



Occupational Radiation Exposure in Hong Kong (2025)

Radiation Monitoring Service
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This is a report on the occupational external radiation dose data of persons who were employed in work involving radioactive substances or irradiating apparatus in Hong Kong in year 2025. The data were obtained from individual occupational monitoring using thermoluminescent dosimeters (TLD) provided by the Radiation Monitoring Service (RMS) of the Radiation Health Division, Department of Health, the Government of the Hong Kong Special Administrative Region.

Whole body radiation monitoring

In 2025, the RMS provided whole body type individual monitoring dosimeters to 13,851 named persons and 1,117 unnamed users at 965 sites. The named persons could be grouped into 57 different job types in one of the following four job categories: *dental* (8.36%), *industrial* (6.75%), *medical* (67.33%) and *others* (17.56%). A summary of the annual dose distribution tabulated separately by job category and by job type is at Table 1 and 4 respectively.

The average annual dose of all the monitored persons was 0.12 mSv, which was the same as the value in 2024. No worker on the register was recorded for exceeding the statutory annual dose limit of 20 mSv for the whole body dose. 82.1% of the monitored persons had annual doses 0.17 mSv or below, which was the level equivalent to one-tenth the pro rata monthly fraction derived from the annual statutory dose limit. Five people received doses exceeding 6 mSv, the highest whole body dose recorded was 10.85 mSv.

For individual job categories, the average annual doses for dental, industrial, medical and others were respectively 0.06, 0.18, 0.12 and 0.13 mSv.

Among the monitored users, about 46.2% worked in the public sector (including staff in hospitals of Hospital Authority), the rest of about 53.8% worked in the private sector. By gender, 6,756 (48.8%) were male and 7,095 (51.2%) were female (Figure 7). The dose distribution by gender is at Table 7.

Extremity radiation monitoring

In 2025, the RMS also provided extremity (finger) dose monitoring service to 438 workers at 70 sites in Hong Kong. The average annual finger dose was about 4.76 mSv. Seven workers received annual finger doses exceeding 100 mSv and the highest dose recorded was 244.50 mSv against the annual limit of 500 mSv prescribed by the Radiation Ordinance. A summary of the dose distribution tabulated separately by job category and by job type is at Table 2 and 5 respectively.

For individual job categories, the average annual extremity doses for industrial, medical and others were respectively 4.53, 5.23 and 3.60 mSv. By gender, 350 (79.9%) were male and 88 (20.1%) were female (Figure 8). The dose distribution by gender is at Table 8.

Eye lens radiation monitoring

In 2025, the RMS also provided eye lens dose monitoring service to 61 workers at 14 sites in Hong Kong. The average annual eye lens dose was about 0.10 mSv. No worker on the register was recorded for exceeding the statutory annual dose limit of 150 mSv for the eye lens dose and the highest dose recorded was 1.32 mSv against the annual limit prescribed by the Radiation Ordinance. A summary of the dose distribution tabulated separately by job category and by job type is at Table 3 and 6 respectively.

For individual job categories, the average annual eye lens doses for industrial and medical were respectively 0.92 and 0.07 mSv. By gender, 50 (82.0%) were male and 11 (18.0%) were female (Figure 9). The dose distribution by gender is at Table 9.

