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International Conference on Occupational Radiation Protection:

Enhancing the Protection of Workers —
Gaps, Challenges and Developments

1–5 December 2014
Vienna, Austria

Summary Session 4 Dose record management of occupational radiation exposure

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FIFTEEN YEARS OF OCCUPATIONAL EXPOSURE MONITORING IN FEDERATION OF BOSNIA AND HERZEGOVINA

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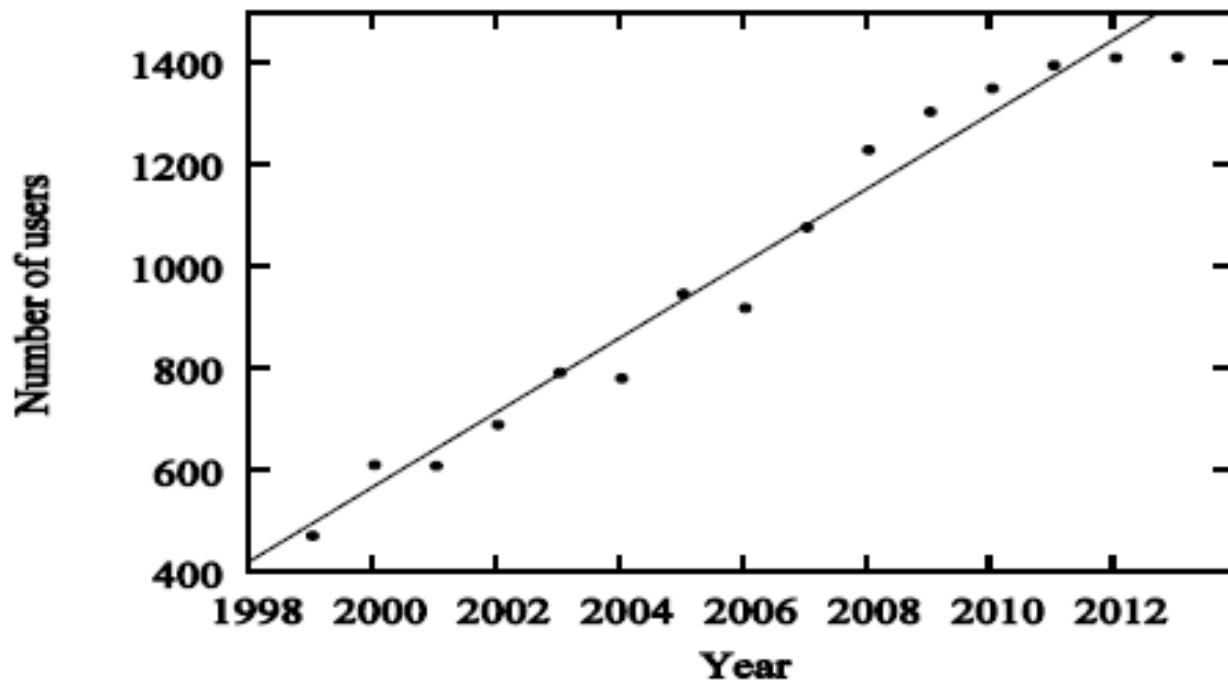
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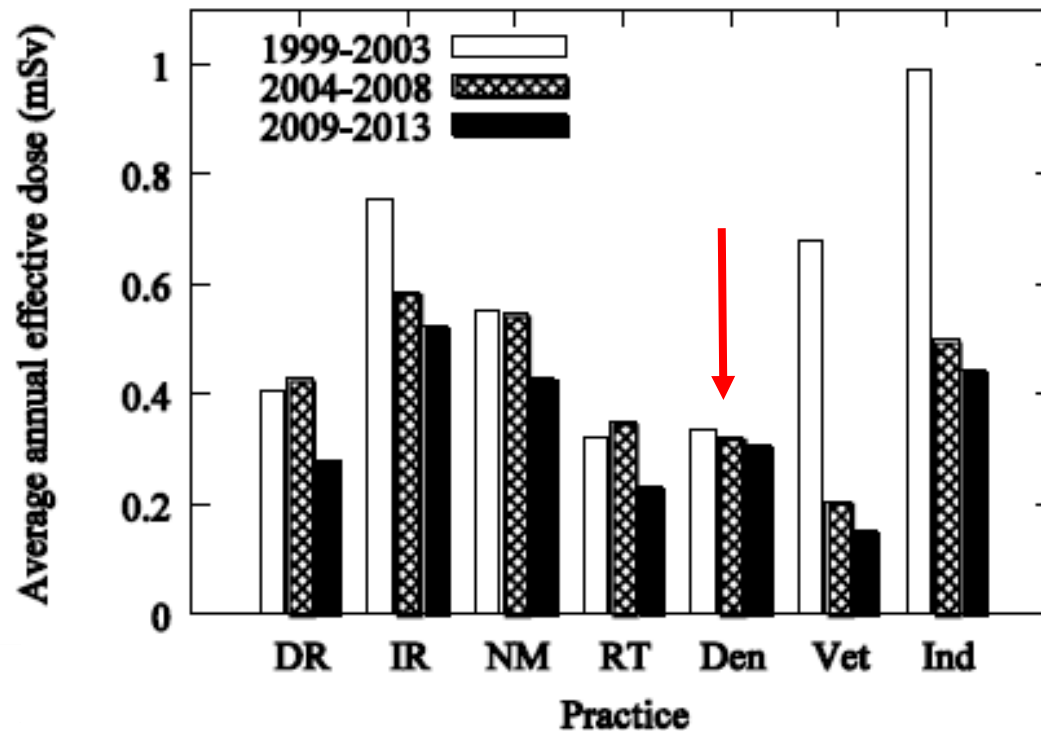
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Number of occupationally exposed workers covered by TL dosimetry



