Use of Transportable Radiation Detection Instruments to Assess Internal Contamination from Intakes of Radionuclides

Part III: Supplementary Data

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PREFACE

Part I of the present series (Anigstein, Erdman, and Ansari 2016) described measurements of count rates from discrete radioactive sources of ^{60}Co, ^{137}Cs, and ^{241}Am on three instruments—the Ludlum Model 44-2 sodium iodide (NaI[Tl]) gamma scintillator, the Captus 3000 thyroid uptake probe, and the Transportable Portal Monitor Model TPM-903B. These measurements were performed to validate the computer models that we had constructed of these instruments, utilizing the radiation transport code MCNPX (LANL 2011).

Part II of the present series (Anigstein, Olsher, Loomis, and Ansari 2016) developed calibration factors to enable the use of transportable radiation detection instruments to estimate intakes of radionuclides and subsequent doses. The study utilized biokinetic models to determine the retention of activity taken into the body and the distribution of such activity among different regions of the body as a function of time following exposure. Normalized count rates from activities of four radionuclides—^{60}Co, ^{131}I, ^{137}Cs, and ^{192}Ir—in various anatomical regions of children of five ages and adult men and women were calculated by MCNPX. Cobalt-60, ^{137}Cs, and ^{192}Ir were among the "nine isotopes of interest for RDDs" listed by ANL (2007); ^{131}I could be a major constituent of radioactive releases following a nuclear reactor accident. Adult men and women were represented by voxel phantoms described by ICRP (2009), while children were represented by the revised ORNL pediatric phantom series described by Han et al. (2006). The Ludlum Model 44-2 gamma scintillator, the Captus 3000 thyroid uptake probe, and two models of the Model TPM-903B portal monitor were represented by models developed during the studies described Part I of the present series. We also calculated exposure rates in air at several positions with respect to each of the child and adult phantoms to enable the use of other instruments, such as ionization chambers that are calibrated in terms of exposure rates, to perform screening assessments. These exposure geometries constitute a virtual instrument; thus, the analysis comprises the study of four instruments (the two models of the TPM-903B portal monitor are considered to be variants of the same instrument, analogous to the other instruments' being located at different distances from the body).

The present report presents detailed tables of data that supplement Part II of the present series.

The results of the calculations developed during this study serve as input data to the ICAT (Internal Contamination Assessment Tool) computer code package, an interactive program that estimates intakes of radioactive material and the resulting doses based on measurements made with the various instruments (Anigstein et al. 2014).

Appendix A

COMPOSITION OF DCAL BLOOD AND *OTHER* REGIONS IN COMPUTATIONAL PHANTOMS

As described in Part II of the present series (Anigstein, Olsher, Loomis, and Ansari 2016), the revised ORNL phantoms do not have a region for blood, a source region that is part of the biokinetic models embodied in the DCAL computer software package (ORNL 2006). To create a blood region in each pediatric phantom, the distribution of regional blood volumes in adults listed by ICRP (2002, Table 2.14) was used to calculate the blood content of each phantom region. The fraction of the total blood volume assigned to each region of each of the five revised ORNL pediatric phantoms is listed in Table A-1. The blood region in each phantom comprises a set of anatomical regions that contained at least 99% of the blood in the body.

The DCAL *Other* region, which is part of the biokinetic model used for cobalt, iodine, and iridium, comprises all the tissues in the body (excluding body fluids and the contents of lumina) that are not part of the model for the given element. Tables A–2 to A–4 list each tissue included in the *Other* regions of the revised ORNL pediatric phantoms in the models of these elements. The activities of the isotopes of each these three elements were apportioned among these tissues according to the fraction of the activity in the *Other* region calculated by DCAL and the ratio of the mass of a given tissue to the total mass of the tissues that comprise the region. The tissues constituting *Body Tissues* in the DCAL model of cesium, which is similar to the *Other* region but excludes cortical bone, are listed in Table A-5. The ^{137}Cs activities were apportioned among these tissues in a manner similar to that used for the *Other* regions.

As described in Part II of the present series, the Reference Male and Reference Female Computational Phantoms (RMCP and RFCP) described by ICRP (2009) do not contain a separate blood region. It was therefore necessary to specify the components of these voxel phantoms corresponding to the DCAL blood region. In the present analysis, DCAL blood regions were constructed for the RMCP and the RFCP by combing the blood in each of the 141 regions in each phantom that contained significant amounts of blood. The mass of blood in each voxel region was calculated by multiplying the total mass of the region by the blood fraction of the medium constituting that region, as listed by ICRP (2009, CD-ROM). These blood regions comprised 77 voxel regions in the RMCP and 78 regions in the RFCP. Each blood region contains 99% of the total blood in the respective phantom. The fraction of the total blood in each constituent region is listed in Table A-6. The remaining 1% of the blood was distributed among the listed voxel regions.

The construction of the DCAL *Other* and *Body Tissues* regions in the RMCP and RFCP was performed in a manner similar to the construction of these regions in the revised ORNL pediatric phantoms. The fractional activities of each of the four radionuclides in each anatomical region of the RMCP and RFCP that is a component of the *Other* or *Body Tissues* regions are listed in Table A-7.

Table A-1. Anatomical Regions of Revised ORNL Pediatric Phantoms Comprising the DCAL Blood Region

Organ/tissue	Blood fraction				
	Infant	1 y	5 y	10 y	15 y
Skin of the head and neck	1.12%	1.06%	0.76%	0.57%	0.45%
Cranium	0.90%	0.82%	0.95%	0.75%	0.52%
Teeth	0.17%	0.16%	—	—	—
Mandible	0.94%	1.11%	0.67%	0.42%	0.27%
Upper facial region (less sinuses)	1.09%	1.19%	0.70%	0.51%	0.34%
Brain	1.69%	1.69%	1.69%	1.69%	1.69%
Oral cavity	1.82%	1.95%	1.76%	1.62%	1.30%
Rest of body – head/neck	2.16%	2.33%	1.47%	0.95%	0.58%
Total salivary glands	0.16%	0.22%	0.27%	0.29%	0.36%
Spine – cervical vertebrae	0.39%	0.33%	0.27%	0.25%	0.24%
Spine – thoracic vertebrae	0.78%	0.70%	0.70%	0.70%	0.77%
Spine – LV and sacrum	0.29%	0.27%	0.26%	0.26%	0.29%
Rib cage	0.99%	0.89%	0.88%	0.89%	0.98%
Scapulae	0.28%	0.26%	0.25%	0.26%	0.28%
Pelvis	0.85%	0.77%	0.76%	0.77%	0.85%
Upper-arm	0.33%	0.31%	0.30%	0.30%	0.34%
Middle-arm	0.33%	0.31%	0.30%	0.30%	0.34%
Lower-arm	0.66%	0.61%	0.60%	0.61%	0.67%
Upper-leg	0.25%	0.29%	0.43%	0.52%	0.54%
Middle-leg	0.52%	0.61%	0.89%	1.08%	1.12%
Lower-leg	1.02%	1.20%	1.75%	2.12%	2.20%
Main bronchi – residual wall	2.29%	2.27%	2.28%	2.28%	2.27%
Lung – left	6.86%	6.89%	6.87%	6.87%	6.88%
Lung – right	7.97%	7.94%	7.96%	7.96%	7.95%
Main bronchi – mucosa	0.53%	0.56%	0.54%	0.54%	0.56%
Thymus	0.30%	0.25%	0.23%	0.26%	0.18%
Heart – wall	1.41%	1.41%	1.41%	1.41%	1.41%
Heart – contents	12.71%	12.71%	12.71%	12.71%	12.71%
Left kidney	1.41%	1.41%	1.41%	1.41%	1.41%
Right kidney	1.41%	1.41%	1.41%	1.41%	1.41%
Liver	14.12%	14.12%	14.12%	14.12%	14.12%
Pancreas	0.85%	0.85%	0.85%	0.85%	0.85%
Spleen	1.98%	1.98%	1.98%	1.98%	1.98%
Esophagus – residual wall	0.30%	0.25%	0.23%	0.22%	0.26%
Stomach – mucosa	0.37%	0.39%	0.39%	0.39%	0.38%
Stomach – residual wall	0.70%	0.73%	0.75%	0.76%	0.72%
Small intestine	5.37%	5.37%	5.37%	5.37%	5.37%
Ascending colon—mucosa wall	0.19%	0.19%	0.19%	0.19%	0.19%
Ascending colon—remainder wall	0.59%	0.59%	0.59%	0.59%	0.58%
Proximal transverse colon—mucosa wall	0.13%	0.13%	0.13%	0.13%	0.13%
Proximal transverse colon—remainder wall	0.38%	0.39%	0.38%	0.38%	0.39%
Distal transverse colon—mucosa wall	0.13%	0.13%	0.13%	0.13%	0.13%
Distal transverse colon—remainder wall	0.38%	0.39%	0.38%	0.38%	0.39%
Descending colon—mucosa wall	0.17%	0.18%	0.18%	0.18%	0.18%
Descending colon—remainder wall	0.54%	0.55%	0.56%	0.56%	0.55%
Sigmoid colon—remainder wall	0.32%	0.31%	0.31%	0.32%	0.31%
Rectum—remainder wall	0.13%	—	0.12%	0.12%	0.12%
Rest of body – legs	3.89%	4.47%	6.20%	7.09%	6.87%
Genitalia (male)	—	—	0.18%	0.23%	0.52%
Rest of body – trunk	13.73%	12.98%	12.10%	11.74%	12.32%
Skin of the trunk	2.04%	1.95%	1.85%	1.84%	1.93%
Skin of the legs	1.06%	1.21%	1.61%	1.81%	1.83%

Table A-2. Anatomical Regions of Revised ORNL Pediatric Phantoms Comprising the *Other* Region for ^{60}Co

Organ/tissue	Co-60 *Other* fraction				
	Infant	1 y	5 y	10 y	15 y
Skin of the Head and Neck	0.97%	0.79%	0.55%	0.40%	0.44%
Cranium	1.16%	1.26%	1.45%	1.13%	0.74%
Mandible	1.21%	1.70%	1.02%	0.63%	0.38%
Upper Facial Region (less sinuses)	1.40%	1.82%	1.07%	0.77%	0.49%
Brain	11.82%	9.65%	6.83%	4.26%	2.54%
Oral Cavity	2.08%	2.34%	1.22%	0.80%	0.45%
Rest of Body – Head/Neck	7.02%	7.63%	5.15%	3.49%	2.20%
Total salivary glands	0.18%	0.26%	0.19%	0.14%	0.13%
Spine – Cervical Vertebrae	0.50%	0.51%	0.42%	0.38%	0.34%
Spine – Thoracic Vertebrae	1.00%	1.07%	1.06%	1.05%	1.09%
Spine – LV and Sacrum	0.38%	0.41%	0.40%	0.39%	0.41%
Rib Cage	1.28%	1.35%	1.34%	1.34%	1.39%
Clavicles	0.10%	0.11%	0.11%	0.11%	0.11%
Scapulae	0.36%	0.39%	0.39%	0.39%	0.40%
Pelvis	1.09%	1.18%	1.16%	1.17%	1.20%
Upper-arm	0.43%	0.47%	0.46%	0.46%	0.48%
Middle-arm	0.43%	0.47%	0.46%	0.46%	0.48%
Lower-arm	0.85%	0.94%	0.92%	0.92%	0.95%
Upper-leg	0.32%	0.45%	0.66%	0.79%	0.77%
Middle-leg	0.67%	0.93%	1.36%	1.63%	1.59%
Lower-leg	1.32%	1.83%	2.68%	3.20%	3.13%
Lung – Left	0.43%	0.41%	0.32%	0.32%	0.29%
Lung – Right	0.50%	0.47%	0.37%	0.36%	0.33%
Thymus	0.34%	0.30%	0.16%	0.13%	—
Heart – Wall	0.78%	0.57%	0.52%	0.49%	0.45%
Left Adrenal Gland	0.09%	—	—	—	—
Right Adrenal Gland	0.09%	—	—	—	—
Left kidney	0.35%	0.35%	0.32%	0.28%	0.23%
Right kidney	0.35%	0.35%	0.32%	0.28%	0.23%
Pancreas	0.17%	0.21%	0.18%	0.18%	0.19%
Spleen	0.28%	0.29%	0.27%	0.26%	0.24%
Stomach – Residual Wall	0.13%	0.16%	0.18%	0.18%	0.14%
Small Intestine	1.62%	1.50%	1.50%	1.49%	1.55%
Ascending colon—Remainder Wall	0.11%	0.10%	0.10%	—	0.10%
Descending colon—Remainder Wall	0.10%	—	—	—	—
Urinary Bladder – Residual Wall	0.09%	—	—	—	—
Rest of Body – Legs	12.62%	14.67%	21.77%	26.14%	26.06%
Genitalia (Male)	0.15%	0.12%	0.12%	0.11%	0.18%
Rest of Body – Trunk	44.57%	42.59%	42.48%	43.29%	46.69%
Skin of the Trunk	1.77%	1.46%	1.34%	1.30%	1.86%
Skin of the Legs	0.92%	0.90%	1.17%	1.28%	1.76%

Table A-3. Anatomical Regions of Revised ORNL Pediatric Phantoms Comprising the *Other* Region for ^{131}I

Organ/tissue	I-131 *Other* fraction				
	Infant	1 y	5 y	10 y	15 y
Skin of the Head and Neck	0.93%	0.76%	0.54%	0.39%	0.43%
Cranium	1.12%	1.22%	1.41%	1.10%	0.72%
Mandible	1.16%	1.65%	0.99%	0.61%	0.37%
Upper Facial Region (less sinuses)	1.35%	1.76%	1.04%	0.75%	0.47%
Brain	11.39%	9.34%	6.62%	4.14%	2.48%
Oral Cavity	2.01%	2.27%	1.18%	0.78%	0.44%
Rest of Body – Head/Neck	6.76%	7.39%	4.99%	3.40%	2.14%
Total salivary glands	0.17%	0.25%	0.18%	0.14%	0.12%
Spine – Cervical Vertebrae	0.49%	0.49%	0.41%	0.37%	0.33%
Spine – Thoracic Vertebrae	0.96%	1.03%	1.03%	1.02%	1.07%
Spine – LV and Sacrum	0.36%	0.39%	0.39%	0.38%	0.40%
Rib Cage	1.23%	1.31%	1.30%	1.30%	1.35%
Clavicles	0.09%	0.10%	0.10%	0.10%	0.11%
Scapulae	0.35%	0.38%	0.38%	0.38%	0.39%
Pelvis	1.05%	1.14%	1.13%	1.14%	1.17%
Upper-arm	0.41%	0.45%	0.45%	0.44%	0.47%
Middle-arm	0.41%	0.45%	0.45%	0.44%	0.47%
Lower-arm	0.82%	0.91%	0.89%	0.89%	0.93%
Upper-leg	0.31%	0.43%	0.64%	0.76%	0.75%
Middle-leg	0.64%	0.90%	1.32%	1.58%	1.55%
Lower-leg	1.27%	1.77%	2.60%	3.11%	3.05%
Lung – Left	0.41%	0.40%	0.31%	0.31%	0.28%
Lung – Right	0.48%	0.46%	0.36%	0.35%	0.32%
Thymus	0.33%	0.29%	0.16%	0.12%	—
Heart – Wall	0.75%	0.55%	0.50%	0.48%	0.44%
Left Adrenal Gland	0.09%	—	—	—	—
Right Adrenal Gland	0.09%	—	—	—	—
Left kidney	0.34%	0.34%	0.31%	0.27%	0.23%
Right kidney	0.34%	0.34%	0.31%	0.27%	0.23%
Liver	3.65%	3.16%	3.15%	2.82%	2.58%
Pancreas	0.16%	0.20%	0.17%	0.17%	0.19%
Spleen	0.27%	0.28%	0.26%	0.25%	0.23%
Stomach – Residual Wall	0.12%	0.15%	0.17%	0.18%	0.14%
Small Intestine	1.56%	1.46%	1.46%	1.45%	1.51%
Ascending colon—Remainder Wall	0.10%	0.10%	—	—	—
Descending colon—Remainder Wall	0.09%	—	—	—	—
Urinary Bladder – Residual Wall	0.09%	—	—	—	—
Rest of Body – Legs	12.16%	14.21%	21.10%	25.41%	25.41%
Genitalia (Male)	0.14%	0.12%	0.12%	0.11%	0.18%
Rest of Body – Trunk	42.95%	41.25%	41.18%	42.07%	45.54%
Skin of the Trunk	1.70%	1.41%	1.30%	1.27%	1.81%
Skin of the Legs	0.88%	0.88%	1.13%	1.24%	1.72%

Table A-4. Anatomical Regions of Revised ORNL Pediatric Phantoms Comprising the *Other* Region for ^{192}Ir

Organ/tissue	Ir-192 *Other* fraction				
	Infant	1 y	5 y	10 y	15 y
Skin of the Head and Neck	0.98%	0.80%	0.56%	0.41%	0.44%
Cranium	1.17%	1.27%	1.46%	1.14%	0.75%
Mandible	1.22%	1.72%	1.03%	0.64%	0.38%
Upper Facial Region (less sinuses)	1.41%	1.84%	1.08%	0.78%	0.49%
Brain	11.93%	9.73%	6.89%	4.29%	2.56%
Oral Cavity	2.10%	2.36%	1.23%	0.81%	0.45%
Rest of Body – Head/Neck	7.08%	7.70%	5.19%	3.52%	2.21%
Total salivary glands	0.18%	0.27%	0.19%	0.14%	0.13%
Spine – Cervical Vertebrae	0.51%	0.51%	0.42%	0.38%	0.34%
Spine – Thoracic Vertebrae	1.01%	1.08%	1.07%	1.06%	1.10%
Spine – LV and Sacrum	0.38%	0.41%	0.40%	0.40%	0.41%
Rib Cage	1.29%	1.37%	1.35%	1.35%	1.40%
Clavicles	0.10%	0.11%	0.11%	0.11%	0.11%
Scapulae	0.37%	0.40%	0.39%	0.39%	0.41%
Pelvis	1.10%	1.19%	1.17%	1.18%	1.21%
Upper-arm	0.43%	0.47%	0.46%	0.46%	0.48%
Middle-arm	0.43%	0.47%	0.46%	0.46%	0.48%
Lower-arm	0.86%	0.95%	0.93%	0.92%	0.96%
Upper-leg	0.33%	0.45%	0.66%	0.79%	0.77%
Middle-leg	0.68%	0.94%	1.37%	1.64%	1.60%
Lower-leg	1.33%	1.84%	2.70%	3.23%	3.15%
Lung – Left	0.43%	0.42%	0.32%	0.32%	0.29%
Lung – Right	0.50%	0.48%	0.37%	0.37%	0.33%
Thymus	0.34%	0.30%	0.16%	0.13%	—
Heart – Wall	0.79%	0.57%	0.52%	0.50%	0.46%
Left Adrenal Gland	0.09%	—	—	—	—
Right Adrenal Gland	0.09%	—	—	—	—
Pancreas	0.17%	0.21%	0.18%	0.18%	0.19%
Stomach – Residual Wall	0.13%	0.16%	0.18%	0.18%	0.14%
Small Intestine	1.63%	1.52%	1.51%	1.50%	1.56%
Ascending colon—Remainder Wall	0.11%	0.10%	0.10%	—	0.10%
Descending colon—Remainder Wall	0.10%	0.09%	—	—	—
Urinary Bladder – Residual Wall	0.09%	—	—	—	—
Rest of Body – Legs	12.75%	14.80%	21.97%	26.36%	26.24%
Genitalia (Male)	0.15%	0.12%	0.12%	0.12%	0.18%
Rest of Body – Trunk	45.01%	42.98%	42.87%	43.65%	47.02%
Skin of the Trunk	1.78%	1.47%	1.36%	1.31%	1.87%
Skin of the Legs	0.93%	0.91%	1.18%	1.29%	1.77%
Genitalia (male)	0.14%	0.12%	0.12%	0.11%	0.18%
Rest of body – trunk	42.95%	41.25%	41.18%	42.07%	45.54%
Skin of the trunk	1.70%	1.41%	1.30%	1.27%	1.81%
Skin of the legs	0.88%	0.88%	1.13%	1.24%	1.72%

Table A-5. Anatomical Regions of Revised ORNL Pediatric Phantoms Comprising the *Body Tissues* Region for ^{137}Cs

Organ/tissue	Cs-137 Body Tissues fraction				
	Infant	1 y	5 y	10 y	15 y
Skin of the Head and Neck	1.04%	0.87%	0.61%	0.44%	0.47%
Cranium	0.45%	0.49%	0.42%	0.40%	0.35%
Brain	12.72%	10.67%	7.50%	4.61%	2.72%
Eye-left	0.09%	—	—	—	—
Eye-right	0.09%	—	—	—	—
Oral Cavity	2.24%	2.59%	1.34%	0.87%	0.48%
Rest of Body – Head/Neck	7.55%	8.44%	5.65%	3.79%	2.35%
Total salivary glands	0.20%	0.29%	0.20%	0.15%	0.13%
Spine – Thoracic Vertebrae	0.16%	0.18%	0.23%	0.33%	0.42%
Spine – LV and Sacrum		0.07%	0.13%	0.19%	0.23%
Rib Cage	0.15%	0.19%	0.26%	0.36%	0.46%
Scapulae			0.07%	0.10%	0.12%
Pelvis	0.19%	0.32%	0.61%	0.90%	1.12%
Upper-arm	—	—	—	—	0.15%
Middle-arm	—	—	—	0.09%	0.14%
Lower-arm	0.10%	0.12%	0.18%	0.29%	0.27%
Upper-leg	—	—	0.09%	0.18%	0.21%
Middle-leg	—	0.08%	0.19%	0.36%	0.41%
Lower-leg	0.27%	0.36%	0.62%	1.01%	1.08%
Lung – Left	0.46%	0.46%	0.35%	0.34%	0.31%
Lung – Right	0.54%	0.52%	0.41%	0.40%	0.35%
Thymus	0.37%	0.33%	0.18%	0.14%	—
Heart – Wall	0.84%	0.63%	0.57%	0.53%	0.48%
Left Adrenal Gland	0.10%	—	—	—	—
Right Adrenal Gland	0.10%	—	—	—	—
Left kidney	0.38%	0.39%	0.35%	0.31%	0.25%
Right kidney	0.38%	0.39%	0.35%	0.31%	0.25%
Liver	4.08%	3.61%	3.56%	3.14%	2.83%
Pancreas	0.18%	0.23%	0.20%	0.19%	0.21%
Spleen	0.30%	0.32%	0.30%	0.28%	0.25%
Stomach – Mucosa	0.07%	0.09%	0.10%	0.10%	0.08%
Stomach – Residual Wall	0.14%	0.17%	0.19%	0.20%	0.15%
Small Intestine	1.74%	1.66%	1.65%	1.62%	1.66%
Ascending colon—Remainder Wall	0.11%	0.11%	0.11%	0.11%	0.11%
Proximal transverse colon—Remainder Wall	0.07%	0.07%	—	—	—
Distal transverse colon—Remainder Wall	0.07%	0.07%	—	—	—
Descending colon—Remainder Wall	0.10%	0.10%	0.10%	0.10%	0.10%
Urinary Bladder – Residual Wall	0.10%	0.08%	0.07%	—	—
Rest of Body – Legs	13.59%	16.23%	23.90%	28.34%	27.86%
Genitalia (Male)	0.16%	0.14%	0.13%	0.12%	0.19%
Rest of Body – Trunk	47.98%	47.12%	46.63%	46.92%	49.93%
Skin of the Trunk	1.90%	1.61%	1.48%	1.41%	1.99%
Skin of the Legs	0.99%	1.00%	1.28%	1.39%	1.88%

Table A-6. Anatomical Regions of Voxel Phantoms Comprising the DCAL Blood Region

Organ/tissue	Blood fraction		Organ/tissue	Blood fraction	
	RMCP	RFCP		RMCP	RFCP
Anterior nasal passage (ET1)	0.12%	—	Small intestine wall	3.78%	3.71%
Posterior nasal passage down to larynx (ET2)	0.30%	0.06%	Ascending colon wall	0.53%	0.54%
Trachea	0.11%	—	Transverse colon wall, right	0.36%	0.33%
Bronchi	0.70%	—	Transverse colon wall, left	0.36%	0.33%
Blood vessels, head	—	0.14%	Descending colon wall	0.53%	0.54%
Blood vessels, trunk	4.84%	5.77%	Sigmoid colon wall	0.24%	0.27%
Blood vessels, arms	0.28%	1.03%	Rectum wall	0.18%	0.15%
Blood vessels, legs	1.48%	2.20%	Heart wall	0.16%	0.15%
Humeri, upper half, spongiosa	0.57%	0.56%	Heart contents (blood)	9.08%	8.80%
Ulnae and radii, spongiosa	0.08%	0.05%	Kidney, left, cortex	0.69%	0.74%
Wrists and hand bones, spongiosa	0.06%	—	Kidney, left, medulla	0.25%	0.27%
Clavicles, spongiosa	0.19%	0.20%	Kidney, left, pelvis	—	0.05%
Cranium, cortical	0.10%	0.10%	Kidney, right, cortex	0.71%	0.62%
Cranium, spongiosa	1.77%	1.93%	Kidney, right, medulla	0.25%	0.22%
Femora, upper half, cortical	—	0.06%	Liver	9.96%	9.76%
Femora, upper half, spongiosa	1.58%	1.52%	Lung, left, blood	1.41%	1.41%
Femora, lower half, cortical	—	0.06%	Lung, left, tissue	3.55%	3.48%
Femora, lower half, spongiosa	0.19%	0.10%	Lung, right, blood	1.27%	1.01%
Tibiae, fibulae and patellae, cortical	0.09%	0.15%	Lung, right, tissue	4.31%	4.35%
Tibiae, fibulae and patellae, spongiosa	0.31%	0.35%	Muscle, head	0.59%	0.24%
Ankles and foot bones, spongiosa	0.22%	0.16%	Muscle, trunk	7.21%	5.07%
Mandible, spongiosa	0.20%	0.19%	Muscle, arms	1.32%	0.91%
Pelvis, cortical	0.07%	0.06%	Muscle, legs	4.82%	4.20%
Pelvis, spongiosa	3.88%	3.94%	Oesophagus	0.21%	0.19%
Ribs, cortical	0.07%	—	Pancreas	0.60%	0.59%
Ribs, spongiosa	3.55%	3.52%	Prostate	0.18%	—
Scapulae, spongiosa	0.67%	0.65%	Residual tissue, head	0.35%	0.38%
Cervical spine, spongiosa	0.82%	0.86%	Residual tissue, trunk	4.18%	5.05%
Thoracic spine, cortical	—	0.05%	Residual tissue, arms	0.56%	0.87%
Thoracic spine, spongiosa	3.43%	3.52%	Residual tissue, legs	1.82%	3.80%
Lumbar spine, spongiosa	2.65%	2.76%	Salivary glands, left	0.45%	0.16%
Sacrum, spongiosa	2.08%	2.15%	Salivary glands, right	0.45%	0.16%
Sternum, spongiosa	0.65%	0.68%	Skin, head	0.26%	0.22%
Cartilage, trunk	—	0.10%	Skin, trunk	1.33%	1.29%
Cartilage, legs	—	0.07%	Skin, arms	0.58%	0.60%
Brain	1.19%	1.18%	Skin, legs	1.21%	1.38%
Breast, left, adipose tissue	—	0.06%	Spinal cord	0.39%	0.08%
Breast, left, glandular tissue	—	0.45%	Spleen	1.40%	1.37%
Breast, right, adipose tissue	—	0.06%	Thymus	0.26%	0.09%
Breast, right, glandular tissue	—	0.45%	Thyroid	0.06%	0.06%
Eye bulb, left	0.08%	—	Ureter, left	0.09%	—
Eye bulb, right	0.08%	—	Ureter, right	0.08%	—
Gall bladder wall	0.15%	—	Uterus	—	0.36%
Gall bladder contents	0.57%	0.21%	Skin at top and bottom	0.14%	—
Stomach wall	0.79%	0.78%			

Source: ICRP 2009

Table A-7. Anatomical Regions of Voxel Phantoms Comprising the DCAL *Other* and *Body Tissues* Regions

Organ/tissue	Co-60 *Other*		I-131 *Other*		Cs-137 *BT*		Ir-192 *Other*	
	RMCP	RFCP	RMCP	RFCP	RMCP	RFCP	RMCP	RFCP
Bronchi	0.10%	—	0.09%	—	0.10%	—	0.10%	—
Humeri, upper half, cortical	0.20%	0.20%	0.19%	0.20%	—	—	0.20%	0.20%
Humeri, upper half, spongiosa	0.27%	0.20%	0.26%	0.19%	0.28%	0.21%	0.27%	0.20%
Humeri, lower half, cortical	0.19%	0.18%	0.18%	0.18%	—	—	0.19%	0.18%
Humeri, lower half, spongiosa	0.09%	0.09%	0.09%	0.09%	0.09%	0.10%	0.09%	0.09%
Ulnae and radii, cortical	0.40%	0.28%	0.39%	0.27%	—	—	0.40%	0.28%
Ulnae and radii, spongiosa	0.27%	0.16%	0.26%	0.16%	0.28%	0.17%	0.27%	0.16%
Wrists and hand bones, cortical	0.26%	0.19%	0.26%	0.18%	—	—	0.26%	0.19%
Wrists and hand bones, spongiosa	0.20%	0.13%	0.20%	0.13%	0.21%	0.13%	0.21%	0.13%
Clavicles, cortical	0.07%	—	0.07%	—	—	—	0.07%	—
Clavicles, spongiosa	0.08%	0.07%	0.08%	0.07%	0.08%	0.07%	0.08%	0.07%
Cranium, cortical	0.82%	0.72%	0.80%	0.70%	—	—	0.83%	0.72%
Cranium, spongiosa	0.66%	0.74%	0.64%	0.73%	0.68%	0.77%	0.66%	0.75%
Femora, upper half, cortical	0.38%	0.44%	0.37%	0.43%	—	—	0.38%	0.44%
Femora, upper half, spongiosa	0.69%	0.40%	0.67%	0.39%	0.72%	0.41%	0.69%	0.40%
Femora, upper half, medullary cavity	—	0.07%	—	0.07%	—	0.07%	—	—
Femora, lower half, cortical	0.43%	0.41%	0.42%	0.40%	—	—	0.43%	0.42%
Femora, lower half, spongiosa	0.64%	0.31%	0.62%	0.30%	0.67%	0.32%	0.64%	0.31%
Femora, lower half, medullary cavity	0.12%	0.10%	0.12%	0.10%	0.12%	0.10%	0.12%	0.10%
Tibiae, fibulae and patellae, cortical	0.78%	1.10%	0.76%	1.08%	—	—	0.78%	1.11%
Tibiae, fibulae and patellae, spongiosa	1.06%	1.04%	1.04%	1.02%	1.11%	1.08%	1.07%	1.05%
Tibiae, fibulae and patellae, medullary cavity	0.11%	0.16%	0.11%	0.15%	0.12%	0.16%	0.12%	0.16%
Ankles and foot bones, cortical	0.34%	0.31%	0.33%	0.30%	—	—	0.34%	0.31%
Ankles and foot bones, spongiosa	0.74%	0.48%	0.72%	0.47%	0.77%	0.50%	0.75%	0.49%
Mandible, cortical	0.11%	0.08%	0.11%	0.08%	—	—	0.11%	0.08%
Mandible, spongiosa	0.11%	—	0.11%	—	0.11%	—	0.11%	—
Pelvis, cortical	0.58%	0.46%	0.57%	0.45%	—	—	0.59%	0.47%
Pelvis, spongiosa	0.99%	0.79%	0.97%	0.77%	1.03%	0.82%	1.00%	0.80%
Ribs, cortical	0.53%	0.29%	0.52%	0.28%	—	—	0.54%	0.29%
Ribs, spongiosa	0.76%	0.46%	0.74%	0.45%	0.79%	0.48%	0.76%	0.46%
Scapulae, cortical	0.32%	0.21%	0.31%	0.21%	—	—	0.32%	0.22%
Scapulae, spongiosa	0.28%	0.17%	0.27%	0.17%	0.29%	0.18%	0.28%	0.17%
Cervical spine, cortical	0.15%	0.13%	0.15%	0.12%	—	—	0.15%	0.13%
Cervical spine, spongiosa	0.11%	0.13%	0.10%	0.13%	0.11%	0.13%	0.11%	0.13%
Thoracic spine, cortical	0.42%	0.36%	0.41%	0.35%	—	—	0.42%	0.37%
Thoracic spine, spongiosa	0.49%	0.45%	0.48%	0.44%	0.51%	0.46%	0.49%	0.45%
Lumbar spine, cortical	0.27%	0.28%	0.27%	0.27%	—	—	0.27%	0.28%
Lumbar spine, spongiosa	0.44%	0.47%	0.43%	0.45%	0.46%	0.48%	0.44%	0.47%
Sacrum, cortical	0.16%	—	0.16%	—	—	—	0.16%	—
Sacrum, spongiosa	0.25%	0.25%	0.25%	0.24%	0.26%	0.26%	0.25%	0.25%
Sternum, spongiosa	0.08%	0.08%	0.08%	0.08%	0.09%	0.09%	0.08%	0.09%
Cartilage, trunk	0.13%	0.56%	0.13%	0.55%	0.13%	0.58%	0.13%	0.56%
Cartilage, arms	—	0.18%	—	0.17%	—	0.18%	—	0.18%
Cartilage, legs	—	0.40%	—	0.39%	—	0.41%	—	0.40%
Brain	2.12%	2.32%	2.06%	2.26%	2.20%	2.39%	2.13%	2.33%
Breast, left, adipose tissue	—	0.27%	—	0.26%	—	0.28%	—	0.27%
Breast, left, glandular tissue	—	0.18%	—	0.17%	—	0.18%	—	0.18%

Table A-7 (continued)

Organ/tissue	Co-60 *Other*		I-131 *Other*		Cs-137 *BT*		Ir-192 *Other*	
	RMCP	RFCP	RMCP	RFCP	RMCP	RFCP	RMCP	RFCP
Breast, right, adipose tissue	—	0.27%	—	0.26%	—	0.28%	—	0.27%
Breast, right, glandular tissue	—	0.18%	—	0.17%	—	0.18%	—	0.18%
Stomach wall	0.22%	0.25%	0.21%	0.24%	0.23%	0.26%	0.22%	0.25%
Small intestine wall	0.95%	1.07%	0.93%	1.04%	0.99%	1.10%	0.95%	1.08%
Ascending colon wall	0.13%	0.16%	0.13%	0.16%	0.14%	0.17%	0.13%	0.16%
Transverse colon wall, right	0.09%	0.10%	0.09%	0.10%	0.09%	0.10%	0.09%	0.10%
Transverse colon wall, left	0.09%	0.10%	0.09%	0.10%	0.09%	0.10%	0.09%	0.10%
Descending colon wall	0.13%	0.16%	0.13%	0.16%	0.14%	0.17%	0.13%	0.16%
Sigmoid colon wall	0.06%	0.08%	—	0.08%	0.06%	0.08%	—	0.08%
Heart wall	0.48%	0.45%	0.47%	0.43%	0.50%	0.46%	0.48%	0.45%
Kidney, left, cortex	0.16%	0.19%	0.15%	0.18%	0.16%	0.19%	—	—
Kidney, left, medulla	—	0.07%	—	0.07%	—	0.07%	—	—
Kidney, right, cortex	0.16%	0.16%	0.16%	0.15%	0.17%	0.16%	—	—
Liver	—	—	2.56%	2.43%	2.73%	2.58%	—	—
Lung, left, tissue	0.70%	0.67%	0.68%	0.65%	0.73%	0.69%	0.70%	0.68%
Lung, right, tissue	0.85%	0.84%	0.83%	0.82%	0.88%	0.87%	0.85%	0.85%
Lymphatic nodes, trunk	0.15%	0.10%	0.15%	0.10%	0.16%	0.11%	0.15%	0.10%
Muscle, head	1.78%	0.72%	1.73%	0.70%	1.85%	0.74%	1.79%	0.72%
Muscle, trunk	21.90%	15.18%	21.36%	14.81%	22.78%	15.68%	22.04%	15.28%
Muscle, arms	4.01%	2.72%	3.92%	2.65%	4.17%	2.81%	4.04%	2.74%
Muscle, legs	14.63%	12.57%	14.27%	12.26%	15.22%	12.99%	14.73%	12.66%
Oesophagus	0.06%	—	—	—	0.06%	—	—	—
Pancreas	0.20%	0.21%	0.20%	0.21%	0.21%	0.22%	0.21%	0.22%
Residual tissue, head	1.53%	1.58%	1.49%	1.54%	1.59%	1.63%	1.54%	1.59%
Residual tissue, trunk	18.05%	21.03%	17.61%	20.52%	18.77%	21.73%	18.17%	21.18%
Residual tissue, arms	2.40%	3.64%	2.34%	3.55%	2.49%	3.76%	2.41%	3.66%
Residual tissue, legs	7.87%	15.79%	7.68%	15.41%	8.19%	16.32%	7.93%	15.91%
Salivary glands, left	0.06%	—	0.06%	—	0.06%	—	0.06%	—
Salivary glands, right	0.06%	—	0.06%	—	0.06%	—	0.06%	—
Skin, head	0.43%	0.31%	0.41%	0.30%	0.44%	0.32%	0.43%	0.31%
Skin, trunk	2.14%	1.79%	2.09%	1.75%	2.22%	1.85%	2.15%	1.80%
Skin, arms	0.93%	0.84%	0.91%	0.82%	0.97%	0.86%	0.94%	0.84%
Skin, legs	1.94%	1.91%	1.90%	1.87%	2.02%	1.98%	1.96%	1.93%
Spleen	0.22%	0.23%	0.21%	0.23%	0.23%	0.24%	—	—
Teeth	0.07%	0.07%	0.07%	0.07%	—	—	0.07%	0.07%
Tongue (inner part)	0.06%	0.07%	0.06%	0.07%	0.06%	0.08%	0.06%	0.07%
Urinary bladder wall	0.07%	0.07%	0.07%	0.07%	0.08%	0.07%	0.07%	0.07%
Uterus	—	0.14%	—	0.14%	—	0.15%	—	0.14%
Skin at top and bottom	0.23%	—	0.22%	—	0.23%	—	0.23%	—

Appendix B

NORMALIZED ACTIVITIES IN DCAL SOURCE REGIONS AT SELECTED TIMES AFTER INTAKE

Tables B-2 to B-12 list the normalized activities in DCAL source regions in children and adults at 12 selected times after intake. These are a subset of the 50 time steps used by the ICAT computer code (Anigstein et al. 2014) and are examples of data that are included in the computer code package. Time in DCAL is specified in days, rounded to 0.001 d. The first four of the 12 time steps—0.042, 0.083, 0.167, and 0.333 day—are approximately 1, 2, 4, and 8 hours after intake. For ease of reference, the first five time steps are listed in hours (rounded off to the nearest hour), the remaining ones in days, while the 1-d step is also listed as 24 h for the sake of clarity. The column headings correspond to source regions in the DCAL model discussed in Part II of the present series (Anigstein, Olsher, Loomis, and Ansari 2016). In some cases, these source regions are grouped according to the corresponding anatomical regions in the appropriate MCNP model of the human body, as shown in Part II (Anigstein, Olsher, Loomis, and Ansari 2016, Tables 4 and 6). Further descriptions of source regions are listed in Table B-1—regions that have common anatomical names and require no further explanation are omitted from the table.