Figure 1

The Distribution of Whole Body Dosimeter Users by Job Categories, 2025

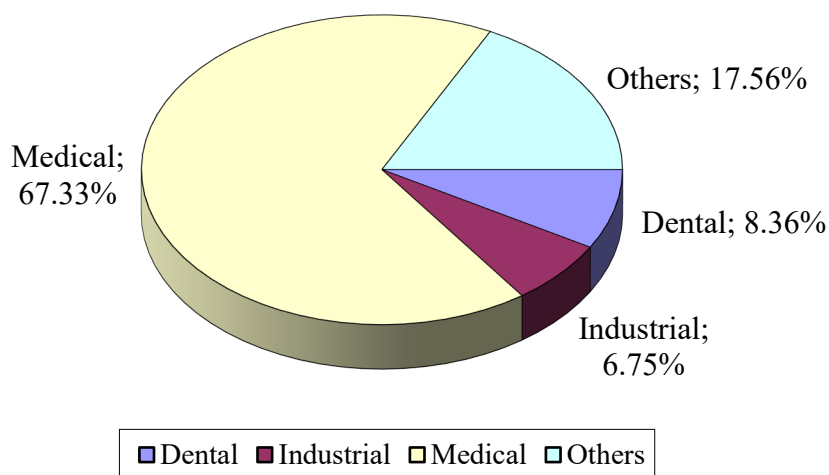


Figure 2

**The Distribution of Finger Dosimeter
Users by Job Categories, 2025**

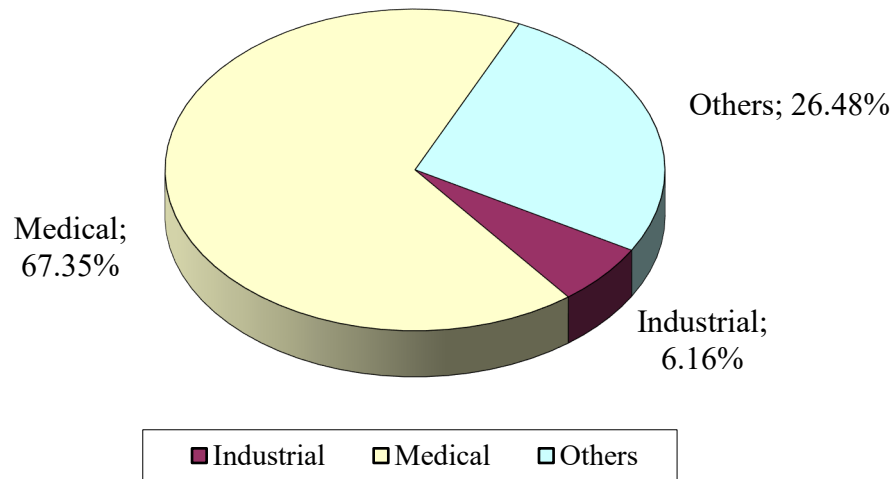


Figure 3

**The Distribution of Eye Lens Dosimeter
Users by Job Categories, 2025**

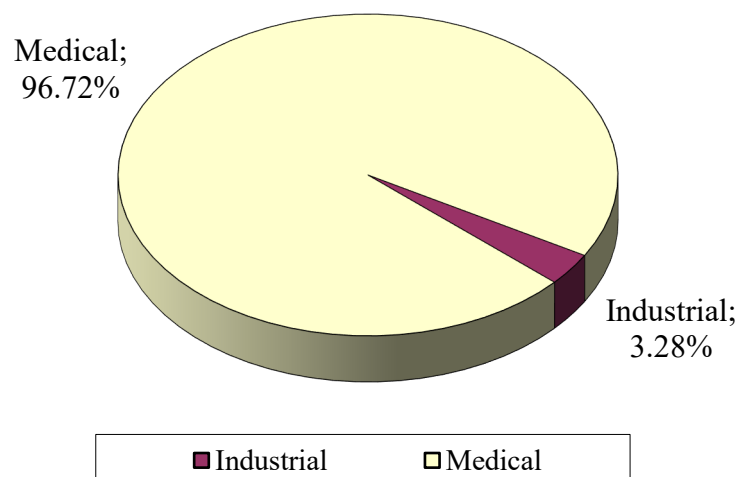


Figure 4

The Average Annual Occupational Whole Body Dose by Job Categories, 2025

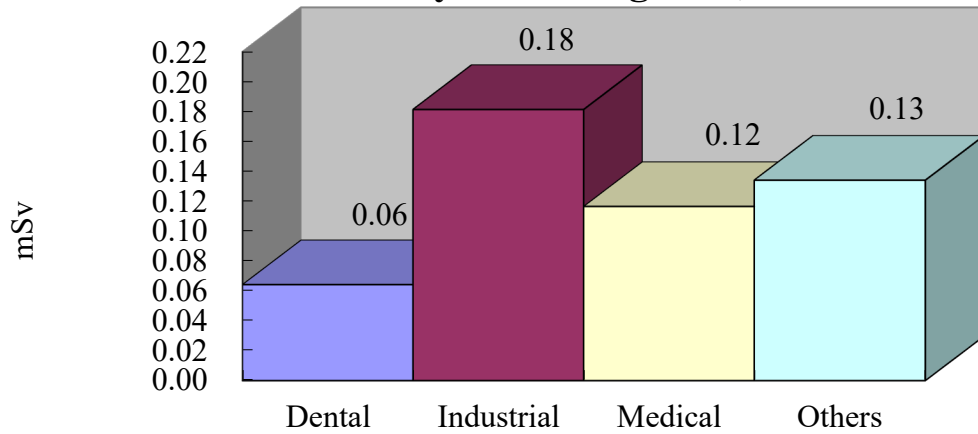


Figure 5

The Average Annual Occupational Finger Dose by Job Categories, 2025

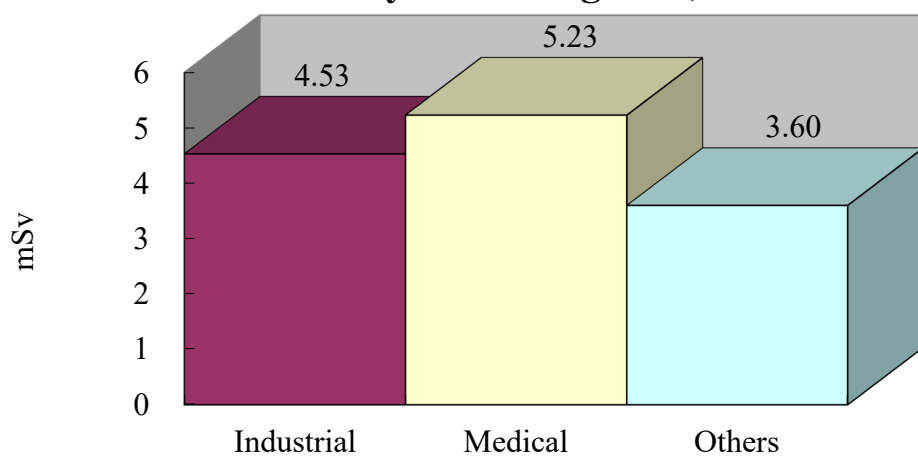


Figure 6

The Average Annual Occupational Eye Lens Dose by Job Categories, 2025

