

Radiation Dose Statistics for Nuclear Workers in FY 2025

Radiation Dose Registration Center

1. Publication of radiation dose statistics

The Radiation Dose Registration Center (RADREC) of the Radiation Effects Association assigns a unique registration number for each worker engaged in radiation work at nuclear power plants and nuclear facilities, and these radiation doses are centrally managed by the “Radiation Dose Registration System for Nuclear Workers” (hereinafter referred to as “Nuclear Registration System”). Therefore, even if the worker moves from one nuclear facility to other facilities to engage in other radiation work, the Nuclear Registration System enables us to accurately track previous radiation doses of each worker at all work sites.

Using the registered data, the RADREC publishes the statistics for fiscal year (FY, April–March) 2024 that represent the management status of radiation doses for the workers engaged in radiation work at the nuclear sites.

Since the contributions of radiation doses due to the decommissioning of Fukushima–Daiichi Nuclear Power Plant operated by Tokyo Electric Power Company were significantly large, radiation management status of the other facilities under normal operation is difficult to understand. Therefore, the statistics excluding Fukushima–Daiichi Power Plant are also published.

The radiation dose statistics for emergency work due to the accident at Fukushima–Daiichi Nuclear Power Plant after the Great East Japan Earthquake which occurred on March 11, 2011 have not been published since FY 2017.

2. List of nuclear licensees registered in Nuclear Registration System

These statistical data were based on the radiation doses registered in Nuclear Registration System by the following nuclear licensees. Names of the work sites are shown in parentheses.

- (1) Japan Atomic Energy Agency (Nuclear Science Research Institute, Nuclear Fuel Cycle Engineering Labs, Oarai–kita, Oarai–kminami, Tono, Ningyo–toge, Fugen, Monju, Aomori)
- (2) Japan Nuclear Fuel Ltd. (Enrichment and Disposal Plants, Reprocessing Plant)
- (3) Recyclable–Fuel Storage Co. (Recyclable–Fuel Storage Center)
- (4) Hokkaido Electric Power Co., Inc. (Tomari)
- (5) Tohoku Electric Power Co., Inc. (Onagawa, Higashidori)
- (6) Tokyo Electric Power Co. Holdings, Inc. (Fukushima–Daiichi, Fukushima–Daini, Kashiwazaki–Kariwa)
- (7) Chubu Electric Power Co., Inc. (Hamaoka)
- (8) Hokuriku Electric Power Co. (Shika)
- (9) The Kansai Electric Power Co., Inc. (Mihama, Takahama, Ohi)

- (10) The Chugoku Electric Power Co., Inc. (Shimane)
- (11) Shikoku Electric Power Co., Inc. (Ikata)
- (12) Kyushu Electric Power Co., Inc. (Genkai Sendai)
- (13) The Japan Atomic power Company (Tokai, Tokai No2, Tsuruga)
- (14) Nuclear Fuel Industries, Ltd. (Kumatori, Tokai)
- (15) Global Nuclear Fuel Japan Co., Ltd. (Yokosuka)
- (16) Mitsubishi Nuclear Fuel Co., Ltd. (Tokai)
- (17) JCO Co., Ltd.

3. Data compilation method

The statistical data are based on the radiation doses of the workers engaged in radiation work of the nuclear licensees that have registered in the Nuclear Registration System operated by the RADREC.

- (1) These statistical data are based on registered data provided by the nuclear licensees as of June 30, 2026
- (2) The doses compiled are the effective doses (sum of external and internal exposure).
- (3) “Maximum dose,” “collective dose,” “average dose,” and “%” were rounded to one decimal place. Some discrepancy which total percent values are other than 100% may be caused by this procedure.
- (4) The age of the workers was calculated as of March 31, 2026.
- (5) The “Total number” of radiation workers was compiled based on distinct individuals, so that workers who worked at more than one nuclear site were counted as one.

【Dose Limits for radiation workers】

The statutory dose limits for radiation workers are 100 millisieverts (mSv) over five years and 50 mSv in one year. In addition to these limits, the dose limit for female workers – excluding those who have declared no possibility of pregnancy and those who are pregnant is 5 mSv per 3 months with the dose limit above. Five-year period refers to the statutory period that started on April 1, 2001 and has been renewed every subsequent five years.

【Definition of terminology】

- (1) Radiation Worker: Worker who is designated by nuclear licensees as a radiation worker based on the “Law for the Regulation of Nuclear Source Material, Nuclear Fuel Material, and Reactors,” whose core occupation is in radiation control areas, excluding people who enter radiation control areas occasionally.
- (2) Exposure doses: Exposure doses of workers engaged in radiation work at nuclear facilities registered in RADREC are compiled as fiscal year data.
- (3) Five-year exposure doses: Exposure doses accumulated in the statutory five-year period to manage long-term dose limit. The first period started on April 1, 2001, with exposure doses accumulating every subsequent five years.

