

Table 1. Frequency of interventional procedures per 1,000 population recorded in this survey. Values marked in **red** are exceptional compared with other countries and are to be checked.

<i>Country</i>	<i>Frequency per 1,000 population</i>
Argentina	1.26
Australia	7.38
Bangladesh	10.03
Belarus	14.59
Belgium	6.97
Brazil	0.42
Brunei Darussalam	1.98
Bulgaria	17.41
Canada	12.42
Chile	0.08
Cyprus	1.69
Czech Republic	17.16
Denmark	1.99
Estonia	22.15
Finland	8.74
France	1.75
Germany	16.63
Greece	1.08
Hungary	30.56
Iceland	6.91
Indonesia	0.03
Lithuania	29.77
Luxembourg	13.33
Netherlands	10.87
Norway	2.27
Philippines	0.01
Poland	6.99
Romania	2.19
Russian Federation	0.49
San Marino	4.59
Slovenia	5.85
Spain	8.56
Sweden	2.50
Switzerland	4.91
United Arab Emirates	4.68
United Kingdom of Great Britain and Northern Ireland	9.47
United States of America	18.67

Bulgaria: Suspiciously high frequency for total IR procedures. Please check the data.

Czech Republic: Suspiciously high frequency for total IR procedures. Please check the data.

Estonia: Suspiciously high frequency for total IR procedures. Please check the data.

Hungary: Suspiciously high frequency for total IR procedures. Please check the data.

Lithuania: Suspiciously high frequency for total IR procedures. Please check the data.

Philippines: Suspiciously low frequency for total IR procedures. Please check the data.

Table 2. Frequencies per 1,000 population for interventional procedures recorded in this survey. Values marked in green are exceptional compared with other countries and are to be checked.

Country	Head (cerebral intervention)	PTCA	Chest (pacemaker)	Thoracic intervention (other)	Abdomen (biliary & urinary intervention)	Abdomen (TIPS)	Abdominal interventions (other)	Pelvic interventions	Limb interventions	Other IR procedures*
Argentina	0.05	0.90		0.18			0.06	0.08		
Australia	0.03	1.67	1.54		0.10		0.05		1.03	2.95
Belgium	0.11	2.30	0.04	1.02		0.02	0.10	0.00	0.06	3.32
Bulgaria	0.07	3.37	0.46							13.51
Cyprus		1.69								
Czech Republic		5.09	1.03	3.76	3.32	0.01				3.95
Denmark		1.96		0.03						
Estonia	0.15	5.89							2.49	13.62
Finland		1.36	0.47			0.001				6.91
France		1.75								
Germany		8.37								8.25
Greece	0.02	0.60	0.34			0.0003				0.12
Iceland	0.06	2.05	1.36	0.17	0.15		0.11	0.36	0.25	2.40
Lithuania		17.86								11.91
Luxembourg	0.28	3.15	1.11	1.25	4.13	0.002	0.37	0.34	1.88	0.82
Netherlands	0.05	8.04	0.26	0.85	0.24		0.49			0.93
Norway		2.27								
Philippines				0.01	0.001		0.001			0.01
Poland	0.24	4.18	0.27	0.22	0.07	0.0001	0.001		0.62	1.38
Romania	0.05	0.92	0.08			0.03	0.01		0.06	1.06
Russian Federation							0.49			
Slovenia		1.85								4.00

Country	Head (cerebral intervention)	PTCA	Chest (pacemaker)	Thoracic intervention (other)	Abdomen (biliary & urinary intervention)	Abdomen (TIPS)	Abdominal interventions (other)	Pelvic interventions	Limb interventions	Other IR procedures*
Spain		1.78								6.78
Sweden		2.20								0.30
Switzerland		3.26								1.65
United Arab Emirates	0.30	1.00	0.13	2.09	0.21	0.030	0.19	0.10	0.62	
United Kingdom of Great Britain and Northern Ireland	0.08	0.30	0.59	2.34	0.59	0.01	1.05	0.60	1.47	2.45
United States of America	0.07	2.63	1.11	1.26	0.49		0.59	0.16	1.31	11.05
*Other procedures include procedures that were submitted by the countries as such or any differences found in the submitted data between the total number of IR procedures and the sum of the specific IR procedures										

Argentina: Only PTCA frequencies were reported and not CA. Please, comment and provide some information about the definition of IR groups or methodology followed for counting frequencies between two surveys.

Czech Republic: The frequency number for PTCA, thoracic interventions (other) and for abdomen (biliary and urinary IR) procedures seem suspiciously high. Please, comment and provide some information about the definition of IR groups (especially PTCA, as there seems to be a big difference between the 2008 UNSCEAR report and data of this survey).