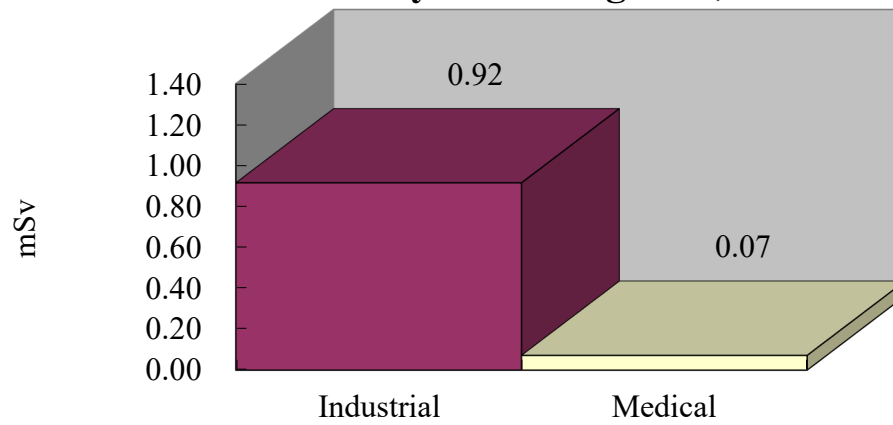


Figure 7

The Distribution of Whole Body Dosimeter Users by Gender, 2025

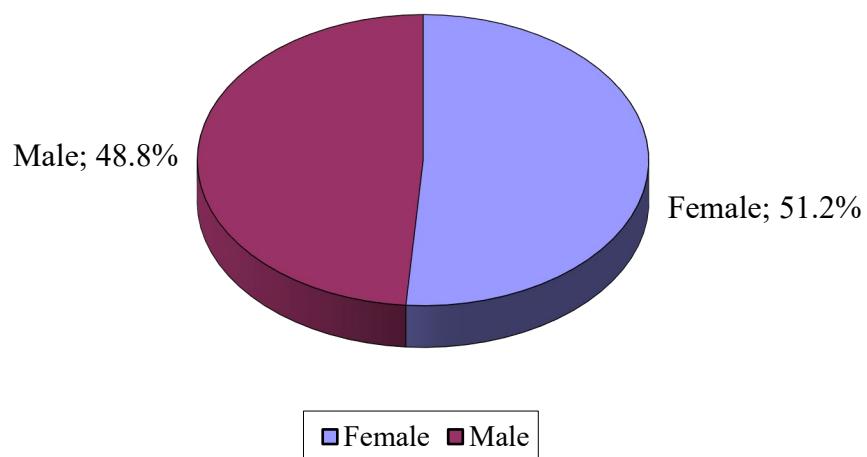


Figure 8

The Distribution of Finger Dosimeter Users by Gender, 2025

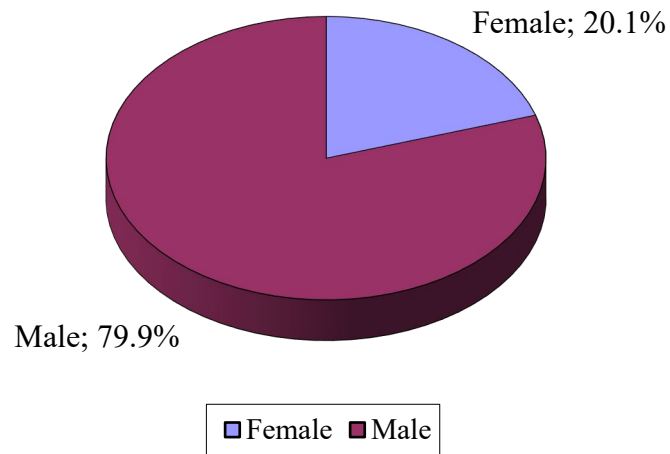


Figure 9

The Distribution of Eye Lens Dosimeter Users by Gender, 2025

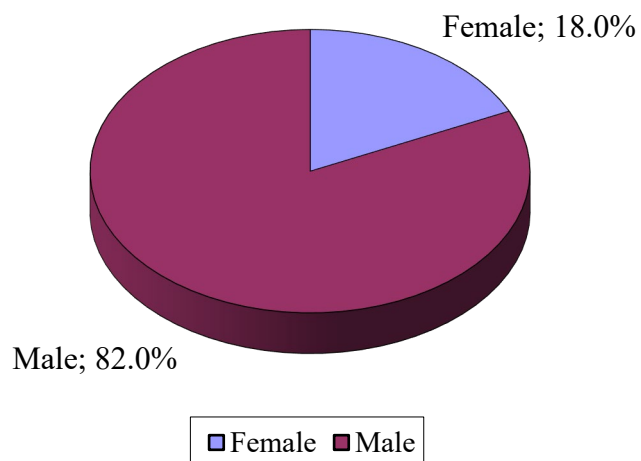


Table 1

**The Distribution of Whole Body Dose
by Job Categories, 2025**

	$x \leq 0.17$	$0.17 < x \leq 0.75$	$0.75 < x \leq 1.5$	$1.5 < x \leq 3.0$	$3.0 < x \leq 6.0$	$6.0 < x \leq 10$	$x > 10$
Dental	1030	126	2	0	0	0	0
Industrial	710	186	21	14	3	1	0
Medical	7661	1409	176	73	6	1	0
Others	1973	407	29	10	10	2	1
Total	11374	2128	228	97	19	4	1

Remark: x represents the dose values in mSv

Table 2

**The Distribution of Finger Dose
by Job Categories, 2025**

	$x \leq 1$	$1 < x \leq 10$	$10 < x \leq 100$	$100 < x \leq 200$	$200 < x \leq 500$	$x > 500$
Industrial	23	1	3	0	0	0
Medical	256	21	12	5	1	0
Others	104	5	6	1	0	0
Total	383	27	21	6	1	0

Remark: x represents the dose values in mSv

Table 3

**The Distribution of Eye Lens Dose
by Job Categories, 2025**

	$x \leq 0.17$	$0.17 < x \leq 0.75$	$0.75 < x \leq 1.5$	$1.5 < x \leq 3.0$	$3.0 < x \leq 6.0$	$6.0 < x \leq 10$	$x > 10$
Industrial	0	1	1	0	0	0	0
Medical	52	5	2	0	0	0	0
Total	52	6	3	0	0	0	0