- (4) Number of work sites in a year: Number of work sites in a year means the number of nuclear sites where workers were engaged in radiation work during the fiscal year when the statistical data were compiled. The total number of work sites in FY 2025 is 35. Even if the worker was engaged in radiation work at one nuclear site several times in a year, that is counted as one work site.
- (5) Number of work sites in five years: Number of work sites in five years means the number of nuclear sites where workers were engaged in radiation work during the period of statistical data compilation (FY 2021–2025).

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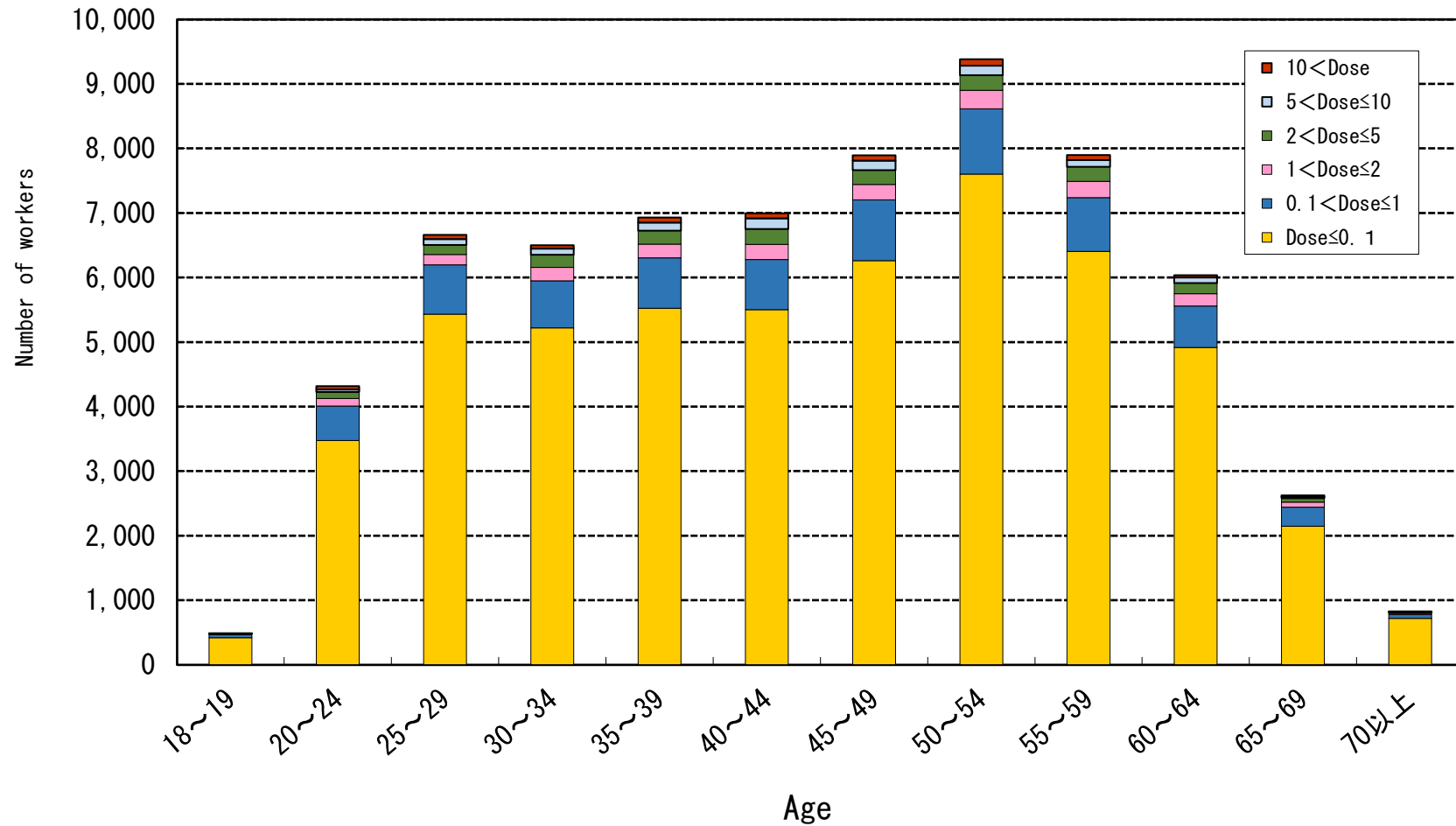
1. Dose Distribution of Workers by Age {FY 2025}

