

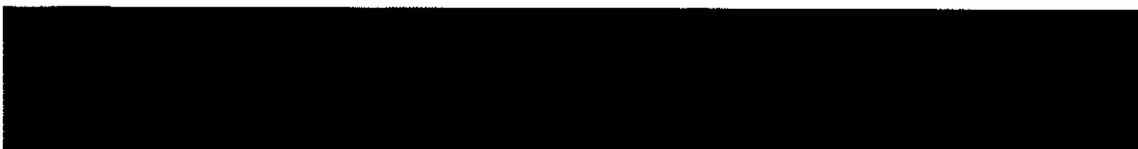


NCRP REPORT No. 160



**IONIZING RADIATION
EXPOSURE OF THE
POPULATION OF THE
UNITED STATES**

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2009



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Exposure of the Population
of the United States**

**Recommendations of the
NATIONAL COUNCIL ON RADIATION
PROTECTION AND MEASUREMENTS**

March 3, 2009

National Council on Radiation Protection and Measurements
7910 Woodmont Avenue, Suite 400 / Bethesda, MD 20814-3095

1.6 OVERALL RESULTS FOR 2006 / 12

TABLE 1.1—Collective effective dose (S), effective dose per individual in the U.S. population (E_{US}), and average effective dose for the exposed group (E_{Exp}) for 2006.^a

Exposure Category	S (person-Sv)	E_{US} (mSv)	E_{Exp} (mSv)
<i>Ubiquitous background</i>	933,000	3.11	3.11
Internal, inhalation (radon and thoron)	684,000	2.28	2.28
External, space	99,000	0.33	0.33
Internal, ingestion	87,000	0.29	0.29
External, terrestrial	63,000	0.21	0.21
<i>Medical</i>	899,000	3.00	— ^b
CT	440,000	1.47	— ^b
Nuclear medicine	231,000	0.77	— ^b
Interventional fluoroscopy	128,000	0.43	— ^b
Conventional radiography and fluoroscopy	100,000	0.33	— ^b
<i>Consumer</i>	39,000	0.13	0.001 – 0.3 ^c
<i>Industrial, security, medical, educational and research</i>	1,000	0.003	0.001 – 0.01 ^c
<i>Occupational</i>	1,400	0.005	1.1
Medical	550		0.8
Aviation	530		3.1
Commercial nuclear power	110		1.9
Industry and commerce	110		0.8
Education and research	60		0.7
Government, DOE, military	40		0.6
<i>Total</i>	1,870,000 ^d	6.2 ^d	

^aSee Table 8.1 for more detail.

^bNot determined for the medical category because the number of patients exposed is not known, only the number of procedures.

^cThe range of values for the various subcategories in this category.

^dRounded values.