Remark: x represents the dose values in mSv

Table 4

**The Distribution of Whole Body Dose
by Job Types, 2025**

	$x \leq 0.17$	$0.17 < x \leq 0.75$	$0.75 < x \leq 1.5$	$1.5 < x \leq 3.0$	$3.0 < x \leq 6.0$	$6.0 < x \leq 10$	$x > 10$
Administrator	4	1	1	0	0	0	0
Artisan	25	4	0	0	0	0	0
Chemist	9	7	0	0	0	0	0
Clerk	20	2	0	0	0	0	0
Consultant (Medical)	11	4	0	0	0	0	0
Delivery	1	2	0	0	0	0	0
Dental Assistant	406	42	1	0	0	0	0
Dental Hygienist	21	2	0	0	0	0	0
Dental Therapist	182	29	0	0	0	0	0
Dentist	421	53	1	0	0	0	0
Department Manager	0	1	1	0	0	0	0
Driver	32	6	0	0	0	0	0
Engineer	206	73	12	10	3	1	0
Experimental Officer	3	0	0	0	0	0	0
Fire Safety Worker	2	0	1	0	0	0	0
Laboratory Attendant	23	5	1	2	0	0	0
Lecturer	4	1	0	0	0	0	0

**The Distribution of Whole Body Dose
by Job Types, 2025 (Continued)**

	$x \leq 0.17$	$0.17 < x \leq 0.75$	$0.75 < x \leq 1.5$	$1.5 < x \leq 3.0$	$3.0 < x \leq 6.0$	$6.0 < x \leq 10$	$x > 10$
Luminous Watch Assembly Worker	4	0	0	0	0	0	0
Mechanic	16	5	0	0	0	0	0
Medical Officer	1621	350	34	5	2	1	0
Medical Officer (Therapeutic)	30	7	0	0	0	0	0
Medical Technologist	56	46	0	1	0	0	0
Nurse	2364	319	23	10	0	0	0
Nurse (Veterinary)	121	22	4	1	0	0	0
Operator	188	35	1	0	0	0	0
Pharmacist	10	8	4	0	0	0	0
Physicist (Health)	10	10	0	0	0	0	0
Physicist (Medical)	108	16	8	1	0	0	0
Physiotherapist	4	0	0	0	0	0	0
Police	6	5	0	0	0	0	0
Quality Assurance	7	3	0	0	0	0	0
Radiochemist	11	4	5	5	1	0	0
Radiographer (Diagnostic)	1615	312	68	40	3	0	0

**The Distribution of Whole Body Dose
by Job Types, 2025 (Continued)**

	$x \leq 0.17$	$0.17 < x \leq 0.75$	$0.75 < x \leq 1.5$	$1.5 < x \leq 3.0$	$3.0 < x \leq 6.0$	$6.0 < x \leq 10$	$x > 10$
Radiographer (Industrial)	26	20	2	0	0	0	0
Radiographer (Therapeutic)	246	56	2	0	0	0	0
Radiologist	139	30	3	1	0	0	0
Research Assistant	117	14	0	0	0	0	0
Safety Officer	9	3	1	0	0	0	0
Scientific Assistant	5	0	0	0	0	0	0
Scientific Officer	9	0	0	0	0	0	0
Security Officer	1	0	0	0	0	0	0
Speech Therapist	71	4	0	1	0	0	0
Store Keeper	2	0	0	0	0	0	0
Student	164	12	1	0	1	0	0
Teaching Assistant	2	0	0	0	0	0	0
Technical Officer	83	10	0	1	0	0	0
Technician (Electrical)	130	31	4	1	0	0	0
Technician (Laboratory)	150	31	1	0	2	0	0
Technician (X-rays)	24	5	0	0	0	0	0
Trainee	7	2	0	0	0	0	0
Vet	222	35	7	3	0	0	0

**The Distribution of Whole Body Dose
by Job Types, 2025 (Continued)**

	$x \leq 0.17$	$0.17 < x \leq 0.75$	$0.75 < x \leq 1.5$	$1.5 < x \leq 3.0$	$3.0 < x \leq 6.0$	$6.0 < x \leq 10$	$x > 10$
Vet Assistant	165	25	1	0	0	0	0
Ward Attendant	829	160	16	5	0	0	0
Workman	21	5	1	0	0	0	0
X-ray Assistant	14	5	0	0	0	0	0
X-ray Crystallographer	1	0	0	0	0	0	0
No Job Code	1396	306	24	10	7	2	1
Total	11374	2128	228	97	19	4	1