Dose (mSv) Age	Number of workers									Dose		
	Dose≤0.1	0.1<Dose ≤1	1<Dose ≤2	2<Dose ≤5	5<Dose ≤10	10<Dose ≤15	15<Dose ≤20	20< Dose	Total No. of workers (%)	Collective dose (person・mSv)	Mean (mSv)	Max (mSv)
18～19	421	49	2	10	2	3	0	0	487 (0.7)	106.8	0.2	13.4
20～24	3,475	535	118	100	39	49	2	0	4,318 (6.5)	1,663.1	0.4	15.5
25～29	5,434	762	162	148	89	59	7	0	6,661 (10.0)	2,596.5	0.4	16.6
30～34	5,220	727	211	193	97	51	3	0	6,502 (9.8)	2,671.7	0.4	15.5
35～39	5,522	783	212	208	125	75	5	0	6,930 (10.4)	3,259.0	0.5	16.5
40～44	5,502	777	234	238	164	75	6	0	6,996 (10.5)	3,689.5	0.5	16.5
45～49	6,262	940	241	222	145	70	12	0	7,892 (11.9)	3,660.1	0.5	16.7
50～54	7,602	1,013	284	236	148	84	13	0	9,380 (14.1)	3,964.8	0.4	16.9
55～59	6,406	830	253	226	106	63	12	0	7,896 (11.9)	3,264.9	0.4	16.8
60～64	4,918	641	190	163	88	26	9	0	6,035 (9.1)	2,199.8	0.4	16.9
65～69	2,149	293	77	61	26	11	7	0	2,624 (3.9)	878.6	0.3	19.8
70以上	718	62	19	17	5	3	4	0	828 (1.2)	258.5	0.3	16.2
Total No. of workers (%)	53,629 (80.6)	7,412 (11.1)	2,003 (3.0)	1,822 (2.7)	1,034 (1.6)	569 (0.9)	80 (0.1)	0 (0.0)	66,549 (100.0)	—	—	—
Collective Dose (person・mSv)	357.5	3,315.9	2,903.2	5,914.1	7,393.1	7,065.5	1,263.9	0.0	—	28,213.2	0.4	19.8

[Notes]

- How to read the numbers in table above:The number "162" in the box for the age row of "25～29" and the dose column of "1<Dose≤2" means that there were 162 workers between age 25 and 29 inclusive whose radiation doses were in the range of greater than 1 and less than or equal to 2 millisieverts in FY 2022.
- The workers' ages are calculated as of March 31, 2026.

2. Dose Distribution of Workers by Age {FY 2025}



* This figure is based on the data in the Table 1 "Dose Distributin of Workers by Age {FY 2025}".

3. Dose Distribution of Workers by Age{FY 2025}

(Excluding the Data for Fukushima-Daiichi Nuclear Power Plant)