Table B-1. Further Descriptions of Certain DCAL Source Regions Listed in Tables B-2 to B-12

Column heading	Description
BBi	Bronchial airways
ET1	Surface of anterior nasal passage (ET_1 in ICRP 1994)
Stomach	Stomach contents
SI	Small intestine contents
ULI	Upper large intestine contents
LLI	Lower large intestine contents
Other	All tissues not specified in biokinetic model of given element
Body tissues	Similar to *Other*, but excluding mineralized bone
UB_Cont	Contents of urinary bladder
Retained	Fraction of ingested or inhaled activity retained in body

The source regions included in the analysis of a given radionuclide in an individual of a given age are those that contain a total of 99% or more of the retained activity following inhalation or ingestion of any chemical form of that nuclide at any time step in the present study. No activities are listed for regions that do not meet that criterion in a given reference individual because we did not utilize regions that make no significant contributions to the total count rates. Fractional activities < 0.005% are rounded to 0.00. A more detailed discussion of the calculation of activity distributions is presented in Part II of the present series.

Table B-2. Activity of Type *M* ^{60}Co in DCAL Source Regions at Selected Times after Inhalation (%)

Time		Lung	BBi	ET1	Stomach	SI	Blood	ULI	LLI	Other	Liver	Retained
d	h											
						Infant						
	1	9.49	0.83	20.11	11.93	11.83	2.75	1.45	0.03	0.06	0.01	58.93
	2	9.40	0.76	19.30	4.72	15.19	3.47	4.72	0.25	0.14	0.02	58.06
	4	9.27	0.67	17.74	0.72	10.94	4.68	10.36	1.37	0.35	0.04	56.25
	8	9.07	0.59	15.03	0.07	3.57	5.18	13.34	4.62	0.87	0.10	52.55
	12	8.92	0.54	12.72	0.04	1.14	4.58	11.73	7.42	1.37	0.15	48.71
1	24	8.65	0.48	7.71	0.02	0.10	2.48	5.49	10.24	2.38	0.26	37.86
2		8.43	0.44	2.84	0.01	0.02	0.67	1.06	6.44	3.05	0.34	23.32
4		8.18	0.41	0.38	0.00	0.01	0.08	0.09	1.23	2.97	0.33	13.70
8		7.74	0.35	0.01	0.00	0.01	0.04	0.05	0.11	2.47	0.27	11.07
10		7.54	0.33	0.00	0.00	0.01	0.04	0.04	0.09	2.28	0.25	10.60
20		6.63	0.23	0.00	0.00	0.01	0.03	0.03	0.06	1.78	0.20	8.99
30		5.89	0.16	0.00	0.00	0.01	0.03	0.02	0.04	1.61	0.18	7.96
						1-year-old						
	1	10.16	0.82	20.20	11.97	12.06	2.63	1.47	0.03	0.06	0.01	59.87
	2	10.09	0.75	19.39	4.74	15.81	2.89	4.84	0.26	0.13	0.01	59.00
	4	9.98	0.65	17.83	0.72	12.01	3.33	10.88	1.42	0.29	0.03	57.22
	8	9.81	0.57	15.10	0.07	4.41	3.40	14.57	4.92	0.64	0.07	53.64
	12	9.68	0.53	12.78	0.04	1.56	2.97	13.14	8.04	0.96	0.11	49.88
1	24	9.44	0.48	7.75	0.02	0.12	1.61	6.26	11.39	1.62	0.18	38.92
2		9.23	0.44	2.85	0.01	0.02	0.44	1.18	7.21	2.05	0.23	23.68
4		8.97	0.41	0.39	0.00	0.01	0.07	0.09	1.35	2.00	0.22	13.53
8		8.51	0.35	0.01	0.00	0.01	0.04	0.05	0.12	1.69	0.19	10.98
10		8.29	0.33	0.00	0.00	0.01	0.04	0.05	0.09	1.57	0.17	10.57
20		7.33	0.23	0.00	0.00	0.01	0.03	0.03	0.06	1.27	0.14	9.12
30		6.54	0.16	0.00	0.00	0.01	0.03	0.02	0.05	1.17	0.13	8.12
						5-year-old						
	1	10.48	0.82	16.67	9.81	9.87	2.39	1.20	0.03	0.05	0.01	51.73
	2	10.40	0.75	16.00	3.90	12.95	2.60	3.97	0.21	0.11	0.01	51.02
	4	10.28	0.65	14.72	0.61	9.87	2.94	8.92	1.16	0.26	0.03	49.58
	8	10.10	0.56	12.46	0.07	3.66	2.96	11.98	4.04	0.57	0.06	46.63
	12	9.96	0.52	10.55	0.04	1.32	2.58	10.84	6.61	0.85	0.09	43.52
1	24	9.70	0.47	6.40	0.02	0.12	1.40	5.22	9.41	1.41	0.16	34.41
2		9.48	0.43	2.35	0.01	0.02	0.39	1.01	6.00	1.79	0.20	21.72
4		9.21	0.40	0.32	0.00	0.01	0.06	0.09	1.15	1.75	0.19	13.22
8		8.73	0.35	0.01	0.00	0.01	0.04	0.05	0.11	1.49	0.17	10.98
10		8.51	0.32	0.00	0.00	0.01	0.04	0.05	0.09	1.40	0.16	10.59
20		7.51	0.23	0.00	0.00	0.01	0.03	0.03	0.06	1.15	0.13	9.17
30		6.70	0.16	0.00	0.00	0.01	0.03	0.03	0.05	1.07	0.12	8.18

Table B-2 (continued)

Time		Lung	BBi	ET1	Stomach	SI	Blood	ULI	LLI	Other	Liver	Retained
d	h											
						10-year-old						
	1	10.05	0.92	17.02	10.05	10.12	2.39	1.23	0.03	0.05	0.01	52.25
	2	9.97	0.82	16.34	4.00	13.28	2.60	4.06	0.22	0.11	0.01	51.54
	4	9.86	0.71	15.02	0.63	10.12	2.96	9.14	1.19	0.26	0.03	50.07
	8	9.69	0.62	12.72	0.07	3.75	2.99	12.29	4.14	0.57	0.06	47.06
	12	9.56	0.58	10.76	0.04	1.34	2.61	11.11	6.78	0.85	0.09	43.88
1	24	9.32	0.52	6.53	0.02	0.12	1.42	5.33	9.64	1.43	0.16	34.58
2		9.11	0.48	2.40	0.01	0.02	0.39	1.02	6.13	1.81	0.20	21.62
4		8.86	0.45	0.32	0.00	0.01	0.06	0.09	1.17	1.77	0.20	12.95
8		8.40	0.39	0.01	0.00	0.01	0.04	0.05	0.11	1.50	0.17	10.69
10		8.18	0.36	0.00	0.00	0.01	0.04	0.04	0.09	1.40	0.16	10.31
20		7.23	0.26	0.00	0.00	0.01	0.03	0.03	0.06	1.15	0.13	8.92
30		6.45	0.18	0.00	0.00	0.01	0.03	0.02	0.05	1.07	0.12	7.94
						15-year-old						
	1	11.32	1.30	13.34	8.04	8.05	2.32	0.98	0.02	0.05	0.01	45.79
	2	11.23	1.16	12.80	3.26	10.63	2.47	3.24	0.17	0.11	0.01	45.22
	4	11.11	0.98	11.77	0.56	8.21	2.72	7.34	0.95	0.25	0.03	44.06
	8	10.90	0.84	9.97	0.08	3.13	2.69	9.97	3.33	0.53	0.06	41.65
	12	10.75	0.79	8.44	0.05	1.16	2.33	9.09	5.49	0.78	0.09	39.11
1	24	10.47	0.72	5.12	0.02	0.12	1.27	4.45	7.90	1.29	0.14	31.60
2		10.23	0.67	1.88	0.01	0.03	0.36	0.89	5.10	1.64	0.18	21.02
4		9.94	0.62	0.25	0.00	0.02	0.07	0.09	1.00	1.61	0.18	13.81
8		9.42	0.54	0.00	0.00	0.01	0.04	0.05	0.12	1.39	0.15	11.77
10		9.18	0.51	0.00	0.00	0.01	0.04	0.05	0.10	1.31	0.15	11.36
20		8.11	0.36	0.00	0.00	0.01	0.04	0.04	0.07	1.10	0.12	9.86
30		7.23	0.25	0.00	0.00	0.01	0.03	0.03	0.05	1.04	0.12	8.78
						Adult						
	1	12.03	1.01	14.28	8.37	8.41	2.40	1.02	0.02	0.05	0.01	47.95
	2	11.95	0.90	13.70	3.36	11.06	2.56	3.38	0.18	0.11	0.01	47.35
	4	11.82	0.78	12.60	0.55	8.48	2.82	7.63	0.99	0.25	0.03	46.10
	8	11.62	0.67	10.67	0.07	3.20	2.78	10.31	3.46	0.54	0.06	43.55
	12	11.47	0.63	9.03	0.04	1.18	2.41	9.37	5.69	0.81	0.09	40.86
1	24	11.20	0.56	5.48	0.02	0.12	1.31	4.57	8.14	1.34	0.15	32.98
2		10.95	0.52	2.01	0.01	0.03	0.38	0.90	5.24	1.69	0.19	21.95
4		10.64	0.48	0.27	0.00	0.02	0.07	0.09	1.03	1.67	0.19	14.48
8		10.09	0.42	0.00	0.00	0.01	0.04	0.05	0.12	1.44	0.16	12.37
10		9.84	0.39	0.00	0.00	0.01	0.04	0.05	0.10	1.35	0.15	11.96
20		8.70	0.28	0.00	0.00	0.01	0.04	0.04	0.07	1.14	0.13	10.42
30		7.77	0.20	0.00	0.00	0.01	0.03	0.03	0.05	1.08	0.12	9.30

Table B-3. Activity of Type *S* ^{60}Co in DCAL Source Regions at Selected Times after Inhalation (%)

Time		Lung	BBi	ET1	Stomach	SI	Blood	ULI	LLI	Other	Liver	Retained
d	h											
						Infant						
	1	10.51	0.93	20.11	12.62	12.71	0.06	1.52	0.04	0.00	0.00	58.96
	2	10.44	0.85	19.30	5.01	16.98	0.13	5.11	0.27	0.00	0.00	58.14
	4	10.30	0.74	17.74	0.77	13.40	0.27	11.71	1.51	0.01	0.00	56.51
	8	10.09	0.65	15.03	0.08	5.37	0.37	16.18	5.35	0.05	0.01	53.20
	12	9.93	0.60	12.72	0.05	2.08	0.36	14.90	8.89	0.09	0.01	49.65
1	24	9.65	0.54	7.71	0.02	0.19	0.21	7.29	12.90	0.17	0.02	38.72
2		9.45	0.49	2.84	0.01	0.03	0.06	1.36	8.25	0.23	0.03	22.74
4		9.26	0.46	0.38	0.00	0.02	0.01	0.09	1.53	0.22	0.02	12.01
8		8.94	0.41	0.01	0.00	0.01	0.00	0.05	0.12	0.18	0.02	9.75
10		8.78	0.38	0.00	0.00	0.01	0.00	0.05	0.09	0.17	0.02	9.52
20		8.12	0.29	0.00	0.00	0.01	0.00	0.04	0.07	0.13	0.01	8.68
30		7.58	0.21	0.00	0.00	0.01	0.00	0.03	0.05	0.11	0.01	8.02
						1-year-old						
	1	11.26	0.91	20.20	12.67	12.77	0.04	1.53	0.04	0.00	0.00	59.89
	2	11.20	0.83	19.39	5.03	17.09	0.08	5.14	0.27	0.00	0.00	59.07
	4	11.08	0.72	17.83	0.76	13.53	0.14	11.79	1.52	0.01	0.00	57.43
	8	10.90	0.63	15.10	0.07	5.45	0.19	16.32	5.39	0.03	0.00	54.12
	12	10.77	0.59	12.78	0.04	2.11	0.18	15.06	8.97	0.05	0.01	50.57
1	24	10.53	0.53	7.75	0.02	0.18	0.11	7.35	13.02	0.09	0.01	39.61
2		10.35	0.49	2.85	0.01	0.03	0.03	1.35	8.31	0.12	0.01	23.56
4		10.15	0.46	0.39	0.00	0.02	0.00	0.09	1.53	0.12	0.01	12.79
8		9.82	0.41	0.01	0.00	0.01	0.00	0.05	0.12	0.10	0.01	10.54
10		9.66	0.38	0.00	0.00	0.01	0.00	0.05	0.09	0.09	0.01	10.32
20		8.97	0.28	0.00	0.00	0.01	0.00	0.04	0.07	0.07	0.01	9.47
30		8.40	0.21	0.00	0.00	0.01	0.00	0.03	0.06	0.06	0.01	8.80
						5-year-old						
	1	11.62	0.91	16.67	10.38	10.45	0.04	1.25	0.03	0.00	0.00	51.74
	2	11.55	0.83	16.00	4.14	14.00	0.06	4.20	0.22	0.00	0.00	51.06
	4	11.42	0.72	14.72	0.65	11.12	0.12	9.67	1.24	0.01	0.00	49.71
	8	11.23	0.63	12.46	0.08	4.53	0.16	13.42	4.42	0.02	0.00	46.98
	12	11.08	0.58	10.55	0.04	1.78	0.15	12.42	7.37	0.04	0.00	44.05
1	24	10.82	0.52	6.40	0.02	0.18	0.09	6.13	10.76	0.07	0.01	35.01
2		10.62	0.48	2.35	0.01	0.03	0.02	1.15	6.92	0.10	0.01	21.71
4		10.42	0.45	0.32	0.00	0.02	0.00	0.09	1.30	0.10	0.01	12.73
8		10.08	0.40	0.01	0.00	0.01	0.00	0.05	0.12	0.08	0.01	10.78
10		9.92	0.38	0.00	0.00	0.01	0.00	0.05	0.09	0.08	0.01	10.55
20		9.20	0.28	0.00	0.00	0.01	0.00	0.04	0.07	0.06	0.01	9.68
30		8.61	0.21	0.00	0.00	0.01	0.00	0.03	0.06	0.05	0.01	9.00

Table B-3 (continued)

Time		Lung	BBi	ET1	Stomach	SI	Blood	ULI	LLI	Other	Liver	Retained
d	h											
						10-year-old						
	1	11.13	1.02	17.02	10.64	10.71	0.04	1.28	0.03	0.00	0.00	52.26
	2	11.07	0.91	16.34	4.25	14.35	0.07	4.31	0.23	0.00	0.00	51.57
	4	10.95	0.79	15.02	0.67	11.41	0.12	9.91	1.28	0.01	0.00	50.20
	8	10.77	0.68	12.72	0.07	4.64	0.16	13.76	4.53	0.02	0.00	47.41
	12	10.64	0.64	10.76	0.04	1.81	0.16	12.73	7.56	0.04	0.00	44.41
1	24	10.40	0.58	6.53	0.02	0.17	0.09	6.26	11.02	0.08	0.01	35.17
2		10.21	0.54	2.40	0.01	0.03	0.03	1.17	7.06	0.10	0.01	21.57
4		10.02	0.51	0.32	0.00	0.02	0.00	0.09	1.32	0.10	0.01	12.41
8		9.69	0.45	0.01	0.00	0.01	0.00	0.05	0.11	0.08	0.01	10.44
10		9.54	0.42	0.00	0.00	0.01	0.00	0.05	0.09	0.08	0.01	10.22
20		8.86	0.31	0.00	0.00	0.01	0.00	0.04	0.07	0.06	0.01	9.37
30		8.30	0.23	0.00	0.00	0.01	0.00	0.03	0.06	0.05	0.01	8.70
						15-year-old						
	1	12.55	1.44	13.34	8.51	8.53	0.03	1.02	0.02	0.00	0.00	45.80
	2	12.47	1.28	12.80	3.47	11.49	0.06	3.44	0.18	0.00	0.00	45.26
	4	12.34	1.09	11.77	0.60	9.25	0.10	7.95	1.02	0.01	0.00	44.18
	8	12.12	0.94	9.97	0.09	3.86	0.14	11.16	3.65	0.02	0.00	41.98
	12	11.96	0.88	8.44	0.05	1.56	0.13	10.41	6.12	0.03	0.00	39.61
1	24	11.68	0.80	5.12	0.02	0.17	0.08	5.22	9.02	0.06	0.01	32.21
2		11.47	0.75	1.88	0.01	0.03	0.02	1.02	5.87	0.08	0.01	21.16
4		11.25	0.71	0.25	0.00	0.02	0.00	0.09	1.14	0.08	0.01	13.57
8		10.88	0.63	0.00	0.00	0.02	0.00	0.06	0.13	0.07	0.01	11.81
10		10.70	0.59	0.00	0.00	0.02	0.00	0.06	0.10	0.07	0.01	11.56
20		9.93	0.44	0.00	0.00	0.01	0.00	0.04	0.08	0.05	0.01	10.58
30		9.30	0.32	0.00	0.00	0.01	0.00	0.03	0.06	0.05	0.01	9.81
						Adult						
	1	13.34	1.12	14.28	8.86	8.90	0.03	1.06	0.02	0.00	0.00	47.96
	2	13.26	1.00	13.70	3.57	11.96	0.06	3.58	0.19	0.00	0.00	47.38
	4	13.13	0.86	12.60	0.59	9.56	0.11	8.27	1.06	0.01	0.00	46.23
	8	12.92	0.75	10.67	0.08	3.95	0.14	11.54	3.79	0.02	0.00	43.89
	12	12.76	0.70	9.03	0.05	1.58	0.13	10.73	6.33	0.03	0.00	41.38
1	24	12.49	0.63	5.48	0.02	0.17	0.08	5.35	9.30	0.07	0.01	33.61
2		12.27	0.58	2.01	0.01	0.03	0.02	1.04	6.03	0.09	0.01	22.11
4		12.04	0.55	0.27	0.00	0.02	0.00	0.09	1.16	0.09	0.01	14.26
8		11.65	0.48	0.00	0.00	0.02	0.00	0.06	0.13	0.07	0.01	12.44
10		11.47	0.46	0.00	0.00	0.02	0.00	0.06	0.10	0.07	0.01	12.20
20		10.66	0.34	0.00	0.00	0.01	0.00	0.04	0.08	0.06	0.01	11.21
30		9.99	0.25	0.00	0.00	0.01	0.00	0.04	0.07	0.05	0.01	10.43

Table B-4. Activity of Type F ^{131}I in DCAL Source Regions at Selected Times after Inhalation (%)

Time		ET1	Stomach	SI	Blood	LLI	Thyroid	UB_Cont	Other	Retained
d	h									
					Infant					
	1	20.04	5.63	0.23	29.87	0.00	0.82	1.03	0.00	57.87
	2	19.16	2.10	0.09	30.12	0.01	1.84	1.38	0.00	54.81
	4	17.49	0.28	0.01	25.29	0.02	3.76	1.30	0.02	48.27
	8	14.60	0.01	0.00	15.93	0.05	6.43	0.83	0.07	38.00
	12	12.18	0.00	0.00	9.89	0.06	8.01	0.52	0.13	30.86
1	24	7.08	0.00	0.00	2.40	0.06	9.54	0.13	0.33	19.57
2		2.39	0.00	0.00	0.22	0.05	8.86	0.01	0.57	12.15
4		0.27	0.00	0.00	0.11	0.07	6.78	0.01	0.64	7.91
8		0.00	0.00	0.00	0.08	0.05	3.99	0.00	0.43	4.58
10		0.00	0.00	0.00	0.06	0.04	3.07	0.00	0.33	3.52
20		0.00	0.00	0.00	0.02	0.01	0.83	0.00	0.09	0.95
30		0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.02	0.26
					1-year-old					
	1	20.13	5.65	0.24	30.60	0.00	0.84	1.18	0.00	58.90
	2	19.25	2.11	0.09	30.79	0.01	1.89	1.69	0.00	55.94
	4	17.58	0.28	0.01	25.83	0.02	3.85	1.66	0.01	49.35
	8	14.68	0.01	0.00	16.27	0.05	6.59	1.08	0.05	38.80
	12	12.24	0.00	0.00	10.10	0.06	8.23	0.67	0.10	31.46
1	24	7.11	0.00	0.00	2.44	0.06	9.85	0.16	0.27	19.92
2		2.40	0.00	0.00	0.19	0.05	9.26	0.01	0.50	12.43
4		0.27	0.00	0.00	0.08	0.05	7.24	0.00	0.62	8.29
8		0.00	0.00	0.00	0.06	0.04	4.45	0.00	0.46	5.05
10		0.00	0.00	0.00	0.05	0.04	3.50	0.00	0.37	3.98
20		0.00	0.00	0.00	0.02	0.01	1.05	0.00	0.11	1.20
30		0.00	0.00	0.00	0.00	0.00	0.32	0.00	0.03	0.36
					5-year-old					
	1	16.61	4.62	0.19	27.36	0.00	0.75	1.43	0.00	51.23
	2	15.89	1.72	0.07	27.29	0.01	1.69	2.60	0.00	49.36
	4	14.50	0.23	0.01	22.78	0.02	3.42	3.48	0.01	44.54
	8	12.11	0.00	0.00	14.34	0.04	5.85	2.83	0.03	35.27
	12	10.10	0.00	0.00	8.90	0.05	7.31	1.85	0.06	28.31
1	24	5.87	0.00	0.00	2.14	0.05	8.80	0.45	0.16	17.49
2		1.98	0.00	0.00	0.15	0.03	8.38	0.03	0.33	10.91
4		0.23	0.00	0.00	0.04	0.02	6.72	0.01	0.46	7.49
8		0.00	0.00	0.00	0.04	0.02	4.32	0.01	0.41	4.82
10		0.00	0.00	0.00	0.03	0.02	3.47	0.00	0.35	3.89
20		0.00	0.00	0.00	0.01	0.01	1.17	0.00	0.13	1.32
30		0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.04	0.45

Table B-4 (continued)

Time		ET1	Stomach	SI	Blood	LLI	Thyroid	UB_Cont	Other	Retained
d	h									
					10-year-old					
	1	16.96	4.73	0.20	27.42	0.00	0.75	1.43	0.00	51.75
	2	16.22	1.76	0.07	27.41	0.01	1.69	2.61	0.00	49.87
	4	14.80	0.23	0.01	22.91	0.02	3.44	3.50	0.00	45.01
	8	12.36	0.00	0.00	14.42	0.04	5.90	2.84	0.01	35.65
	12	10.31	0.00	0.00	8.95	0.05	7.38	1.86	0.03	28.62
1	24	5.99	0.00	0.00	2.14	0.05	8.95	0.45	0.07	17.68
2		2.02	0.00	0.00	0.13	0.03	8.67	0.03	0.15	11.02
4		0.23	0.00	0.00	0.01	0.01	7.16	0.00	0.26	7.67
8		0.00	0.00	0.00	0.01	0.01	4.86	0.00	0.30	5.19
10		0.00	0.00	0.00	0.01	0.01	4.01	0.00	0.29	4.32
20		0.00	0.00	0.00	0.01	0.00	1.54	0.00	0.15	1.70
30		0.00	0.00	0.00	0.00	0.00	0.59	0.00	0.06	0.66
					15-year-old					
	1	13.29	3.76	0.16	25.79	0.00	0.71	1.35	0.00	45.33
	2	12.71	1.40	0.06	25.40	0.01	1.59	2.44	0.00	43.68
	4	11.60	0.19	0.01	21.05	0.02	3.20	3.24	0.00	39.37
	8	9.69	0.00	0.00	13.23	0.03	5.46	2.61	0.01	31.08
	12	8.08	0.00	0.00	8.21	0.04	6.82	1.70	0.02	24.91
1	24	4.69	0.00	0.00	1.97	0.04	8.26	0.41	0.06	15.45
2		1.58	0.00	0.00	0.12	0.02	8.01	0.02	0.12	9.88
4		0.18	0.00	0.00	0.01	0.01	6.63	0.00	0.21	7.04
8		0.00	0.00	0.00	0.01	0.00	4.53	0.00	0.25	4.80
10		0.00	0.00	0.00	0.01	0.00	3.74	0.00	0.24	4.00
20		0.00	0.00	0.00	0.00	0.00	1.45	0.00	0.13	1.60
30		0.00	0.00	0.00	0.00	0.00	0.57	0.00	0.06	0.63
					Adult					
	1	14.23	3.93	0.16	26.74	0.00	0.74	1.40	0.00	47.47
	2	13.61	1.47	0.06	26.35	0.01	1.65	2.53	0.00	45.74
	4	12.42	0.19	0.01	21.84	0.02	3.32	3.36	0.00	41.24
	8	10.37	0.00	0.00	13.73	0.03	5.66	2.71	0.01	32.57
	12	8.65	0.00	0.00	8.52	0.04	7.08	1.77	0.02	26.11
1	24	5.03	0.00	0.00	2.04	0.04	8.58	0.43	0.05	16.18
2		1.70	0.00	0.00	0.12	0.02	8.33	0.02	0.11	10.30
4		0.19	0.00	0.00	0.00	0.00	6.92	0.00	0.20	7.32
8		0.00	0.00	0.00	0.00	0.00	4.75	0.00	0.26	5.02
10		0.00	0.00	0.00	0.00	0.00	3.93	0.00	0.26	4.20
20		0.00	0.00	0.00	0.00	0.00	1.54	0.00	0.17	1.71
30		0.00	0.00	0.00	0.00	0.00	0.61	0.00	0.08	0.69

Table B-5. Activity of Type *F* ^{137}Cs in DCAL Source Regions at Selected Times after Inhalation (%)

Time		ET1	Stomach	Blood	LLI	Body tissues	Retained
d	h						
				Infant			
	1	20.11	5.65	29.98	0.00	2.73	58.96
	2	19.30	2.11	30.33	0.01	6.19	58.15
	4	17.74	0.28	25.66	0.03	12.72	56.57
	8	15.03	0.01	16.39	0.05	22.14	53.75
	12	12.72	0.00	10.32	0.07	28.04	51.29
1	24	7.71	0.00	2.58	0.14	35.07	45.67
2		2.84	0.00	0.16	0.23	35.93	39.36
4		0.38	0.00	0.00	0.29	33.08	33.95
8		0.01	0.00	0.00	0.26	27.79	28.22
10		0.00	0.00	0.00	0.24	25.46	25.85
20		0.00	0.00	0.00	0.15	16.41	16.66
30		0.00	0.00	0.00	0.10	10.53	10.695
				1-year-old			
	1	20.20	5.67	30.71	0.00	2.80	59.89
	2	19.39	2.12	31.01	0.01	6.34	59.08
	4	17.83	0.28	26.20	0.03	13.00	57.48
	8	15.10	0.01	16.74	0.05	22.59	54.64
	12	12.78	0.00	10.54	0.08	28.57	52.13
1	24	7.75	0.00	2.63	0.15	35.59	46.34
2		2.85	0.00	0.16	0.28	36.12	39.67
4		0.39	0.00	0.00	0.36	32.61	33.60
8		0.01	0.00	0.00	0.31	26.34	26.85
10		0.00	0.00	0.00	0.27	23.68	24.13
20		0.00	0.00	0.00	0.16	13.89	14.15
30		0.00	0.00	0.00	0.09	8.15	8.304
				5-year-old			
	1	16.68	4.64	27.46	0.00	2.51	51.74
	2	16.00	1.74	27.49	0.01	5.66	51.06
	4	14.72	0.23	23.11	0.02	11.55	49.76
	8	12.46	0.00	14.75	0.04	20.02	47.43
	12	10.55	0.00	9.29	0.06	25.31	45.38
1	24	6.40	0.00	2.32	0.12	31.60	40.66
2		2.35	0.00	0.15	0.22	32.27	35.25
4		0.32	0.00	0.00	0.27	29.62	30.45
8		0.01	0.00	0.00	0.23	24.91	25.33
10		0.00	0.00	0.00	0.20	22.94	23.31
20		0.00	0.00	0.00	0.12	15.72	15.94
30		0.00	0.00	0.00	0.07	11.33	11.466

Table B-5 (continued)

Time		ET1	Stomach	Blood	LLI	Body tissues	Retained
d	h						
				10-year-old			
	1	17.02	4.75	27.52	0.00	2.52	52.26
	2	16.34	1.78	27.61	0.01	5.67	51.58
	4	15.02	0.24	23.24	0.02	11.60	50.25
	8	12.72	0.00	14.84	0.04	20.12	47.88
	12	10.77	0.00	9.34	0.06	25.45	45.79
1	24	6.53	0.00	2.34	0.12	31.80	41.01
2		2.40	0.00	0.15	0.21	32.58	35.58
4		0.33	0.00	0.00	0.25	30.22	31.00
8		0.01	0.00	0.00	0.19	26.35	26.69
10		0.00	0.00	0.00	0.16	24.83	25.12
20		0.00	0.00	0.00	0.08	19.71	19.86
30		0.00	0.00	0.00	0.05	16.60	16.70
				15-year-old			
	1	13.34	3.78	25.88	—	2.38	45.80
	2	12.80	1.41	25.58	—	5.32	45.26
	4	11.77	0.19	21.35	—	10.78	44.22
	8	9.97	0.00	13.61	—	18.60	42.35
	12	8.44	0.00	8.57	—	23.49	40.70
1	24	5.12	0.00	2.14	—	29.34	36.89
2		1.88	0.00	0.13	—	30.23	32.61
4		0.25	0.00	0.00	—	28.76	29.31
8		0.00	0.00	0.00	—	26.98	27.13
10		0.00	0.00	0.00	—	26.40	26.52
20		0.00	0.00	0.00	—	24.31	24.38
30		0.00	0.00	0.00	—	22.55	22.61
				Adult			
	1	14.28	3.95	26.83	—	2.46	47.96
	2	13.70	1.48	26.54	—	5.52	47.39
	4	12.60	0.20	22.16	—	11.19	46.27
	8	10.67	0.00	14.13	—	19.32	44.28
	12	9.03	0.00	8.89	—	24.42	42.54
1	24	5.48	0.00	2.22	—	30.59	38.56
2		2.01	0.00	0.14	—	31.71	34.18
4		0.27	0.00	0.00	—	30.51	31.03
8		0.00	0.00	0.00	—	29.04	29.16
10		0.00	0.00	0.00	—	28.56	28.65
20		0.00	0.00	0.00	—	26.69	26.75
30		0.00	0.00	0.00	—	25.04	25.10

Table B-6. Activity of Type *F* ^{192}Ir in DCAL Source Regions at Selected Times after Inhalation (%)

Time		Lung	BBi	ET1	Stomach	SI	Blood	ULI	LLI	Liver	Kidneys	Spleen	Other	Retained
d	h													
							Infant							
	1	0.16	0.01	20.10	5.65	7.00	22.75	1.15	0.03	0.46	0.09	0.05	1.25	58.82
	2	0.00	0.00	19.28	2.11	8.51	20.50	3.22	0.19	0.95	0.19	0.10	2.58	57.77
	4	0.00	0.00	17.72	0.28	6.40	16.30	6.73	0.92	1.80	0.36	0.18	4.87	55.67
	8	0.00	0.00	14.98	0.01	2.44	10.33	9.00	3.06	3.00	0.60	0.30	8.09	51.89
	12	0.00	0.00	12.66	0.00	0.88	6.52	8.29	5.01	3.75	0.75	0.37	10.12	48.40
1	24	0.00	0.00	7.64	0.00	0.04	1.63	4.14	7.23	4.66	0.93	0.47	12.59	39.35
2		0.00	0.00	2.79	0.00	0.00	0.10	0.82	4.66	4.83	0.97	0.48	13.05	27.69
4		0.00	0.00	0.37	0.00	0.00	0.00	0.11	0.94	4.60	0.92	0.46	12.42	19.81
8		0.00	0.00	0.01	0.00	0.00	0.00	0.06	0.14	4.18	0.84	0.42	11.28	16.92
10		0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.11	4.00	0.80	0.40	10.79	16.16
20		0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.05	3.32	0.66	0.33	8.95	13.34
30		0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	2.84	0.57	0.28	7.67	11.41
							1-year-old							
	1	0.17	0.01	20.20	5.67	7.03	23.45	1.16	0.03	0.48	0.10	0.05	1.28	59.77
	2	0.00	0.00	19.38	2.12	8.56	21.11	3.25	0.19	0.98	0.20	0.10	2.65	58.72
	4	0.00	0.00	17.80	0.28	6.47	16.75	6.79	0.93	1.86	0.37	0.19	5.01	56.60
	8	0.00	0.00	15.06	0.01	2.49	10.59	9.12	3.09	3.08	0.62	0.31	8.32	52.78
	12	0.00	0.00	12.72	0.00	0.91	6.66	8.42	5.07	3.85	0.77	0.38	10.39	49.24
1	24	0.00	0.00	7.68	0.00	0.04	1.66	4.22	7.34	4.78	0.96	0.48	12.92	40.10
2		0.00	0.00	2.80	0.00	0.00	0.10	0.83	4.74	4.96	0.99	0.50	13.38	28.30
4		0.00	0.00	0.37	0.00	0.00	0.00	0.11	0.95	4.72	0.94	0.47	12.74	20.31
8		0.00	0.00	0.01	0.00	0.00	0.00	0.07	0.14	4.28	0.86	0.43	11.56	17.35
10		0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.11	4.10	0.82	0.41	11.07	16.57
20		0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.05	3.40	0.68	0.34	9.18	13.68
30		0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	2.91	0.58	0.29	7.86	11.70
							5-year-old							
	1	0.17	0.01	16.67	4.64	5.75	21.52	0.97	0.03	0.43	0.09	0.04	1.17	51.67
	2	0.00	0.00	15.99	1.73	7.00	19.39	2.70	0.16	0.90	0.18	0.09	2.43	50.86
	4	0.00	0.00	14.69	0.23	5.29	15.38	5.63	0.77	1.70	0.34	0.17	4.59	49.16
	8	0.00	0.00	12.43	0.00	2.04	9.72	7.57	2.57	2.83	0.57	0.28	7.63	45.91
	12	0.00	0.00	10.50	0.00	0.74	6.12	7.00	4.21	3.53	0.71	0.35	9.53	42.89
1	24	0.00	0.00	6.34	0.00	0.04	1.52	3.53	6.12	4.39	0.88	0.44	11.85	35.16
2		0.00	0.00	2.31	0.00	0.00	0.09	0.71	3.97	4.55	0.91	0.45	12.27	25.28
4		0.00	0.00	0.31	0.00	0.00	0.00	0.10	0.81	4.33	0.87	0.43	11.68	18.54
8		0.00	0.00	0.01	0.00	0.00	0.00	0.06	0.13	3.93	0.79	0.39	10.61	15.92
10		0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.10	3.76	0.75	0.38	10.15	15.20
20		0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.05	3.12	0.62	0.31	8.42	12.56
30		0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	2.67	0.53	0.27	7.21	10.73

Table B-6 (continued)