Average annual effective doses in diagnostic radiology (DR), interventional radiology (IR), nuclear medicine (NM), radiotherapy (RT), dentistry (Den), veterinary medicine (Vet) and industry (Ind)

TABLE 1. AVERAGE ANNUAL EFFECTIVE DOSES (mSv) IN COMPARISON TO OTHER COUNTRIES [6, 9]

	In mSv			Roma- nia ¹	Slova- kia ¹	UK ¹	Eastern Europe	World ²
Practices	99–03	04–08	09–13					
Diagnostic radiology	0.408	0.428	0.281	0.54	1.79	0.07		
Interventional radiology	0.753	0.585	0.524	3.58	3.72	0.21		
Nuclear medicine	0.553	0.546	0.429			0.59	0.68	0.79
Radiotherapy	0.324	0.349	0.233				1	0.55
Dental practice	0.335	0.322	0.309				0.16	0.06
Veterinary practice	0.681	0.205	0.153					
Industry	0.989	0.498	0.442	2.75	1.60	0.76		

¹Data from UNSCEAR Report 2008 [6]




²Data from UNSCEAR Report 2000 [9]

- **Monitoring of workers in Bosnia and Herzegovina started in 1960s;**
- **In 2013, 70% of all radiation workers in the country were covered with personal TLD dosimeters (1,485 workers);**
- **Most of the TLD users work in medical institutions (1,417);**
- **Majority of the annual doses received were less than 0.99 mSv/y (96%);**
- **3.3% received doses between 1.00–1.99 mSv/y;**
- **About 0.5% receive doses between 2.00 and 2.99 mSv/y;**
- **Very few persons received doses higher than 3 mSv/y;**
- **No cases of exceeding the annual limit of 20 mSv/y including interventional cardiologists; and**
- **The paper shows improvement in occupational radiation protection in the last years, which is most likely due to active involvement of the State Regulatory Agency for Radiation and Nuclear Safety (SRARNS).**

UNSCEAR's Radiological Exposure Surveys



United Nations Scientific Committee
on the Effects of Atomic Radiation
survey.unscear.org

- Online platform for data collection/archiving
 - Medical exposure (2014) 
 - **Occupational exposure (2015)** 
 - Public exposure (2015/2016) 
- Network of **national contact persons**
 - Nomination ONLY via official channels
 - Additional experts can be registered to online platform

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Thank you for your attention!

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