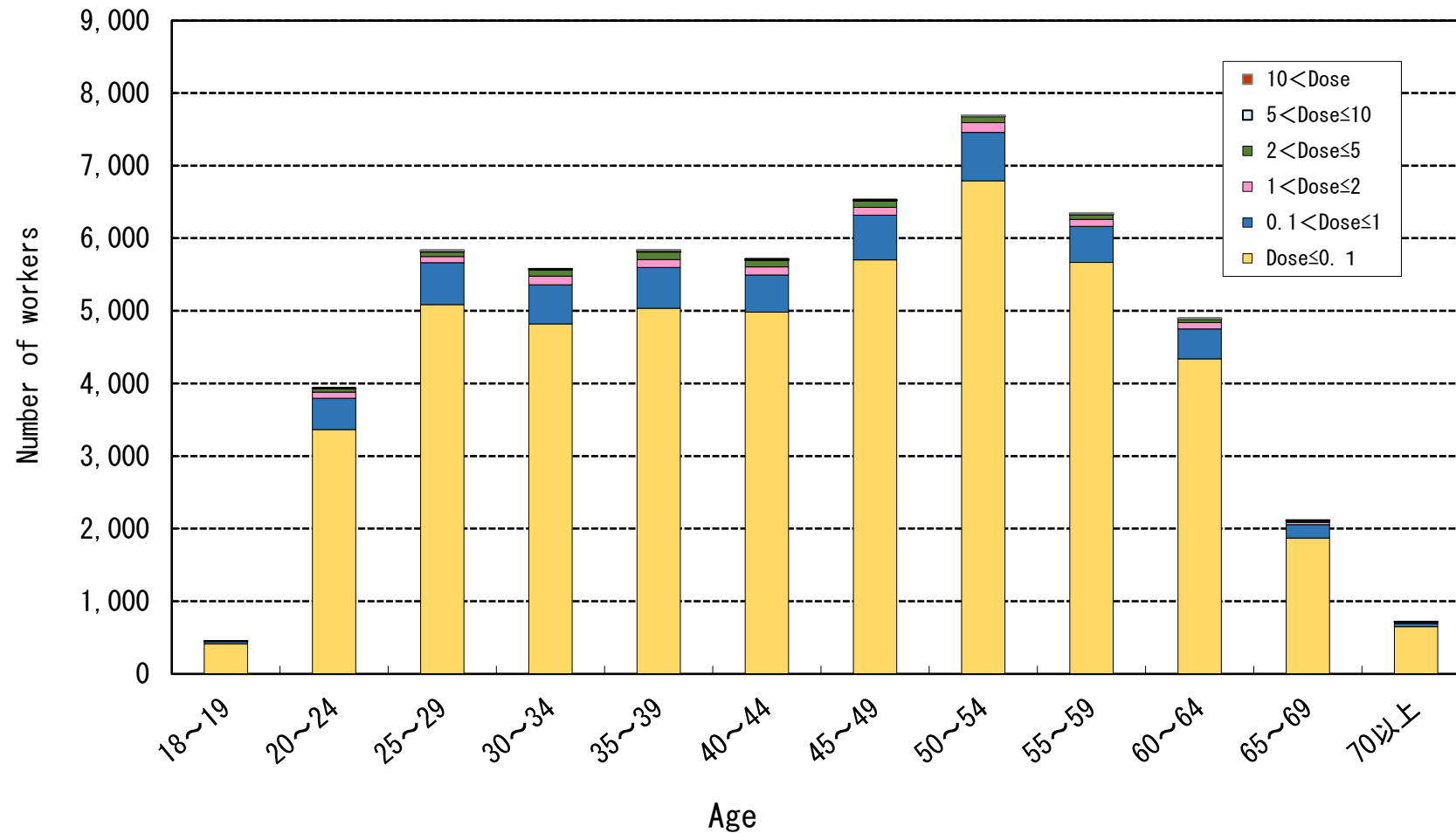
Dose (mSv) Age	Number of workers									Dose		
	Dose≤0.1	0.1<Dose ≤1	1<Dose ≤2	2<Dose ≤5	5<Dose ≤10	10<Dose ≤15	15<Dose ≤20	20< Dose	Total No. of workers (%)	Collective dose (person・mSv)	Mean (mSv)	Max (mSv)
18～19	410	36	1	3	2	0	0	0	452 (0.8)	38.8	0.1	5.6
20～24	3,364	433	84	52	4	0	0	0	3,937 (7.1)	514.3	0.1	6.1
25～29	5,085	577	87	66	19	1	1	0	5,836 (10.5)	772.6	0.1	15.4
30～34	4,818	541	120	87	13	0	0	0	5,579 (10.0)	800.3	0.1	9.6
35～39	5,035	561	111	107	21	2	2	0	5,839 (10.5)	969.5	0.2	16.5
40～44	4,981	512	111	95	19	0	0	0	5,718 (10.3)	805.2	0.1	6.9
45～49	5,700	619	107	90	17	0	0	0	6,533 (11.7)	852.7	0.1	9.7
50～54	6,792	667	135	81	15	1	0	0	7,691 (13.8)	864.0	0.1	11.8
55～59	5,668	497	95	66	14	3	0	0	6,343 (11.4)	731.4	0.1	14.0
60～64	4,337	414	88	45	12	0	1	0	4,897 (8.8)	553.4	0.1	15.7
65～69	1,871	182	31	22	9	0	0	0	2,115 (3.8)	259.3	0.1	8.7
70以上	648	44	14	10	1	0	0	0	717 (1.3)	81.4	0.1	8.2
Total No. of workers (%)	48,709 (87.5)	5,083 (9.1)	984 (1.8)	724 (1.3)	146 (0.3)	7 (0.0)	4 (0.0)	0 (0.0)	55,657 (100.0)	—	—	—
Collective Dose (person・mSv)	279.8	2,157.0	1,433.5	2,260.9	962.1	86.9	62.7	0.0	—	7,242.8	0.1	16.5

[Notes]

- This table was compiled by excluding the data for Fukushima-Daiichi Nuclear Power Plant. The exposure dose data of workers at Fukushima Daiichi Nuclear Power Plant are shown in website of Tokyo Electric Power Company Holdings, Inc.
- How to read the numbers in table above: The number "87" in the box for the age row of "25～29" and the dose column of "1<Dose≤2" means that there were 87 workers between age 25 and 29 inclusive whose radiation doses were in the range of greater than 1 and less than or equal to 2 mSv in FY 2025.
- The workers' ages are calculated as of March 31, 2026.