Time		Lung	BBi	ET1	Stomach	SI	Blood	ULI	LLI	Liver	Kidneys	Spleen	Other	Retained
d	h													
							10-year-old							
	1	0.17	0.02	17.01	4.75	5.89	21.44	0.99	0.03	0.43	0.09	0.04	1.17	52.20
	2	0.00	0.00	16.32	1.78	7.17	19.31	2.76	0.16	0.90	0.18	0.09	2.42	51.38
	4	0.00	0.00	15.00	0.24	5.42	15.32	5.75	0.78	1.70	0.34	0.17	4.58	49.65
	8	0.00	0.00	12.68	0.00	2.09	9.68	7.73	2.62	2.82	0.56	0.28	7.60	46.35
	12	0.00	0.00	10.72	0.00	0.76	6.09	7.14	4.30	3.52	0.70	0.35	9.50	43.27
1	24	0.00	0.00	6.47	0.00	0.04	1.52	3.60	6.24	4.37	0.87	0.44	11.80	35.40
2		0.00	0.00	2.36	0.00	0.00	0.09	0.72	4.04	4.53	0.91	0.45	12.23	25.34
4		0.00	0.00	0.31	0.00	0.00	0.00	0.10	0.82	4.31	0.86	0.43	11.64	18.49
8		0.00	0.00	0.01	0.00	0.00	0.00	0.06	0.13	3.91	0.78	0.39	10.57	15.86
10		0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.10	3.75	0.75	0.37	10.12	15.15
20		0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.05	3.11	0.62	0.31	8.39	12.51
30		0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	2.66	0.53	0.27	7.19	10.69
							15-year-old							
	1	0.19	0.02	13.33	3.78	4.68	21.05	0.82	0.02	0.42	0.08	0.04	1.13	45.74
	2	0.00	0.00	12.79	1.41	5.70	18.98	2.27	0.13	0.87	0.17	0.09	2.36	45.07
	4	0.00	0.00	11.75	0.19	4.31	15.05	4.71	0.64	1.66	0.33	0.17	4.48	43.64
	8	0.00	0.00	9.94	0.00	1.66	9.51	6.33	2.15	2.76	0.55	0.28	7.45	40.91
	12	0.00	0.00	8.40	0.00	0.60	5.98	5.88	3.53	3.45	0.69	0.34	9.32	38.38
1	24	0.00	0.00	5.07	0.00	0.03	1.49	3.00	5.15	4.29	0.86	0.43	11.58	31.95
2		0.00	0.00	1.85	0.00	0.00	0.09	0.62	3.37	4.44	0.89	0.44	12.00	23.72
4		0.00	0.00	0.25	0.00	0.00	0.00	0.10	0.71	4.23	0.85	0.42	11.42	17.98
8		0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.12	3.84	0.77	0.38	10.37	15.56
10		0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.10	3.68	0.74	0.37	9.92	14.86
20		0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.05	3.05	0.61	0.30	8.23	12.27
30		0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	2.61	0.52	0.26	7.05	10.49
							Adult							
	1	0.20	0.02	14.27	3.95	4.89	21.78	0.86	0.02	0.43	0.09	0.04	1.17	47.90
	2	0.00	0.00	13.69	1.48	5.96	19.64	2.36	0.14	0.91	0.18	0.09	2.44	47.19
	4	0.00	0.00	12.58	0.20	4.50	15.58	4.91	0.67	1.72	0.34	0.17	4.64	45.68
	8	0.00	0.00	10.64	0.00	1.73	9.84	6.61	2.24	2.86	0.57	0.29	7.71	42.78
	12	0.00	0.00	8.99	0.00	0.63	6.19	6.14	3.68	3.57	0.71	0.36	9.64	40.10
1	24	0.00	0.00	5.43	0.00	0.03	1.54	3.13	5.37	4.44	0.89	0.44	11.98	33.31
2		0.00	0.00	1.98	0.00	0.00	0.10	0.64	3.51	4.60	0.92	0.46	12.42	24.64
4		0.00	0.00	0.26	0.00	0.00	0.00	0.10	0.74	4.38	0.88	0.44	11.82	18.62
8		0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.13	3.97	0.79	0.40	10.73	16.10
10		0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.10	3.80	0.76	0.38	10.27	15.38
20		0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.05	3.16	0.63	0.32	8.52	12.70
30		0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	2.70	0.54	0.27	7.30	10.86

Table B-7
Activity of Type *M* ^{192}Ir in DCAL Source Regions at Selected Times after Inhalation (%)

Time		Lung	BBi	ET1	Stomach	SI	Blood	ULI	LLI	Liver	Kidneys	Spleen	Other	Retained
d	h													
							Infant							
	1	9.48	0.83	20.10	11.92	12.14	2.31	1.48	0.04	0.05	0.01	0.00	0.13	58.92
	2	9.39	0.76	19.28	4.72	16.13	2.14	4.92	0.26	0.10	0.02	0.01	0.26	58.07
	4	9.26	0.67	17.72	0.72	12.69	1.84	11.20	1.45	0.19	0.04	0.02	0.51	56.35
	8	9.05	0.58	14.98	0.07	5.07	1.30	15.43	5.11	0.33	0.07	0.03	0.90	52.95
	12	8.88	0.54	12.66	0.04	1.95	0.87	14.20	8.47	0.43	0.09	0.04	1.16	49.36
1	24	8.58	0.48	7.64	0.02	0.18	0.25	6.93	12.24	0.56	0.11	0.06	1.51	38.57
2		8.28	0.43	2.79	0.01	0.02	0.03	1.28	7.77	0.60	0.12	0.06	1.61	23.01
4		7.89	0.39	0.37	0.00	0.01	0.02	0.09	1.43	0.59	0.12	0.06	1.58	12.56
8		7.20	0.33	0.01	0.00	0.01	0.01	0.05	0.12	0.56	0.11	0.06	1.52	9.99
10		6.89	0.30	0.00	0.00	0.01	0.01	0.05	0.09	0.55	0.11	0.06	1.49	9.57
20		5.54	0.19	0.00	0.00	0.01	0.01	0.03	0.06	0.52	0.10	0.05	1.39	7.91
30		4.50	0.13	0.00	0.00	0.01	0.01	0.02	0.04	0.48	0.10	0.05	1.31	6.65
							1-year-old							
	1	10.16	0.82	20.20	11.97	12.20	2.36	1.49	0.04	0.05	0.01	0.00	0.13	59.86
	2	10.08	0.75	19.38	4.73	16.23	2.16	4.94	0.26	0.10	0.02	0.01	0.27	59.00
	4	9.96	0.65	17.80	0.72	12.81	1.78	11.28	1.46	0.19	0.04	0.02	0.51	57.28
	8	9.78	0.56	15.06	0.07	5.14	1.20	15.57	5.15	0.32	0.06	0.03	0.88	53.86
	12	9.64	0.53	12.72	0.04	1.98	0.78	14.34	8.55	0.41	0.08	0.04	1.12	50.25
1	24	9.36	0.47	7.68	0.02	0.17	0.22	6.99	12.36	0.53	0.11	0.05	1.43	39.39
2		9.07	0.43	2.80	0.01	0.02	0.03	1.28	7.82	0.56	0.11	0.06	1.51	23.72
4		8.65	0.39	0.37	0.00	0.01	0.02	0.09	1.43	0.55	0.11	0.06	1.49	13.20
8		7.92	0.33	0.01	0.00	0.01	0.02	0.05	0.12	0.53	0.11	0.05	1.44	10.60
10		7.58	0.30	0.00	0.00	0.01	0.01	0.05	0.09	0.53	0.11	0.05	1.42	10.17
20		6.12	0.19	0.00	0.00	0.01	0.01	0.03	0.06	0.50	0.10	0.05	1.35	8.44
30		4.99	0.13	0.00	0.00	0.01	0.01	0.02	0.04	0.47	0.09	0.05	1.28	7.10
							5-year-old							
	1	10.48	0.82	16.67	9.80	9.98	2.17	1.22	0.03	0.04	0.01	0.00	0.12	51.71
	2	10.39	0.74	15.99	3.90	13.30	1.98	4.05	0.22	0.09	0.02	0.01	0.24	51.01
	4	10.27	0.65	14.69	0.61	10.53	1.63	9.25	1.20	0.17	0.03	0.02	0.47	49.59
	8	10.07	0.56	12.43	0.07	4.27	1.09	12.81	4.23	0.30	0.06	0.03	0.80	46.76
	12	9.91	0.52	10.50	0.04	1.67	0.71	11.84	7.03	0.38	0.08	0.04	1.02	43.77
1	24	9.62	0.46	6.34	0.02	0.16	0.20	5.83	10.22	0.48	0.10	0.05	1.30	34.78
2		9.31	0.42	2.31	0.01	0.02	0.03	1.09	6.52	0.51	0.10	0.05	1.38	21.77
4		8.88	0.38	0.31	0.00	0.01	0.02	0.09	1.22	0.51	0.10	0.05	1.37	12.95
8		8.12	0.32	0.01	0.00	0.01	0.02	0.05	0.11	0.49	0.10	0.05	1.33	10.63
10		7.77	0.29	0.00	0.00	0.01	0.01	0.05	0.09	0.49	0.10	0.05	1.32	10.20
20		6.28	0.19	0.00	0.00	0.01	0.01	0.03	0.06	0.47	0.09	0.05	1.26	8.46
30		5.11	0.12	0.00	0.00	0.01	0.01	0.02	0.04	0.45	0.09	0.04	1.21	7.13

Table B-7 (continued)

Time		Lung	BBi	ET1	Stomach	SI	Blood	ULI	LLI	Liver	Kidneys	Spleen	Other	Retained
d	h													
							10-year-old							
	1	10.04	0.92	17.01	10.05	10.23	2.16	1.25	0.03	0.04	0.01	0.00	0.12	52.24
	2	9.96	0.82	16.32	4.00	13.63	1.97	4.15	0.22	0.09	0.02	0.01	0.24	51.52
	4	9.85	0.71	15.00	0.62	10.80	1.62	9.49	1.23	0.17	0.03	0.02	0.47	50.07
	8	9.66	0.61	12.68	0.07	4.37	1.09	13.13	4.33	0.30	0.06	0.03	0.80	47.18
	12	9.52	0.57	10.72	0.04	1.70	0.71	12.13	7.20	0.38	0.08	0.04	1.02	44.14
1	24	9.24	0.52	6.47	0.02	0.16	0.20	5.95	10.46	0.48	0.10	0.05	1.30	34.94
2		8.95	0.47	2.36	0.01	0.02	0.03	1.11	6.66	0.51	0.10	0.05	1.38	21.66
4		8.54	0.43	0.31	0.00	0.01	0.02	0.09	1.23	0.50	0.10	0.05	1.36	12.67
8		7.81	0.36	0.01	0.00	0.01	0.02	0.05	0.11	0.49	0.10	0.05	1.33	10.35
10		7.48	0.33	0.00	0.00	0.01	0.01	0.05	0.09	0.49	0.10	0.05	1.31	9.93
20		6.04	0.21	0.00	0.00	0.01	0.01	0.03	0.06	0.46	0.09	0.05	1.25	8.23
30		4.93	0.14	0.00	0.00	0.01	0.01	0.02	0.04	0.44	0.09	0.04	1.20	6.93
							15-year-old							
	1	11.32	1.30	13.33	8.04	8.14	2.12	1.00	0.02	0.04	0.01	0.00	0.11	45.78
	2	11.23	1.15	12.79	3.26	10.91	1.93	3.32	0.18	0.09	0.02	0.01	0.24	45.21
	4	11.09	0.98	11.75	0.56	8.75	1.58	7.62	0.98	0.17	0.03	0.02	0.46	44.07
	8	10.87	0.84	9.94	0.08	3.63	1.05	10.66	3.49	0.29	0.06	0.03	0.78	41.77
	12	10.70	0.79	8.40	0.05	1.46	0.69	9.92	5.84	0.37	0.07	0.04	0.99	39.34
1	24	10.38	0.71	5.07	0.02	0.16	0.19	4.96	8.57	0.47	0.09	0.05	1.26	31.95
2		10.05	0.66	1.85	0.01	0.03	0.03	0.96	5.54	0.50	0.10	0.05	1.34	21.12
4		9.59	0.60	0.25	0.00	0.02	0.02	0.09	1.06	0.49	0.10	0.05	1.33	13.62
8		8.77	0.50	0.00	0.00	0.01	0.02	0.06	0.12	0.49	0.10	0.05	1.31	11.44
10		8.39	0.46	0.00	0.00	0.01	0.02	0.05	0.10	0.48	0.10	0.05	1.30	10.98
20		6.78	0.30	0.00	0.00	0.01	0.01	0.04	0.07	0.47	0.09	0.05	1.27	9.09
30		5.52	0.19	0.00	0.00	0.01	0.01	0.03	0.05	0.45	0.09	0.05	1.23	7.63
							Adult							
	1	12.03	1.01	14.27	8.37	8.50	2.19	1.04	0.02	0.04	0.01	0.00	0.12	47.94
	2	11.94	0.90	13.69	3.36	11.35	2.00	3.46	0.18	0.09	0.02	0.01	0.25	47.33
	4	11.80	0.78	12.58	0.55	9.05	1.64	7.92	1.02	0.18	0.04	0.02	0.47	46.11
	8	11.59	0.67	10.64	0.07	3.72	1.09	11.03	3.63	0.30	0.06	0.03	0.80	43.67
	12	11.42	0.62	8.99	0.04	1.48	0.71	10.24	6.05	0.38	0.08	0.04	1.02	41.10
1	24	11.09	0.56	5.43	0.02	0.16	0.20	5.09	8.84	0.48	0.10	0.05	1.30	33.34
2		10.75	0.51	1.98	0.01	0.03	0.03	0.98	5.69	0.51	0.10	0.05	1.39	22.05
4		10.26	0.47	0.26	0.00	0.02	0.02	0.09	1.09	0.51	0.10	0.05	1.38	14.27
8		9.39	0.39	0.00	0.00	0.01	0.02	0.06	0.12	0.50	0.10	0.05	1.36	12.03
10		8.99	0.36	0.00	0.00	0.01	0.02	0.05	0.10	0.50	0.10	0.05	1.35	11.55
20		7.27	0.23	0.00	0.00	0.01	0.01	0.04	0.07	0.49	0.10	0.05	1.32	9.59
30		5.93	0.15	0.00	0.00	0.01	0.01	0.03	0.05	0.47	0.09	0.05	1.28	8.08

Table B-8
Activity of Type *S* ^{192}Ir in DCAL Source Regions at Selected Times after Inhalation (%)

Time		Lung	BBi	ET1	Stomach	SI	Blood	ULI	LLI	Liver	Kidneys	Spleen	Other	Retained
d	h													
							Infant							
	1	10.51	0.93	20.10	12.62	12.71	0.05	1.52	0.04	0.00	0.00	0.00	0.00	58.94
	2	10.43	0.85	19.28	5.01	16.97	0.12	5.11	0.27	0.00	0.00	0.00	0.01	58.10
	4	10.29	0.74	17.72	0.77	13.38	0.24	11.70	1.51	0.01	0.00	0.00	0.03	56.43
	8	10.06	0.65	14.98	0.08	5.35	0.29	16.14	5.33	0.04	0.01	0.00	0.10	53.06
	12	9.88	0.60	12.66	0.05	2.07	0.24	14.85	8.85	0.06	0.01	0.01	0.17	49.47
1	24	9.57	0.53	7.64	0.02	0.19	0.08	7.24	12.80	0.10	0.02	0.01	0.27	38.48
2		9.28	0.48	2.79	0.01	0.03	0.01	1.33	8.11	0.11	0.02	0.01	0.31	22.50
4		8.93	0.44	0.37	0.00	0.02	0.00	0.09	1.48	0.11	0.02	0.01	0.30	11.79
8		8.31	0.38	0.01	0.00	0.01	0.00	0.05	0.11	0.10	0.02	0.01	0.28	9.30
10		8.03	0.35	0.00	0.00	0.01	0.00	0.04	0.08	0.10	0.02	0.01	0.27	8.93
20		6.78	0.24	0.00	0.00	0.01	0.00	0.03	0.06	0.09	0.02	0.01	0.23	7.47
30		5.78	0.16	0.00	0.00	0.01	0.00	0.02	0.04	0.08	0.02	0.01	0.20	6.33
							1-year-old							
	1	11.26	0.91	20.20	12.66	12.77	0.04	1.53	0.04	0.00	0.00	0.00	0.00	59.87
	2	11.19	0.83	19.38	5.02	17.07	0.07	5.13	0.27	0.00	0.00	0.00	0.00	59.03
	4	11.07	0.72	17.80	0.76	13.51	0.13	11.78	1.52	0.01	0.00	0.00	0.02	57.35
	8	10.87	0.63	15.06	0.07	5.43	0.15	16.28	5.37	0.02	0.00	0.00	0.05	53.97
	12	10.72	0.58	12.72	0.04	2.10	0.12	15.00	8.93	0.03	0.01	0.00	0.09	50.36
1	24	10.44	0.53	7.68	0.02	0.18	0.04	7.29	12.91	0.05	0.01	0.01	0.14	39.31
2		10.16	0.48	2.80	0.01	0.03	0.00	1.33	8.16	0.06	0.01	0.01	0.16	23.22
4		9.79	0.44	0.37	0.00	0.02	0.00	0.09	1.48	0.06	0.01	0.01	0.16	12.45
8		9.14	0.38	0.01	0.00	0.01	0.00	0.05	0.11	0.05	0.01	0.01	0.15	9.93
10		8.83	0.35	0.00	0.00	0.01	0.00	0.04	0.08	0.05	0.01	0.01	0.14	9.55
20		7.49	0.24	0.00	0.00	0.01	0.00	0.03	0.06	0.05	0.01	0.00	0.12	8.03
30		6.41	0.16	0.00	0.00	0.01	0.00	0.02	0.04	0.04	0.01	0.00	0.11	6.83
							5-year-old							
	1	11.61	0.91	16.67	10.37	10.45	0.03	1.25	0.03	0.00	0.00	0.00	0.00	51.72
	2	11.54	0.83	15.99	4.13	13.99	0.06	4.20	0.22	0.00	0.00	0.00	0.00	51.02
	4	11.41	0.72	14.69	0.65	11.11	0.11	9.65	1.24	0.01	0.00	0.00	0.02	49.64
	8	11.19	0.63	12.43	0.08	4.51	0.13	13.39	4.41	0.02	0.00	0.00	0.05	46.85
	12	11.03	0.58	10.50	0.04	1.77	0.10	12.37	7.34	0.03	0.01	0.00	0.07	43.87
1	24	10.73	0.52	6.34	0.02	0.17	0.03	6.08	10.67	0.04	0.01	0.00	0.12	34.74
2		10.43	0.47	2.31	0.01	0.03	0.00	1.13	6.80	0.05	0.01	0.00	0.13	21.40
4		10.06	0.43	0.31	0.00	0.02	0.00	0.09	1.26	0.05	0.01	0.00	0.13	12.37
8		9.38	0.37	0.01	0.00	0.01	0.00	0.05	0.11	0.05	0.01	0.00	0.12	10.12
10		9.06	0.34	0.00	0.00	0.01	0.00	0.04	0.08	0.04	0.01	0.00	0.12	9.74
20		7.68	0.23	0.00	0.00	0.01	0.00	0.03	0.06	0.04	0.01	0.00	0.11	8.19
30		6.57	0.16	0.00	0.00	0.01	0.00	0.02	0.04	0.04	0.01	0.00	0.10	6.96

Table B-8 (continued)

Time		Lung	BBi	ET1	Stomach	SI	Blood	ULI	LLI	Liver	Kidneys	Spleen	Other	Retained
d	h													
							10-year-old							
	1	11.13	1.01	17.01	10.63	10.70	0.03	1.28	0.03	0.00	0.00	0.00	0.00	52.24
	2	11.06	0.91	16.32	4.24	14.34	0.06	4.30	0.23	0.00	0.00	0.00	0.00	51.54
	4	10.94	0.79	15.00	0.67	11.39	0.11	9.90	1.27	0.01	0.00	0.00	0.02	50.12
	8	10.74	0.68	12.68	0.07	4.62	0.13	13.73	4.52	0.02	0.00	0.00	0.05	47.28
	12	10.59	0.64	10.72	0.04	1.81	0.10	12.68	7.52	0.03	0.01	0.00	0.08	44.23
1	24	10.31	0.58	6.47	0.02	0.17	0.03	6.21	10.92	0.05	0.01	0.00	0.12	34.90
2		10.03	0.53	2.36	0.01	0.03	0.00	1.15	6.94	0.05	0.01	0.01	0.14	21.26
4		9.67	0.49	0.31	0.00	0.02	0.00	0.08	1.28	0.05	0.01	0.00	0.13	12.06
8		9.02	0.42	0.01	0.00	0.01	0.00	0.05	0.11	0.05	0.01	0.00	0.13	9.81
10		8.72	0.39	0.00	0.00	0.01	0.00	0.04	0.08	0.05	0.01	0.00	0.12	9.44
20		7.40	0.26	0.00	0.00	0.01	0.00	0.03	0.06	0.04	0.01	0.00	0.11	7.93
30		6.33	0.18	0.00	0.00	0.01	0.00	0.02	0.04	0.04	0.01	0.00	0.10	6.74
							15-year-old							
	1	12.54	1.44	13.33	8.51	8.53	0.03	1.02	0.02	0.00	0.00	0.00	0.00	45.78
	2	12.46	1.28	12.79	3.46	11.48	0.05	3.43	0.18	0.00	0.00	0.00	0.00	45.23
	4	12.32	1.09	11.75	0.60	9.24	0.09	7.94	1.02	0.00	0.00	0.00	0.01	44.11
	8	12.09	0.93	9.94	0.09	3.85	0.11	11.13	3.64	0.01	0.00	0.00	0.04	41.87
	12	11.91	0.87	8.40	0.05	1.55	0.09	10.37	6.10	0.02	0.00	0.00	0.06	39.45
1	24	11.58	0.80	5.07	0.02	0.17	0.03	5.18	8.95	0.04	0.01	0.00	0.10	31.96
2		11.26	0.74	1.85	0.01	0.03	0.00	1.00	5.77	0.04	0.01	0.00	0.12	20.84
4		10.85	0.68	0.25	0.00	0.02	0.00	0.09	1.10	0.04	0.01	0.00	0.11	13.17
8		10.12	0.58	0.00	0.00	0.02	0.00	0.05	0.12	0.04	0.01	0.00	0.11	11.07
10		9.78	0.54	0.00	0.00	0.01	0.00	0.05	0.10	0.04	0.01	0.00	0.10	10.65
20		8.30	0.36	0.00	0.00	0.01	0.00	0.04	0.07	0.04	0.01	0.00	0.09	8.93
30		7.10	0.25	0.00	0.00	0.01	0.00	0.03	0.05	0.03	0.01	0.00	0.09	7.58
							Adult							
	1	13.33	1.12	14.27	8.86	8.90	0.03	1.06	0.02	0.00	0.00	0.00	0.00	47.94
	2	13.25	1.00	13.69	3.57	11.95	0.05	3.58	0.19	0.00	0.00	0.00	0.00	47.35
	4	13.11	0.86	12.58	0.59	9.55	0.09	8.25	1.06	0.01	0.00	0.00	0.01	46.16
	8	12.88	0.75	10.64	0.08	3.94	0.11	11.51	3.78	0.01	0.00	0.00	0.04	43.77
	12	12.71	0.69	8.99	0.05	1.58	0.09	10.69	6.31	0.02	0.00	0.00	0.06	41.21
1	24	12.38	0.62	5.43	0.02	0.17	0.03	5.31	9.22	0.04	0.01	0.00	0.11	33.35
2		12.05	0.57	1.98	0.01	0.03	0.00	1.02	5.93	0.04	0.01	0.00	0.12	21.78
4		11.62	0.53	0.26	0.00	0.02	0.00	0.09	1.12	0.04	0.01	0.00	0.12	13.83
8		10.84	0.45	0.00	0.00	0.02	0.00	0.05	0.12	0.04	0.01	0.00	0.11	11.67
10		10.48	0.42	0.00	0.00	0.01	0.00	0.05	0.10	0.04	0.01	0.00	0.11	11.24
20		8.90	0.28	0.00	0.00	0.01	0.00	0.04	0.07	0.04	0.01	0.00	0.10	9.46
30		7.62	0.19	0.00	0.00	0.01	0.00	0.03	0.05	0.03	0.01	0.00	0.09	8.05

Table B-9. Activity of ^{60}Co in DCAL Source Regions at Selected Times after Ingestion (%)

Time		Stomach	SI	Blood	ULI	LLI	Other	Liver	Retained
d	h								
					Infant				
	1	36.49	44.71	11.03	7.32	0.21	0.11	0.01	99.96
	2	13.64	40.41	26.25	17.34	1.11	0.59	0.07	99.66
	4	1.82	16.94	43.18	28.15	4.49	2.49	0.28	97.93
	8	0.03	1.72	43.05	27.10	11.72	7.08	0.79	92.16
	12	0.00	0.15	34.97	21.16	16.57	11.04	1.23	85.67
1	24	0.00	0.00	17.53	9.47	20.00	18.39	2.04	67.74
2		0.00	0.00	4.38	2.03	12.15	22.82	2.54	44.03
4		0.00	0.00	0.27	0.21	2.41	21.70	2.41	27.05
8		0.00	0.00	0.00	0.08	0.21	17.39	1.93	19.64
10		0.00	0.00	0.00	0.07	0.14	15.79	1.75	17.77
20		0.00	0.00	0.00	0.02	0.05	11.33	1.26	12.67
30		0.00	0.00	0.00	0.01	0.02	9.57	1.06	10.67
					1-year-old				
	1	36.49	51.76	3.45	8.00	0.22	0.03	0.00	99.99
	2	13.64	55.15	8.94	20.59	1.25	0.19	0.02	99.88
	4	1.82	34.34	17.15	38.88	5.65	0.90	0.10	99.10
	8	0.03	8.91	20.74	45.06	16.97	2.93	0.33	95.35
	12	0.00	2.14	18.22	37.61	25.87	4.94	0.55	89.69
1	24	0.00	0.03	9.48	16.48	33.41	8.90	0.99	69.49
2		0.00	0.00	2.37	2.98	20.06	11.37	1.26	38.11
4		0.00	0.00	0.15	0.16	3.58	10.88	1.21	16.00
8		0.00	0.00	0.00	0.04	0.15	8.72	0.97	9.89
10		0.00	0.00	0.00	0.03	0.08	7.92	0.88	8.92
20		0.00	0.00	0.00	0.01	0.02	5.67	0.63	6.34
30		0.00	0.00	0.00	0.01	0.01	4.79	0.53	5.34
					5-year-old				
	1	36.49	51.76	3.45	8.00	0.22	0.03	0.00	99.99
	2	13.64	55.15	8.94	20.59	1.25	0.19	0.02	99.92
	4	1.82	34.34	17.15	38.88	5.65	0.90	0.10	99.33
	8	0.03	8.91	20.74	45.06	16.97	2.93	0.33	95.91
	12	0.00	2.14	18.22	37.61	25.87	4.94	0.55	90.30
1	24	0.00	0.03	9.48	16.48	33.41	8.90	0.99	69.87
2		0.00	0.00	2.37	2.98	20.06	11.37	1.26	38.24
4		0.00	0.00	0.15	0.16	3.58	10.88	1.21	16.04
8		0.00	0.00	0.00	0.04	0.15	8.72	0.97	9.91
10		0.00	0.00	0.00	0.03	0.08	7.92	0.88	8.93
20		0.00	0.00	0.00	0.01	0.02	5.67	0.63	6.35
30		0.00	0.00	0.00	0.01	0.01	4.79	0.53	5.34

Table B-9 (continued)

Time		Stomach	SI	Blood	ULI	LLI	Other	Liver	Retained
d	h								
					10-year-old				
	1	36.49	51.76	3.45	8.00	0.22	0.03	0.00	99.99
	2	13.64	55.15	8.94	20.59	1.25	0.19	0.02	99.92
	4	1.82	34.34	17.15	38.88	5.65	0.90	0.10	99.33
	8	0.03	8.91	20.74	45.06	16.97	2.93	0.33	95.91
	12	0.00	2.14	18.22	37.61	25.87	4.94	0.55	90.30
1	24	0.00	0.03	9.48	16.48	33.41	8.90	0.99	69.87
2		0.00	0.00	2.37	2.98	20.06	11.37	1.26	38.24
4		0.00	0.00	0.15	0.16	3.58	10.88	1.21	16.04
8		0.00	0.00	0.00	0.04	0.15	8.72	0.97	9.91
10		0.00	0.00	0.00	0.03	0.08	7.92	0.88	8.93
20		0.00	0.00	0.00	0.01	0.02	5.67	0.63	6.35
30		0.00	0.00	0.00	0.01	0.01	4.79	0.53	5.34
					15-year-old				
	1	36.49	51.76	3.45	8.00	0.22	0.03	0.00	99.99
	2	13.64	55.15	8.94	20.59	1.25	0.19	0.02	99.92
	4	1.82	34.34	17.15	38.88	5.65	0.90	0.10	99.33
	8	0.03	8.91	20.73	45.06	16.97	2.93	0.33	95.91
	12	0.00	2.14	18.22	37.61	25.87	4.94	0.55	90.30
1	24	0.00	0.03	9.48	16.48	33.41	8.90	0.99	69.87
2		0.00	0.00	2.37	2.98	20.06	11.37	1.26	38.24
4		0.00	0.00	0.15	0.16	3.58	10.88	1.21	16.04
8		0.00	0.00	0.00	0.04	0.15	8.72	0.97	9.91
10		0.00	0.00	0.00	0.03	0.08	7.92	0.88	8.93
20		0.00	0.00	0.00	0.01	0.02	5.67	0.63	6.35
30		0.00	0.00	0.00	0.01	0.01	4.79	0.53	5.34
					Adult				
	1	36.49	54.12	0.92	8.22	0.23	0.01	0.00	100.00
	2	13.64	60.73	2.45	21.74	1.30	0.05	0.01	99.96
	4	1.82	42.96	4.96	43.32	6.09	0.25	0.03	99.57
	8	0.03	14.99	6.55	54.77	19.41	0.87	0.10	97.01
	12	0.00	4.94	6.08	48.27	30.84	1.52	0.17	92.13
1	24	0.00	0.18	3.33	22.03	42.13	2.89	0.32	71.07
2		0.00	0.00	0.84	3.76	25.69	3.78	0.42	34.56
4		0.00	0.00	0.05	0.13	4.44	3.63	0.40	8.68
8		0.00	0.00	0.00	0.01	0.11	2.91	0.32	3.37
10		0.00	0.00	0.00	0.01	0.03	2.64	0.29	2.99
20		0.00	0.00	0.00	0.00	0.01	1.89	0.21	2.12
30		0.00	0.00	0.00	0.00	0.00	1.60	0.18	1.78

Table B-10. Activity of ^{131}I in DCAL Source Regions at Selected Times after Ingestion (%)

Time		Stomach	SI	Blood	LLI	Thyroid	UB_Cont	Other	Retained
d	h								
					Infant				
	1	36.36	1.52	57.33	0.02	1.14	1.60	0.00	98.57
	2	13.54	0.57	72.90	0.07	3.42	3.01	0.01	94.30
	4	1.79	0.07	67.68	0.18	8.38	3.39	0.04	82.31
	8	0.03	0.00	43.37	0.34	15.68	2.26	0.15	62.41
	12	0.00	0.00	26.95	0.42	20.03	1.41	0.31	49.53
1	24	0.00	0.00	6.54	0.44	24.31	0.34	0.82	32.63
2		0.00	0.00	0.59	0.28	22.68	0.03	1.46	25.13
4		0.00	0.00	0.29	0.19	17.34	0.01	1.64	19.58
8		0.00	0.00	0.20	0.14	10.21	0.01	1.09	11.72
10		0.00	0.00	0.15	0.11	7.85	0.01	0.84	9.02
20		0.00	0.00	0.04	0.03	2.11	0.00	0.23	2.43
30		0.00	0.00	0.01	0.01	0.57	0.00	0.06	0.658
					1-year-old				
	1	36.36	1.52	57.33	0.02	1.14	1.75	0.00	98.72
	2	13.54	0.57	72.90	0.07	3.42	3.51	0.00	94.80
	4	1.79	0.07	67.68	0.18	8.39	4.22	0.03	83.14
	8	0.03	0.00	43.37	0.34	15.72	2.87	0.12	63.03
	12	0.00	0.00	26.94	0.42	20.11	1.79	0.24	49.92
1	24	0.00	0.00	6.50	0.43	24.56	0.43	0.65	32.75
2		0.00	0.00	0.51	0.25	23.20	0.03	1.23	25.29
4		0.00	0.00	0.20	0.13	18.15	0.01	1.54	20.11
8		0.00	0.00	0.16	0.11	11.15	0.01	1.16	12.65
10		0.00	0.00	0.13	0.09	8.76	0.01	0.93	9.97
20		0.00	0.00	0.04	0.03	2.63	0.00	0.28	3.00
30		0.00	0.00	0.01	0.01	0.79	0.00	0.09	0.903
					5-year-old				
	1	36.36	1.52	57.33	0.02	1.14	2.25	0.00	99.22
	2	13.54	0.57	72.90	0.07	3.42	5.63	0.00	96.92
	4	1.79	0.07	67.68	0.18	8.40	9.36	0.02	88.28
	8	0.03	0.00	43.37	0.34	15.76	8.38	0.08	68.53
	12	0.00	0.00	26.93	0.42	20.20	5.56	0.16	53.70
1	24	0.00	0.00	6.47	0.43	24.81	1.36	0.45	33.69
2		0.00	0.00	0.43	0.23	23.75	0.09	0.92	25.47
4		0.00	0.00	0.11	0.08	19.05	0.02	1.31	20.60
8		0.00	0.00	0.10	0.07	12.25	0.02	1.17	13.64
10		0.00	0.00	0.09	0.06	9.85	0.01	0.99	11.03
20		0.00	0.00	0.03	0.02	3.33	0.01	0.36	3.75
30		0.00	0.00	0.01	0.01	1.13	0.00	0.12	1.272

Table B-10 (continued)

Time		Stomach	SI	Blood	LLI	Thyroid	UB_Cont	Other	Retained
d	h								
					10-year-old				
	1	36.36	1.52	57.33	0.02	1.14	2.25	0.00	99.22
	2	13.54	0.57	72.90	0.07	3.42	5.63	0.00	96.92
	4	1.79	0.07	67.67	0.18	8.41	9.36	0.01	88.28
	8	0.03	0.00	43.36	0.34	15.81	8.38	0.03	68.53
	12	0.00	0.00	26.93	0.42	20.30	5.56	0.07	53.70
1	24	0.00	0.00	6.45	0.42	25.11	1.36	0.19	33.70
2		0.00	0.00	0.38	0.21	24.42	0.08	0.43	25.55
4		0.00	0.00	0.02	0.04	20.18	0.00	0.72	20.98
8		0.00	0.00	0.03	0.02	13.70	0.00	0.85	14.61
10		0.00	0.00	0.03	0.02	11.30	0.00	0.80	12.17
20		0.00	0.00	0.01	0.01	4.34	0.00	0.42	4.79
30		0.00	0.00	0.01	0.00	1.67	0.00	0.17	1.863
					15-year-old				
	1	36.36	1.52	57.33	0.02	1.14	2.25	0.00	99.22
	2	13.54	0.57	72.90	0.07	3.43	5.63	0.00	96.92
	4	1.79	0.07	67.67	0.18	8.41	9.36	0.01	88.28
	8	0.03	0.00	43.36	0.34	15.81	8.38	0.03	68.53
	12	0.00	0.00	26.93	0.42	20.31	5.56	0.06	53.70
1	24	0.00	0.00	6.45	0.42	25.14	1.36	0.17	33.70
2		0.00	0.00	0.38	0.21	24.48	0.08	0.38	25.56
4		0.00	0.00	0.02	0.04	20.29	0.00	0.64	21.00
8		0.00	0.00	0.02	0.01	13.85	0.00	0.78	14.68
10		0.00	0.00	0.02	0.01	11.45	0.00	0.75	12.25
20		0.00	0.00	0.01	0.01	4.45	0.00	0.41	4.89
30		0.00	0.00	0.01	0.00	1.74	0.00	0.18	1.925
					Adult				
	1	36.36	1.52	57.33	0.02	1.14	2.25	0.00	99.22
	2	13.54	0.57	72.90	0.07	3.43	5.63	0.00	96.92
	4	1.79	0.07	67.67	0.18	8.41	9.36	0.01	88.28
	8	0.03	0.00	43.36	0.34	15.82	8.38	0.02	68.53
	12	0.00	0.00	26.93	0.42	20.32	5.56	0.05	53.70
1	24	0.00	0.00	6.45	0.42	25.17	1.36	0.14	33.70
2		0.00	0.00	0.37	0.21	24.54	0.08	0.33	25.56
4		0.00	0.00	0.01	0.03	20.40	0.00	0.58	21.04
8		0.00	0.00	0.01	0.01	13.99	0.00	0.77	14.78
10		0.00	0.00	0.01	0.01	11.59	0.00	0.77	12.38
20		0.00	0.00	0.01	0.01	4.54	0.00	0.49	5.05
30		0.00	0.00	0.00	0.00	1.79	0.00	0.24	2.036

Table B-11. Activity of ^{137}Cs in DCAL Source Regions at Selected Times after Ingestion (%)