Remark: x represents the dose values in mSv

Table 5

**The Distribution of Finger Dose
by Job Types, 2025**

	$x \leq 1$	$1 < x \leq 10$	$10 < x \leq 100$	$100 < x \leq 200$	$200 < x \leq 500$	$x > 500$
Chemist	3	0	0	0	0	0
Dentist	0	0	0	0	0	0
Engineer	17	1	0	0	0	0
Experimental officer	2	0	0	0	0	0
Laboratory Attendant	2	0	2	0	0	0
Medical Officer	83	2	0	0	0	0
Medical Officer (Therapeutic)	11	0	0	0	0	0
Medical Technologist	1	0	0	0	0	0
Operator	3	0	0	0	0	0
Pharmacist	3	5	1	0	0	0
Physicist (Health)	2	0	0	0	0	0
Physicist (Medical)	30	0	1	0	0	0
Radiochemist	8	4	9	4	0	0
Radiographer (Diagnostic)	105	10	1	1	0	0
Radiographer (Therapeutic)	1	0	0	0	0	0
Radiologist	8	0	0	0	1	0
Research Assistant	2	1	0	0	0	0

The Distribution of Finger Dose by Job Types, 2025 (Continued)

	$x \leq 1$	$1 < x \leq 10$	$10 < x \leq 100$	$100 < x \leq 200$	$200 < x \leq 500$	$x > 500$
Safety Officer	2	0	0	0	0	0
Scientific Officer	1	0	2	0	0	0
Speech Therapist	1	0	0	0	0	0
Store Keeper	4	0	0	0	0	0
Student	2	0	0	0	0	0
Technical Officer	0	0	1	0	0	0
Technician (Electrical)	1	0	0	0	0	0
Technician (Laboratory)	3	2	1	0	0	0
Vet	1	0	0	0	0	0
Ward Attendant	4	0	0	0	0	0
No Job Code	83	2	3	1	0	0
Total	383	27	21	6	1	0

Remark: x represents the dose values in mSv

Table 6
**The Distribution of Eye Lens Dose
by Job Types, 2025**

	$x \leq 0.17$	$0.17 < x \leq 0.75$	$0.75 < x \leq 1.5$	$1.5 < x \leq 3.0$	$3.0 < x \leq 6.0$	$6.0 < x \leq 10$	$x > 10$
Laboratory Attendant	0	1	0	0	0	0	0
Medical Officer	29	2	1	0	0	0	0
Pharmacist	0	1	0	0	0	0	0
Physicist (Medical)	2	0	0	0	0	0	0
Radiologist	2	0	0	0	0	0	0
Technical Officer	0	0	1	0	0	0	0
No Job Code	19	2	1	0	0	0	0
Total	52	6	3	0	0	0	0

Remark: x represents the dose values in mSv

Table 7

**The Distribution of Whole Body Dose
by Gender, 2025**

	$x \leq 0.17$	$0.17 < x \leq 0.75$	$0.75 < x \leq 1.5$	$1.5 < x \leq 3.0$	$3.0 < x \leq 6.0$	$6.0 < x \leq 10$	$x > 10$
Male	5387	1152	135	63	15	3	1
Female	5987	976	93	34	4	1	0
Total	11374	2128	228	97	19	4	1

Remark: x represents the dose values in mSv

Table 8

**The Distribution of Finger Dose
by Gender, 2025**

	$x \leq 1$	$1 < x \leq 10$	$10 < x \leq 100$	$100 < x \leq 200$	$200 < x \leq 500$	$x > 500$
Male	302	22	19	6	1	0
Female	81	5	2	0	0	0
Total	383	27	21	6	1	0

Remark: x represents the dose values in mSv

Table 9

**The Distribution of Eye Lens Dose
by Gender, 2025**

	$x \leq 0.17$	$0.17 < x \leq 0.75$	$0.75 < x \leq 1.5$	$1.5 < x \leq 3.0$	$3.0 < x \leq 6.0$	$6.0 < x \leq 10$	$x > 10$
Male	42	5	3	0	0	0	0
Female	10	1	0	0	0	0	0
Total	52	6	3	0	0	0	0

Remark: x represents the dose values in mSv