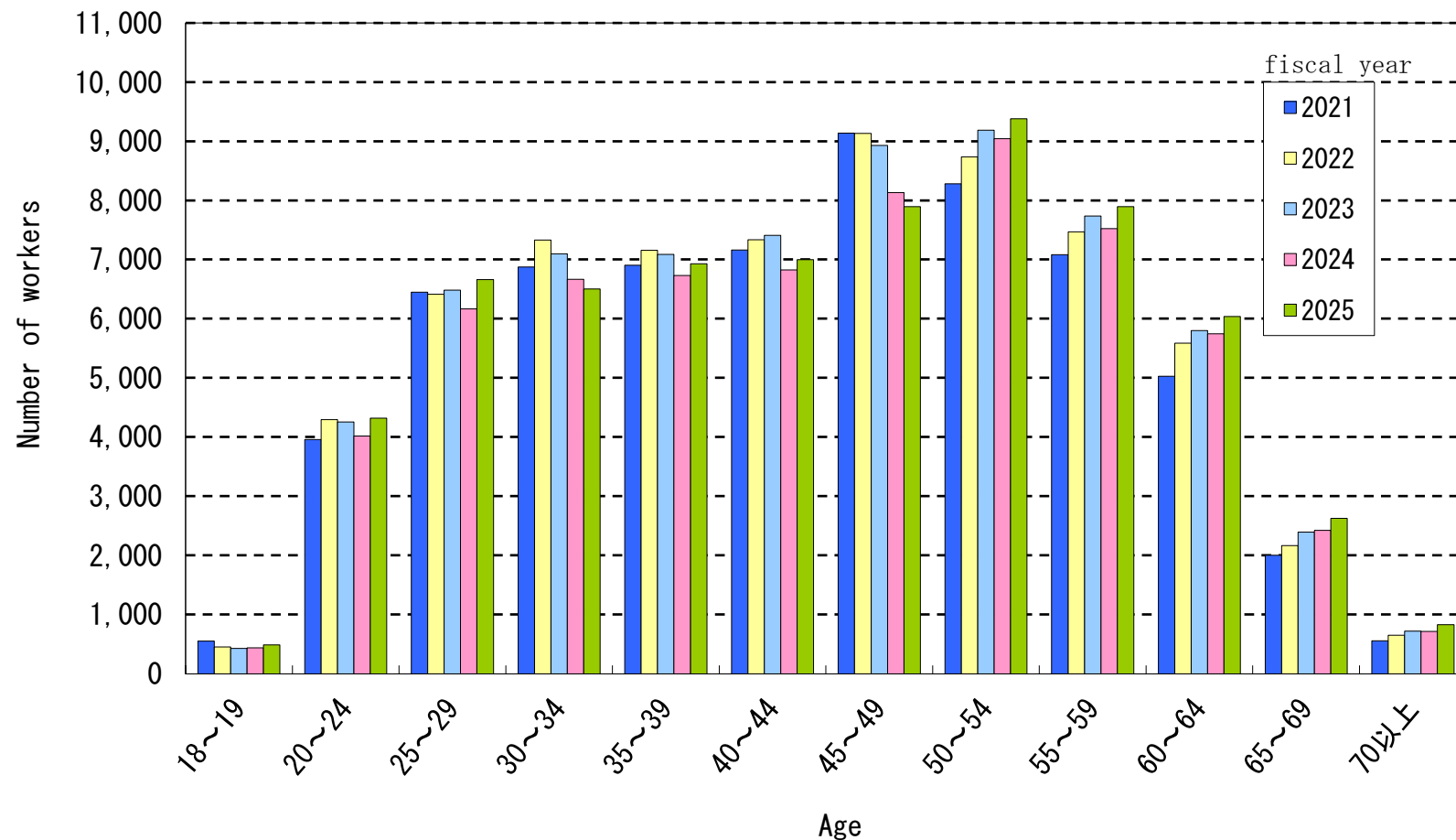
4. Dose Distribution of Workers by Age {FY 2025}

(Excluding the Data for Fukushima-Daiichi Nuclear Power Plant)