Time		Stomach	SI	Blood	LLI	Body tissues	Retained
d	h						
				Infant			
	1	36.49	1.52	57.54	0.03	3.82	100.00
	2	13.64	0.57	73.43	0.08	11.49	99.99
	4	1.82	0.08	68.66	0.19	28.38	99.94
	8	0.03	0.00	44.63	0.36	53.94	99.67
	12	0.00	0.00	28.11	0.47	70.04	99.25
1	24	0.00	0.00	7.03	0.64	89.34	97.56
2		0.00	0.00	0.44	0.75	91.93	93.65
4		0.00	0.00	0.00	0.77	84.68	85.95
8		0.00	0.00	0.00	0.66	71.13	72.21
10		0.00	0.00	0.00	0.61	65.17	66.16
20		0.00	0.00	0.00	0.40	41.99	42.64
30		0.00	0.00	0.00	0.26	26.957	27.375
				1-year-old			
	1	36.49	1.52	57.54	0.03	3.82	100.00
	2	13.64	0.57	73.43	0.08	11.48	99.99
	4	1.82	0.08	68.66	0.19	28.36	99.93
	8	0.03	0.00	44.63	0.36	53.86	99.62
	12	0.00	0.00	28.11	0.48	69.85	99.12
1	24	0.00	0.00	7.03	0.68	88.75	97.11
2		0.00	0.00	0.44	0.86	90.48	92.44
4		0.00	0.00	0.00	0.92	81.72	83.25
8		0.00	0.00	0.00	0.77	66.01	67.27
10		0.00	0.00	0.00	0.69	59.33	60.46
20		0.00	0.00	0.00	0.40	34.80	35.47
30		0.00	0.00	0.00	0.24	20.421	20.81
				5-year-old			
	1	36.49	1.52	57.54	0.03	3.82	100.00
	2	13.64	0.57	73.43	0.08	11.49	99.99
	4	1.82	0.08	68.66	0.19	28.37	99.96
	8	0.03	0.00	44.63	0.36	53.91	99.73
	12	0.00	0.00	28.11	0.47	69.97	99.33
1	24	0.00	0.00	7.03	0.65	89.14	97.58
2		0.00	0.00	0.44	0.78	91.49	93.46
4		0.00	0.00	0.00	0.80	83.97	85.46
8		0.00	0.00	0.00	0.65	70.63	71.82
10		0.00	0.00	0.00	0.58	65.03	66.09
20		0.00	0.00	0.00	0.34	44.57	45.20
30		0.00	0.00	0.00	0.21	32.11	32.50

Table B-11 (continued)

Time		Stomach	SI	Blood	LLI	Body tissues	Retained
d	h						
				10-year-old			
	1	36.49	1.52	57.54	0.03	3.82	100.00
	2	13.64	0.57	73.43	0.08	11.49	99.99
	4	1.82	0.08	68.66	0.19	28.38	99.96
	8	0.03	0.00	44.63	0.36	53.93	99.74
	12	0.00	0.00	28.11	0.47	70.00	99.35
1	24	0.00	0.00	7.03	0.65	89.26	97.67
2		0.00	0.00	0.44	0.75	91.89	93.78
4		0.00	0.00	0.00	0.73	85.24	86.56
8		0.00	0.00	0.00	0.53	74.30	75.25
10		0.00	0.00	0.00	0.45	70.03	70.84
20		0.00	0.00	0.00	0.23	55.58	56.01
30		0.00	0.00	0.00	0.15	46.789	47.075
				15-year-old			
	1	36.49	1.52	57.54	—	3.82	100.00
	2	13.64	0.57	73.43	—	11.49	99.99
	4	1.82	0.08	68.66	—	28.38	99.96
	8	0.03	0.00	44.63	—	53.92	99.73
	12	0.00	0.00	28.11	—	69.99	99.34
1	24	0.00	0.00	7.03	—	89.32	97.70
2		0.00	0.00	0.44	—	92.49	94.24
4		0.00	0.00	0.00	—	88.00	88.93
8		0.00	0.00	0.00	—	82.53	82.97
10		0.00	0.00	0.00	—	80.77	81.10
20		0.00	0.00	0.00	—	74.37	74.58
30		0.00	0.00	0.00	—	68.971	69.166
				Adult			
	1	36.49	1.52	57.54	—	3.82	100.00
	2	13.64	0.57	73.43	—	11.49	99.99
	4	1.82	0.08	68.66	—	28.39	99.96
	8	0.03	0.00	44.63	—	53.98	99.76
	12	0.00	0.00	28.11	—	70.13	99.42
1	24	0.00	0.00	7.03	—	89.74	98.01
2		0.00	0.00	0.44	—	93.49	95.06
4		0.00	0.00	0.00	—	89.95	90.71
8		0.00	0.00	0.00	—	85.61	85.96
10		0.00	0.00	0.00	—	84.18	84.45
20		0.00	0.00	0.00	—	78.66	78.85
30		0.00	0.00	0.00	—	73.801	73.978

Table B-12. Activity of ^{192}Ir in DCAL Source Regions at Selected Times after Ingestion (%)

Time		Stomach	SI	Blood	ULI	LLI	Liver	Kidneys	Spleen	Other	Retained
d	h										
						Infant					
	1	36.48	54.79	0.17	8.28	0.23	0.00	0.00	0.00	0.00	99.96
	2	13.63	62.40	0.44	22.07	1.32	0.01	0.00	0.00	0.02	99.89
	4	1.81	45.78	0.85	44.68	6.22	0.04	0.01	0.00	0.11	99.50
	8	0.03	17.38	1.00	58.03	20.17	0.13	0.03	0.01	0.35	97.14
	12	0.00	6.26	0.80	52.12	32.46	0.21	0.04	0.02	0.57	92.49
1	24	0.00	0.29	0.25	24.24	45.15	0.34	0.07	0.03	0.92	71.30
2		0.00	0.00	0.02	4.05	27.55	0.38	0.08	0.04	1.02	33.13
4		0.00	0.00	0.00	0.12	4.64	0.36	0.07	0.04	0.98	6.20
8		0.00	0.00	0.00	0.01	0.10	0.33	0.07	0.03	0.89	1.41
10		0.00	0.00	0.00	0.00	0.02	0.31	0.06	0.03	0.85	1.28
20		0.00	0.00	0.00	0.00	0.00	0.26	0.05	0.03	0.70	1.05
30		0.00	0.00	0.00	0.00	0.00	0.22	0.04	0.02	0.60	0.90
						1-year-old					
	1	36.48	54.87	0.08	8.29	0.23	0.00	0.00	0.00	0.00	99.96
	2	13.63	62.60	0.22	22.11	1.32	0.00	0.00	0.00	0.01	99.89
	4	1.81	46.12	0.42	44.84	6.23	0.02	0.00	0.00	0.05	99.51
	8	0.03	17.68	0.50	58.42	20.26	0.06	0.01	0.01	0.17	97.16
	12	0.00	6.43	0.40	52.59	32.66	0.11	0.02	0.01	0.29	92.51
1	24	0.00	0.31	0.12	24.53	45.55	0.17	0.03	0.02	0.46	71.20
2		0.00	0.00	0.01	4.09	27.83	0.19	0.04	0.02	0.51	32.69
4		0.00	0.00	0.00	0.11	4.68	0.18	0.04	0.02	0.49	5.52
8		0.00	0.00	0.00	0.00	0.09	0.16	0.03	0.02	0.44	0.75
10		0.00	0.00	0.00	0.00	0.02	0.16	0.03	0.02	0.42	0.65
20		0.00	0.00	0.00	0.00	0.00	0.13	0.03	0.01	0.35	0.52
30		0.00	0.00	0.00	0.00	0.00	0.11	0.02	0.01	0.30	0.45
						5-year-old					
	1	36.48	54.87	0.08	8.29	0.23	0.00	0.00	0.00	0.00	99.96
	2	13.63	62.60	0.22	22.11	1.32	0.00	0.00	0.00	0.01	99.89
	4	1.81	46.12	0.42	44.84	6.23	0.02	0.00	0.00	0.05	99.51
	8	0.03	17.68	0.50	58.42	20.26	0.06	0.01	0.01	0.17	97.16
	12	0.00	6.43	0.40	52.59	32.66	0.11	0.02	0.01	0.29	92.52
1	24	0.00	0.31	0.12	24.53	45.55	0.17	0.03	0.02	0.46	71.20
2		0.00	0.00	0.01	4.09	27.83	0.19	0.04	0.02	0.51	32.69
4		0.00	0.00	0.00	0.11	4.68	0.18	0.04	0.02	0.49	5.52
8		0.00	0.00	0.00	0.00	0.09	0.16	0.03	0.02	0.44	0.75
10		0.00	0.00	0.00	0.00	0.02	0.16	0.03	0.02	0.42	0.65
20		0.00	0.00	0.00	0.00	0.00	0.13	0.03	0.01	0.35	0.52
30		0.00	0.00	0.00	0.00	0.00	0.11	0.02	0.01	0.30	0.45

Table B-12 (continued)

Time		Stomach	SI	Blood	ULI	LLI	Liver	Kidneys	Spleen	Other	Retained
d	h										
						10-year-old					
	1	36.48	54.87	0.08	8.29	0.23	0.00	0.00	0.00	0.00	99.96
	2	13.63	62.60	0.22	22.11	1.32	0.00	0.00	0.00	0.01	99.89
	4	1.81	46.12	0.42	44.84	6.23	0.02	0.00	0.00	0.05	99.51
	8	0.03	17.68	0.50	58.42	20.26	0.06	0.01	0.01	0.17	97.16
	12	0.00	6.43	0.40	52.59	32.66	0.11	0.02	0.01	0.29	92.52
1	24	0.00	0.31	0.12	24.53	45.55	0.17	0.03	0.02	0.46	71.20
2		0.00	0.00	0.01	4.09	27.83	0.19	0.04	0.02	0.51	32.69
4		0.00	0.00	0.00	0.11	4.68	0.18	0.04	0.02	0.49	5.52
8		0.00	0.00	0.00	0.00	0.09	0.16	0.03	0.02	0.44	0.75
10		0.00	0.00	0.00	0.00	0.02	0.16	0.03	0.02	0.42	0.65
20		0.00	0.00	0.00	0.00	0.00	0.13	0.03	0.01	0.35	0.52
30		0.00	0.00	0.00	0.00	0.00	0.11	0.02	0.01	0.30	0.45
						15-year-old					
	1	36.48	54.87	0.08	8.29	0.23	0.00	0.00	0.00	0.00	99.96
	2	13.63	62.60	0.22	22.11	1.32	0.00	0.00	0.00	0.01	99.89
	4	1.81	46.12	0.42	44.84	6.23	0.02	0.00	0.00	0.05	99.51
	8	0.03	17.68	0.50	58.42	20.26	0.06	0.01	0.01	0.17	97.16
	12	0.00	6.43	0.40	52.59	32.66	0.11	0.02	0.01	0.29	92.52
1	24	0.00	0.31	0.12	24.53	45.55	0.17	0.03	0.02	0.46	71.20
2		0.00	0.00	0.01	4.09	27.83	0.19	0.04	0.02	0.51	32.69
4		0.00	0.00	0.00	0.11	4.68	0.18	0.04	0.02	0.49	5.52
8		0.00	0.00	0.00	0.00	0.09	0.16	0.03	0.02	0.44	0.75
10		0.00	0.00	0.00	0.00	0.02	0.16	0.03	0.02	0.42	0.65
20		0.00	0.00	0.00	0.00	0.00	0.13	0.03	0.01	0.35	0.52
30		0.00	0.00	0.00	0.00	0.00	0.11	0.02	0.01	0.30	0.45
						Adult					
	1	36.48	54.87	0.08	8.29	0.23	0.00	0.00	0.00	0.00	99.96
	2	13.63	62.60	0.22	22.11	1.32	0.00	0.00	0.00	0.01	99.89
	4	1.81	46.12	0.42	44.84	6.23	0.02	0.00	0.00	0.05	99.51
	8	0.03	17.68	0.50	58.42	20.26	0.06	0.01	0.01	0.17	97.16
	12	0.00	6.43	0.40	52.59	32.66	0.11	0.02	0.01	0.29	92.52
1	24	0.00	0.31	0.12	24.53	45.55	0.17	0.03	0.02	0.46	71.20
2		0.00	0.00	0.01	4.09	27.83	0.19	0.04	0.02	0.51	32.69
4		0.00	0.00	0.00	0.11	4.68	0.18	0.04	0.02	0.49	5.52
8		0.00	0.00	0.00	0.00	0.09	0.16	0.03	0.02	0.44	0.75
10		0.00	0.00	0.00	0.00	0.02	0.16	0.03	0.02	0.42	0.65
20		0.00	0.00	0.00	0.00	0.00	0.13	0.03	0.01	0.35	0.52
30		0.00	0.00	0.00	0.00	0.00	0.11	0.02	0.01	0.30	0.45

Appendix C

NORMALIZED COUNT RATES FROM RADIONUCLIDES IN VARIOUS ANATOMICAL REGIONS

Tables C-1 to C-16 list the calculated count rates or exposure rates on each of four instruments in various positions from each of four radionuclides in various anatomical regions of each of the seven anthropomorphic phantoms used in the present analysis. These regions are identified by the same names as the corresponding source regions in the DCAL model, described in Part II of the present series (Anigstein, Olsher, Loomis, and Ansari 2016), with additional details presented in Part II (Anigstein, Olsher, Loomis, and Ansari 2016, Tables 4 and 6) and in Table B-1 in the present report. All count and exposure rates are normalized to a total activity of 1 Bq, uniformly distributed in each region.

These count rates were used to calculate the calibration factors used by the ICAT computer code (Anigstein et al. 2014) and the alternate set of calibration factors listed in Part IV of the present series (Anigstein and Loomis 2016, Appendix A).

Table C-1
Normalized Count Rates on Ludlum 44-2 from ^{60}Co in Various Anatomical Regions (cps/Bq)

Anatomical region	Detector location/distance from body							
	Chest				Abdomen			
	Contact		1 ft		Contact		1 ft	
	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior
				Infant				
Lung	7.49e-03	8.79e-03	3.87e-04	4.04e-04	–	–	–	–
BBi	7.75e-03	9.74e-03	3.54e-04	3.97e-04	–	–	–	–
ET1	5.54e-03	1.47e-03	4.50e-04	1.98e-04	–	–	–	–
Stomach	6.31e-03	3.69e-03	4.56e-04	3.53e-04	1.47e-02	5.60e-03	4.86e-04	3.79e-04
SI	2.91e-03	2.73e-03	4.27e-04	3.96e-04	8.16e-03	6.77e-03	4.64e-04	4.32e-04
Blood	6.64e-03	5.23e-03	3.83e-04	3.88e-04	6.71e-03	5.63e-03	4.06e-04	3.87e-04
ULI	3.31e-03	2.69e-03	4.53e-04	3.79e-04	9.52e-03	5.91e-03	4.91e-04	4.07e-04
LLI	2.04e-03	1.85e-03	4.14e-04	4.04e-04	5.30e-03	4.62e-03	4.49e-04	4.27e-04
Other	3.87e-03	4.01e-03	3.62e-04	3.66e-04	4.02e-03	4.40e-03	3.71e-04	3.87e-04
Liver	6.29e-03	4.30e-03	4.40e-04	3.85e-04	1.45e-02	6.60e-03	4.71e-04	4.09e-04
				1-y-old				
Lung	5.04e-03	5.69e-03	3.52e-04	3.70e-04	–	–	–	–
BBi	5.66e-03	7.02e-03	3.22e-04	3.68e-04	–	–	–	–
ET1	3.03e-03	7.96e-04	4.34e-04	1.53e-04	–	–	–	–
Stomach	3.67e-03	2.25e-03	4.55e-04	3.06e-04	1.06e-02	3.88e-03	4.71e-04	3.32e-04
SI	1.57e-03	1.46e-03	3.87e-04	3.57e-04	5.40e-03	4.42e-03	4.37e-04	3.97e-04
Blood	4.23e-03	3.39e-03	3.44e-04	3.52e-04	4.43e-03	3.67e-03	3.61e-04	3.34e-04
ULI	1.78e-03	1.47e-03	3.98e-04	3.24e-04	6.27e-03	3.95e-03	4.55e-04	3.63e-04
LLI	1.07e-03	9.56e-04	3.44e-04	3.36e-04	3.31e-03	2.86e-03	4.16e-04	3.84e-04
Other	2.40e-03	2.39e-03	3.11e-04	3.18e-04	2.43e-03	2.70e-03	3.23e-04	3.30e-04
Liver	3.81e-03	2.70e-03	3.82e-04	3.32e-04	1.01e-02	4.66e-03	4.56e-04	3.56e-04
				5-y-old				
Lung	4.06e-03	4.49e-03	3.46e-04	3.62e-04	–	–	–	–
BBi	4.39e-03	6.38e-03	3.33e-04	3.71e-04	–	–	–	–
ET1	2.02e-03	5.85e-04	3.97e-04	1.29e-04	–	–	–	–
Stomach	2.59e-03	1.67e-03	4.40e-04	2.92e-04	8.46e-03	3.18e-03	4.83e-04	3.13e-04
SI	1.03e-03	9.08e-04	3.38e-04	3.22e-04	4.02e-03	3.40e-03	4.19e-04	3.82e-04
Blood	3.11e-03	2.51e-03	3.39e-04	3.12e-04	3.28e-03	2.60e-03	3.36e-04	3.30e-04
ULI	1.12e-03	9.47e-04	3.61e-04	3.02e-04	4.70e-03	2.98e-03	4.49e-04	3.48e-04
LLI	6.02e-04	5.58e-04	3.09e-04	2.70e-04	2.30e-03	1.91e-03	3.89e-04	3.57e-04
Other	1.54e-03	1.65e-03	2.52e-04	2.71e-04	1.65e-03	1.83e-03	2.84e-04	2.88e-04
Liver	2.68e-03	2.00e-03	4.04e-04	3.33e-04	7.70e-03	3.93e-03	4.27e-04	3.59e-04

Table C-1 (continued)

Anatomical region	Detector location/distance from body							
	Chest				Abdomen			
	Contact		1 ft		Contact		1 ft	
	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior
10-y-old								
Lung	3.29e-03	3.56e-03	3.42e-04	3.52e-04	–	–	–	–
BBi	4.26e-03	5.04e-03	3.41e-04	3.76e-04	–	–	–	–
ET1	1.52e-03	4.53e-04	3.60e-04	1.17e-04	–	–	–	–
Stomach	1.85e-03	1.23e-03	4.20e-04	2.72e-04	6.77e-03	2.65e-03	4.94e-04	3.08e-04
SI	6.33e-04	5.63e-04	3.11e-04	2.81e-04	3.05e-03	2.64e-03	4.19e-04	3.73e-04
Blood	2.65e-03	1.96e-03	2.84e-04	2.97e-04	2.59e-03	2.19e-03	3.18e-04	3.03e-04
ULI	7.21e-04	6.07e-04	3.28e-04	2.65e-04	3.60e-03	2.38e-03	4.49e-04	3.50e-04
LLI	3.56e-04	3.31e-04	2.61e-04	2.40e-04	1.64e-03	1.39e-03	3.67e-04	3.31e-04
Other	1.10e-03	1.20e-03	2.28e-04	2.38e-04	1.25e-03	1.37e-03	2.51e-04	2.61e-04
Liver	1.92e-03	1.51e-03	3.90e-04	3.23e-04	5.68e-03	3.16e-03	4.19e-04	3.48e-04
15-y-old								
Lung	2.65e-03	2.77e-03	3.45e-04	3.60e-04	–	–	–	–
BBi	3.73e-03	3.73e-03	3.62e-04	3.44e-04	–	–	–	–
ET1	1.09e-03	3.44e-04	3.21e-04	1.08e-04	–	–	–	–
Stomach	1.30e-03	9.02e-04	3.88e-04	2.45e-04	5.17e-03	2.14e-03	4.99e-04	3.07e-04
SI	4.00e-04	3.79e-04	2.75e-04	2.45e-04	2.32e-03	2.00e-03	4.08e-04	3.60e-04
Blood	2.08e-03	1.48e-03	2.96e-04	2.64e-04	1.85e-03	1.69e-03	3.21e-04	2.94e-04
ULI	4.59e-04	3.89e-04	2.87e-04	2.30e-04	2.70e-03	1.85e-03	4.41e-04	3.34e-04
LLI	2.12e-04	2.00e-04	2.16e-04	1.92e-04	1.13e-03	9.89e-04	3.42e-04	3.14e-04
Other	8.84e-04	9.01e-04	2.00e-04	1.99e-04	9.89e-04	1.05e-03	2.34e-04	2.37e-04
Liver	1.45e-03	1.16e-03	3.64e-04	3.02e-04	4.02e-03	2.41e-03	4.22e-04	3.27e-04
Adult male								
Lung	3.38e-03	2.88e-03	3.68e-04	3.51e-04	—	—	—	—
BBi	4.51e-03	2.35e-03	4.00e-04	3.39e-04	—	—	—	—
ET1	6.78e-04	1.92e-04	3.07e-04	9.65e-05	—	—	—	—
Stomach	2.78e-03	1.49e-03	4.31e-04	2.87e-04	3.97e-03	2.19e-03	4.17e-04	3.19e-04
SI	1.10e-03	7.80e-04	3.35e-04	2.73e-04	2.29e-03	1.90e-03	3.64e-04	3.42e-04
Blood	1.93e-03	1.45e-03	2.85e-04	2.64e-04	1.49e-03	1.65e-03	2.81e-04	2.99e-04
ULI	1.19e-03	6.27e-04	3.82e-04	2.21e-04	3.25e-03	1.40e-03	4.19e-04	2.65e-04
LLI	5.31e-04	4.51e-04	2.52e-04	2.19e-04	9.50e-04	9.36e-04	2.92e-04	2.70e-04
Other	7.49e-04	7.80e-04	1.81e-04	2.04e-04	6.76e-04	9.19e-04	1.85e-04	2.28e-04
Liver	2.69e-03	1.64e-03	4.13e-04	3.16e-04	3.75e-03	2.63e-03	3.82e-04	3.56e-04
Adult female								
Lung	3.26e-03	3.78e-03	3.40e-04	3.88e-04	—	—	—	—
BBi	3.12e-03	3.91e-03	3.65e-04	3.60e-04	—	—	—	—
ET1	1.15e-03	3.17e-04	3.81e-04	1.24e-04	—	—	—	—
Stomach	2.13e-03	1.69e-03	4.02e-04	3.23e-04	4.06e-03	2.85e-03	4.14e-04	3.52e-04
SI	7.65e-04	5.67e-04	3.13e-04	2.58e-04	2.26e-03	1.60e-03	3.92e-04	3.21e-04
Blood	1.83e-03	1.72e-03	2.77e-04	2.80e-04	1.78e-03	1.78e-03	2.94e-04	3.05e-04
ULI	5.28e-04	3.90e-04	3.28e-04	2.19e-04	1.69e-03	1.20e-03	4.10e-04	2.78e-04
LLI	2.47e-04	2.76e-04	2.20e-04	2.17e-04	7.15e-04	8.35e-04	2.92e-04	3.07e-04
Other	9.14e-04	9.91e-04	2.06e-04	2.13e-04	8.85e-04	1.08e-03	2.15e-04	2.45e-04
Liver	2.46e-03	1.75e-03	3.91e-04	3.36e-04	4.66e-03	3.09e-03	4.06e-04	3.45e-04

Table C-2
Normalized Count Rates on Ludlum 44-2 from ^{131}I in Various Anatomical Regions (cps/Bq)

Anatomical region	Detector location/distance from body									
	Chest				Abdomen				Thyroid	
	Contact		1 ft		Contact		1 ft		Contact	1 ft
	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior	Anterior	
Infant										
ET1	5.42e-03	1.01e-03	4.35e-04	1.34e-04	–	–	–	–	2.24e-02	5.68e-04
Stomach	5.66e-03	3.09e-03	4.10e-04	2.82e-04	1.38e-02	4.93e-03	4.43e-04	2.93e-04	2.14e-03	4.70e-04
SI	–	–	–	–	7.29e-03	5.86e-03	4.05e-04	3.60e-04	1.05e-03	3.85e-04
Blood	5.91e-03	4.62e-03	3.44e-04	3.26e-04	6.19e-03	5.05e-03	3.59e-04	3.31e-04	3.04e-03	3.94e-04
LLI	1.59e-03	1.36e-03	3.47e-04	3.32e-04	4.46e-03	3.85e-03	3.95e-04	3.50e-04	7.56e-04	3.73e-04
Thyroid	5.14e-03	5.23e-03	3.77e-04	3.24e-04	1.75e-03	1.80e-03	3.26e-04	3.02e-04	8.14e-03	4.75e-04
Urine	1.50e-03	8.94e-04	4.16e-04	2.47e-04	4.69e-03	2.32e-03	4.61e-04	2.90e-04	7.81e-04	4.23e-04
Other	3.39e-03	3.59e-03	3.18e-04	3.11e-04	3.83e-03	3.96e-03	3.18e-04	3.28e-04	2.60e-03	3.48e-04
1-y-old										
ET1	2.89e-03	4.72e-04	4.20e-04	9.38e-05	–	–	–	–	1.15e-02	6.32e-04
Stomach	3.11e-03	1.80e-03	3.89e-04	2.40e-04	9.56e-03	3.12e-03	4.20e-04	2.49e-04	1.12e-03	4.31e-04
SI	–	–	–	–	4.62e-03	3.70e-03	3.74e-04	3.22e-04	4.89e-04	3.19e-04
Blood	3.79e-03	2.80e-03	3.02e-04	2.75e-04	3.90e-03	3.11e-03	3.10e-04	2.87e-04	1.82e-03	3.52e-04
LLI	7.37e-04	6.23e-04	2.96e-04	2.56e-04	2.71e-03	2.19e-03	3.48e-04	3.06e-04	3.20e-04	2.79e-04
Thyroid	3.23e-03	3.25e-03	3.41e-04	2.96e-04	8.93e-04	8.81e-04	2.66e-04	2.54e-04	5.82e-03	4.84e-04
Urine	6.40e-04	3.64e-04	3.46e-04	1.86e-04	2.57e-03	1.24e-03	4.25e-04	2.30e-04	3.22e-04	3.23e-04
Other	2.03e-03	1.96e-03	2.60e-04	2.67e-04	2.20e-03	2.25e-03	2.70e-04	2.77e-04	1.49e-03	2.97e-04
5-y-old										
ET1	1.88e-03	3.22e-04	3.84e-04	7.57e-05	–	–	–	–	9.36e-03	6.81e-04
Stomach	2.09e-03	1.13e-03	3.88e-04	2.14e-04	7.49e-03	2.39e-03	4.09e-04	2.31e-04	5.88e-04	4.02e-04
SI	–	–	–	–	3.21e-03	2.49e-03	3.58e-04	2.99e-04	2.19e-04	2.52e-04
Blood	2.81e-03	2.03e-03	2.80e-04	2.49e-04	2.77e-03	2.09e-03	2.89e-04	2.60e-04	1.13e-03	3.18e-04
LLI	–	–	–	–	1.66e-03	1.39e-03	3.03e-04	2.88e-04	1.27e-04	1.98e-04
Thyroid	1.98e-03	2.22e-03	3.02e-04	2.95e-04	4.54e-04	4.76e-04	2.12e-04	2.25e-04	4.73e-03	4.84e-04
Urine	2.98e-04	1.69e-04	2.77e-04	1.38e-04	1.47e-03	7.23e-04	3.91e-04	1.96e-04	1.27e-04	2.33e-04
Other	1.27e-03	1.26e-03	2.08e-04	2.25e-04	1.52e-03	1.54e-03	2.37e-04	2.38e-04	9.34e-04	2.42e-04
10-y-old										
ET1	1.40e-03	2.38e-04	3.43e-04	6.69e-05	–	–	–	–	8.41e-03	6.25e-04
Stomach	1.35e-03	8.15e-04	3.74e-04	1.88e-04	6.01e-03	1.90e-03	4.21e-04	2.23e-04	3.09e-04	3.06e-04
SI	–	–	–	–	2.39e-03	1.95e-03	3.30e-04	2.73e-04	1.03e-04	1.77e-04
Blood	2.17e-03	1.49e-03	2.61e-04	2.34e-04	2.01e-03	1.68e-03	2.67e-04	2.44e-04	8.06e-04	2.56e-04
LLI	–	–	–	–	1.16e-03	9.65e-04	3.04e-04	2.60e-04	5.24e-05	1.37e-04
Thyroid	1.51e-03	1.38e-03	3.05e-04	2.52e-04	2.52e-04	2.41e-04	1.81e-04	1.68e-04	4.97e-03	4.80e-04
Urine	1.39e-04	8.28e-05	2.37e-04	1.08e-04	9.17e-04	4.42e-04	3.76e-04	1.69e-04	4.90e-05	1.67e-04
Other	9.55e-04	8.80e-04	1.91e-04	1.83e-04	9.91e-04	1.09e-03	2.07e-04	2.09e-04	6.13e-04	1.72e-04

Table C-2 (continued)

Anatomical region	Detector location/distance from body									
	Chest				Abdomen				Thyroid	
	Contact		1 ft		Contact		1 ft		Contact	1 ft
	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior	Anterior	
15-y-old										
ET1	9.71e-04	1.61e-04	3.05e-04	6.10e-05	–	–	–	–	7.32e-03	6.18e-04
Stomach	9.09e-04	5.51e-04	3.30e-04	1.80e-04	4.34e-03	1.51e-03	4.18e-04	2.08e-04	1.45e-04	2.61e-04
SI	–	–	–	–	1.65e-03	1.37e-03	3.23e-04	2.60e-04	3.96e-05	1.21e-04
Blood	1.68e-03	1.14e-03	2.39e-04	2.21e-04	1.43e-03	1.18e-03	2.54e-04	2.20e-04	5.27e-04	2.18e-04
LLI	–	–	–	–	6.85e-04	5.98e-04	2.72e-04	2.20e-04	1.98e-05	8.52e-05
Thyroid	9.52e-04	8.09e-04	2.69e-04	2.00e-04	1.33e-04	1.23e-04	1.48e-04	1.20e-04	4.90e-03	5.12e-04
Urine	6.60e-05	3.91e-05	1.75e-04	7.58e-05	5.04e-04	2.73e-04	3.32e-04	1.39e-04	1.72e-05	1.03e-04
Other	7.01e-04	6.95e-04	1.59e-04	1.69e-04	7.85e-04	8.31e-04	1.82e-04	1.83e-04	4.46e-04	1.46e-04
Adult male										
ET1	5.36e-04	7.92e-05	2.72e-04	4.86e-05	–	–	–	–	1.09e-03	4.85e-04
Stomach	2.14e-03	1.01e-03	3.50e-04	2.01e-04	3.25e-03	1.60e-03	3.33e-04	2.22e-04	6.62e-04	3.27e-04
SI	–	–	–	–	1.75e-03	1.30e-03	2.81e-04	2.38e-04	2.20e-04	1.94e-04
Blood	1.54e-03	1.13e-03	2.22e-04	2.11e-04	1.14e-03	1.24e-03	2.08e-04	2.24e-04	1.16e-03	2.22e-04
LLI	–	–	–	–	6.16e-04	5.63e-04	2.21e-04	2.02e-04	1.19e-04	1.22e-04
Thyroid	2.02e-03	8.87e-04	3.66e-04	1.77e-04	4.78e-04	3.50e-04	2.60e-04	1.40e-04	1.65e-02	4.85e-04
Urine	5.33e-05	6.83e-05	1.39e-04	1.19e-04	1.97e-04	2.23e-04	2.01e-04	1.72e-04	1.93e-05	8.30e-05
Other	5.68e-04	6.14e-04	1.43e-04	1.61e-04	5.53e-04	6.89e-04	1.51e-04	1.74e-04	5.86e-04	1.39e-04
Adult female										
ET1	9.84e-04	1.46e-04	3.36e-04	6.58e-05	–	–	–	–	2.44e-03	6.02e-04
Stomach	1.57e-03	1.22e-03	3.37e-04	2.41e-04	3.31e-03	2.18e-03	3.35e-04	2.65e-04	5.60e-04	2.90e-04
SI	–	–	–	–	1.78e-03	1.10e-03	3.25e-04	2.40e-04	1.38e-04	1.81e-04
Blood	1.50e-03	1.37e-03	2.28e-04	2.25e-04	1.32e-03	1.36e-03	2.25e-04	2.38e-04	1.25e-03	2.28e-04
LLI	–	–	–	–	4.28e-04	5.06e-04	2.26e-04	2.36e-04	3.58e-05	1.11e-04
Thyroid	2.51e-03	1.18e-03	3.78e-04	1.99e-04	4.59e-04	3.62e-04	2.84e-04	1.56e-04	1.93e-02	4.91e-04
Urine	5.97e-05	5.74e-05	1.84e-04	9.48e-05	2.54e-04	2.40e-04	2.87e-04	1.43e-04	1.78e-05	1.21e-04
Other	6.06e-04	6.56e-04	1.55e-04	1.69e-04	6.17e-04	7.79e-04	1.58e-04	1.87e-04	6.65e-04	1.46e-04

Table C-3
Normalized Count Rates on Ludlum 44-2 from ^{137}Cs in Various Anatomical Regions (cps/Bq)

Anatomical region	Detector location/distance from body							
	Chest				Abdomen			
	Contact		1 ft		Contact		1 ft	
	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior
Infant								
ET1	3.30e-03	7.44e-04	2.82e-04	1.01e-04	–	–	–	–
Stomach	3.62e-03	2.01e-03	2.70e-04	1.93e-04	8.76e-03	3.21e-03	2.86e-04	2.03e-04
SI	–	–	–	–	4.66e-03	3.87e-03	2.70e-04	2.45e-04
Blood	3.76e-03	3.02e-03	2.29e-04	2.15e-04	3.93e-03	3.29e-03	2.41e-04	2.25e-04
LLI	1.11e-03	9.87e-04	2.33e-04	2.20e-04	2.96e-03	2.59e-03	2.62e-04	2.41e-04
Body tissues	2.31e-03	2.25e-03	2.12e-04	2.13e-04	2.65e-03	2.54e-03	2.17e-04	2.19e-04
1-y-old								
ET1	1.79e-03	3.75e-04	2.69e-04	7.32e-05	–	–	–	–
Stomach	2.02e-03	1.18e-03	2.65e-04	1.64e-04	6.19e-03	2.15e-03	2.79e-04	1.76e-04
SI	–	–	–	–	3.02e-03	2.45e-03	2.51e-04	2.16e-04
Blood	2.49e-03	1.86e-03	2.06e-04	1.90e-04	2.55e-03	2.05e-03	2.10e-04	1.93e-04
LLI	5.47e-04	4.72e-04	2.00e-04	1.82e-04	1.82e-03	1.55e-03	2.31e-04	2.13e-04
Body tissues	1.35e-03	1.30e-03	1.76e-04	1.78e-04	1.59e-03	1.53e-03	1.87e-04	1.89e-04
5-y-old								
ET1	1.17e-03	2.67e-04	2.44e-04	6.12e-05	–	–	–	–
Stomach	1.45e-03	9.03e-04	2.49e-04	1.55e-04	4.89e-03	1.75e-03	2.80e-04	1.65e-04
SI	–	–	–	–	2.28e-03	1.88e-03	2.38e-04	2.09e-04
Blood	1.88e-03	1.40e-03	1.88e-04	1.69e-04	1.83e-03	1.46e-03	1.97e-04	1.80e-04
LLI	2.92e-04	2.66e-04	1.62e-04	1.47e-04	1.21e-03	1.01e-03	2.20e-04	2.03e-04
Body tissues	8.97e-04	8.60e-04	1.48e-04	1.49e-04	1.08e-03	1.07e-03	1.62e-04	1.65e-04
10-y-old								
ET1	8.79e-04	2.02e-04	2.21e-04	5.64e-05	–	–	–	–
Stomach	9.78e-04	6.28e-04	2.40e-04	1.44e-04	3.87e-03	1.44e-03	2.81e-04	1.64e-04
SI	–	–	–	–	1.68e-03	1.43e-03	2.34e-04	2.03e-04
Blood	1.43e-03	1.06e-03	1.72e-04	1.55e-04	1.40e-03	1.17e-03	1.83e-04	1.67e-04
LLI	1.61e-04	1.40e-04	1.50e-04	1.29e-04	8.43e-04	7.06e-04	2.08e-04	1.88e-04
Body tissues	6.52e-04	6.18e-04	1.28e-04	1.29e-04	7.94e-04	7.92e-04	1.46e-04	1.50e-04
15-y-old								
ET1	6.23e-04	1.50e-04	1.95e-04	4.89e-05	–	–	–	–
Stomach	6.86e-04	4.27e-04	2.26e-04	1.26e-04	2.93e-03	1.13e-03	2.78e-04	1.61e-04
SI	–	–	–	–	1.18e-03	1.03e-03	2.32e-04	1.87e-04
Blood	1.12e-03	8.26e-04	1.68e-04	1.49e-04	1.02e-03	8.92e-04	1.71e-04	1.52e-04
LLI	9.01e-05	7.98e-05	1.09e-04	9.40e-05	5.79e-04	4.63e-04	1.86e-04	1.65e-04
Body tissues	4.89e-04	4.82e-04	1.12e-04	1.12e-04	5.94e-04	5.99e-04	1.30e-04	1.31e-04

Table C-3 (continued)

Anatomical region	Detector location/distance from body							
	Chest				Abdomen			
	Contact		1 ft		Contact		1 ft	
	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior
Adult male								
ET1	3.73e-04	7.56e-05	1.85e-04	4.33e-05	–	–	–	–
Stomach	1.53e-03	7.68e-04	2.49e-04	1.56e-04	2.21e-03	1.14e-03	2.27e-04	1.65e-04
SI	–	–	–	–	1.24e-03	9.68e-04	1.97e-04	1.73e-04
Blood	1.07e-03	7.89e-04	1.58e-04	1.47e-04	7.92e-04	8.97e-04	1.45e-04	1.63e-04
Body tissues	4.22e-04	4.31e-04	1.02e-04	1.14e-04	4.10e-04	5.10e-04	1.02e-04	1.26e-04
Adult female								
ET1	6.59e-04	1.45e-04	2.16e-04	5.11e-05	–	–	–	–
Stomach	1.13e-03	9.02e-04	2.24e-04	1.75e-04	2.29e-03	1.53e-03	2.34e-04	1.87e-04
SI	–	–	–	–	1.24e-03	8.50e-04	2.25e-04	1.73e-04
Blood	1.03e-03	9.37e-04	1.60e-04	1.60e-04	9.33e-04	9.65e-04	1.56e-04	1.65e-04
Body tissues	4.28e-04	4.64e-04	1.03e-04	1.15e-04	4.50e-04	5.40e-04	1.13e-04	1.31e-04