Germany: There is a huge difference for PTCA procedures between UNSCEAR 2008 data and this survey. Please, comment and provide some information about the definition of IR groups. This may be related to the fact that numbers for both CA and PTCA are also high (CA and PTCA were counted together in bibliography). Please, comment and provide some information about the definition of IR groups or methodology followed for counting frequencies between two surveys.

Luxembourg: The frequency number for abdomen (biliary and urinary IR) procedures seem suspiciously high. There is a huge difference for PTCA procedures between UNSCEAR 2008 data and this survey. Please, comment and provide some information about the definition of IR groups or methodology followed for counting frequencies between two surveys.

Romania: There is some difference between the number of total IR procedures reported in the questionnaire and the sum of the separate IR procedures. Please, comment. In the table, other procedures include procedures that were submitted by the countries as such or any differences found in the submitted data between the total number of IR procedures and the sum of the specific IR procedures

Spain: There is a huge difference for PTCA procedures between UNSCEAR 2008 data and this survey. Please, comment and provide some information about the definition of IR groups or methodology followed for counting frequencies between two surveys.

Switzerland: There is a huge difference for PTCA procedures between UNSCEAR 2008 data and this survey. Please, comment and provide some information about the definition of IR groups or methodology followed for counting frequencies between two surveys.

United Kingdom of Great Britain and Northern Ireland: There is a huge difference for head IR procedures between UNSCEAR 2008 data and this survey. Please, comment and provide some information about the definition of IR groups or methodology followed for counting frequencies between two surveys.

Table 3. The number of interventional staff by country, as an absolute number and as a frequency per million population as reported in this survey. Values marked in green are exceptional compared with other countries and are to be checked.

Country	Interventional radiologists		Interventional cardiologists		Other physicians conducting interventional procedures	
	Number	Per 1mln population	Number	Per 1mln population	Number	Per 1mln population
Argentina			487	12		
Australia	50	2	300	13	4 010	169
Belarus			504	45	1 174	105
Belgium			651	3		
Bulgaria	90	9	9	1	8	1
Cyprus	2	2	27	28	100	105
Czech Republic	137	13	361	34	83	8
Estonia	3	2	15	11		
Finland	244	44				
France			1100	17		
Greece	208	19	514	47		
Hungary	300	306	48	49	164	167
Indonesia	2	0.01	7	0,03	3	0,01
Lithuania	37	13	63	22		
Luxembourg			20	35		
Philippines	14	0,13			5	0,05
Romania	166	8	301	15	266	14
Russian Federation			847	6		
San Marino	2	61			3	92
Slovenia	20	10	30	15		
Spain	305	7	411	9		
Sweden			1 700	170		
Switzerland	250	30	170	20	500	59
Thailand	145	2	270	4		
United Arab Emirates	38	4	76	8	99	11
United Kingdom of Great Britain and Northern Ireland	433	7	660	10		
United States of America	2 967	9	3 255	10		

San Marino: Please check the number of interventional radiologists, other physicians and the number of population of the country.

Table 4: Effective doses in mSv per country and procedure

<i>Country</i>	<i>Head (cerebral intervention)</i>	<i>PTCA</i>	<i>Chest (pace maker)</i>	<i>Thoracic intervention (other)</i>	<i>Abdomen (biliary & urinary intervention)</i>	<i>Abdomen (TIPS)</i>	<i>Abdominal interventions (other)</i>	<i>Pelvic interventions</i>	<i>Limb interventions</i>	<i>Other IR procedures</i>
Australia		2155	0.64							
Belgium	13.11	37.96								
Bulgaria	10.70	30.16	6.00							
Czech Republic		19.42								
Estonia	9.07	31.12							10.01	
Finland		16.64								
France		19.00								
Germany	11.00	9.00		44.00			32.00	11.00	1.30	
Greece		29.12	2.46							
Iceland		5.23								
Lithuania	6.00	16.12			11.70				24.84	
Norway		17.00								
Republic of Korea	31.69								19.64	
Romania	3.20	6.69	1.72			2.36			2.26	
Russian Federation	4.50				5.80			3.00	1.90	
Slovenia		14.82								
Spain		28.60								

<i>Country</i>	<i>Head (cerebral intervention)</i>	<i>PTCA</i>	<i>Chest (pace maker)</i>	<i>Thoracic intervention (other)</i>	<i>Abdomen (biliary & urinary intervention)</i>	<i>Abdomen (TIPS)</i>	<i>Abdominal interventions (other)</i>	<i>Pelvic interventions</i>	<i>Limb interventions</i>	<i>Other IR procedures</i>
Sweden		8.06								
Switzerland		33.80								
United Kingdom of Great Britain and Northern Ireland		13.52	0.74	2.81	2.72	53.33			11.25	
Uruguay		16.58								