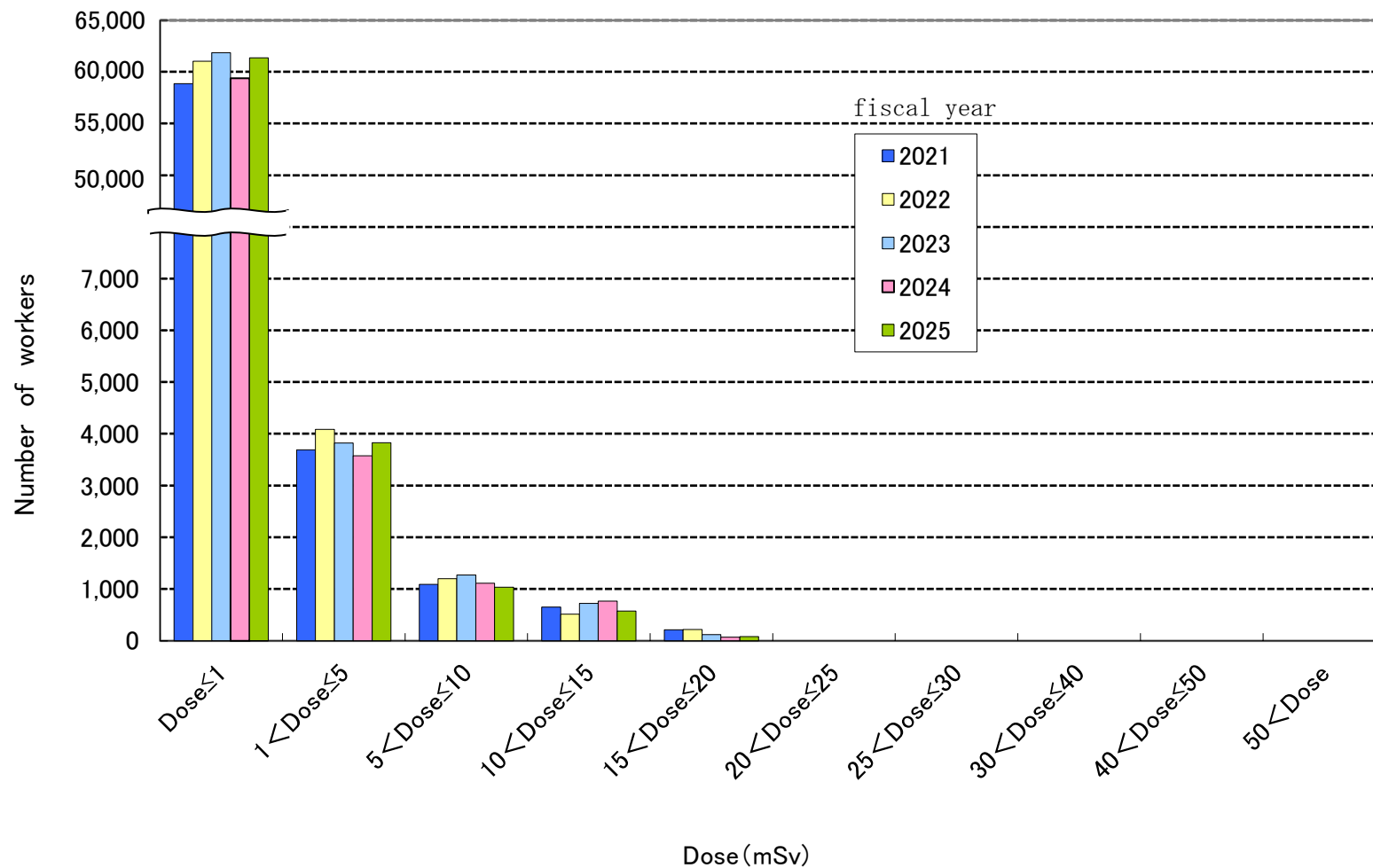
* This figure is based on the data in the Table 3 "Dose Distribution of Workers by Age {FY 2025} (Excluding the data for Fukushima-Daiichi Nuclear Power Plant)".

5. Annual Trends of Number of Workers by Age {FY 2021—2025}



* This figure is based on the data in the Table 1 "Dose Distributin of Workers by Age {FY 2025}" and those of the latest four years {FY 2021—2024}.

6. Annual Trends of Number of Workers by Dose Range {FY 2021—2025}



* This figure is based on the data in the Table 1 "Dose Distributin of Workers by Age {FY 2025}" and those of the latest four years {FY 2021—2024}.

7. Dose Distribution of Workers by Gender {FY 2025}

Gender Dose (mSv)	Male (%)	Female (%)	Total No. of workers (%)	Collective dose (person·mSv) (%)
Dose ≤ 0.1	52,023 (80.1)	1,606 (97.9)	53,629 (80.6)	357.5 (1.3)
$0.1 < \text{dose} \leq 1$	7,380 (11.4)	32 (2.0)	7,412 (11.1)	3,315.9 (11.8)
$1 < \text{dose} \leq 2$	2,001 (3.1)	2 (0.1)	2,003 (3.0)	2,903.2 (10.3)
$2 < \text{dose} \leq 5$	1,821 (2.8)	1 (0.1)	1,822 (2.7)	5,914.1 (21.0)
$5 < \text{dose} \leq 10$	1,034 (1.6)	0 (0.0)	1,034 (1.6)	7,393.1 (26.2)
$10 < \text{Dose} \leq 15$	569 (0.9)	0 (0.0)	569 (0.9)	7,065.5 (25.0)
$15 < \text{Dose} \leq 20$	80 (0.1)	0 (0.0)	80 (0.1)	1,263.9 (4.5)
$20 < \text{Dose}$	0 (0.0)	0 (0.0)	0 (0.0)	0.0 (0.0)
Total No. of workers (%)	64,908 (100.0)	1,641 (100.0)	66,549 (100.0)	—
Total No. of workers Ratio of man and female(%)	97.5	2.5	100.0	—
Collective dose (person · mSv) (%)	28,190.4 (99.9)	22.9 (0.1)	—	28,213.2 (100.0)
Mean dose (mSv)	0.4	0.0	0.4	—
Max dose (mSv)	19.8	3.1	19.8	—