Table C-4
Normalized Count Rates on Ludlum 44-2 from ^{192}Ir in Various Anatomical Regions (cps/Bq)

Anatomical region	Detector location/distance from body							
	Chest				Abdomen			
	Contact		1 ft		Contact		1 ft	
	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior
				Infant				
Lung	1.58e-02	1.90e-02	7.72e-04	8.27e-04	—	—	—	—
BBi	1.65e-02	2.08e-02	7.10e-04	8.07e-04	—	—	—	—
ET1	1.27e-02	2.29e-03	1.01e-03	3.02e-04	—	—	—	—
Stomach	1.29e-02	7.24e-03	9.51e-04	6.40e-04	3.23e-02	1.14e-02	1.02e-03	6.65e-04
SI	5.40e-03	4.84e-03	8.38e-04	7.46e-04	1.73e-02	1.34e-02	9.16e-04	8.21e-04
Blood	1.36e-02	1.07e-02	7.88e-04	7.46e-04	1.45e-02	1.16e-02	8.31e-04	7.52e-04
ULI	6.30e-03	4.74e-03	8.97e-04	6.97e-04	1.99e-02	1.16e-02	9.69e-04	7.64e-04
LLI	3.57e-03	3.06e-03	8.06e-04	7.53e-04	1.04e-02	8.88e-03	8.98e-04	8.12e-04
Other	7.81e-03	8.23e-03	7.11e-04	7.34e-04	8.04e-03	8.72e-03	7.40e-04	7.45e-04
Liver	1.28e-02	8.43e-03	8.95e-04	7.06e-04	3.28e-02	1.32e-02	9.45e-04	7.31e-04
Kidneys	5.16e-03	1.26e-02	5.66e-04	1.09e-03	8.84e-03	4.64e-02	5.92e-04	1.13e-03
Spleen	7.44e-03	1.21e-02	6.45e-04	8.96e-04	1.14e-02	2.27e-02	7.10e-04	9.68e-04
				1-y-old				
Lung	1.04e-02	1.20e-02	7.14e-04	7.54e-04	—	—	—	—
BBi	1.15e-02	1.41e-02	6.45e-04	6.99e-04	—	—	—	—
ET1	6.75e-03	1.05e-03	9.74e-04	2.11e-04	—	—	—	—
Stomach	7.24e-03	3.98e-03	9.33e-04	5.53e-04	2.25e-02	7.12e-03	9.68e-04	5.68e-04
SI	2.62e-03	2.28e-03	7.27e-04	6.59e-04	1.07e-02	8.35e-03	8.54e-04	7.42e-04
Blood	8.82e-03	6.50e-03	6.95e-04	6.48e-04	—	—	—	—
ULI	3.09e-03	2.31e-03	7.92e-04	5.80e-04	1.26e-02	7.19e-03	9.00e-04	6.62e-04
LLI	1.59e-03	1.39e-03	6.73e-04	5.99e-04	6.12e-03	4.93e-03	7.92e-04	7.06e-04
Other	4.48e-03	4.58e-03	5.96e-04	6.11e-04	4.56e-03	4.96e-03	6.14e-04	6.31e-04
Liver	7.52e-03	4.96e-03	8.24e-04	6.20e-04	2.13e-02	8.64e-03	8.84e-04	6.38e-04
Kidneys	2.92e-03	6.93e-03	4.64e-04	9.78e-04	5.88e-03	3.42e-02	4.99e-04	1.08e-03
Spleen	4.25e-03	6.95e-03	5.79e-04	8.27e-04	7.31e-03	1.46e-02	6.11e-04	8.75e-04
				5-y-old				
Lung	8.23e-03	9.28e-03	6.99e-04	7.22e-04	—	—	—	—
BBi	8.33e-03	1.26e-02	5.68e-04	7.11e-04	—	—	—	—
ET1	4.36e-03	6.93e-04	8.91e-04	1.75e-04	—	—	—	—
Stomach	4.71e-03	2.62e-03	8.98e-04	4.70e-04	1.73e-02	5.59e-03	9.60e-04	5.41e-04
SI	1.41e-03	1.25e-03	6.65e-04	5.55e-04	7.49e-03	5.82e-03	8.22e-04	6.84e-04
Blood	6.63e-03	4.88e-03	6.51e-04	5.61e-04	—	—	—	—
ULI	1.76e-03	1.32e-03	7.27e-04	5.10e-04	9.36e-03	5.19e-03	8.81e-04	6.21e-04
LLI	7.92e-04	7.20e-04	5.41e-04	4.82e-04	3.91e-03	3.12e-03	7.23e-04	6.33e-04
Other	2.90e-03	2.98e-03	4.87e-04	5.14e-04	2.95e-03	3.23e-03	5.34e-04	5.61e-04
Liver	4.86e-03	3.37e-03	8.32e-04	6.07e-04	1.59e-02	6.77e-03	8.53e-04	6.39e-04
Kidneys	1.88e-03	4.14e-03	3.93e-04	9.48e-04	4.50e-03	2.34e-02	4.43e-04	1.07e-03
Spleen	2.97e-03	4.52e-03	5.48e-04	8.14e-04	5.69e-03	1.07e-02	5.83e-04	8.56e-04

Table C-4 (continued)

Anatomical region	Detector location/distance from body							
	Chest				Abdomen			
	Contact		1 ft		Contact		1 ft	
	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior
10-y-old								
Lung	6.31e-03	7.04e-03	6.59e-04	6.90e-04	—	—	—	—
BBi	8.10e-03	9.41e-03	5.57e-04	6.77e-04	—	—	—	—
ET1	3.23e-03	5.30e-04	8.10e-04	1.54e-04	—	—	—	—
Stomach	2.91e-03	1.88e-03	8.59e-04	4.51e-04	1.36e-02	4.35e-03	9.80e-04	5.04e-04
SI	8.18e-04	6.76e-04	5.75e-04	5.09e-04	5.41e-03	4.39e-03	7.82e-04	6.51e-04
Blood	4.98e-03	3.44e-03	5.68e-04	5.28e-04	—	—	—	—
ULI	9.69e-04	7.20e-04	6.52e-04	4.19e-04	6.79e-03	3.95e-03	8.88e-04	5.99e-04
LLI	3.92e-04	3.49e-04	4.48e-04	4.00e-04	2.55e-03	2.17e-03	6.82e-04	5.79e-04
Other	2.12e-03	2.07e-03	4.15e-04	4.14e-04	2.16e-03	2.36e-03	4.69e-04	4.89e-04
Liver	3.29e-03	2.56e-03	7.62e-04	5.48e-04	1.16e-02	5.46e-03	8.05e-04	6.18e-04
Kidneys	1.28e-03	2.61e-03	3.71e-04	9.01e-04	3.76e-03	1.98e-02	4.37e-04	1.10e-03
Spleen	2.03e-03	3.07e-03	4.92e-04	7.75e-04	4.36e-03	8.52e-03	5.27e-04	8.64e-04
15-y-old								
Lung	4.80e-03	5.09e-03	6.37e-04	6.82e-04	—	—	—	—
BBi	6.98e-03	6.23e-03	6.34e-04	6.12e-04	—	—	—	—
ET1	2.24e-03	3.36e-04	7.05e-04	1.37e-04	—	—	—	—
Stomach	2.03e-03	1.21e-03	7.84e-04	3.82e-04	9.91e-03	3.39e-03	9.53e-04	4.79e-04
SI	4.56e-04	3.83e-04	4.64e-04	3.90e-04	3.78e-03	3.03e-03	7.16e-04	6.04e-04
Blood	3.77e-03	2.57e-03	5.33e-04	4.84e-04	—	—	—	—
ULI	5.23e-04	3.90e-04	5.29e-04	3.40e-04	4.62e-03	2.65e-03	8.17e-04	5.29e-04
LLI	2.04e-04	1.70e-04	3.45e-04	2.82e-04	1.62e-03	1.26e-03	6.19e-04	5.21e-04
Other	1.53e-03	1.64e-03	3.52e-04	3.63e-04	1.64e-03	1.68e-03	4.10e-04	4.21e-04
Liver	2.30e-03	1.67e-03	6.42e-04	4.95e-04	7.75e-03	4.02e-03	7.39e-04	5.56e-04
Kidneys	7.96e-04	1.66e-03	3.04e-04	8.44e-04	2.80e-03	1.56e-02	3.79e-04	1.10e-03
Spleen	1.36e-03	1.99e-03	4.34e-04	6.88e-04	3.19e-03	5.97e-03	4.89e-04	8.28e-04
Adult male								
Lung	6.72e-03	5.20e-03	6.98e-04	6.20e-04	—	—	—	—
BBi	9.12e-03	3.94e-03	8.63e-04	5.05e-04	—	—	—	—
ET1	1.22e-03	1.67e-04	6.41e-04	1.08e-04	—	—	—	—
Stomach	4.94e-03	2.23e-03	8.08e-04	4.42e-04	7.65e-03	3.58e-03	7.39e-04	4.94e-04
SI	1.56e-03	1.01e-03	5.74e-04	4.23e-04	3.88e-03	2.86e-03	6.34e-04	5.38e-04
Blood	3.48e-03	2.55e-03	5.04e-04	4.59e-04	2.54e-03	2.80e-03	4.72e-04	5.11e-04
ULI	1.71e-03	7.32e-04	7.10e-04	3.23e-04	5.90e-03	1.89e-03	7.77e-04	3.90e-04
LLI	6.57e-04	5.11e-04	4.16e-04	3.39e-04	1.39e-03	1.28e-03	5.09e-04	4.53e-04
Other	1.23e-03	1.36e-03	3.14e-04	3.53e-04	1.09e-03	1.50e-03	3.21e-04	4.04e-04
Liver	4.85e-03	2.44e-03	7.33e-04	4.87e-04	7.01e-03	4.38e-03	6.82e-04	5.57e-04
Kidneys	1.42e-03	1.89e-03	4.02e-04	7.11e-04	2.32e-03	6.45e-03	4.05e-04	8.53e-04
Spleen	2.36e-03	3.93e-03	3.98e-04	8.33e-04	2.13e-03	6.97e-03	3.64e-04	8.94e-04

Table C-4 (continued)

Anatomical region	Detector location/distance from body							
	Chest				Abdomen			
	Contact		1 ft		Contact		1 ft	
	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior
Adult female								
Lung	6.30e-03	7.47e-03	6.48e-04	7.52e-04	—	—	—	—
BBi	6.01e-03	7.18e-03	7.20e-04	6.93e-04	—	—	—	—
ET1	2.24e-03	3.39e-04	8.09e-04	1.47e-04	—	—	—	—
Stomach	3.55e-03	2.72e-03	7.60e-04	5.44e-04	7.72e-03	4.83e-03	7.74e-04	5.92e-04
SI	1.08e-03	7.16e-04	5.65e-04	3.94e-04	4.06e-03	2.47e-03	7.25e-04	5.29e-04
Blood	3.39e-03	3.11e-03	5.17e-04	5.06e-04	3.16e-03	3.05e-03	5.09e-04	5.67e-04
ULI	6.13e-04	4.06e-04	6.20e-04	3.25e-04	2.71e-03	1.72e-03	8.11e-04	4.41e-04
LLI	2.38e-04	3.15e-04	3.67e-04	3.72e-04	9.44e-04	1.15e-03	5.27e-04	5.36e-04
Other	1.26e-03	1.51e-03	3.28e-04	3.71e-04	1.21e-03	1.59e-03	3.57e-04	4.24e-04
Liver	4.48e-03	2.94e-03	7.56e-04	5.56e-04	8.96e-03	5.68e-03	7.51e-04	6.09e-04
Kidneys	1.68e-03	1.81e-03	5.00e-04	6.95e-04	4.08e-03	7.33e-03	5.96e-04	8.22e-04
Spleen	2.48e-03	4.13e-03	4.96e-04	7.78e-04	3.28e-03	8.66e-03	4.58e-04	8.87e-04

Table C-5
Normalized Count Rates on Captus 3000 from ^{60}Co in Various Anatomical Regions (cps/Bq)

Anatomical region	Detector location/distance from body							
	Chest				Abdomen			
	Contact		1 ft		Contact		1 ft	
	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior
				Infant				
Lung	5.05e-03	5.41e-03	9.92e-04	1.03e-03	—	—	—	—
BBi	4.94e-03	5.50e-03	9.43e-04	1.05e-03	—	—	—	—
ET1	1.51e-03	7.58e-04	1.08e-03	5.09e-04	—	—	—	—
Stomach	1.67e-03	1.94e-03	1.13e-03	8.49e-04	6.95e-03	4.25e-03	1.25e-03	9.14e-04
SI	9.30e-04	7.36e-04	8.86e-04	8.37e-04	5.19e-03	4.48e-03	1.06e-03	1.02e-03
Blood	3.14e-03	2.79e-03	8.75e-04	8.55e-04	3.33e-03	3.08e-03	9.06e-04	8.75e-04
ULI	9.08e-04	7.11e-04	8.71e-04	8.09e-04	5.11e-03	4.24e-03	1.11e-03	9.68e-04
LLI	8.09e-04	7.60e-04	6.28e-04	5.96e-04	2.16e-03	1.97e-03	1.01e-03	9.55e-04
Other	1.91e-03	1.83e-03	6.85e-04	6.69e-04	1.93e-03	2.06e-03	6.92e-04	7.13e-04
Liver	2.47e-03	2.30e-03	1.08e-03	9.32e-04	6.19e-03	4.70e-03	1.10e-03	9.67e-04
				1-y-old				
Lung	3.73e-03	3.83e-03	9.06e-04	9.76e-04	—	—	—	—
BBi	4.14e-03	4.67e-03	9.08e-04	9.67e-04	—	—	—	—
ET1	1.75e-03	3.13e-04	6.84e-04	3.82e-04	—	—	—	—
Stomach	9.13e-04	7.99e-04	1.05e-03	6.68e-04	6.19e-03	3.22e-03	1.25e-03	8.30e-04
SI	7.41e-04	6.25e-04	4.73e-04	4.60e-04	2.82e-03	2.70e-03	1.04e-03	9.26e-04
Blood	2.20e-03	2.02e-03	6.98e-04	7.26e-04	2.13e-03	2.08e-03	8.26e-04	7.30e-04
ULI	7.86e-04	5.65e-04	5.23e-04	4.60e-04	3.41e-03	2.71e-03	1.10e-03	9.01e-04
LLI	6.52e-04	5.83e-04	2.65e-04	2.49e-04	1.04e-03	1.03e-03	8.57e-04	8.24e-04
Other	1.14e-03	1.20e-03	4.79e-04	5.03e-04	1.24e-03	1.26e-03	5.27e-04	5.38e-04
Liver	1.10e-03	1.08e-03	9.67e-04	7.63e-04	5.05e-03	3.47e-03	1.12e-03	8.33e-04
				5-y-old				
Lung	2.63e-03	2.85e-03	9.03e-04	1.02e-03	—	—	—	—
BBi	3.48e-03	4.30e-03	9.26e-04	9.40e-04	—	—	—	—
ET1	1.72e-03	2.49e-04	2.93e-04	2.47e-04	—	—	—	—
Stomach	8.77e-04	5.62e-04	7.96e-04	5.75e-04	4.89e-03	2.82e-03	1.25e-03	8.54e-04
SI	6.30e-04	5.06e-04	2.36e-04	2.46e-04	1.51e-03	1.42e-03	9.84e-04	8.78e-04
Blood	1.71e-03	1.48e-03	6.14e-04	6.00e-04	1.51e-03	1.34e-03	6.93e-04	6.06e-04
ULI	7.09e-04	5.03e-04	2.71e-04	2.69e-04	2.15e-03	1.82e-03	1.05e-03	8.31e-04
LLI	5.36e-04	4.51e-04	1.56e-04	1.62e-04	7.58e-04	6.91e-04	6.88e-04	5.91e-04
Other	8.72e-04	8.66e-04	3.71e-04	3.72e-04	9.17e-04	9.54e-04	4.13e-04	4.36e-04
Liver	8.45e-04	7.22e-04	7.88e-04	6.30e-04	3.76e-03	2.46e-03	1.12e-03	8.88e-04

Table C-5 (continued)

Anatomical region	Detector location/distance from body							
	Chest				Abdomen			
	Contact		1 ft		Contact		1 ft	
	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior
10-y-old								
Lung	1.76e-03	1.89e-03	8.83e-04	9.24e-04	—	—	—	—
BBi	3.36e-03	3.68e-03	8.71e-04	9.73e-04	—	—	—	—
ET1	1.50e-03	2.09e-04	2.18e-04	1.76e-04	—	—	—	—
Stomach	8.25e-04	4.47e-04	5.07e-04	4.01e-04	3.39e-03	2.14e-03	1.19e-03	7.49e-04
SI	5.36e-04	4.20e-04	1.72e-04	1.52e-04	1.01e-03	9.28e-04	9.02e-04	8.10e-04
Blood	1.46e-03	1.12e-03	5.93e-04	5.08e-04	1.10e-03	1.07e-03	6.50e-04	5.46e-04
ULI	6.21e-04	3.95e-04	1.79e-04	1.56e-04	1.21e-03	1.18e-03	9.19e-04	7.91e-04
LLI	4.23e-04	3.61e-04	1.33e-04	1.28e-04	6.84e-04	5.40e-04	4.76e-04	4.26e-04
Other	5.95e-04	6.66e-04	2.96e-04	3.21e-04	6.99e-04	7.85e-04	3.28e-04	3.42e-04
Liver	7.64e-04	5.98e-04	5.75e-04	5.11e-04	2.61e-03	1.85e-03	1.09e-03	8.29e-04
15-y-old								
Lung	1.20e-03	1.28e-03	7.87e-04	8.43e-04	—	—	—	—
BBi	2.86e-03	2.72e-03	8.96e-04	8.14e-04	—	—	—	—
ET1	1.20e-03	1.78e-04	2.22e-04	1.20e-04	—	—	—	—
Stomach	6.87e-04	3.61e-04	3.46e-04	2.81e-04	2.08e-03	1.55e-03	1.09e-03	7.04e-04
SI	3.96e-04	3.21e-04	1.44e-04	1.17e-04	7.54e-04	6.72e-04	7.06e-04	6.26e-04
Blood	1.10e-03	9.04e-04	4.74e-04	4.27e-04	8.13e-04	8.04e-04	4.97e-04	4.90e-04
ULI	4.73e-04	2.98e-04	1.40e-04	1.23e-04	8.65e-04	7.35e-04	7.75e-04	6.08e-04
LLI	3.17e-04	2.42e-04	1.19e-04	1.04e-04	5.23e-04	4.45e-04	3.16e-04	2.77e-04
Other	5.06e-04	5.05e-04	2.52e-04	2.78e-04	5.79e-04	6.13e-04	2.90e-04	2.93e-04
Liver	6.43e-04	4.77e-04	4.24e-04	3.83e-04	1.77e-03	1.26e-03	9.52e-04	7.93e-04
Adult male								
Lung	1.66e-03	1.48e-03	8.11e-04	7.74e-04	—	—	—	—
BBi	2.38e-03	1.63e-03	9.08e-04	7.07e-04	—	—	—	—
ET1	9.75e-04	1.16e-04	2.08e-04	7.43e-05	—	—	—	—
Stomach	7.94e-04	5.05e-04	6.84e-04	5.08e-04	2.27e-03	1.56e-03	9.78e-04	7.02e-04
SI	4.94e-04	3.38e-04	2.57e-04	2.60e-04	1.03e-03	9.53e-04	7.08e-04	6.07e-04
Blood	8.96e-04	8.57e-04	4.29e-04	4.22e-04	8.36e-04	8.96e-04	4.81e-04	4.60e-04
ULI	6.54e-04	2.59e-04	2.40e-04	2.02e-04	9.41e-04	7.30e-04	8.73e-04	4.92e-04
LLI	3.75e-04	2.76e-04	1.67e-04	1.64e-04	4.96e-04	4.27e-04	3.08e-04	2.81e-04
Other	3.94e-04	4.60e-04	2.19e-04	2.38e-04	4.05e-04	5.35e-04	2.32e-04	2.53e-04
Liver	7.75e-04	6.12e-04	6.71e-04	5.28e-04	2.20e-03	1.53e-03	8.58e-04	7.23e-04
Adult female								
Lung	1.83e-03	1.89e-03	8.18e-04	9.21e-04	—	—	—	—
BBi	2.07e-03	2.52e-03	8.84e-04	8.91e-04	—	—	—	—
ET1	1.16e-03	1.62e-04	2.01e-04	1.26e-04	—	—	—	—
Stomach	6.89e-04	5.21e-04	5.96e-04	5.47e-04	2.22e-03	1.88e-03	9.88e-04	8.05e-04
SI	5.12e-04	3.22e-04	2.01e-04	1.79e-04	9.41e-04	8.28e-04	6.57e-04	4.98e-04
Blood	9.24e-04	9.67e-04	4.53e-04	4.71e-04	9.08e-04	9.81e-04	4.68e-04	4.73e-04
ULI	5.77e-04	2.56e-04	1.77e-04	1.11e-04	8.04e-04	4.06e-04	4.85e-04	3.95e-04
LLI	3.04e-04	3.06e-04	1.14e-04	1.19e-04	4.64e-04	4.67e-04	2.08e-04	2.06e-04
Other	5.21e-04	5.62e-04	2.66e-04	2.73e-04	5.34e-04	6.18e-04	2.81e-04	2.91e-04
Liver	7.08e-04	6.49e-04	6.43e-04	5.71e-04	2.94e-03	1.91e-03	1.02e-03	8.54e-04

Table C-6
Normalized Count Rates on Captus 3000 from ^{131}I in Various Anatomical Regions (cps/Bq)

Anatomical region	Detector location/distance from body									
	Chest				Abdomen				Thyroid	
	Contact		1 ft		Contact		1 ft		Contact	1 ft
	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior	Anterior	
Infant										
ET1	1.50e-04	3.03e-04	7.83e-04	2.54e-04	—	—	—	—	4.85e-03	1.03e-03
Stomach	8.85e-04	1.07e-03	7.83e-04	5.34e-04	4.70e-03	2.54e-03	8.34e-04	5.50e-04	1.35e-04	5.47e-04
SI	—	—	—	—	3.37e-03	2.84e-03	7.32e-04	6.44e-04	6.71e-05	1.82e-04
Blood	1.82e-03	1.65e-03	5.85e-04	5.46e-04	2.05e-03	1.85e-03	5.94e-04	5.65e-04	8.89e-04	5.27e-04
LLI	1.17e-04	1.19e-04	3.97e-04	3.67e-04	1.23e-03	1.13e-03	6.87e-04	6.12e-04	4.54e-05	8.15e-05
Thyroid	3.09e-03	2.71e-03	7.84e-04	6.37e-04	1.67e-04	1.67e-04	5.35e-04	4.69e-04	3.51e-03	9.49e-04
Urine	8.75e-05	8.10e-05	3.12e-04	2.41e-04	3.71e-04	4.68e-04	7.81e-04	4.66e-04	4.05e-05	4.46e-05
Other	9.06e-04	9.15e-04	4.19e-04	4.32e-04	1.05e-03	1.10e-03	4.56e-04	4.51e-04	7.62e-04	3.95e-04
1-y-old										
ET1	1.17e-04	9.24e-05	4.25e-04	1.50e-04	—	—	—	—	2.91e-04	1.11e-03
Stomach	2.99e-04	3.68e-04	7.03e-04	4.09e-04	4.07e-03	1.88e-03	8.45e-04	5.04e-04	9.42e-05	1.57e-04
SI	—	—	—	—	1.64e-03	1.59e-03	7.01e-04	6.05e-04	4.44e-05	4.41e-05
Blood	1.22e-03	1.00e-03	4.81e-04	4.38e-04	1.20e-03	1.08e-03	5.14e-04	4.60e-04	5.17e-04	3.87e-04
LLI	6.17e-05	5.95e-05	1.33e-04	1.25e-04	4.23e-04	4.61e-04	5.78e-04	5.16e-04	2.98e-05	2.56e-05
Thyroid	1.09e-03	1.03e-03	7.32e-04	5.72e-04	9.66e-05	1.01e-04	2.22e-04	2.08e-04	3.42e-03	9.73e-04
Urine	5.06e-05	3.83e-05	6.07e-05	6.69e-05	2.16e-04	2.12e-04	6.13e-04	3.58e-04	2.96e-05	1.86e-05
Other	4.66e-04	4.78e-04	2.93e-04	2.99e-04	5.72e-04	5.88e-04	3.14e-04	3.18e-04	4.68e-04	2.81e-04
5-y-old										
ET1	9.68e-05	5.88e-05	1.23e-04	9.89e-05	—	—	—	—	2.97e-04	1.14e-03
Stomach	2.02e-04	2.13e-04	5.27e-04	3.21e-04	3.24e-03	1.48e-03	8.45e-04	4.69e-04	5.02e-05	5.42e-05
SI	—	—	—	—	7.83e-04	7.75e-04	6.61e-04	5.56e-04	2.24e-05	1.88e-05
Blood	9.19e-04	7.12e-04	4.00e-04	3.58e-04	7.41e-04	6.51e-04	4.49e-04	3.94e-04	2.62e-04	2.51e-04
LLI	—	—	—	—	2.24e-04	2.20e-04	4.17e-04	3.66e-04	1.45e-05	1.17e-05
Thyroid	3.50e-04	3.41e-04	6.20e-04	5.43e-04	5.44e-05	5.65e-05	7.28e-05	7.10e-05	3.01e-03	9.59e-04
Urine	3.30e-05	1.89e-05	2.91e-05	2.57e-05	1.31e-04	1.16e-04	3.08e-04	2.14e-04	1.75e-05	1.01e-05
Other	2.85e-04	3.04e-04	2.10e-04	2.15e-04	3.73e-04	3.79e-04	2.43e-04	2.44e-04	2.71e-04	1.96e-04
10-y-old										
ET1	8.42e-05	4.40e-05	5.77e-05	6.93e-05	—	—	—	—	2.76e-04	1.11e-03
Stomach	1.37e-04	1.25e-04	3.26e-04	2.17e-04	2.11e-03	1.13e-03	8.31e-04	4.35e-04	3.23e-05	2.98e-05
SI	—	—	—	—	4.54e-04	4.28e-04	5.70e-04	4.87e-04	1.27e-05	1.04e-05
Blood	6.90e-04	5.19e-04	3.38e-04	2.92e-04	5.06e-04	4.47e-04	3.77e-04	3.33e-04	1.63e-04	1.65e-04
LLI	—	—	—	—	1.44e-04	1.42e-04	2.81e-04	2.42e-04	8.92e-06	6.60e-06
Thyroid	2.17e-04	2.13e-04	5.21e-04	4.09e-04	3.28e-05	3.20e-05	—	—	3.16e-03	9.91e-04
Urine	2.21e-05	1.04e-05	1.44e-05	1.19e-05	8.65e-05	6.66e-05	1.30e-04	1.18e-04	1.14e-05	6.17e-06
Other	2.03e-04	2.11e-04	1.55e-04	1.57e-04	2.65e-04	2.63e-04	1.92e-04	1.88e-04	1.77e-04	1.33e-04

Table C-6 (continued)

Anatomical region	Detector location/distance from body									
	Chest				Abdomen				Thyroid	
	Contact		1 ft		Contact		1 ft		Contact	1 ft
	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior	Anterior	
15-y-old										
ET1	6.93e-05	3.04e-05	4.61e-05	4.24e-05	—	—	—	—	2.66e-04	1.07e-03
Stomach	9.63e-05	8.47e-05	1.87e-04	1.41e-04	1.21e-03	7.42e-04	7.77e-04	3.68e-04	2.07e-05	1.77e-05
SI	—	—	—	—	2.81e-04	2.49e-04	4.23e-04	3.67e-04	7.20e-06	5.84e-06
Blood	5.16e-04	3.63e-04	2.89e-04	2.42e-04	3.27e-04	2.98e-04	2.96e-04	2.56e-04	1.07e-04	1.06e-04
LLI	—	—	—	—	9.06e-05	8.52e-05	1.61e-04	1.36e-04	4.85e-06	3.94e-06
Thyroid	1.40e-04	1.31e-04	3.20e-04	2.43e-04	1.98e-05	1.74e-05	1.97e-05	1.91e-05	3.14e-03	9.98e-04
Urine	1.38e-05	4.92e-06	8.97e-06	5.90e-06	5.40e-05	3.75e-05	6.43e-05	5.48e-05	6.58e-06	4.53e-06
Other	1.47e-04	1.57e-04	1.28e-04	1.28e-04	1.84e-04	1.87e-04	1.44e-04	1.45e-04	1.13e-04	9.31e-05
Adult male										
ET1	5.31e-05	1.46e-05	2.65e-05	2.02e-05	—	—	—	—	8.46e-05	—
Stomach	2.59e-04	2.34e-04	4.37e-04	2.84e-04	1.30e-03	7.72e-04	6.27e-04	3.73e-04	6.33e-05	—
SI	—	—	—	—	5.06e-04	4.34e-04	4.32e-04	3.58e-04	2.52e-05	—
Blood	4.29e-04	3.47e-04	2.57e-04	2.27e-04	3.65e-04	3.43e-04	2.59e-04	2.50e-04	2.08e-04	—
LLI	—	—	—	—	1.14e-04	9.78e-05	1.52e-04	1.29e-04	1.40e-05	—
Thyroid	2.24e-04	1.88e-04	5.80e-04	2.90e-04	5.69e-05	4.70e-05	7.51e-05	6.22e-05	4.05e-03	—
Urine	9.66e-06	7.98e-06	8.72e-06	7.23e-06	2.52e-05	2.11e-05	3.29e-05	2.74e-05	4.06e-06	—
Other	1.15e-04	1.22e-04	1.04e-04	1.09e-04	1.41e-04	1.43e-04	1.16e-04	1.19e-04	1.03e-04	—
Adult female										
ET1	6.90e-05	2.83e-05	4.42e-05	4.55e-05	—	—	—	—	9.75e-05	—
Stomach	1.95e-04	1.86e-04	3.60e-04	3.04e-04	1.21e-03	9.88e-04	6.38e-04	4.67e-04	6.15e-05	—
SI	—	—	—	—	3.67e-04	3.15e-04	4.03e-04	2.74e-04	2.15e-05	—
Blood	4.49e-04	4.32e-04	2.63e-04	2.65e-04	4.09e-04	3.79e-04	2.81e-04	2.67e-04	2.54e-04	—
LLI	—	—	—	—	5.34e-05	4.84e-05	8.86e-05	8.25e-05	7.63e-06	—
Thyroid	2.57e-04	2.24e-04	6.43e-04	3.43e-04	5.37e-05	4.32e-05	6.29e-05	5.69e-05	3.82e-03	—
Urine	1.31e-05	5.94e-06	8.94e-06	6.22e-06	3.22e-05	2.09e-05	3.13e-05	2.91e-05	8.23e-06	—
Other	1.27e-04	1.28e-04	1.18e-04	1.15e-04	1.58e-04	1.62e-04	1.21e-04	1.23e-04	1.14e-04	—

Table C-7
Normalized Count Rates on Captus 3000 from ^{137}Cs in Various Anatomical Regions (cps/Bq)

Anatomical region	Detector location/distance from body							
	Chest				Abdomen			
	Contact		1 ft		Contact		1 ft	
	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior
Infant								
ET1	2.65e-04	2.88e-04	5.91e-04	2.24e-04	–	–	–	–
Stomach	7.12e-04	8.53e-04	5.99e-04	4.10e-04	3.53e-03	2.06e-03	6.27e-04	4.37e-04
SI	–	–	–	–	2.55e-03	2.21e-03	5.49e-04	5.10e-04
Blood	1.45e-03	1.28e-03	4.51e-04	4.21e-04	1.60e-03	1.46e-03	4.65e-04	4.42e-04
LLI	1.56e-04	1.41e-04	3.18e-04	2.78e-04	9.52e-04	8.67e-04	5.06e-04	4.68e-04
Body tissues	7.48e-04	7.30e-04	3.26e-04	3.36e-04	8.94e-04	9.11e-04	3.62e-04	3.56e-04
1-y-old								
ET1	3.00e-04	9.11e-05	3.26e-04	1.42e-04	–	–	–	–
Stomach	2.80e-04	2.93e-04	5.40e-04	3.22e-04	3.09e-03	1.52e-03	6.33e-04	4.02e-04
SI	–	–	–	–	1.29e-03	1.24e-03	5.23e-04	4.72e-04
Blood	9.94e-04	8.27e-04	3.65e-04	3.47e-04	9.56e-04	8.97e-04	3.91e-04	3.60e-04
LLI	1.13e-04	9.57e-05	1.04e-04	1.02e-04	3.55e-04	3.95e-04	4.38e-04	3.96e-04
Body tissues	4.26e-04	4.17e-04	2.26e-04	2.26e-04	5.36e-04	5.45e-04	2.70e-04	2.62e-04
5-y-old								
ET1	3.05e-04	6.11e-05	1.08e-04	9.49e-05	–	–	–	–
Stomach	2.08e-04	1.75e-04	3.92e-04	2.68e-04	2.46e-03	1.25e-03	6.35e-04	3.82e-04
SI	–	–	–	–	6.13e-04	6.22e-04	5.09e-04	4.40e-04
Blood	7.53e-04	5.90e-04	3.10e-04	2.77e-04	6.13e-04	5.52e-04	3.46e-04	3.08e-04
LLI	8.91e-05	7.46e-05	4.88e-05	4.59e-05	2.20e-04	2.04e-04	3.41e-04	2.87e-04
Body tissues	2.85e-04	2.80e-04	1.70e-04	1.68e-04	3.62e-04	3.65e-04	2.06e-04	2.02e-04
10-y-old								
ET1	2.81e-04	4.84e-05	5.76e-05	6.79e-05	–	–	–	–
Stomach	1.67e-04	1.15e-04	2.41e-04	1.91e-04	1.65e-03	9.55e-04	6.29e-04	3.70e-04
SI	–	–	–	–	3.82e-04	3.51e-04	4.43e-04	3.89e-04
Blood	5.86e-04	4.49e-04	2.66e-04	2.33e-04	4.34e-04	4.04e-04	2.98e-04	2.58e-04
LLI	6.73e-05	5.24e-05	2.94e-05	2.61e-05	1.52e-04	1.46e-04	2.19e-04	1.93e-04
Body tissues	2.04e-04	2.09e-04	1.30e-04	1.30e-04	2.63e-04	2.64e-04	1.63e-04	1.62e-04
15-y-old								
ET1	2.40e-04	3.65e-05	5.19e-05	4.23e-05	–	–	–	–
Stomach	1.47e-04	8.68e-05	1.45e-04	1.23e-04	9.35e-04	6.46e-04	5.83e-04	3.20e-04
SI	–	–	–	–	2.44e-04	2.19e-04	3.35e-04	2.99e-04
Blood	4.33e-04	3.19e-04	2.33e-04	1.88e-04	3.00e-04	2.76e-04	2.38e-04	2.11e-04
LLI	4.51e-05	3.72e-05	2.07e-05	1.83e-05	1.16e-04	9.73e-05	1.33e-04	1.18e-04
Body tissues	1.52e-04	1.57e-04	1.10e-04	1.07e-04	1.95e-04	1.92e-04	1.31e-04	1.31e-04

Table C-7 (continued)

Anatomical region	Detector location/distance from body							
	Chest				Abdomen			
	Contact		1 ft		Contact		1 ft	
	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior
Adult male								
ET1	1.94e-04	2.11e-05	3.91e-05	2.16e-05	–	–	–	–
Stomach	2.18e-04	2.01e-04	3.47e-04	2.33e-04	1.03e-03	6.60e-04	4.79e-04	3.07e-04
SI	–	–	–	–	3.99e-04	3.89e-04	3.38e-04	2.93e-04
Blood	3.60e-04	3.10e-04	2.00e-04	1.90e-04	3.20e-04	3.13e-04	2.10e-04	2.06e-04
Body tissues	1.20e-04	1.31e-04	9.07e-05	9.70e-05	1.44e-04	1.60e-04	1.01e-04	1.04e-04
Adult female								
ET1	2.11e-04	3.36e-05	4.75e-05	4.55e-05	–	–	–	–
Stomach	1.93e-04	1.68e-04	2.77e-04	2.55e-04	9.68e-04	8.33e-04	4.99e-04	3.85e-04
SI	–	–	–	–	3.00e-04	3.02e-04	3.15e-04	2.23e-04
Blood	3.76e-04	3.73e-04	2.07e-04	2.10e-04	3.58e-04	3.41e-04	2.23e-04	2.18e-04
Body tissues	1.30e-04	1.36e-04	9.64e-05	9.82e-05	1.62e-04	1.73e-04	1.06e-04	1.08e-04

Table C-8
Normalized Count Rates on Captus 3000 from ^{192}Ir in Various Anatomical Regions (cps/Bq)

