	--
		Wheeler	Plumbbob	9/6/57	<1	--	--
		LaPlace	Plumbbob	9/8/57	2.9	--	--
		Fizeau	Plumbbob	9/14/57	<1	--	--
		Newton	Plumbbob	9/16/57	<1	--	--
		Whitney	Plumbbob	9/23/57	1.3	--	--
		Charleston	Plumbbob	9/28/57	3.8	--	--
		Morgan	Plumbbob	10/7/57	<1	--	--
		(19 Tests)	Hardtack II	10/18-10/30/58	27	--	--
		Sanford	Hardtack II	10/26/58	--	0.85-3.4 ^b	--
Caliente, NV	8/61-8/69	(2 Tests)	Dominic II	7/11-7/14/62	--	0.21 ^c	Caliente, NV
		Bandicoot	Storax	10/19/62	<1	--	--
		Pin Stripe	Flintlock	4/25/66	<1	0.003 ^d	Caliente, NV
Las Vegas, NV	8/69-1/71		NONE		--	--	--

Table 2. Summary of Estimated Radiation Dose Equivalents for born (continued)

Location	Date	Test(s) with Potential of Causing Radiation Exposures at Location		Operation or Series	Date	Postulated	Postulated	Milk Shed Potentially Affected by Fallout
		Test Name				Thyroid Dose Equivalent from Inhalation (mrad) ^a	Thyroid Dose Equivalent from Milk Ingestion (rad)	
	11/71-Present			NONE		--	--	--
				Maximum Credible Dose Equivalent		<90	1.1-3.6	

^aAll dose equivalents calculated through August 1969 are based upon: (1) Gross beta radioactivity concentrations in air extrapolated to midpoint of collection or to peak of cloud passage; (2) maximum ratios of radioiodine to gross beta radioactivity derived from data in UCRL-50243, Fission Product Decay Chains, Vol. II, 3/31/67; (3) thyroid dose conversion factors in NERC-LV hand-out entitled, "Thyroid Dose Calculations," by D. E. Bernhardt, 4/4/71 (unpublished).

^bDose equivalent based upon open field gamma radiation levels, application of Knapp's correlation (TID-19266, Iodine in Fresh Milk and Human Thyroids Following a Single Deposition of Nuclear Fallout, USAEC, Washington, D.C., June 1, 1963) of peak ¹³¹I concentrations in milk with open field gamma radiation readings at H+24 hours, and dose conversion factor of 1.6 mrad (for an adult) per 100 pCi/l peak ¹³¹I concentration in milk based upon FRC Report No. 5.

^cDose equivalent based upon: (1) time-integrated concentrations of ¹³¹I summed from data reports in TID-18892, Off-Site Environmental Contamination from Nuclear Explosives at the Nevada Test Site, September 15, 1961-September 15, 1962, USAEC, Division of Technical Information, Washington, D.C., (2) dose conversion factor derived by D. E. Bernhardt for infant thyroid exposure and (3) correction factor of 2/9 for difference in thyroid weight for a two- and nine-year old child.

^dD. E. Bernhardt, R. B. Evans, F. N. Buck, M. W. Carter, Hypothetical Thyroid Dose from NTS and NRDS Activities, 1963-1970, WERLV-539-5, Western Environmental Research Laboratory, Las Vegas, Nevada (unpublished) and correction factor of 2/13 to compensate in differences in thyroid weight for infant and 13-year old child.

Table 3
 Infant Thyroid Dose Equivalents Resulting
 From Nuclear Tests Conducted at Nevada Test Site -
 Estimates Performed by Others

Estimator	Location of Exposure	Test and Series Name	Test Date	Estimated Infant Thyroid Dose Equivalent (rad)
Pendleton ¹	St. George, Utah	Harry, Upshot-Knothole	5/19/53	84
Tamplin ²	St. George, Utah	Annie, Upshot-Knothole	3/17/53	} 120
		Simon, Upshot-Knothole	4/25/53	
		Harry, Upshot-Knothole	5/19/53	
		Tesla, Teapot	3/1/55	
		Zucchini, Teapot	5/15/55	

¹Pendleton, R. C., Mays, C. W., Lloyd, R. D., and Brooks, A. L., "Differential Accumulation of ¹³¹I from Local Fallout in People and Milk," Health Physics, Vol. 9, No. 12, December 1963. p. 1258.

²Tamplin, A. R., "Estimation of Dosage of Thyroids of Children in the U. S. from Nuclear Tests Conducted in Nevada During 1952 Through 1955," UCRL-70787. Lawrence Radiation Laboratory, University of California, Livermore, November 14, 1967. p. 13.