[Notes]

- How to read the numbers in table above : The number "2,001 " in the box of the dose row " $1 < \text{Dose} \leq 2$ " and the "Male" column means that there were 2,001 man workers whose radiation doses were in the range of greater than 1 and less than or equal to 2 mSv in FY 2025.

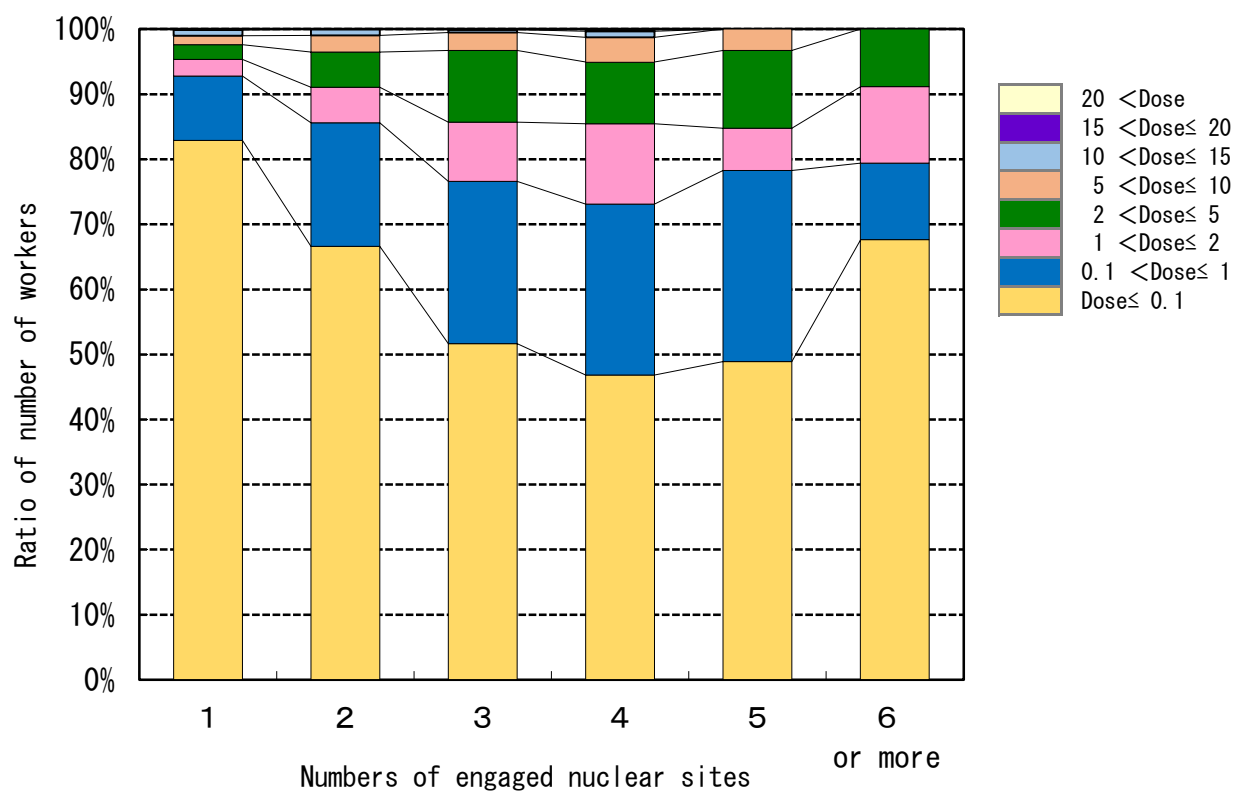
8. Dose Distribution of Workers by Number of Work Sites{FY 2025}