Anatomical region	Detector location/distance from body							
	Chest				Abdomen			
	Contact		1 ft		Contact		1 ft	
	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior
				Infant				
Lung	7.20e-03	8.31e-03	1.49e-03	1.66e-03	—	—	—	—
BBi	6.92e-03	7.94e-03	1.40e-03	1.53e-03	—	—	—	—
ET1	3.17e-04	6.69e-04	1.76e-03	5.80e-04	—	—	—	—
Stomach	2.11e-03	2.40e-03	1.79e-03	1.16e-03	1.06e-02	5.83e-03	1.93e-03	1.25e-03
SI	4.76e-04	4.73e-04	1.35e-03	1.23e-03	7.63e-03	6.44e-03	1.70e-03	1.47e-03
Blood	4.29e-03	3.73e-03	1.36e-03	1.25e-03	4.94e-03	4.19e-03	1.41e-03	1.26e-03
ULI	4.95e-04	5.43e-04	1.36e-03	1.13e-03	7.63e-03	5.64e-03	1.72e-03	1.40e-03
LLI	2.73e-04	2.65e-04	8.97e-04	8.18e-04	2.80e-03	2.42e-03	1.55e-03	1.38e-03
Other	2.06e-03	2.01e-03	9.35e-04	9.71e-04	2.09e-03	2.23e-03	1.02e-03	9.95e-04
Liver	3.21e-03	2.79e-03	1.68e-03	1.24e-03	9.51e-03	6.66e-03	1.73e-03	1.35e-03
Kidneys	1.55e-03	8.77e-04	9.81e-04	1.90e-03	4.86e-03	1.22e-02	1.10e-03	2.02e-03
Spleen	2.67e-03	1.98e-03	1.19e-03	1.66e-03	6.09e-03	9.31e-03	1.31e-03	1.77e-03
				1-y-old				
Lung	5.13e-03	5.51e-03	1.41e-03	1.60e-03	—	—	—	—
BBi	5.54e-03	6.27e-03	1.31e-03	1.41e-03	—	—	—	—
ET1	2.63e-04	2.09e-04	9.71e-04	3.44e-04	—	—	—	—
Stomach	6.81e-04	8.05e-04	1.54e-03	8.99e-04	9.10e-03	4.16e-03	1.92e-03	1.10e-03
SI	2.50e-04	2.20e-04	6.42e-04	6.07e-04	3.80e-03	3.54e-03	1.59e-03	1.34e-03
Blood	2.76e-03	2.28e-03	1.06e-03	9.46e-04	—	—	—	—
ULI	2.70e-04	2.61e-04	7.78e-04	6.05e-04	4.61e-03	3.33e-03	1.65e-03	1.23e-03
LLI	1.39e-04	1.31e-04	2.90e-04	2.70e-04	9.80e-04	1.04e-03	1.31e-03	1.17e-03
Other	1.08e-03	1.07e-03	6.23e-04	6.48e-04	1.09e-03	1.16e-03	7.09e-04	7.17e-04
Liver	9.45e-04	1.06e-03	1.41e-03	1.04e-03	7.33e-03	4.37e-03	1.63e-03	1.26e-03
Kidneys	5.49e-04	4.58e-04	7.80e-04	1.59e-03	3.45e-03	1.11e-02	9.65e-04	2.08e-03
Spleen	7.50e-04	6.63e-04	1.05e-03	1.35e-03	4.28e-03	6.89e-03	1.22e-03	1.78e-03
				5-y-old				
Lung	3.49e-03	3.85e-03	1.39e-03	1.52e-03	—	—	—	—
BBi	4.22e-03	5.74e-03	1.15e-03	1.49e-03	—	—	—	—
ET1	2.17e-04	1.32e-04	2.78e-04	2.07e-04	—	—	—	—
Stomach	4.64e-04	4.51e-04	1.18e-03	6.96e-04	7.18e-03	3.23e-03	1.96e-03	1.07e-03
SI	1.40e-04	1.40e-04	2.68e-04	2.69e-04	1.71e-03	1.76e-03	1.50e-03	1.26e-03
Blood	2.09e-03	1.61e-03	8.72e-04	8.07e-04	—	—	—	—
ULI	1.60e-04	1.53e-04	3.19e-04	3.01e-04	2.56e-03	2.10e-03	1.53e-03	1.11e-03
LLI	7.98e-05	7.48e-05	1.07e-04	1.09e-04	5.02e-04	4.88e-04	9.70e-04	8.12e-04
Other	6.46e-04	6.76e-04	4.56e-04	4.67e-04	6.60e-04	7.12e-04	4.99e-04	5.13e-04
Liver	5.43e-04	5.27e-04	1.10e-03	8.52e-04	5.32e-03	2.96e-03	1.66e-03	1.25e-03
Kidneys	2.86e-04	3.30e-04	5.70e-04	1.05e-03	2.65e-03	8.17e-03	8.86e-04	2.12e-03
Spleen	4.61e-04	4.86e-04	8.15e-04	1.20e-03	2.89e-03	3.87e-03	1.18e-03	1.65e-03

Table C-8 (continued)

Anatomical region	Detector location/distance from body							
	Chest				Abdomen			
	Contact		1 ft		Contact		1 ft	
	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior
10-y-old								
Lung	2.25e-03	2.37e-03	1.32e-03	1.42e-03	—	—	—	—
BBi	4.29e-03	4.33e-03	1.23e-03	1.31e-03	—	—	—	—
ET1	1.88e-04	9.76e-05	1.38e-04	1.58e-04	—	—	—	—
Stomach	3.08e-04	2.76e-04	7.47e-04	4.94e-04	4.75e-03	2.46e-03	1.88e-03	9.70e-04
SI	8.85e-05	8.21e-05	1.19e-04	1.11e-04	1.03e-03	1.00e-03	1.29e-03	1.11e-03
Blood	1.53e-03	1.15e-03	7.56e-04	6.50e-04	—	—	—	—
ULI	1.02e-04	8.29e-05	1.39e-04	1.35e-04	1.27e-03	1.25e-03	1.40e-03	9.56e-04
LLI	4.68e-05	4.12e-05	5.39e-05	4.98e-05	3.25e-04	3.03e-04	6.23e-04	5.15e-04
Other	4.62e-04	4.86e-04	3.40e-04	3.49e-04	4.84e-04	5.27e-04	3.90e-04	3.95e-04
Liver	3.88e-04	3.75e-04	7.94e-04	6.63e-04	3.85e-03	2.08e-03	1.54e-03	1.22e-03
Kidneys	1.99e-04	2.19e-04	3.65e-04	5.10e-04	2.05e-03	6.25e-03	8.21e-04	2.03e-03
Spleen	3.14e-04	3.24e-04	5.71e-04	7.57e-04	1.83e-03	2.19e-03	1.06e-03	1.63e-03
15-y-old								
Lung	1.39e-03	1.44e-03	1.15e-03	1.22e-03	—	—	—	—
BBi	3.41e-03	3.25e-03	1.21e-03	1.12e-03	—	—	—	—
ET1	1.58e-04	6.69e-05	1.01e-04	8.75e-05	—	—	—	—
Stomach	2.20e-04	1.85e-04	4.28e-04	3.14e-04	2.67e-03	1.62e-03	1.71e-03	8.08e-04
SI	5.45e-05	4.88e-05	6.48e-05	6.02e-05	6.24e-04	5.49e-04	9.32e-04	8.28e-04
Blood	1.15e-03	8.07e-04	6.80e-04	5.17e-04	—	—	—	—
ULI	6.44e-05	5.14e-05	7.65e-05	7.07e-05	7.65e-04	6.91e-04	1.15e-03	7.53e-04
LLI	2.85e-05	2.53e-05	2.77e-05	2.73e-05	2.06e-04	1.84e-04	3.64e-04	2.96e-04
Other	3.40e-04	3.57e-04	2.80e-04	2.76e-04	3.51e-04	3.75e-04	3.03e-04	3.02e-04
Liver	2.78e-04	2.58e-04	5.67e-04	4.35e-04	2.31e-03	1.30e-03	1.38e-03	1.01e-03
Kidneys	1.27e-04	1.77e-04	2.09e-04	2.51e-04	1.55e-03	4.65e-03	6.99e-04	2.07e-03
Spleen	2.11e-04	2.45e-04	3.63e-04	4.15e-04	1.03e-03	1.10e-03	8.27e-04	1.49e-03
Adult male								
Lung	2.15e-03	1.74e-03	1.20e-03	1.08e-03	—	—	—	—
BBi	3.25e-03	1.94e-03	1.45e-03	9.03e-04	—	—	—	—
ET1	1.14e-04	3.08e-05	5.64e-05	4.31e-05	—	—	—	—
Stomach	5.75e-04	5.11e-04	9.72e-04	6.25e-04	2.89e-03	1.75e-03	1.41e-03	8.37e-04
SI	1.82e-04	1.52e-04	2.82e-04	2.63e-04	1.10e-03	9.87e-04	9.40e-04	7.55e-04
Blood	9.63e-04	7.72e-04	5.74e-04	5.05e-04	8.12e-04	7.88e-04	6.02e-04	5.61e-04
ULI	1.62e-04	1.17e-04	2.38e-04	2.00e-04	9.72e-04	6.54e-04	1.26e-03	5.48e-04
LLI	7.90e-05	6.43e-05	1.22e-04	1.19e-04	2.35e-04	2.10e-04	3.53e-04	3.06e-04
Other	2.53e-04	2.72e-04	2.19e-04	2.36e-04	2.45e-04	2.86e-04	2.32e-04	2.45e-04
Liver	6.38e-04	5.48e-04	8.90e-04	6.79e-04	2.83e-03	1.76e-03	1.22e-03	9.11e-04
Kidneys	2.11e-04	2.14e-04	3.18e-04	4.68e-04	9.86e-04	1.63e-03	6.64e-04	1.48e-03
Spleen	4.73e-04	5.03e-04	5.45e-04	1.03e-03	8.81e-04	1.38e-03	6.52e-04	1.49e-03

Table C-8 (continued)

Anatomical region	Detector location/distance from body							
	Chest				Abdomen			
	Contact		1 ft		Contact		1 ft	
	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior	Anterior	Posterior
Adult female								
Lung	2.39e-03	2.37e-03	1.18e-03	1.36e-03	—	—	—	—
BBi	2.69e-03	3.36e-03	1.30e-03	1.17e-03	—	—	—	—
ET1	1.59e-04	6.46e-05	9.77e-05	1.00e-04	—	—	—	—
Stomach	4.43e-04	4.35e-04	8.06e-04	7.00e-04	2.70e-03	2.24e-03	1.45e-03	1.04e-03
SI	1.05e-04	9.56e-05	1.62e-04	1.53e-04	8.44e-04	7.42e-04	9.05e-04	6.04e-04
Blood	1.01e-03	9.86e-04	5.88e-04	5.87e-04	9.17e-04	8.64e-04	6.18e-04	5.99e-04
ULI	7.35e-05	4.57e-05	7.63e-05	6.70e-05	3.14e-04	2.75e-04	6.67e-04	4.63e-04
LLI	2.93e-05	2.95e-05	3.14e-05	3.38e-05	1.22e-04	1.19e-04	2.13e-04	1.82e-04
Other	2.72e-04	2.84e-04	2.38e-04	2.46e-04	2.56e-04	3.01e-04	2.42e-04	2.48e-04
Liver	6.09e-04	5.23e-04	9.71e-04	7.46e-04	3.75e-03	2.21e-03	1.43e-03	1.09e-03
Kidneys	1.93e-04	1.98e-04	3.43e-04	3.93e-04	1.69e-03	2.46e-03	9.45e-04	1.46e-03
Spleen	4.29e-04	4.87e-04	6.31e-04	1.03e-03	1.40e-03	2.39e-03	8.63e-04	1.56e-03

Table C-9
Normalized Count Rates on TPM-903B from ^{60}Co in Various Anatomical Regions (cps/Bq)

Anatomical region	Model/energy window (keV)			
	Standard width		Extra wide	
	22.4–1650	32.3–1650	22.4–1650	32.3–1650
	Infant			
Lung	2.45e-02	2.36e-02	1.95e-02	1.87e-02
BBi	2.36e-02	2.27e-02	1.85e-02	1.77e-02
ET1	2.37e-02	2.29e-02	1.82e-02	1.76e-02
Stomach	2.38e-02	2.27e-02	1.91e-02	1.82e-02
SI	2.28e-02	2.16e-02	1.83e-02	1.73e-02
Blood	2.35e-02	2.25e-02	1.86e-02	1.78e-02
ULI	2.28e-02	2.18e-02	1.82e-02	1.74e-02
LLI	2.23e-02	2.11e-02	1.80e-02	1.71e-02
Other	2.31e-02	2.22e-02	1.84e-02	1.76e-02
Liver	2.43e-02	2.32e-02	1.91e-02	1.83e-02
	1-y-old			
Lung	2.72e-02	2.61e-02	2.15e-02	2.06e-02
BBi	2.57e-02	2.45e-02	2.04e-02	1.95e-02
ET1	2.56e-02	2.49e-02	1.96e-02	1.90e-02
Stomach	2.68e-02	2.55e-02	2.11e-02	2.00e-02
SI	2.56e-02	2.42e-02	2.03e-02	1.91e-02
Blood	2.60e-02	2.48e-02	2.05e-02	1.96e-02
ULI	2.56e-02	2.43e-02	2.03e-02	1.92e-02
LLI	2.45e-02	2.32e-02	1.96e-02	1.85e-02
Other	2.53e-02	2.42e-02	2.01e-02	1.92e-02
Liver	2.70e-02	2.57e-02	2.11e-02	2.00e-02
	5-y-old			
Lung	2.98e-02	2.85e-02	2.35e-02	2.25e-02
BBi	2.80e-02	2.66e-02	2.19e-02	2.08e-02
ET1	2.67e-02	2.59e-02	2.04e-02	1.98e-02
Stomach	2.96e-02	2.80e-02	2.33e-02	2.21e-02
SI	2.93e-02	2.76e-02	2.31e-02	2.17e-02
Blood	2.85e-02	2.71e-02	2.23e-02	2.13e-02
ULI	2.89e-02	2.74e-02	2.28e-02	2.16e-02
LLI	2.84e-02	2.68e-02	2.26e-02	2.13e-02
Other	2.74e-02	2.62e-02	2.16e-02	2.05e-02
Liver	2.99e-02	2.85e-02	2.35e-02	2.24e-02

Table C-9 (continued)

Anatomical region	Model/energy window (keV)			
	Standard width		Extra wide	
	22.4–1650	32.3–1650	22.4–1650	32.3–1650
	10-y-old			
Lung	3.03e-02	2.89e-02	2.40e-02	2.29e-02
BBi	2.84e-02	2.69e-02	2.26e-02	2.13e-02
ET1	2.60e-02	2.51e-02	1.98e-02	1.91e-02
Stomach	3.05e-02	2.87e-02	2.42e-02	2.29e-02
SI	3.07e-02	2.88e-02	2.43e-02	2.28e-02
Blood	2.94e-02	2.78e-02	2.31e-02	2.20e-02
ULI	3.03e-02	2.85e-02	2.41e-02	2.26e-02
LLI	2.99e-02	2.80e-02	2.40e-02	2.25e-02
Other	2.80e-02	2.66e-02	2.22e-02	2.10e-02
Liver	3.04e-02	2.89e-02	2.41e-02	2.29e-02
	15-y-old			
Lung	2.93e-02	2.79e-02	2.33e-02	2.21e-02
BBi	2.68e-02	2.52e-02	2.13e-02	2.00e-02
ET1	2.40e-02	2.31e-02	1.82e-02	1.76e-02
Stomach	3.05e-02	2.85e-02	2.44e-02	2.28e-02
SI	3.07e-02	2.87e-02	2.46e-02	2.30e-02
Blood	2.87e-02	2.71e-02	2.29e-02	2.16e-02
ULI	3.07e-02	2.86e-02	2.44e-02	2.27e-02
LLI	3.04e-02	2.82e-02	2.43e-02	2.26e-02
Other	2.82e-02	2.67e-02	2.23e-02	2.10e-02
Liver	3.05e-02	2.87e-02	2.38e-02	2.23e-02
	Adult male			
Lung	2.86e-02	2.70e-02	2.25e-02	2.12e-02
BBi	2.76e-02	2.60e-02	2.17e-02	2.03e-02
ET1	2.21e-02	2.13e-02	1.64e-02	1.59e-02
Stomach	2.88e-02	2.68e-02	2.25e-02	2.10e-02
SI	2.98e-02	2.78e-02	2.41e-02	2.25e-02
Blood	2.74e-02	2.60e-02	2.22e-02	2.09e-02
ULI	2.96e-02	2.78e-02	2.39e-02	2.24e-02
LLI	2.93e-02	2.74e-02	2.38e-02	2.22e-02
Other	2.75e-02	2.59e-02	2.18e-02	2.06e-02
Liver	2.86e-02	2.66e-02	2.32e-02	2.18e-02
	Adult female			
Lung	2.96e-02	2.80e-02	2.31e-02	2.20e-02
BBi	3.01e-02	2.86e-02	2.33e-02	2.21e-02
ET1	2.52e-02	2.41e-02	1.89e-02	1.79e-02
Stomach	2.97e-02	2.79e-02	2.40e-02	2.24e-02
SI	3.19e-02	2.98e-02	2.55e-02	2.37e-02
Blood	2.86e-02	2.67e-02	2.31e-02	2.15e-02
ULI	3.16e-02	2.97e-02	2.54e-02	2.38e-02
LLI	3.21e-02	3.02e-02	2.55e-02	2.39e-02
Other	2.80e-02	2.64e-02	2.23e-02	2.10e-02
Liver	3.10e-02	2.92e-02	2.39e-02	2.26e-02

Table C-10
Normalized Count Rates on TPM-903B from ^{131}I in Various Anatomical Regions (cps/Bq)

Anatomical region	Model/energy window (keV)			
	Standard width		Extra wide	
	22.4–1650	32.3–1650	22.4–1650	32.3–1650
	Infant			
ET1	1.40e-02	1.28e-02	1.08e-02	9.84e-03
Stomach	1.40e-02	1.27e-02	1.11e-02	1.00e-02
SI	1.30e-02	1.17e-02	1.04e-02	9.26e-03
Blood	1.38e-02	1.25e-02	1.10e-02	9.90e-03
LLI	1.27e-02	1.13e-02	1.03e-02	9.14e-03
Thyroid	1.42e-02	1.29e-02	1.13e-02	1.02e-02
Urine	1.25e-02	1.12e-02	1.01e-02	8.98e-03
Other	1.35e-02	1.23e-02	1.07e-02	9.68e-03
	1-y-old			
ET1	1.51e-02	1.39e-02	1.16e-02	1.06e-02
Stomach	1.51e-02	1.34e-02	1.20e-02	1.07e-02
SI	1.42e-02	1.25e-02	1.13e-02	9.94e-03
Blood	1.49e-02	1.33e-02	1.17e-02	1.05e-02
LLI	1.37e-02	1.22e-02	1.09e-02	9.64e-03
Thyroid	1.45e-02	1.29e-02	1.15e-02	1.03e-02
Urine	1.38e-02	1.22e-02	1.08e-02	9.56e-03
Other	1.44e-02	1.29e-02	1.14e-02	1.02e-02
	5-y-old			
ET1	1.57e-02	1.44e-02	1.19e-02	1.09e-02
Stomach	1.64e-02	1.45e-02	1.30e-02	1.15e-02
SI	1.57e-02	1.38e-02	1.25e-02	1.10e-02
Blood	1.58e-02	1.41e-02	1.26e-02	1.12e-02
LLI	1.55e-02	1.36e-02	1.24e-02	1.09e-02
Thyroid	1.50e-02	1.33e-02	1.21e-02	1.07e-02
Urine	1.61e-02	1.42e-02	1.26e-02	1.11e-02
Other	1.54e-02	1.38e-02	1.22e-02	1.09e-02
	10-y-old			
ET1	1.53e-02	1.40e-02	1.16e-02	1.06e-02
Stomach	1.65e-02	1.45e-02	1.32e-02	1.16e-02
SI	1.58e-02	1.38e-02	1.28e-02	1.12e-02
Blood	1.58e-02	1.41e-02	1.27e-02	1.12e-02
LLI	1.57e-02	1.37e-02	1.26e-02	1.10e-02
Thyroid	1.47e-02	1.31e-02	1.18e-02	1.05e-02
Urine	1.70e-02	1.49e-02	1.34e-02	1.18e-02
Other	1.55e-02	1.38e-02	1.24e-02	1.11e-02

Table C-10 (continued)

Anatomical region	Model/energy window (keV)			
	Standard width		Extra wide	
	22.4–1650	32.3–1650	22.4–1650	32.3–1650
	15-y-old			
ET1	1.41e-02	1.29e-02	1.06e-02	9.66e-03
Stomach	1.56e-02	1.36e-02	1.26e-02	1.09e-02
SI	1.50e-02	1.30e-02	1.23e-02	1.06e-02
Blood	1.51e-02	1.33e-02	1.20e-02	1.06e-02
LLI	1.49e-02	1.29e-02	1.20e-02	1.04e-02
Thyroid	1.37e-02	1.21e-02	1.09e-02	9.60e-03
Urine	1.69e-02	1.47e-02	1.34e-02	1.17e-02
Other	1.52e-02	1.34e-02	1.21e-02	1.07e-02
	Adult male			
ET1	1.25e-02	1.14e-02	9.25e-03	8.41e-03
Stomach	1.43e-02	1.24e-02	1.13e-02	9.82e-03
SI	1.38e-02	1.18e-02	1.10e-02	9.56e-03
Blood	1.43e-02	1.27e-02	1.14e-02	1.01e-02
LLI	1.46e-02	1.27e-02	1.18e-02	1.03e-02
Thyroid	1.46e-02	1.30e-02	1.15e-02	1.02e-02
Urine	1.61e-02	1.39e-02	1.32e-02	1.14e-02
Other	1.47e-02	1.30e-02	1.15e-02	1.02e-02
	Adult female			
ET1	1.42e-02	1.29e-02	1.06e-02	9.56e-03
Stomach	1.50e-02	1.30e-02	1.22e-02	1.06e-02
SI	1.67e-02	1.46e-02	1.29e-02	1.12e-02
Blood	1.56e-02	1.38e-02	1.24e-02	1.10e-02
LLI	1.58e-02	1.36e-02	1.31e-02	1.13e-02
Thyroid	1.56e-02	1.38e-02	1.23e-02	1.09e-02
Urine	1.80e-02	1.56e-02	1.44e-02	1.27e-02
Other	1.43e-02	1.27e-02	1.17e-02	1.04e-02

Table C-11
Normalized Count Rates on TPM-903B from ^{137}Cs in Various Anatomical Regions (cps/Bq)

Anatomical region	Model/energy window (keV)			
	Standard width		Extra wide	
	22.4–1650	32.3–1650	22.4–1650	32.3–1650
Infant				
ET1	1.17e-02	1.11e-02	8.99e-03	8.53e-03
Stomach	1.17e-02	1.10e-02	9.27e-03	8.67e-03
SI	1.12e-02	1.04e-02	8.96e-03	8.31e-03
Blood	1.17e-02	1.10e-02	9.24e-03	8.67e-03
LLI	1.08e-02	1.01e-02	8.69e-03	8.09e-03
Body tissues	1.14e-02	1.07e-02	9.09e-03	8.51e-03
1-y-old				
ET1	1.26e-02	1.20e-02	9.67e-03	9.17e-03
Stomach	1.29e-02	1.20e-02	1.02e-02	9.48e-03
SI	1.23e-02	1.14e-02	9.80e-03	9.06e-03
Blood	1.27e-02	1.19e-02	1.00e-02	9.34e-03
LLI	1.18e-02	1.10e-02	9.44e-03	8.72e-03
Body tissues	1.23e-02	1.15e-02	9.77e-03	9.13e-03
5-y-old				
ET1	1.31e-02	1.25e-02	9.99e-03	9.49e-03
Stomach	1.40e-02	1.30e-02	1.11e-02	1.03e-02
SI	1.38e-02	1.27e-02	1.09e-02	1.00e-02
Blood	1.35e-02	1.26e-02	1.08e-02	1.00e-02
LLI	1.36e-02	1.25e-02	1.07e-02	9.82e-03
Body tissues	1.33e-02	1.24e-02	1.05e-02	9.84e-03
10-y-old				
ET1	1.28e-02	1.22e-02	9.70e-03	9.21e-03
Stomach	1.45e-02	1.33e-02	1.16e-02	1.07e-02
SI	1.42e-02	1.30e-02	1.15e-02	1.05e-02
Blood	1.39e-02	1.29e-02	1.11e-02	1.02e-02
LLI	1.40e-02	1.28e-02	1.12e-02	1.02e-02
Body tissues	1.35e-02	1.26e-02	1.07e-02	1.00e-02
15-y-old				
ET1	1.18e-02	1.12e-02	8.87e-03	8.39e-03
Stomach	1.39e-02	1.27e-02	1.12e-02	1.02e-02
SI	1.40e-02	1.27e-02	1.13e-02	1.02e-02
Blood	1.34e-02	1.24e-02	1.07e-02	9.84e-03
LLI	1.37e-02	1.24e-02	1.10e-02	1.00e-02
Body tissues	1.34e-02	1.24e-02	1.06e-02	9.79e-03

Table C-11 (continued)

Anatomical region	Model/energy window (keV)			
	Standard width		Extra wide	
	22.4–1650	32.3–1650	22.4–1650	32.3–1650
Adult male				
ET1	1.06e-02	9.95e-03	7.91e-03	7.50e-03
Stomach	1.29e-02	1.18e-02	1.03e-02	9.41e-03
SI	1.31e-02	1.18e-02	1.08e-02	9.70e-03
Blood	1.28e-02	1.19e-02	1.01e-02	9.37e-03
Body tissues	1.31e-02	1.21e-02	1.05e-02	9.70e-03
Adult female				
ET1	1.19e-02	1.12e-02	8.89e-03	8.33e-03
Stomach	1.34e-02	1.22e-02	1.09e-02	9.92e-03
SI	1.48e-02	1.36e-02	1.17e-02	1.07e-02
Blood	1.40e-02	1.28e-02	1.12e-02	1.03e-02
Body tissues	1.33e-02	1.23e-02	1.07e-02	9.93e-03

Table C-12
Normalized Count Rates on TPM-903B from ^{192}Ir in Various Anatomical Regions (cps/Bq)

Anatomical region	Model/energy window (keV)			
	Standard width		Extra wide	
	22.4–1650	32.3–1650	22.4–1650	32.3–1650
Infant				
Lung	3.31e-02	2.98e-02	2.62e-02	2.35e-02
BBi	3.07e-02	2.70e-02	2.40e-02	2.11e-02
ET1	3.09e-02	2.81e-02	2.38e-02	2.16e-02
Stomach	3.07e-02	2.74e-02	2.45e-02	2.18e-02
SI	2.88e-02	2.55e-02	2.32e-02	2.04e-02
Blood	3.04e-02	2.72e-02	2.42e-02	2.17e-02
ULI	2.90e-02	2.57e-02	2.32e-02	2.05e-02
LLI	2.78e-02	2.46e-02	2.24e-02	1.97e-02
Other	3.00e-02	2.69e-02	2.38e-02	2.13e-02
Liver	3.07e-02	2.73e-02	2.45e-02	2.18e-02
Kidneys	3.08e-02	2.79e-02	2.46e-02	2.22e-02
Spleen	3.11e-02	2.78e-02	2.46e-02	2.19e-02
1-y-old				
Lung	3.55e-02	3.19e-02	2.81e-02	2.52e-02
BBi	3.05e-02	2.71e-02	2.41e-02	2.15e-02
ET1	3.35e-02	3.04e-02	2.57e-02	2.32e-02
Stomach	3.30e-02	2.93e-02	2.62e-02	2.33e-02
SI	3.10e-02	2.72e-02	2.46e-02	2.15e-02
Blood	3.24e-02	2.89e-02	2.58e-02	2.28e-02
ULI	3.12e-02	2.73e-02	2.47e-02	2.17e-02
LLI	2.99e-02	2.63e-02	2.38e-02	2.08e-02
Other	3.17e-02	2.84e-02	2.53e-02	2.25e-02
Liver	3.30e-02	2.92e-02	2.62e-02	2.31e-02
Kidneys	3.34e-02	2.99e-02	2.65e-02	2.34e-02
Spleen	3.32e-02	2.95e-02	2.63e-02	2.33e-02
5-y-old				
Lung	3.76e-02	3.36e-02	3.01e-02	2.69e-02
BBi	3.27e-02	2.87e-02	2.61e-02	2.29e-02
ET1	3.46e-02	3.15e-02	2.64e-02	2.41e-02
Stomach	3.57e-02	3.14e-02	2.85e-02	2.50e-02
SI	3.43e-02	2.99e-02	2.73e-02	2.38e-02
Blood	3.46e-02	3.05e-02	2.76e-02	2.43e-02
ULI	3.43e-02	3.00e-02	2.75e-02	2.40e-02
LLI	3.37e-02	2.94e-02	2.67e-02	2.33e-02
Other	3.41e-02	3.03e-02	2.69e-02	2.39e-02
Liver	3.52e-02	3.10e-02	2.82e-02	2.47e-02
Kidneys	3.63e-02	3.19e-02	2.91e-02	2.56e-02
Spleen	3.52e-02	3.11e-02	2.82e-02	2.48e-02

Table C-12 (continued)

Anatomical region	Model/energy window (keV)			
	Standard width		Extra wide	
	22.4–1650	32.3–1650	22.4–1650	32.3–1650
10-y-old				
Lung	3.74e-02	3.33e-02	3.00e-02	2.68e-02
BBi	3.23e-02	2.82e-02	2.56e-02	2.23e-02
ET1	3.37e-02	3.06e-02	2.57e-02	2.33e-02
Stomach	3.61e-02	3.16e-02	2.89e-02	2.53e-02
SI	3.48e-02	3.02e-02	2.78e-02	2.40e-02
Blood	3.45e-02	3.04e-02	2.76e-02	2.43e-02
ULI	3.48e-02	3.03e-02	2.80e-02	2.44e-02
LLI	3.42e-02	2.97e-02	2.75e-02	2.38e-02
Other	3.38e-02	2.99e-02	2.71e-02	2.39e-02
Liver	3.49e-02	3.06e-02	2.82e-02	2.46e-02
Kidneys	3.73e-02	3.25e-02	2.94e-02	2.56e-02
Spleen	3.49e-02	3.07e-02	2.82e-02	2.48e-02
15-y-old				
Lung	3.50e-02	3.09e-02	2.80e-02	2.47e-02
BBi	2.92e-02	2.50e-02	2.33e-02	1.99e-02
ET1	3.08e-02	2.80e-02	2.34e-02	2.12e-02
Stomach	3.40e-02	2.94e-02	2.73e-02	2.37e-02
SI	3.31e-02	2.84e-02	2.67e-02	2.29e-02
Blood	3.31e-02	2.90e-02	2.62e-02	2.30e-02
ULI	3.29e-02	2.82e-02	2.67e-02	2.30e-02
LLI	3.26e-02	2.80e-02	2.63e-02	2.26e-02
Other	3.33e-02	2.93e-02	2.64e-02	2.31e-02
Liver	3.31e-02	2.87e-02	2.65e-02	2.30e-02
Kidneys	3.64e-02	3.17e-02	2.89e-02	2.50e-02
Spleen	3.23e-02	2.80e-02	2.64e-02	2.29e-02
Adult male				
Lung	3.32e-02	2.89e-02	2.61e-02	2.28e-02
BBi	3.24e-02	2.79e-02	2.57e-02	2.25e-02
ET1	2.73e-02	2.46e-02	2.02e-02	1.82e-02
Stomach	3.10e-02	2.66e-02	2.48e-02	2.13e-02
SI	3.14e-02	2.67e-02	2.56e-02	2.18e-02
Blood	3.07e-02	2.70e-02	2.48e-02	2.18e-02
ULI	3.24e-02	2.81e-02	2.61e-02	2.24e-02
LLI	3.26e-02	2.83e-02	2.63e-02	2.27e-02
Other	3.27e-02	2.86e-02	2.59e-02	2.27e-02
Liver	3.19e-02	2.71e-02	2.54e-02	2.18e-02
Kidneys	3.18e-02	2.76e-02	2.50e-02	2.19e-02
Spleen	2.91e-02	2.49e-02	2.33e-02	1.98e-02

Table C-12 (continued)

Anatomical region	Model/energy window (keV)			
	Standard width		Extra wide	
	22.4–1650	32.3–1650	22.4–1650	32.3–1650
Adult female				
Lung	3.56e-02	3.14e-02	2.81e-02	2.47e-02
BBi	3.36e-02	2.95e-02	2.63e-02	2.27e-02
ET1	3.18e-02	2.85e-02	2.34e-02	2.10e-02
Stomach	3.27e-02	2.83e-02	2.65e-02	2.29e-02
SI	3.45e-02	2.97e-02	2.77e-02	2.37e-02
Blood	3.40e-02	2.97e-02	2.74e-02	2.41e-02
ULI	3.60e-02	3.14e-02	2.89e-02	2.51e-02
LLI	3.59e-02	3.12e-02	2.87e-02	2.48e-02
Other	3.28e-02	2.89e-02	2.63e-02	2.32e-02
Liver	3.50e-02	3.05e-02	2.78e-02	2.39e-02
Kidneys	3.30e-02	2.84e-02	2.85e-02	2.45e-02
Spleen	3.35e-02	2.91e-02	2.87e-02	2.43e-02

Table C-13. Normalized Exposure Rates from ^{60}Co in Various Anatomical Regions (μR/h per Bq)

Anatomical region	Aspect/distance from body							
	Anterior				Posterior			
	2 in	1 ft	2 ft	3 ft	2 in	1 ft	2 ft	3 ft
Infant—chest								
Lung	6.92e-03	6.36e-04	1.91e-04	9.14e-05	8.04e-03	6.76e-04	1.99e-04	9.48e-05
BBi	6.40e-03	5.76e-04	1.72e-04	8.30e-05	7.80e-03	6.20e-04	1.81e-04	8.62e-05
ET1	9.20e-03	9.26e-04	2.42e-04	1.09e-04	1.65e-03	3.26e-04	1.13e-04	5.68e-05
Stomach	6.88e-03	7.12e-04	2.08e-04	9.80e-05	3.58e-03	4.98e-04	1.59e-04	7.78e-05
SI	3.42e-03	5.94e-04	1.87e-04	9.02e-05	2.98e-03	5.40e-04	1.73e-04	8.46e-05
Blood	5.98e-03	6.14e-04	1.89e-04	9.00e-05	5.08e-03	5.80e-04	1.80e-04	8.70e-05
ULI	3.88e-03	6.30e-04	1.95e-04	9.36e-05	2.82e-03	5.12e-04	1.66e-04	8.16e-05
LLI	2.50e-03	5.56e-04	1.82e-04	8.90e-05	2.24e-03	5.18e-04	1.73e-04	8.52e-05
Other	4.00e-03	5.58e-04	1.79e-04	8.72e-05	4.16e-03	5.72e-04	1.82e-04	8.84e-05
Liver	6.70e-03	6.74e-04	1.98e-04	9.38e-05	4.26e-03	5.36e-04	1.67e-04	8.14e-05
Infant—abdomen								
Lung	5.38e-03	6.24e-04	1.90e-04	9.16e-05	6.22e-03	6.60e-04	1.98e-04	9.50e-05
BBi	3.90e-03	5.46e-04	1.71e-04	8.28e-05	4.40e-03	5.86e-04	1.79e-04	8.62e-05
ET1	3.46e-03	7.90e-04	2.32e-04	1.08e-04	1.09e-03	2.96e-04	1.10e-04	5.66e-05
Stomach	1.13e-02	7.42e-04	2.10e-04	9.90e-05	4.70e-03	5.16e-04	1.62e-04	7.88e-05
SI	7.04e-03	6.46e-04	1.92e-04	9.18e-05	5.72e-03	5.86e-04	1.79e-04	8.60e-05
Blood	6.14e-03	6.22e-04	1.89e-04	9.08e-05	5.30e-03	5.90e-04	1.82e-04	8.78e-05
ULI	8.04e-03	6.84e-04	2.00e-04	9.52e-05	5.00e-03	5.52e-04	1.71e-04	8.30e-05
LLI	5.18e-03	6.18e-04	1.89e-04	9.08e-05	4.42e-03	5.78e-04	1.79e-04	8.70e-05
Other	4.10e-03	5.68e-04	1.81e-04	8.80e-05	4.38e-03	5.80e-04	1.84e-04	8.92e-05
Liver	1.05e-02	6.98e-04	2.00e-04	9.50e-05	5.58e-03	5.56e-04	1.70e-04	8.24e-05
1-y-old—chest								
Lung	4.86e-03	5.70e-04	1.77e-04	8.58e-05	5.54e-03	6.02e-04	1.84e-04	8.86e-05
BBi	4.58e-03	4.98e-04	1.54e-04	7.50e-05	5.66e-03	5.48e-04	1.65e-04	7.94e-05
ET1	5.06e-03	8.68e-04	2.38e-04	1.08e-04	7.88e-04	2.24e-04	8.38e-05	4.36e-05
Stomach	4.22e-03	6.38e-04	1.94e-04	9.28e-05	2.08e-03	3.94e-04	1.35e-04	6.76e-05
SI	1.78e-03	4.84e-04	1.66e-04	8.20e-05	1.52e-03	4.28e-04	1.51e-04	7.54e-05
Blood	3.96e-03	5.26e-04	1.69e-04	8.30e-05	3.16e-03	4.82e-04	1.59e-04	7.86e-05
ULI	2.04e-03	5.26e-04	1.76e-04	8.64e-05	1.46e-03	4.02e-04	1.43e-04	7.18e-05
LLI	1.22e-03	4.36e-04	1.59e-04	8.02e-05	1.07e-03	3.96e-04	1.48e-04	7.56e-05
Other	2.36e-03	4.48e-04	1.57e-04	7.86e-05	2.46e-03	4.58e-04	1.59e-04	7.98e-05
Liver	4.08e-03	5.88e-04	1.82e-04	8.74e-05	2.64e-03	4.52e-04	1.49e-04	7.34e-05
1-y-old—abdomen								
Lung	3.38e-03	5.44e-04	1.75e-04	8.56e-05	3.86e-03	5.76e-04	1.83e-04	8.86e-05
BBi	2.34e-03	4.56e-04	1.51e-04	7.42e-05	2.66e-03	4.98e-04	1.61e-04	7.88e-05
ET1	1.82e-03	6.56e-04	2.18e-04	1.04e-04	4.50e-04	1.80e-04	8.00e-05	4.28e-05
Stomach	8.50e-03	6.88e-04	1.99e-04	9.42e-05	3.00e-03	4.22e-04	1.39e-04	6.88e-05
SI	4.62e-03	5.64e-04	1.75e-04	8.44e-05	3.66e-03	4.98e-04	1.58e-04	7.72e-05
Blood	4.04e-03	5.34e-04	1.71e-04	8.36e-05	3.36e-03	4.90e-04	1.61e-04	7.92e-05
ULI	5.36e-03	6.08e-04	1.85e-04	8.86e-05	3.16e-03	4.58e-04	1.50e-04	7.38e-05
LLI	3.10e-03	5.26e-04	1.70e-04	8.30e-05	2.58e-03	4.78e-04	1.58e-04	7.80e-05
Other	2.42e-03	4.60e-04	1.60e-04	7.96e-05	2.62e-03	4.72e-04	1.62e-04	8.10e-05
Liver	7.56e-03	6.26e-04	1.86e-04	8.84e-05	3.76e-03	4.86e-04	1.51e-04	7.42e-05

Table C-13 (continued)

Anatomical region	Aspect/distance from body							
	Anterior				Posterior			
	2 in	1 ft	2 ft	3 ft	2 in	1 ft	2 ft	3 ft
5-y-old—chest								
Lung	3.86e-03	5.28e-04	1.68e-04	8.18e-05	4.38e-03	5.60e-04	1.75e-04	8.48e-05
BBi	3.32e-03	4.32e-04	1.41e-04	6.78e-05	4.92e-03	5.18e-04	1.58e-04	7.60e-05
ET1	3.24e-03	7.90e-04	2.30e-04	1.05e-04	5.50e-04	1.85e-04	7.34e-05	3.86e-05
Stomach	2.88e-03	5.84e-04	1.86e-04	8.92e-05	1.42e-03	3.40e-04	1.22e-04	6.20e-05
SI	1.05e-03	4.08e-04	1.52e-04	7.66e-05	9.00e-04	3.56e-04	1.36e-04	6.94e-05
Blood	2.92e-03	4.58e-04	1.55e-04	7.72e-05	2.28e-03	4.16e-04	1.45e-04	7.30e-05
ULI	1.23e-03	4.48e-04	1.63e-04	8.14e-05	8.80e-04	3.34e-04	1.28e-04	6.58e-05
LLI	6.72e-04	3.50e-04	1.43e-04	7.40e-05	5.86e-04	3.14e-04	1.31e-04	6.88e-05
Other	1.55e-03	3.58e-04	1.37e-04	7.16e-05	1.62e-03	3.68e-04	1.40e-04	7.28e-05
Liver	2.74e-03	5.28e-04	1.70e-04	8.26e-05	1.79e-03	3.98e-04	1.38e-04	6.88e-05
5-y-old—abdomen								
Lung	2.26e-03	4.84e-04	1.64e-04	8.10e-05	2.60e-03	5.18e-04	1.72e-04	8.42e-05
BBi	1.46e-03	3.76e-04	1.32e-04	6.76e-05	1.75e-03	4.48e-04	1.51e-04	7.44e-05
ET1	1.15e-03	5.36e-04	2.02e-04	9.94e-05	2.58e-04	1.34e-04	6.74e-05	3.72e-05
Stomach	6.90e-03	6.56e-04	1.92e-04	9.08e-05	2.30e-03	3.76e-04	1.27e-04	6.34e-05
SI	3.34e-03	5.16e-04	1.64e-04	7.98e-05	2.66e-03	4.44e-04	1.46e-04	7.22e-05
Blood	2.88e-03	4.68e-04	1.58e-04	7.84e-05	2.38e-03	4.28e-04	1.48e-04	7.40e-05
ULI	3.98e-03	5.60e-04	1.75e-04	8.44e-05	2.34e-03	4.08e-04	1.37e-04	6.84e-05
LLI	2.04e-03	4.62e-04	1.57e-04	7.80e-05	1.69e-03	4.16e-04	1.45e-04	7.26e-05
Other	1.61e-03	3.82e-04	1.43e-04	7.36e-05	1.76e-03	3.94e-04	1.46e-04	7.48e-05
Liver	5.96e-03	5.84e-04	1.76e-04	8.42e-05	2.94e-03	4.48e-04	1.42e-04	7.00e-05
10-y-old—chest								
Lung	3.10e-03	4.94e-04	1.62e-04	7.94e-05	3.42e-03	5.22e-04	1.68e-04	8.20e-05
BBi	3.26e-03	4.38e-04	1.41e-04	6.88e-05	3.74e-03	4.66e-04	1.47e-04	7.14e-05
ET1	2.36e-03	7.04e-04	2.20e-04	1.03e-04	4.24e-04	1.66e-04	6.94e-05	3.70e-05
Stomach	1.94e-03	5.28e-04	1.77e-04	8.62e-05	9.94e-04	2.92e-04	1.11e-04	5.76e-05
SI	6.40e-04	3.40e-04	1.39e-04	7.20e-05	5.42e-04	2.92e-04	1.22e-04	6.44e-05
Blood	2.24e-03	4.02e-04	1.42e-04	7.24e-05	1.72e-03	3.64e-04	1.33e-04	6.86e-05
ULI	7.50e-04	3.78e-04	1.50e-04	7.70e-05	5.40e-04	2.74e-04	1.15e-04	6.10e-05
LLI	3.86e-04	2.80e-04	1.27e-04	6.86e-05	3.34e-04	2.48e-04	1.15e-04	6.32e-05
Other	1.10e-03	2.90e-04	1.20e-04	6.52e-05	1.15e-03	2.98e-04	1.23e-04	6.64e-05
Liver	1.93e-03	4.66e-04	1.59e-04	7.82e-05	1.37e-03	3.62e-04	1.30e-04	6.58e-05
10-y-old—abdomen								
Lung	1.76e-03	4.46e-04	1.57e-04	7.82e-05	1.98e-03	4.72e-04	1.63e-04	8.10e-05
BBi	1.08e-03	3.56e-04	1.32e-04	6.66e-05	1.11e-03	3.76e-04	1.37e-04	6.92e-05
ET1	8.04e-04	4.32e-04	1.84e-04	9.42e-05	1.65e-04	1.08e-04	6.04e-05	3.48e-05
Stomach	5.62e-03	6.24e-04	1.87e-04	8.86e-05	1.84e-03	3.38e-04	1.18e-04	5.92e-05
SI	2.50e-03	4.72e-04	1.56e-04	7.64e-05	1.99e-03	4.02e-04	1.37e-04	6.82e-05
Blood	2.18e-03	4.16e-04	1.46e-04	7.36e-05	1.83e-03	3.80e-04	1.37e-04	6.98e-05
ULI	3.02e-03	5.18e-04	1.67e-04	8.12e-05	1.76e-03	3.66e-04	1.28e-04	6.42e-05
LLI	1.42e-03	4.10e-04	1.47e-04	7.42e-05	1.16e-03	3.62e-04	1.34e-04	6.82e-05
Other	1.17e-03	3.22e-04	1.29e-04	6.84e-05	1.28e-03	3.32e-04	1.32e-04	6.96e-05
Liver	4.50e-03	5.34e-04	1.66e-04	8.00e-05	2.40e-03	4.08e-04	1.36e-04	6.74e-05

Table C-13 (continued)

Anatomical region	Aspect/distance from body							
	Anterior				Posterior			
	2 in	1 ft	2 ft	3 ft	2 in	1 ft	2 ft	3 ft
15-y-old—chest								
Lung	2.32e-03	4.44e-04	1.52e-04	7.54e-05	2.52e-03	4.66e-04	1.57e-04	7.76e-05
BBi	2.74e-03	4.12e-04	1.36e-04	6.66e-05	2.54e-03	3.94e-04	1.31e-04	6.44e-05
ET1	1.65e-03	5.92e-04	2.04e-04	9.82e-05	2.88e-04	1.44e-04	6.50e-05	3.54e-05
Stomach	1.28e-03	4.54e-04	1.64e-04	8.18e-05	6.60e-04	2.40e-04	9.82e-05	5.20e-05
SI	3.72e-04	2.66e-04	1.22e-04	6.58e-05	3.14e-04	2.26e-04	1.06e-04	5.78e-05
Blood	1.71e-03	3.48e-04	1.30e-04	6.74e-05	1.24e-03	3.08e-04	1.19e-04	6.26e-05
ULI	4.44e-04	3.02e-04	1.34e-04	7.12e-05	3.16e-04	2.10e-04	9.82e-05	5.40e-05
LLI	2.10e-04	2.08e-04	1.08e-04	6.16e-05	1.80e-04	1.78e-04	9.62e-05	5.56e-05
Other	8.00e-04	2.38e-04	1.05e-04	5.88e-05	8.42e-04	2.44e-04	1.07e-04	5.98e-05
Liver	1.34e-03	4.04e-04	1.46e-04	7.34e-05	9.58e-04	3.10e-04	1.19e-04	6.12e-05
15-y-old—abdomen								
Lung	1.23e-03	3.86e-04	1.44e-04	7.36e-05	1.35e-03	4.06e-04	1.50e-04	7.60e-05
BBi	7.16e-04	3.08e-04	1.23e-04	6.36e-05	6.58e-04	2.92e-04	1.18e-04	6.12e-05
ET1	5.60e-04	3.38e-04	1.62e-04	8.72e-05	9.80e-05	7.86e-05	4.98e-05	3.22e-05
Stomach	4.14e-03	5.70e-04	1.77e-04	8.48e-05	1.37e-03	2.92e-04	1.06e-04	5.42e-05
SI	1.74e-03	4.14e-04	1.44e-04	7.18e-05	1.38e-03	3.46e-04	1.24e-04	6.30e-05
Blood	1.54e-03	3.60e-04	1.34e-04	6.90e-05	1.31e-03	3.24e-04	1.23e-04	6.44e-05
ULI	2.14e-03	4.60e-04	1.56e-04	7.72e-05	1.23e-03	3.10e-04	1.14e-04	5.86e-05
LLI	9.06e-04	3.42e-04	1.33e-04	6.88e-05	7.32e-04	2.94e-04	1.19e-04	6.22e-05
Other	8.66e-04	2.70e-04	1.15e-04	6.26e-05	9.36e-04	2.80e-04	1.18e-04	6.38e-05
Liver	3.24e-03	4.76e-04	1.55e-04	7.56e-05	1.75e-03	3.58e-04	1.25e-04	6.30e-05
Adult male—chest								
Lung	2.86e-03	4.50e-04	1.49e-04	7.35e-05	2.27e-03	3.98e-04	1.36e-04	6.75e-05
BBi	3.78e-03	5.24e-04	1.67e-04	8.10e-05	1.65e-03	3.31e-04	1.18e-04	5.99e-05
ET1	9.49e-04	5.27e-04	1.93e-04	9.37e-05	1.56e-04	1.15e-04	5.68e-05	3.23e-05
Stomach	2.24e-03	4.89e-04	1.59e-04	7.70e-05	9.98e-04	2.60e-04	9.93e-05	5.18e-05
SI	8.28e-04	3.34e-04	1.32e-04	6.81e-05	5.64e-04	2.43e-04	1.03e-04	5.56e-05
Blood	1.50e-03	3.19e-04	1.21e-04	6.34e-05	1.15e-03	2.91e-04	1.15e-04	6.13e-05
ULI	1.05e-03	4.25e-04	1.58e-04	7.94e-05	4.13e-04	1.94e-04	8.60e-05	4.78e-05
LLI	4.05e-04	2.59e-04	1.22e-04	6.70e-05	3.50e-04	2.03e-04	9.65e-05	5.39e-05
Other	6.44e-04	2.17e-04	9.97e-05	5.66e-05	7.46e-04	2.37e-04	1.05e-04	5.91e-05
Liver	2.18e-03	4.42e-04	1.46e-04	7.13e-05	1.11e-03	2.96e-04	1.11e-04	5.72e-05
Adult male—abdomen								
Lung	1.33e-03	3.48e-04	1.31e-04	6.72e-05	1.64e-03	3.80e-04	1.35e-04	6.75e-05
BBi	1.45e-03	3.96e-04	1.45e-04	7.40e-05	1.10e-03	3.09e-04	1.16e-04	5.99e-05
ET1	4.90e-04	3.28e-04	1.52e-04	8.11e-05	7.74e-05	7.42e-05	5.00e-05	3.05e-05
Stomach	2.97e-03	4.51e-04	1.48e-04	7.26e-05	1.36e-03	2.84e-04	1.04e-04	5.30e-05
SI	1.64e-03	3.69e-04	1.32e-04	6.72e-05	1.22e-03	3.03e-04	1.13e-04	5.84e-05
Blood	1.15e-03	2.87e-04	1.14e-04	6.06e-05	1.25e-03	3.14e-04	1.21e-04	6.33e-05
ULI	2.65e-03	4.72e-04	1.58e-04	7.77e-05	8.50e-04	2.43e-04	9.50e-05	4.97e-05
LLI	7.67e-04	3.05e-04	1.27e-04	6.74e-05	6.83e-04	2.64e-04	1.09e-04	5.78e-05
Other	5.88e-04	2.15e-04	9.86e-05	5.59e-05	8.18e-04	2.65e-04	1.14e-04	6.24e-05
Liver	2.69e-03	4.02e-04	1.35e-04	6.72e-05	1.74e-03	3.32e-04	1.21e-04	5.92e-05

Table C-13 (continued)

Anatomical region	Aspect/distance from body							
	Anterior				Posterior			
	2 in	1 ft	2 ft	3 ft	2 in	1 ft	2 ft	3 ft
Adult female—chest								
Lung	2.70e-03	4.28e-04	1.43e-04	7.10e-05	3.25e-03	4.90e-04	1.59e-04	7.74e-05
BBi	2.63e-03	4.56e-04	1.53e-04	7.57e-05	2.88e-03	4.32e-04	1.43e-04	7.05e-05
ET1	1.56e-03	6.01e-04	2.02e-04	9.58e-05	2.51e-04	1.31e-04	6.85e-05	3.91e-05
Stomach	1.79e-03	4.54e-04	1.55e-04	7.62e-05	1.27e-03	3.18e-04	1.17e-04	6.04e-05
SI	7.03e-04	3.33e-04	1.39e-04	7.30e-05	4.64e-04	2.33e-04	1.04e-04	5.66e-05
Blood	1.52e-03	3.33e-04	1.27e-04	6.64e-05	1.44e-03	3.21e-04	1.23e-04	6.47e-05
ULI	5.24e-04	3.71e-04	1.57e-04	8.16e-05	3.02e-04	1.97e-04	9.39e-05	5.19e-05
LLI	2.32e-04	2.20e-04	1.11e-04	6.25e-05	2.79e-04	2.13e-04	1.07e-04	6.02e-05
Other	8.40e-04	2.44e-04	1.07e-04	5.97e-05	9.04e-04	2.59e-04	1.12e-04	6.21e-05
Liver	2.15e-03	4.70e-04	1.56e-04	7.65e-05	1.39e-03	3.40e-04	1.23e-04	6.23e-05
Adult female—abdomen								
Lung	1.46e-03	3.59e-04	1.32e-04	6.75e-05	1.93e-03	4.44e-04	1.54e-04	7.65e-05
BBi	1.06e-03	3.51e-04	1.36e-04	7.05e-05	1.28e-03	3.62e-04	1.35e-04	6.80e-05
ET1	6.57e-04	3.78e-04	1.64e-04	8.55e-05	1.24e-04	8.38e-05	5.24e-05	3.45e-05
Stomach	3.12e-03	4.71e-04	1.53e-04	7.49e-05	1.87e-03	3.48e-04	1.22e-04	6.22e-05
SI	1.94e-03	4.25e-04	1.51e-04	7.55e-05	1.12e-03	3.07e-04	1.16e-04	6.01e-05
Blood	1.39e-03	3.31e-04	1.26e-04	6.61e-05	1.41e-03	3.38e-04	1.28e-04	6.64e-05
ULI	1.64e-03	4.87e-04	1.70e-04	8.42e-05	8.18e-04	2.67e-04	1.05e-04	5.49e-05
LLI	6.69e-04	3.06e-04	1.26e-04	6.63e-05	6.71e-04	3.01e-04	1.24e-04	6.51e-05
Other	8.11e-04	2.59e-04	1.11e-04	6.13e-05	9.76e-04	2.91e-04	1.21e-04	6.53e-05
Liver	3.51e-03	4.73e-04	1.53e-04	7.51e-05	2.18e-03	3.73e-04	1.27e-04	6.36e-05

Table C-14. Normalized Exposure Rates from ^{131}I in Various Anatomical Regions (μR/h per Bq)

Anatomical region	Aspect/distance from body									
	Anterior				Posterior				Thyroid—anterior	
	2 in	1 ft	2 ft	3 ft	2 in	1 ft	2 ft	3 ft	2 in	1 ft
	Infant—chest								Infant	
ET1	1.66e-03	1.67e-04	4.48e-05	2.06e-05	2.20e-04	4.43e-05	1.55e-05	7.91e-06	8.22e-03	2.34e-04
Stomach	1.18e-03	1.30e-04	3.91e-05	1.86e-05	5.70e-04	8.14e-05	2.67e-05	1.32e-05	6.21e-04	1.46e-04
SI	5.57e-04	1.05e-04	3.39e-05	1.65e-05	4.69e-04	9.25e-05	3.05e-05	1.50e-05	2.84e-04	1.12e-04
Blood	1.01e-03	1.08e-04	3.37e-05	1.64e-05	8.42e-04	1.00e-04	3.19e-05	1.56e-05	8.98e-04	1.25e-04
LLI	3.92e-04	9.77e-05	3.31e-05	1.63e-05	3.41e-04	8.94e-05	3.07e-05	1.52e-05	1.95e-04	1.01e-04
Thyroid	9.56e-04	1.25e-04	3.92e-05	1.91e-05	9.40e-04	1.04e-04	3.21e-05	1.56e-05	2.33e-03	1.70e-04
Urine	4.49e-04	1.19e-04	3.91e-05	1.89e-05	2.11e-04	6.63e-05	2.44e-05	1.25e-05	2.22e-04	1.23e-04
Other	6.77e-04	9.74e-05	3.19e-05	1.57e-05	6.91e-04	9.89e-05	3.23e-05	1.59e-05	7.62e-04	1.13e-04
	Infant—abdomen									
ET1	6.34e-04	1.44e-04	4.33e-05	2.04e-05	1.38e-04	4.03e-05	1.53e-05	7.92e-06		
Stomach	1.96e-03	1.36e-04	3.97e-05	1.89e-05	7.53e-04	8.53e-05	2.73e-05	1.34e-05		
SI	1.19e-03	1.15e-04	3.51e-05	1.68e-05	9.52e-04	1.01e-04	3.16e-05	1.53e-05		
Blood	1.04e-03	1.10e-04	3.41e-05	1.66e-05	8.81e-04	1.02e-04	3.26e-05	1.58e-05		
LLI	8.63e-04	1.10e-04	3.43e-05	1.66e-05	7.22e-04	1.00e-04	3.20e-05	1.57e-05		
Thyroid	4.26e-04	1.02e-04	3.64e-05	1.84e-05	4.30e-04	9.18e-05	3.09e-05	1.54e-05		
Urine	1.11e-03	1.37e-04	4.09e-05	1.94e-05	4.41e-04	7.62e-05	2.57e-05	1.27e-05		
Other	7.27e-04	9.99e-05	3.24e-05	1.58e-05	7.38e-04	1.01e-04	3.28e-05	1.62e-05		
	1-y-old—chest								1-y-old	
ET1	9.25e-04	1.56e-04	4.37e-05	2.02e-05	9.27e-05	2.74e-05	1.04e-05	5.46e-06	4.26e-03	2.52e-04
Stomach	7.03e-04	1.15e-04	3.61e-05	1.75e-05	3.19e-04	6.22e-05	2.18e-05	1.10e-05	2.89e-04	1.24e-04
SI	2.73e-04	8.42e-05	2.97e-05	1.49e-05	2.22e-04	7.08e-05	2.57e-05	1.30e-05	1.13e-04	8.19e-05
Blood	6.62e-04	9.10e-05	2.99e-05	1.48e-05	5.13e-04	8.13e-05	2.75e-05	1.38e-05	4.87e-04	1.05e-04
LLI	1.75e-04	7.44e-05	2.82e-05	1.45e-05	1.48e-04	6.52e-05	2.55e-05	1.32e-05	7.26e-05	6.96e-05
Thyroid	5.74e-04	1.04e-04	3.53e-05	1.75e-05	5.63e-04	8.37e-05	2.73e-05	1.35e-05	1.53e-03	1.62e-04
Urine	1.99e-04	9.46e-05	3.50e-05	1.76e-05	8.10e-05	4.36e-05	1.87e-05	1.01e-05	8.28e-05	8.73e-05
Other	3.91e-04	7.67e-05	2.78e-05	1.39e-05	3.98e-04	7.79e-05	2.78e-05	1.43e-05	4.12e-04	8.81e-05
	1-y-old—abdomen									
ET1	3.36e-04	1.19e-04	4.06e-05	1.96e-05	4.90e-05	2.17e-05	9.93e-06	5.38e-06		
Stomach	1.48e-03	1.26e-04	3.72e-05	1.80e-05	4.70e-04	6.69e-05	2.24e-05	1.12e-05		
SI	7.76e-04	9.92e-05	3.14e-05	1.54e-05	5.94e-04	8.31e-05	2.70e-05	1.34e-05		
Blood	6.75e-04	9.25e-05	3.03e-05	1.50e-05	5.46e-04	8.34e-05	2.81e-05	1.40e-05		
LLI	5.04e-04	9.13e-05	3.03e-05	1.51e-05	4.05e-04	8.05e-05	2.74e-05	1.37e-05		
Thyroid	2.04e-04	7.25e-05	2.99e-05	1.61e-05	1.94e-04	6.76e-05	2.51e-05	1.30e-05		
Urine	6.18e-04	1.20e-04	3.80e-05	1.84e-05	2.25e-04	5.59e-05	2.07e-05	1.07e-05		
Other	4.22e-04	7.95e-05	2.81e-05	1.43e-05	4.36e-04	8.11e-05	2.84e-05	1.44e-05		
	5-y-old—chest								5-y-old	
ET1	5.99e-04	1.43e-04	4.21e-05	1.95e-05	6.12e-05	2.15e-05	8.59e-06	4.55e-06	3.41e-03	2.69e-04
Stomach	4.70e-04	1.06e-04	3.42e-05	1.67e-05	2.11e-04	5.24e-05	1.92e-05	9.84e-06	1.43e-04	1.03e-04
SI	1.53e-04	6.98e-05	2.67e-05	1.37e-05	1.24e-04	5.79e-05	2.27e-05	1.18e-05	4.71e-05	5.87e-05
Blood	4.86e-04	7.83e-05	2.71e-05	1.36e-05	3.69e-04	6.97e-05	2.47e-05	1.26e-05	2.90e-04	8.69e-05
LLI	8.91e-05	5.83e-05	2.46e-05	1.31e-05	7.36e-05	4.97e-05	2.19e-05	1.17e-05	2.77e-05	4.63e-05
Thyroid	3.58e-04	8.42e-05	3.14e-05	1.61e-05	4.08e-04	7.81e-05	2.63e-05	1.31e-05	1.17e-03	1.55e-04
Urine	9.79e-05	7.49e-05	3.14e-05	1.64e-05	3.81e-05	3.12e-05	1.51e-05	8.52e-06	3.20e-05	5.94e-05
Other	2.55e-04	6.07e-05	2.37e-05	1.26e-05	2.61e-04	6.19e-05	2.42e-05	1.28e-05	2.42e-04	6.66e-05

Table C-14 (continued)

Anatomical region	Aspect/distance from body									
	Anterior				Posterior				Thyroid—anterior	
	2 in	1 ft	2 ft	3 ft	2 in	1 ft	2 ft	3 ft	2 in	1 ft
5-y-old—abdomen										
ET1	2.12e-04	9.73e-05	3.72e-05	1.85e-05	2.50e-05	1.49e-05	7.85e-06	4.41e-06		
Stomach	1.20e-03	1.19e-04	3.56e-05	1.71e-05	3.57e-04	5.85e-05	2.01e-05	1.01e-05		
SI	5.58e-04	9.00e-05	2.92e-05	1.44e-05	4.26e-04	7.40e-05	2.48e-05	1.24e-05		
Blood	4.80e-04	8.06e-05	2.76e-05	1.38e-05	3.83e-04	7.21e-05	2.53e-05	1.29e-05		
LLI	3.23e-04	7.92e-05	2.76e-05	1.38e-05	2.55e-04	6.84e-05	2.45e-05	1.25e-05		
Thyroid	1.02e-04	5.33e-05	2.42e-05	1.38e-05	1.08e-04	5.68e-05	2.30e-05	1.23e-05		
Urine	3.63e-04	1.07e-04	3.56e-05	1.75e-05	1.33e-04	4.46e-05	1.75e-05	9.24e-06		
Other	2.79e-04	6.56e-05	2.49e-05	1.30e-05	2.90e-04	6.69e-05	2.52e-05	1.32e-05		
10-y-old—chest									10-y-old	
ET1	4.38e-04	1.27e-04	4.01e-05	1.89e-05	4.55e-05	1.90e-05	7.96e-06	4.28e-06	3.04e-03	2.64e-04
Stomach	3.11e-04	9.47e-05	3.25e-05	1.61e-05	1.42e-04	4.45e-05	1.72e-05	8.94e-06	6.92e-05	8.03e-05
SI	8.58e-05	5.68e-05	2.41e-05	1.27e-05	6.91e-05	4.62e-05	2.01e-05	1.08e-05	2.00e-05	4.06e-05
Blood	3.70e-04	6.85e-05	2.47e-05	1.27e-05	2.75e-04	6.03e-05	2.24e-05	1.17e-05	1.94e-04	7.11e-05
LLI	4.65e-05	4.54e-05	2.17e-05	1.19e-05	3.80e-05	3.75e-05	1.88e-05	1.05e-05	1.06e-05	3.00e-05
Thyroid	2.77e-04	8.23e-05	3.17e-05	1.63e-05	2.49e-04	6.31e-05	2.30e-05	1.17e-05	1.25e-03	1.59e-04
Urine	5.01e-05	5.84e-05	2.82e-05	1.53e-05	1.78e-05	2.17e-05	1.23e-05	7.26e-06	1.18e-05	3.94e-05
Other	1.77e-04	4.86e-05	2.06e-05	1.13e-05	1.84e-04	4.97e-05	2.09e-05	1.15e-05	1.64e-04	5.03e-05
10-y-old—abdomen										
ET1	1.47e-04	7.88e-05	3.37e-05	1.74e-05	1.49e-05	1.14e-05	6.89e-06	4.05e-06		
Stomach	9.72e-04	1.14e-04	3.45e-05	1.66e-05	2.81e-04	5.21e-05	1.83e-05	9.29e-06		
SI	4.09e-04	8.21e-05	2.75e-05	1.36e-05	3.12e-04	6.65e-05	2.29e-05	1.15e-05		
Blood	3.55e-04	7.13e-05	2.55e-05	1.30e-05	2.92e-04	6.33e-05	2.32e-05	1.19e-05		
LLI	2.17e-04	6.95e-05	2.56e-05	1.30e-05	1.69e-04	5.86e-05	2.24e-05	1.15e-05		
Thyroid	5.79e-05	4.52e-05	2.32e-05	1.37e-05	5.31e-05	4.01e-05	1.85e-05	1.04e-05		
Urine	2.26e-04	9.43e-05	3.38e-05	1.69e-05	8.11e-05	3.58e-05	1.52e-05	8.19e-06		
Other	2.03e-04	5.47e-05	2.22e-05	1.19e-05	2.09e-04	5.60e-05	2.27e-05	1.21e-05		
15-y-old—chest									15-y-old	
ET1	3.08e-04	1.08e-04	3.74e-05	1.81e-05	2.89e-05	1.61e-05	7.38e-06	4.03e-06	2.62e-03	2.47e-04
Stomach	1.93e-04	8.05e-05	2.99e-05	1.51e-05	8.95e-05	3.56e-05	1.47e-05	7.87e-06	2.70e-05	5.62e-05
SI	4.50e-05	4.30e-05	2.07e-05	1.14e-05	3.61e-05	3.40e-05	1.69e-05	9.42e-06	6.45e-06	2.43e-05
Blood	2.79e-04	5.90e-05	2.22e-05	1.16e-05	1.93e-04	5.04e-05	1.98e-05	1.05e-05	1.23e-04	5.56e-05
LLI	2.24e-05	3.20e-05	1.80e-05	1.06e-05	1.80e-05	2.56e-05	1.51e-05	9.00e-06	3.19e-06	1.70e-05
Thyroid	1.83e-04	6.81e-05	2.87e-05	1.52e-05	1.40e-04	4.62e-05	1.90e-05	1.01e-05	1.27e-03	1.57e-04
Urine	2.27e-05	4.15e-05	2.39e-05	1.38e-05	7.71e-06	1.37e-05	9.10e-06	5.84e-06	3.07e-06	2.28e-05
Other	1.28e-04	3.95e-05	1.76e-05	1.00e-05	1.33e-04	4.05e-05	1.80e-05	1.02e-05	1.14e-04	3.81e-05
15-y-old—abdomen										
ET1	9.94e-05	6.22e-05	2.97e-05	1.61e-05	7.79e-06	7.81e-06	5.41e-06	3.64e-06		
Stomach	7.08e-04	1.03e-04	3.25e-05	1.57e-05	2.04e-04	4.39e-05	1.59e-05	8.23e-06		
SI	2.76e-04	7.07e-05	2.50e-05	1.26e-05	2.08e-04	5.59e-05	2.03e-05	1.04e-05		
Blood	2.48e-04	6.14e-05	2.31e-05	1.20e-05	2.06e-04	5.32e-05	2.06e-05	1.09e-05		
LLI	1.32e-04	5.67e-05	2.27e-05	1.18e-05	9.97e-05	4.61e-05	1.93e-05	1.03e-05		
Thyroid	2.97e-05	3.35e-05	1.91e-05	1.20e-05	2.45e-05	2.59e-05	1.37e-05	8.24e-06		
Urine	1.25e-04	7.72e-05	3.08e-05	1.58e-05	4.52e-05	2.63e-05	1.25e-05	6.95e-06		
Other	1.46e-04	4.56e-05	1.96e-05	1.08e-05	1.51e-04	4.66e-05	2.00e-05	1.10e-05		

Table C-14 (continued)

Anatomical region	Aspect/distance from body									
	Anterior				Posterior				Thyroid—anterior	
	2 in	1 ft	2 ft	3 ft	2 in	1 ft	2 ft	3 ft	2 in	1 ft
	Adult male—chest								Adult male	
ET1	1.54e-04	9.26e-05	3.40e-05	1.66e-05	1.40e-05	1.26e-05	6.48e-06	3.68e-06	3.62e-04	1.71e-04
Stomach	3.68e-04	8.42e-05	2.80e-05	1.36e-05	1.46e-04	4.08e-05	1.52e-05	7.96e-06	1.29e-04	7.41e-05
SI	1.18e-04	5.35e-05	2.21e-05	1.16e-05	7.60e-05	3.70e-05	1.62e-05	8.76e-06	4.17e-05	3.93e-05
Blood	2.47e-04	5.31e-05	2.06e-05	1.09e-05	1.82e-04	4.77e-05	1.92e-05	1.03e-05	2.13e-04	5.45e-05
LLI	5.09e-05	4.07e-05	2.07e-05	1.17e-05	4.39e-05	3.13e-05	1.52e-05	8.60e-06	2.04e-05	2.74e-05
Thyroid	4.58e-04	1.03e-04	3.44e-05	1.69e-05	1.35e-04	4.01e-05	1.54e-05	8.06e-06	2.10e-03	1.44e-04
Urine	9.97e-06	2.86e-05	1.93e-05	1.18e-05	1.56e-05	2.27e-05	1.31e-05	7.89e-06	3.62e-06	1.61e-05
Other	1.07e-04	3.60e-05	1.68e-05	9.65e-06	1.20e-04	3.95e-05	1.78e-05	1.01e-05	1.14e-04	3.49e-05
	Adult male—abdomen									
ET1	8.08e-05	5.79e-05	2.68e-05	1.44e-05	6.10e-06	7.43e-06	5.49e-06	3.46e-06		
Stomach	5.05e-04	7.80e-05	2.59e-05	1.28e-05	2.11e-04	4.39e-05	1.61e-05	8.27e-06		
SI	2.60e-04	6.17e-05	2.26e-05	1.16e-05	1.85e-04	4.82e-05	1.80e-05	9.31e-06		
Blood	1.82e-04	4.79e-05	1.94e-05	1.04e-05	2.01e-04	5.19e-05	2.03e-05	1.07e-05		
LLI	1.09e-04	5.05e-05	2.20e-05	1.19e-05	9.81e-05	4.14e-05	1.75e-05	9.29e-06		
Thyroid	1.27e-04	7.06e-05	2.90e-05	1.53e-05	5.75e-05	2.95e-05	1.37e-05	7.56e-06		
Urine	4.52e-05	4.36e-05	2.20e-05	1.23e-05	4.50e-05	3.29e-05	1.56e-05	8.62e-06		
Other	9.97e-05	3.58e-05	1.67e-05	9.58e-06	1.37e-04	4.47e-05	1.95e-05	1.08e-05		
	Adult female—chest								Adult female	
ET1	2.73e-04	1.06e-04	3.61e-05	1.73e-05	2.46e-05	1.50e-05	8.24e-06	4.86e-06	9.83e-04	1.96e-04
Stomach	2.84e-04	7.81e-05	2.72e-05	1.35e-05	1.97e-04	5.10e-05	1.91e-05	9.83e-06	9.98e-05	6.66e-05
SI	9.95e-05	5.61e-05	2.46e-05	1.31e-05	6.07e-05	3.60e-05	1.67e-05	9.21e-06	2.84e-05	4.06e-05
Blood	2.46e-04	5.56e-05	2.17e-05	1.14e-05	2.35e-04	5.38e-05	2.10e-05	1.11e-05	2.24e-04	5.61e-05
LLI	2.58e-05	3.50e-05	1.88e-05	1.08e-05	3.51e-05	3.36e-05	1.79e-05	1.02e-05	6.76e-06	2.28e-05
Thyroid	5.37e-04	1.06e-04	3.51e-05	1.72e-05	1.85e-04	4.61e-05	1.70e-05	8.73e-06	2.31e-03	1.47e-04
Urine	1.66e-05	4.24e-05	2.48e-05	1.44e-05	1.35e-05	1.80e-05	1.04e-05	6.32e-06	3.87e-06	2.62e-05
Other	1.12e-04	3.80e-05	1.74e-05	1.01e-05	1.35e-04	4.22e-05	1.88e-05	1.07e-05	1.27e-04	3.76e-05
	Adult female—abdomen									
ET1	1.15e-04	6.72e-05	2.94e-05	1.54e-05	1.15e-05	8.61e-06	5.97e-06	4.13e-06		
Stomach	5.20e-04	8.14e-05	2.68e-05	1.33e-05	2.99e-04	5.64e-05	1.99e-05	1.01e-05		
SI	3.15e-04	7.44e-05	2.70e-05	1.37e-05	1.74e-04	4.99e-05	1.91e-05	9.94e-06		
Blood	2.25e-04	5.55e-05	2.16e-05	1.14e-05	2.31e-04	5.73e-05	2.19e-05	1.15e-05		
LLI	9.54e-05	5.11e-05	2.16e-05	1.16e-05	9.75e-05	4.96e-05	2.10e-05	1.11e-05		
Thyroid	1.28e-04	7.77e-05	3.10e-05	1.61e-05	6.44e-05	3.47e-05	1.50e-05	8.12e-06		
Urine	6.85e-05	6.48e-05	2.90e-05	1.55e-05	4.59e-05	2.63e-05	1.25e-05	7.02e-06		
Other	1.16e-04	4.06e-05	1.83e-05	1.05e-05	1.47e-04	4.83e-05	2.05e-05	1.13e-05		

Table C-15. Normalized Exposure Rates from ^{137}Cs in Various Anatomical Regions (μR/h per Bq)

Anatomical region	Aspect/distance from body							
	Anterior				Posterior			
	2 in	1 ft	2 ft	3 ft	2 in	1 ft	2 ft	3 ft
Infant–chest								
ET1	2.41e-03	2.38e-04	6.31e-05	2.88e-05	3.64e-04	7.26e-05	2.52e-05	1.28e-05
Stomach	1.72e-03	1.84e-04	5.43e-05	2.59e-05	8.54e-04	1.21e-04	3.92e-05	1.95e-05
SI	8.27e-04	1.51e-04	4.79e-05	2.36e-05	7.11e-04	1.35e-04	4.39e-05	2.15e-05
Blood	1.48e-03	1.55e-04	4.80e-05	2.33e-05	1.25e-03	1.46e-04	4.58e-05	2.23e-05
LLI	5.99e-04	1.40e-04	4.68e-05	2.30e-05	5.24e-04	1.29e-04	4.42e-05	2.18e-05
Body tissues	1.00e-03	1.41e-04	4.59e-05	2.24e-05	1.00e-03	1.43e-04	4.63e-05	2.26e-05
Infant–abdomen								
ET1	9.12e-04	2.05e-04	6.09e-05	2.87e-05	2.34e-04	6.59e-05	2.50e-05	1.28e-05
Stomach	2.85e-03	1.92e-04	5.53e-05	2.62e-05	1.13e-03	1.27e-04	4.00e-05	1.97e-05
SI	1.74e-03	1.64e-04	4.95e-05	2.38e-05	1.40e-03	1.47e-04	4.53e-05	2.20e-05
Blood	1.53e-03	1.58e-04	4.86e-05	2.34e-05	1.30e-03	1.48e-04	4.63e-05	2.25e-05
LLI	1.27e-03	1.57e-04	4.87e-05	2.34e-05	1.07e-03	1.45e-04	4.58e-05	2.22e-05
Body tissues	1.11e-03	1.45e-04	4.66e-05	2.28e-05	1.10e-03	1.46e-04	4.70e-05	2.29e-05
1-y-old–chest								
ET1	1.33e-03	2.24e-04	6.19e-05	2.83e-05	1.61e-04	4.67e-05	1.77e-05	9.24e-06
Stomach	1.03e-03	1.64e-04	5.05e-05	2.44e-05	4.88e-04	9.40e-05	3.25e-05	1.64e-05
SI	4.15e-04	1.21e-04	4.21e-05	2.10e-05	3.47e-04	1.04e-04	3.72e-05	1.88e-05
Blood	9.77e-04	1.31e-04	4.28e-05	2.11e-05	7.64e-04	1.19e-04	3.98e-05	1.98e-05
LLI	2.78e-04	1.08e-04	4.03e-05	2.06e-05	2.36e-04	9.68e-05	3.69e-05	1.89e-05
Body tissues	5.91e-04	1.13e-04	3.96e-05	2.00e-05	5.85e-04	1.14e-04	4.02e-05	2.04e-05
1-y-old–abdomen								
ET1	4.81e-04	1.70e-04	5.72e-05	2.74e-05	8.84e-05	3.73e-05	1.68e-05	9.09e-06
Stomach	2.14e-03	1.78e-04	5.20e-05	2.48e-05	7.09e-04	1.00e-04	3.35e-05	1.67e-05
SI	1.14e-03	1.42e-04	4.45e-05	2.17e-05	8.78e-04	1.22e-04	3.93e-05	1.94e-05
Blood	9.96e-04	1.35e-04	4.34e-05	2.14e-05	8.10e-04	1.22e-04	4.05e-05	2.01e-05
LLI	7.52e-04	1.31e-04	4.32e-05	2.13e-05	6.10e-04	1.17e-04	3.95e-05	1.96e-05
Body tissues	6.66e-04	1.17e-04	4.07e-05	2.04e-05	6.55e-04	1.19e-04	4.11e-05	2.07e-05
5-y-old–chest								
ET1	8.56e-04	2.04e-04	5.97e-05	2.75e-05	1.09e-04	3.81e-05	1.50e-05	7.91e-06
Stomach	6.97e-04	1.50e-04	4.80e-05	2.33e-05	3.25e-04	7.95e-05	2.88e-05	1.48e-05
SI	2.38e-04	1.01e-04	3.82e-05	1.94e-05	1.98e-04	8.56e-05	3.32e-05	1.71e-05
Blood	7.15e-04	1.14e-04	3.89e-05	1.95e-05	5.52e-04	1.02e-04	3.59e-05	1.82e-05
LLI	1.45e-04	8.57e-05	3.56e-05	1.87e-05	1.24e-04	7.48e-05	3.20e-05	1.70e-05
Body tissues	3.86e-04	8.98e-05	3.46e-05	1.81e-05	3.81e-04	9.11e-05	3.51e-05	1.83e-05
5-y-old–abdomen								
ET1	3.04e-04	1.39e-04	5.27e-05	2.60e-05	4.74e-05	2.65e-05	1.37e-05	7.67e-06
Stomach	1.73e-03	1.68e-04	4.99e-05	2.37e-05	5.40e-04	8.84e-05	3.01e-05	1.51e-05
SI	8.17e-04	1.29e-04	4.15e-05	2.03e-05	6.31e-04	1.09e-04	3.60e-05	1.79e-05
Blood	7.07e-04	1.17e-04	3.97e-05	1.99e-05	5.72e-04	1.05e-04	3.68e-05	1.85e-05
LLI	4.85e-04	1.15e-04	3.96e-05	1.98e-05	3.91e-04	1.01e-04	3.58e-05	1.80e-05
Body tissues	4.46e-04	9.77e-05	3.64e-05	1.87e-05	4.43e-04	9.86e-05	3.68e-05	1.89e-05

Table C-15 (continued)

Anatomical region	Aspect/distance from body							
	Anterior				Posterior			
	2 in	1 ft	2 ft	3 ft	2 in	1 ft	2 ft	3 ft
10-y-old–chest								
ET1	6.24e-04	1.82e-04	5.71e-05	2.67e-05	8.27e-05	3.37e-05	1.40e-05	7.53e-06
Stomach	4.62e-04	1.35e-04	4.58e-05	2.24e-05	2.22e-04	6.81e-05	2.61e-05	1.36e-05
SI	1.39e-04	8.31e-05	3.47e-05	1.81e-05	1.14e-04	6.93e-05	2.97e-05	1.57e-05
Blood	5.45e-04	9.96e-05	3.56e-05	1.82e-05	4.10e-04	8.87e-05	3.27e-05	1.69e-05
LLI	7.95e-05	6.73e-05	3.15e-05	1.72e-05	6.61e-05	5.79e-05	2.78e-05	1.54e-05
Body tissues	2.74e-04	7.28e-05	3.03e-05	1.65e-05	2.70e-04	7.36e-05	3.06e-05	1.67e-05
10-y-old–abdomen								
ET1	2.11e-04	1.13e-04	4.78e-05	2.46e-05	2.90e-05	2.07e-05	1.22e-05	7.10e-06
Stomach	1.40e-03	1.60e-04	4.84e-05	2.31e-05	4.27e-04	7.92e-05	2.76e-05	1.40e-05
SI	6.05e-04	1.18e-04	3.92e-05	1.94e-05	4.69e-04	9.77e-05	3.35e-05	1.67e-05
Blood	5.26e-04	1.03e-04	3.67e-05	1.86e-05	4.35e-04	9.29e-05	3.38e-05	1.73e-05
LLI	3.30e-04	1.01e-04	3.68e-05	1.86e-05	2.61e-04	8.70e-05	3.28e-05	1.67e-05
Body tissues	3.22e-04	8.29e-05	3.28e-05	1.74e-05	3.22e-04	8.35e-05	3.31e-05	1.75e-05
15-y-old–chest								
ET1	4.39e-04	1.54e-04	5.30e-05	2.56e-05	5.38e-05	2.87e-05	1.31e-05	7.14e-06
Stomach	2.96e-04	1.14e-04	4.21e-05	2.11e-05	1.43e-04	5.49e-05	2.26e-05	1.21e-05
SI	7.60e-05	6.40e-05	3.01e-05	1.64e-05	6.27e-05	5.21e-05	2.52e-05	1.40e-05
Blood	4.12e-04	8.60e-05	3.23e-05	1.68e-05	2.91e-04	7.44e-05	2.91e-05	1.54e-05
LLI	4.03e-05	4.87e-05	2.64e-05	1.53e-05	3.30e-05	4.00e-05	2.27e-05	1.34e-05
Body tissues	1.95e-04	5.93e-05	2.62e-05	1.48e-05	1.96e-04	5.97e-05	2.65e-05	1.50e-05
15-y-old–abdomen								
ET1	1.45e-04	8.84e-05	4.21e-05	2.27e-05	1.60e-05	1.46e-05	9.77e-06	6.47e-06
Stomach	1.02e-03	1.45e-04	4.56e-05	2.20e-05	3.14e-04	6.75e-05	2.46e-05	1.26e-05
SI	4.11e-04	1.02e-04	3.58e-05	1.80e-05	3.18e-04	8.26e-05	3.00e-05	1.53e-05
Blood	3.69e-04	8.93e-05	3.34e-05	1.73e-05	3.09e-04	7.84e-05	3.01e-05	1.58e-05
LLI	2.05e-04	8.32e-05	3.29e-05	1.71e-05	1.60e-04	6.94e-05	2.89e-05	1.51e-05
Body tissues	2.31e-04	6.91e-05	2.91e-05	1.58e-05	2.33e-04	6.98e-05	2.93e-05	1.59e-05
Adult male–chest								
ET1	2.31e-04	1.34e-04	4.91e-05	2.39e-05	2.72e-05	2.27e-05	1.14e-05	6.57e-06
Stomach	5.41e-04	1.21e-04	3.99e-05	1.94e-05	2.28e-04	6.06e-05	2.33e-05	1.21e-05
SI	1.87e-04	8.00e-05	3.23e-05	1.69e-05	1.22e-04	5.65e-05	2.44e-05	1.31e-05
Blood	3.62e-04	7.82e-05	3.00e-05	1.60e-05	2.76e-04	7.06e-05	2.84e-05	1.51e-05
Body tissues	1.65e-04	5.66e-05	2.48e-05	1.42e-05	1.79e-04	5.81e-05	2.60e-05	1.47e-05
Adult male–abdomen								
ET1	1.21e-04	8.37e-05	3.87e-05	2.07e-05	1.24e-05	1.38e-05	9.89e-06	6.14e-06
Stomach	7.38e-04	1.12e-04	3.70e-05	1.83e-05	3.21e-04	6.69e-05	2.42e-05	1.24e-05
SI	3.90e-04	9.01e-05	3.28e-05	1.67e-05	2.81e-04	7.17e-05	2.69e-05	1.39e-05
Blood	2.74e-04	7.05e-05	2.82e-05	1.51e-05	3.00e-04	7.64e-05	2.96e-05	1.56e-05
Body tissues	1.58e-04	5.40e-05	2.46e-05	1.40e-05	2.00e-04	6.55e-05	2.82e-05	1.56e-05

Table C-15 (continued)

Anatomical region	Aspect/distance from body							
	Anterior				Posterior			
	2 in	1 ft	2 ft	3 ft	2 in	1 ft	2 ft	3 ft
Adult female–chest								
ET1	3.97e-04	1.52e-04	5.15e-05	2.46e-05	4.48e-05	2.61e-05	1.42e-05	8.20e-06
Stomach	4.30e-04	1.13e-04	3.90e-05	1.92e-05	3.02e-04	7.64e-05	2.84e-05	1.46e-05
SI	1.57e-04	8.19e-05	3.50e-05	1.85e-05	9.89e-05	5.47e-05	2.49e-05	1.36e-05
Blood	3.69e-04	8.27e-05	3.17e-05	1.66e-05	3.48e-04	7.87e-05	3.05e-05	1.61e-05
Body tissues	1.73e-04	5.69e-05	2.60e-05	1.47e-05	2.00e-04	6.18e-05	2.74e-05	1.54e-05
Adult female–abdomen								
ET1	1.67e-04	9.65e-05	4.20e-05	2.20e-05	2.15e-05	1.54e-05	1.04e-05	7.14e-06
Stomach	7.61e-04	1.17e-04	3.84e-05	1.89e-05	4.54e-04	8.38e-05	2.98e-05	1.50e-05
SI	4.66e-04	1.07e-04	3.82e-05	1.93e-05	2.62e-04	7.41e-05	2.83e-05	1.47e-05
Blood	3.29e-04	8.14e-05	3.15e-05	1.67e-05	3.39e-04	8.32e-05	3.17e-05	1.66e-05
Body tissues	1.81e-04	6.08e-05	2.72e-05	1.52e-05	2.20e-04	6.98e-05	2.97e-05	1.63e-05

Table C-16. Normalized Exposure Rates from ^{192}Ir in Various Anatomical Regions (μR/h per Bq)

Anatomical region	Aspect/distance from body							
	Anterior				Posterior			
	2 in	1 ft	2 ft	3 ft	2 in	1 ft	2 ft	3 ft
Infant—chest								
Lung	2.49e-03	2.37e-04	7.28e-05	3.55e-05	2.93e-03	2.56e-04	7.74e-05	3.73e-05
BBi	2.27e-03	2.09e-04	6.41e-05	3.09e-05	2.77e-03	2.26e-04	6.85e-05	3.34e-05
ET1	3.48e-03	3.50e-04	9.43e-05	4.36e-05	4.66e-04	9.38e-05	3.30e-05	1.68e-05
Stomach	2.51e-03	2.74e-04	8.25e-05	3.96e-05	1.21e-03	1.74e-04	5.69e-05	2.81e-05
SI	1.18e-03	2.23e-04	7.24e-05	3.53e-05	9.98e-04	1.97e-04	6.50e-05	3.20e-05
Blood	2.13e-03	2.28e-04	7.15e-05	3.48e-05	1.79e-03	2.14e-04	6.80e-05	3.32e-05
ULI	1.36e-03	2.40e-04	7.65e-05	3.71e-05	9.27e-04	1.83e-04	6.13e-05	3.04e-05
LLI	8.37e-04	2.09e-04	7.03e-05	3.46e-05	7.26e-04	1.90e-04	6.55e-05	3.25e-05
Other	1.40e-03	2.05e-04	6.78e-05	3.34e-05	1.45e-03	2.09e-04	6.87e-05	3.37e-05
Liver	2.44e-03	2.58e-04	7.74e-05	3.73e-05	1.48e-03	1.94e-04	6.18e-05	3.02e-05
Kidneys	9.10e-04	1.50e-04	5.09e-05	2.58e-05	2.77e-03	3.02e-04	8.90e-05	4.19e-05
Spleen	1.29e-03	1.86e-04	6.06e-05	2.97e-05	2.28e-03	2.60e-04	7.93e-05	3.80e-05
Infant—abdomen								
Lung	1.92e-03	2.33e-04	7.33e-05	3.57e-05	2.26e-03	2.51e-04	7.74e-05	3.76e-05
BBi	1.32e-03	1.98e-04	6.36e-05	3.11e-05	1.51e-03	2.15e-04	6.78e-05	3.32e-05
ET1	1.33e-03	3.02e-04	9.13e-05	4.31e-05	2.93e-04	8.60e-05	3.25e-05	1.68e-05
Stomach	4.17e-03	2.88e-04	8.44e-05	4.03e-05	1.61e-03	1.82e-04	5.81e-05	2.86e-05
SI	2.54e-03	2.44e-04	7.47e-05	3.60e-05	2.02e-03	2.16e-04	6.73e-05	3.27e-05
Blood	2.20e-03	2.33e-04	7.26e-05	3.50e-05	1.88e-03	2.17e-04	6.89e-05	3.37e-05
ULI	2.93e-03	2.63e-04	7.91e-05	3.78e-05	1.74e-03	1.99e-04	6.34e-05	3.09e-05
LLI	1.85e-03	2.33e-04	7.33e-05	3.53e-05	1.54e-03	2.13e-04	6.82e-05	3.32e-05
Other	1.45e-03	2.10e-04	6.87e-05	3.37e-05	1.52e-03	2.15e-04	7.01e-05	3.41e-05
Liver	3.85e-03	2.67e-04	7.91e-05	3.80e-05	1.95e-03	2.00e-04	6.29e-05	3.07e-05
Kidneys	9.10e-04	1.50e-04	5.09e-05	2.58e-05	2.77e-03	3.02e-04	8.90e-05	4.19e-05
Spleen	1.29e-03	1.86e-04	6.06e-05	2.97e-05	2.28e-03	2.60e-04	7.93e-05	3.80e-05
1-y-old—chest								
Lung	1.74e-03	2.10e-04	6.66e-05	3.27e-05	2.01e-03	2.26e-04	7.03e-05	3.43e-05
BBi	1.62e-03	1.77e-04	5.60e-05	2.77e-05	1.95e-03	1.94e-04	5.99e-05	2.93e-05
ET1	1.95e-03	3.30e-04	9.22e-05	4.26e-05	1.97e-04	5.79e-05	2.20e-05	1.15e-05
Stomach	1.50e-03	2.47e-04	7.70e-05	3.73e-05	6.82e-04	1.33e-04	4.63e-05	2.35e-05
SI	5.81e-04	1.79e-04	6.34e-05	3.18e-05	4.73e-04	1.52e-04	5.49e-05	2.79e-05
Blood	1.40e-03	1.93e-04	6.34e-05	3.16e-05	1.09e-03	1.73e-04	5.85e-05	2.93e-05
ULI	6.78e-04	1.98e-04	6.82e-05	3.41e-05	4.47e-04	1.39e-04	5.09e-05	2.60e-05
LLI	3.76e-04	1.59e-04	6.02e-05	3.09e-05	3.16e-04	1.39e-04	5.44e-05	2.81e-05
Other	8.14e-04	1.61e-04	5.81e-05	2.95e-05	8.39e-04	1.65e-04	5.90e-05	3.00e-05
Liver	1.47e-03	2.22e-04	7.01e-05	3.43e-05	8.87e-04	1.58e-04	5.32e-05	2.65e-05
Kidneys	4.98e-04	1.12e-04	4.06e-05	2.09e-05	1.62e-03	2.74e-04	8.37e-05	4.03e-05
Spleen	7.49e-04	1.51e-04	5.14e-05	2.60e-05	1.37e-03	2.28e-04	7.28e-05	3.57e-05

Table C-16 (continued)

Anatomical region	Aspect/distance from body							
	Anterior				Posterior			
	2 in	1 ft	2 ft	3 ft	2 in	1 ft	2 ft	3 ft
1-y-old—abdomen								
Lung	1.18e-03	2.01e-04	6.62e-05	3.30e-05	1.38e-03	2.16e-04	6.98e-05	3.46e-05
BBi	7.81e-04	1.61e-04	5.46e-05	2.74e-05	8.64e-04	1.76e-04	5.88e-05	2.90e-05
ET1	7.08e-04	2.51e-04	8.57e-05	4.15e-05	1.04e-04	4.59e-05	2.11e-05	1.14e-05
Stomach	3.13e-03	2.67e-04	7.95e-05	3.83e-05	1.00e-03	1.42e-04	4.79e-05	2.40e-05
SI	1.66e-03	2.12e-04	6.68e-05	3.30e-05	1.27e-03	1.77e-04	5.79e-05	2.88e-05
Blood	1.43e-03	1.99e-04	6.45e-05	3.20e-05	1.16e-03	1.77e-04	5.97e-05	2.97e-05
ULI	1.93e-03	2.30e-04	7.24e-05	3.53e-05	1.07e-03	1.61e-04	5.35e-05	2.67e-05
LLI	1.08e-03	1.95e-04	6.48e-05	3.20e-05	8.62e-04	1.72e-04	5.85e-05	2.93e-05
Other	8.32e-04	1.67e-04	5.95e-05	3.02e-05	8.83e-04	1.71e-04	6.06e-05	3.07e-05
Liver	2.74e-03	2.37e-04	7.17e-05	3.48e-05	1.28e-03	1.66e-04	5.42e-05	2.70e-05
Kidneys	4.98e-04	1.12e-04	4.06e-05	2.09e-05	1.62e-03	2.74e-04	8.37e-05	4.03e-05
Spleen	7.49e-04	1.51e-04	5.14e-05	2.60e-05	1.37e-03	2.28e-04	7.28e-05	3.57e-05
5-y-old—chest								
Lung	1.37e-03	1.95e-04	6.34e-05	3.09e-05	1.58e-03	2.09e-04	6.64e-05	3.25e-05
BBi	1.16e-03	1.51e-04	4.86e-05	2.40e-05	1.69e-03	1.84e-04	5.67e-05	2.77e-05
ET1	1.26e-03	3.00e-04	8.87e-05	4.10e-05	1.29e-04	4.56e-05	1.81e-05	9.66e-06
Stomach	1.00e-03	2.25e-04	7.28e-05	3.55e-05	4.49e-04	1.12e-04	4.10e-05	2.10e-05
SI	3.23e-04	1.48e-04	5.69e-05	2.93e-05	2.63e-04	1.23e-04	4.86e-05	2.51e-05
Blood	1.03e-03	1.67e-04	5.76e-05	2.90e-05	7.86e-04	1.48e-04	5.26e-05	2.67e-05
ULI	3.85e-04	1.67e-04	6.25e-05	3.18e-05	2.54e-04	1.12e-04	4.43e-05	2.33e-05
LLI	1.90e-04	1.25e-04	5.28e-05	2.79e-05	1.57e-04	1.06e-04	4.68e-05	2.51e-05
Other	5.26e-04	1.27e-04	5.05e-05	2.65e-05	5.49e-04	1.30e-04	5.12e-05	2.70e-05
Liver	9.68e-04	1.99e-04	6.55e-05	3.20e-05	5.83e-04	1.38e-04	4.86e-05	2.44e-05
Kidneys	3.04e-04	9.13e-05	3.46e-05	1.83e-05	1.01e-03	2.49e-04	8.02e-05	3.87e-05
Spleen	5.00e-04	1.29e-04	4.61e-05	2.35e-05	9.06e-04	2.05e-04	6.82e-05	3.37e-05
5-y-old—abdomen								
Lung	7.72e-04	1.78e-04	6.13e-05	3.07e-05	9.15e-04	1.93e-04	6.50e-05	3.23e-05
BBi	4.63e-04	1.29e-04	4.70e-05	2.35e-05	5.74e-04	1.58e-04	5.51e-05	2.72e-05
ET1	4.47e-04	2.05e-04	7.84e-05	3.90e-05	5.30e-05	3.16e-05	1.66e-05	9.38e-06
Stomach	2.58e-03	2.54e-04	7.61e-05	3.64e-05	7.61e-04	1.25e-04	4.26e-05	2.15e-05
SI	1.18e-03	1.92e-04	6.20e-05	3.07e-05	9.06e-04	1.58e-04	5.28e-05	2.63e-05
Blood	1.02e-03	1.72e-04	5.90e-05	2.95e-05	8.21e-04	1.53e-04	5.39e-05	2.74e-05
ULI	1.42e-03	2.12e-04	6.78e-05	3.32e-05	7.74e-04	1.41e-04	4.82e-05	2.42e-05
LLI	6.91e-04	1.70e-04	5.90e-05	2.97e-05	5.44e-04	1.46e-04	5.26e-05	2.67e-05
Other	5.44e-04	1.37e-04	5.26e-05	2.74e-05	5.81e-04	1.40e-04	5.37e-05	2.79e-05
Liver	2.18e-03	2.21e-04	6.75e-05	3.27e-05	9.98e-04	1.52e-04	5.02e-05	2.51e-05
Kidneys	3.04e-04	9.13e-05	3.46e-05	1.83e-05	1.01e-03	2.49e-04	8.02e-05	3.87e-05
Spleen	5.00e-04	1.29e-04	4.61e-05	2.35e-05	9.06e-04	2.05e-04	6.82e-05	3.37e-05

Table C-16 (continued)

Anatomical region	Aspect/distance from body							
	Anterior				Posterior			
	2 in	1 ft	2 ft	3 ft	2 in	1 ft	2 ft	3 ft
10-y-old—chest								
Lung	1.09e-03	1.83e-04	6.06e-05	3.00e-05	1.23e-03	1.95e-04	6.36e-05	3.11e-05
BBi	1.11e-03	1.52e-04	4.91e-05	2.42e-05	1.28e-03	1.65e-04	5.23e-05	2.56e-05
ET1	9.22e-04	2.67e-04	8.46e-05	3.99e-05	9.63e-05	4.01e-05	1.68e-05	9.04e-06
Stomach	6.59e-04	2.03e-04	6.96e-05	3.43e-05	3.02e-04	9.47e-05	3.66e-05	1.90e-05
SI	1.82e-04	1.21e-04	5.14e-05	2.72e-05	1.46e-04	9.86e-05	4.31e-05	2.30e-05
Blood	7.88e-04	1.46e-04	5.28e-05	2.70e-05	5.83e-04	1.28e-04	4.77e-05	2.49e-05
ULI	2.20e-04	1.38e-04	5.72e-05	2.97e-05	1.45e-04	8.92e-05	3.90e-05	2.10e-05
LLI	9.89e-05	9.63e-05	4.66e-05	2.56e-05	8.04e-05	8.00e-05	4.01e-05	2.26e-05
Other	3.73e-04	1.02e-04	4.33e-05	2.40e-05	3.87e-04	1.04e-04	4.43e-05	2.44e-05
Liver	6.66e-04	1.76e-04	6.06e-05	3.02e-05	4.43e-04	1.26e-04	4.59e-05	2.33e-05
Kidneys	2.06e-04	7.51e-05	3.04e-05	1.62e-05	6.52e-04	2.25e-04	7.65e-05	3.76e-05
Spleen	3.34e-04	1.08e-04	4.08e-05	2.11e-05	6.25e-04	1.88e-04	6.59e-05	3.27e-05
10-y-old—abdomen								
Lung	5.97e-04	1.63e-04	5.83e-05	2.93e-05	6.80e-04	1.75e-04	6.15e-05	3.07e-05
BBi	3.27e-04	1.20e-04	4.56e-05	2.33e-05	3.41e-04	1.30e-04	4.86e-05	2.47e-05
ET1	3.09e-04	1.66e-04	7.10e-05	3.66e-05	3.11e-05	2.42e-05	1.45e-05	8.53e-06
Stomach	2.07e-03	2.42e-04	7.38e-05	3.55e-05	5.99e-04	1.11e-04	3.90e-05	1.97e-05
SI	8.74e-04	1.75e-04	5.85e-05	2.90e-05	6.68e-04	1.42e-04	4.89e-05	2.47e-05
Blood	7.56e-04	1.52e-04	5.44e-05	2.77e-05	6.20e-04	1.35e-04	4.96e-05	2.54e-05
ULI	1.07e-03	1.96e-04	6.43e-05	3.16e-05	5.79e-04	1.25e-04	4.43e-05	2.24e-05
LLI	4.63e-04	1.49e-04	5.49e-05	2.79e-05	3.57e-04	1.25e-04	4.77e-05	2.47e-05
Other	3.94e-04	1.14e-04	4.70e-05	2.54e-05	4.17e-04	1.17e-04	4.79e-05	2.58e-05
Liver	1.64e-03	2.01e-04	6.34e-05	3.09e-05	8.14e-04	1.43e-04	4.79e-05	2.40e-05
Kidneys	2.06e-04	7.51e-05	3.04e-05	1.62e-05	6.52e-04	2.25e-04	7.65e-05	3.76e-05
Spleen	3.34e-04	1.08e-04	4.08e-05	2.11e-05	6.25e-04	1.88e-04	6.59e-05	3.27e-05
15-y-old—chest								
Lung	8.07e-04	1.63e-04	5.62e-05	2.81e-05	8.83e-04	1.72e-04	5.85e-05	2.93e-05
BBi	9.40e-04	1.44e-04	4.77e-05	2.37e-05	8.41e-04	1.35e-04	4.49e-05	2.23e-05
ET1	6.50e-04	2.26e-04	7.88e-05	3.80e-05	6.08e-05	3.39e-05	1.56e-05	8.53e-06
Stomach	4.13e-04	1.72e-04	6.41e-05	3.23e-05	1.90e-04	7.56e-05	3.13e-05	1.68e-05
SI	9.54e-05	9.17e-05	4.43e-05	2.44e-05	7.68e-05	7.26e-05	3.60e-05	2.01e-05
Blood	5.92e-04	1.26e-04	4.75e-05	2.49e-05	4.13e-04	1.07e-04	4.22e-05	2.24e-05
ULI	1.19e-04	1.07e-04	5.00e-05	2.72e-05	7.68e-05	6.50e-05	3.20e-05	1.80e-05
LLI	4.75e-05	6.82e-05	3.85e-05	2.24e-05	3.80e-05	5.44e-05	3.23e-05	1.92e-05
Other	2.70e-04	8.25e-05	3.71e-05	2.13e-05	2.81e-04	8.46e-05	3.80e-05	2.16e-05
Liver	4.45e-04	1.49e-04	5.51e-05	2.79e-05	3.00e-04	1.06e-04	4.13e-05	2.14e-05
Kidneys	1.23e-04	5.74e-05	2.51e-05	1.37e-05	4.15e-04	1.97e-04	7.24e-05	3.69e-05
Spleen	2.13e-04	8.62e-05	3.50e-05	1.86e-05	3.96e-04	1.60e-04	6.02e-05	3.07e-05

Table C-16 (continued)

Anatomical region	Aspect/distance from body							
	Anterior				Posterior			
	2 in	1 ft	2 ft	3 ft	2 in	1 ft	2 ft	3 ft
15-y-old—abdomen								
Lung	4.01e-04	1.40e-04	5.32e-05	2.74e-05	4.47e-04	1.49e-04	5.58e-05	2.86e-05
BBi	2.04e-04	1.04e-04	4.26e-05	2.27e-05	1.86e-04	9.66e-05	4.01e-05	2.12e-05
ET1	2.09e-04	1.31e-04	6.27e-05	3.39e-05	1.63e-05	1.64e-05	1.14e-05	7.70e-06
Stomach	1.51e-03	2.21e-04	6.94e-05	3.37e-05	4.36e-04	9.40e-05	3.41e-05	1.76e-05
SI	5.90e-04	1.51e-04	5.35e-05	2.70e-05	4.45e-04	1.19e-04	4.33e-05	2.21e-05
Blood	5.28e-04	1.31e-04	4.91e-05	2.56e-05	4.38e-04	1.13e-04	4.40e-05	2.30e-05
ULI	7.40e-04	1.72e-04	5.95e-05	2.97e-05	3.87e-04	1.03e-04	3.85e-05	1.98e-05
LLI	2.81e-04	1.21e-04	4.86e-05	2.54e-05	2.13e-04	9.84e-05	4.13e-05	2.19e-05
Other	2.86e-04	9.50e-05	4.15e-05	2.29e-05	3.02e-04	9.73e-05	4.22e-05	2.33e-05
Liver	1.18e-03	1.78e-04	5.85e-05	2.88e-05	5.81e-04	1.24e-04	4.40e-05	2.21e-05
Kidneys	1.23e-04	5.74e-05	2.51e-05	1.37e-05	4.15e-04	1.97e-04	7.24e-05	3.69e-05
Spleen	2.13e-04	8.62e-05	3.50e-05	1.86e-05	3.96e-04	1.60e-04	6.02e-05	3.07e-05
Adult male—chest								
Lung	1.05e-03	1.68e-04	5.58e-05	2.76e-05	7.93e-04	1.42e-04	4.84e-05	2.42e-05
BBi	1.40e-03	1.99e-04	6.45e-05	3.13e-05	5.53e-04	1.12e-04	3.99e-05	2.03e-05
ET1	3.27e-04	1.96e-04	7.20e-05	3.53e-05	2.99e-05	2.65e-05	1.37e-05	7.77e-06
Stomach	7.83e-04	1.81e-04	5.96e-05	2.90e-05	3.17e-04	8.71e-05	3.26e-05	1.70e-05
SI	2.55e-04	1.14e-04	4.74e-05	2.49e-05	1.60e-04	7.86e-05	3.44e-05	1.89e-05
Blood	5.30e-04	1.14e-04	4.41e-05	2.33e-05	3.93e-04	1.02e-04	4.08e-05	2.19e-05
ULI	3.24e-04	1.54e-04	5.96e-05	3.05e-05	1.09e-04	5.89e-05	2.68e-05	1.48e-05
LLI	1.08e-04	8.67e-05	4.42e-05	2.49e-05	9.51e-05	6.57e-05	3.25e-05	1.84e-05
Other	2.11e-04	7.38e-05	3.51e-05	2.04e-05	2.54e-04	8.31e-05	3.78e-05	2.15e-05
Liver	7.58e-04	1.60e-04	5.32e-05	2.63e-05	3.56e-04	9.89e-05	3.73e-05	1.93e-05
Kidneys	2.10e-04	7.10e-05	2.88e-05	1.53e-05	3.43e-04	1.46e-04	5.65e-05	2.91e-05
Spleen	3.09e-04	8.00e-05	3.12e-05	1.64e-05	6.70e-04	1.75e-04	6.15e-05	3.08e-05
Adult male—abdomen								
Lung	4.56e-04	1.26e-04	4.81e-05	2.50e-05	5.54e-04	1.35e-04	4.81e-05	2.43e-05
BBi	5.01e-04	1.48e-04	5.51e-05	2.83e-05	3.53e-04	1.05e-04	3.92e-05	2.02e-05
ET1	1.71e-04	1.22e-04	5.68e-05	3.05e-05	1.33e-05	1.57e-05	1.16e-05	7.31e-06
Stomach	1.08e-03	1.67e-04	5.53e-05	2.74e-05	4.52e-04	9.36e-05	3.42e-05	1.74e-05
SI	5.57e-04	1.32e-04	4.85e-05	2.48e-05	3.94e-04	1.02e-04	3.85e-05	1.99e-05
Blood	3.91e-04	1.02e-04	4.18e-05	2.23e-05	4.27e-04	1.10e-04	4.29e-05	2.27e-05
ULI	9.36e-04	1.77e-04	6.11e-05	3.02e-05	2.61e-04	7.68e-05	3.00e-05	1.58e-05
LLI	2.33e-04	1.08e-04	4.69e-05	2.54e-05	2.10e-04	8.83e-05	3.73e-05	1.99e-05
Other	1.90e-04	7.42e-05	3.51e-05	2.03e-05	2.75e-04	9.37e-05	4.11e-05	2.29e-05
Liver	9.56e-04	1.45e-04	4.93e-05	2.48e-05	5.76e-04	1.13e-04	4.00e-05	2.02e-05
Kidneys	2.10e-04	7.10e-05	2.88e-05	1.53e-05	3.43e-04	1.46e-04	5.65e-05	2.91e-05
Spleen	3.09e-04	8.00e-05	3.12e-05	1.64e-05	6.70e-04	1.75e-04	6.15e-05	3.08e-05

Table C-16 (continued)

Anatomical region	Aspect/distance from body							
	Anterior				Posterior			
	2 in	1 ft	2 ft	3 ft	2 in	1 ft	2 ft	3 ft
Adult female—chest								
Lung	9.60e-04	1.55e-04	5.23e-05	2.61e-05	1.18e-03	1.83e-04	5.96e-05	2.92e-05
BBi	9.56e-04	1.71e-04	5.79e-05	2.88e-05	1.01e-03	1.57e-04	5.16e-05	2.54e-05
ET1	5.79e-04	2.24e-04	7.64e-05	3.67e-05	5.26e-05	3.19e-05	1.74e-05	1.01e-05
Stomach	6.02e-04	1.66e-04	5.80e-05	2.87e-05	4.16e-04	1.08e-04	4.03e-05	2.08e-05
SI	2.13e-04	1.20e-04	5.24e-05	2.80e-05	1.28e-04	7.62e-05	3.53e-05	1.95e-05
Blood	5.36e-04	1.21e-04	4.65e-05	2.46e-05	4.98e-04	1.14e-04	4.45e-05	2.36e-05
ULI	1.43e-04	1.38e-04	6.15e-05	3.25e-05	7.39e-05	6.11e-05	3.03e-05	1.70e-05
LLI	5.40e-05	7.44e-05	4.01e-05	2.31e-05	7.40e-05	7.22e-05	3.81e-05	2.18e-05
Other	2.23e-04	7.85e-05	3.66e-05	2.12e-05	2.80e-04	8.81e-05	3.97e-05	2.26e-05
Liver	7.65e-04	1.73e-04	5.88e-05	2.94e-05	4.51e-04	1.17e-04	4.29e-05	2.19e-05
Kidneys	2.63e-04	9.71e-05	3.95e-05	2.08e-05	3.42e-04	1.39e-04	5.50e-05	2.83e-05
Spleen	3.59e-04	1.01e-04	3.82e-05	1.97e-05	7.42e-04	1.81e-04	6.33e-05	3.16e-05
Adult female—abdomen								
Lung	5.00e-04	1.28e-04	4.77e-05	2.47e-05	6.78e-04	1.65e-04	5.77e-05	2.88e-05
BBi	3.48e-04	1.28e-04	5.10e-05	2.69e-05	4.31e-04	1.28e-04	4.80e-05	2.45e-05
ET1	2.44e-04	1.42e-04	6.23e-05	3.28e-05	2.44e-05	1.81e-05	1.26e-05	8.72e-06
Stomach	1.10e-03	1.73e-04	5.74e-05	2.84e-05	6.29e-04	1.19e-04	4.21e-05	2.13e-05
SI	6.69e-04	1.59e-04	5.78e-05	2.92e-05	3.64e-04	1.04e-04	4.03e-05	2.10e-05
Blood	4.82e-04	1.19e-04	4.71e-05	2.46e-05	4.89e-04	1.22e-04	4.65e-05	2.44e-05
ULI	5.53e-04	1.88e-04	6.73e-05	3.37e-05	2.53e-04	8.70e-05	3.46e-05	1.82e-05
LLI	2.03e-04	1.09e-04	4.64e-05	2.47e-05	2.07e-04	1.06e-04	4.49e-05	2.38e-05
Other	2.21e-04	8.37e-05	3.85e-05	2.19e-05	2.93e-04	9.92e-05	4.32e-05	2.40e-05
Liver	1.25e-03	1.76e-04	5.78e-05	2.84e-05	7.52e-04	1.31e-04	4.48e-05	2.25e-05
Kidneys	2.63e-04	9.71e-05	3.95e-05	2.08e-05	3.42e-04	1.39e-04	5.50e-05	2.83e-05
Spleen	3.59e-04	1.01e-04	3.82e-05	1.97e-05	7.42e-04	1.81e-04	6.33e-05	3.16e-05

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