No. of Work sites Dose (mSv)	Number of workers						Total No. of workers (%)
	1	2	3	4	5	6 or more	
Dose ≤ 0.1	48,657	4,126	630	148	45	23	53,629 (80.6)
$0.1 < \text{Dose} \leq 1$	5,817	1,177	304	83	27	4	7,412 (11.1)
$1 < \text{Dose} \leq 2$	1,503	340	111	39	6	4	2,003 (3.0)
$2 < \text{Dose} \leq 5$	1,308	336	134	30	11	3	1,822 (2.7)
$5 < \text{Dose} \leq 10$	829	156	34	12	3	0	1,034 (1.6)
$10 < \text{Dose} \leq 15$	503	58	5	3	0	0	569 (0.9)
$15 < \text{Dose} \leq 20$	76	2	1	1	0	0	80 (0.1)
$20 < \text{Dose}$	0	0	0	0	0	0	0 (0.0)
Total No. of workers (%)	58,693 (88.2)	6,195 (9.3)	1,219 (1.8)	316 (0.5)	92 (0.1)	34 (0.1)	66,549 (100.0)
Mean dose (mSv)	0.4	0.6	0.9	1.1	0.9	0.5	0.4

[Notes]

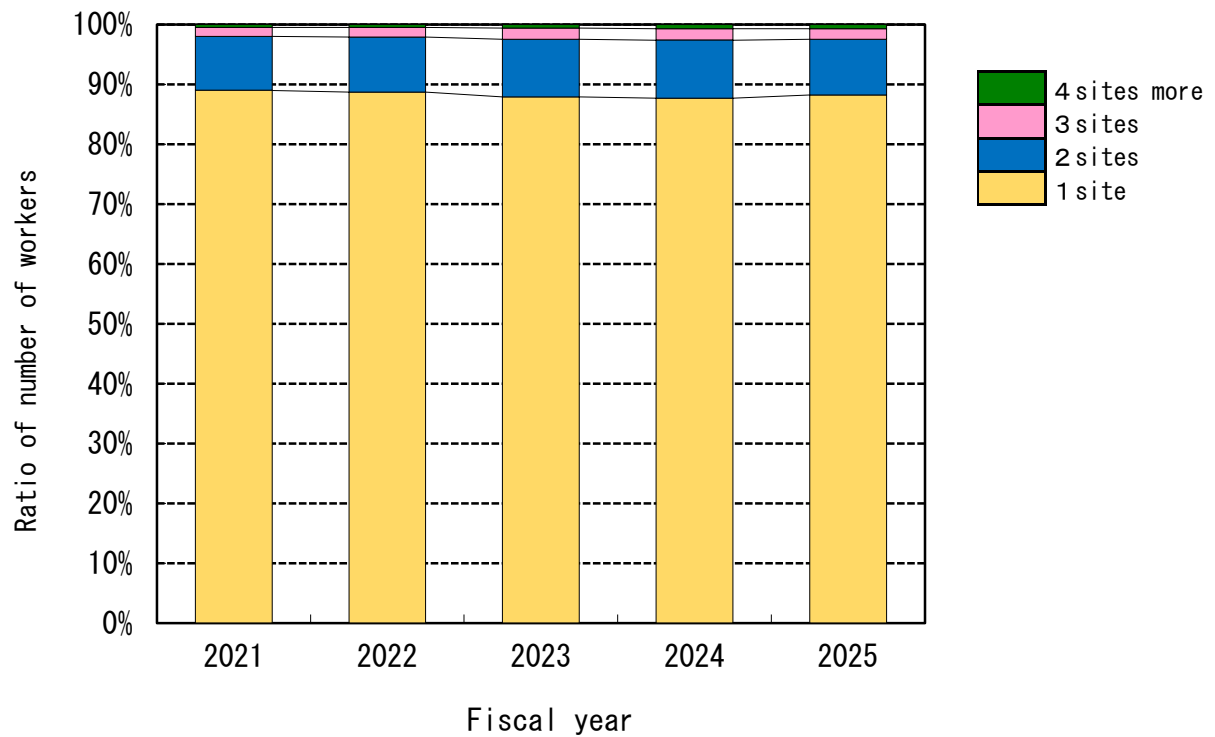
- How to read the numbers in table above : The number "45" in the box for the dose row of "Dose ≤ 0.1 " and the No. of work sites of "5" column means that there were 45 workers who were engaged in five work sites and whoes radiation doses were less than 5 mSv in FY 2025.

9. Ratio of Number of Workers by Number of Work Sites {FY 2025}



* This figure is based on the data in the Table 8 "Dose Distribution of Workers by Number of Work Sites {FY 2025}".

10. Annual Trends of Ratio of Workers by Number
of Work Sites {FY 2021—2025}



* This figure is based on the data in the Table 8 "Dose Distribution of Workers by Number of Work Sites {FY 2025}" and those of the latest four years {FY 2021—2024}.

11. Dose Distribution of Workers by Number of Work Sites {FY 2025}
(Excluding the Data for Fukushima-Daiichi Nuclear Power Plant)

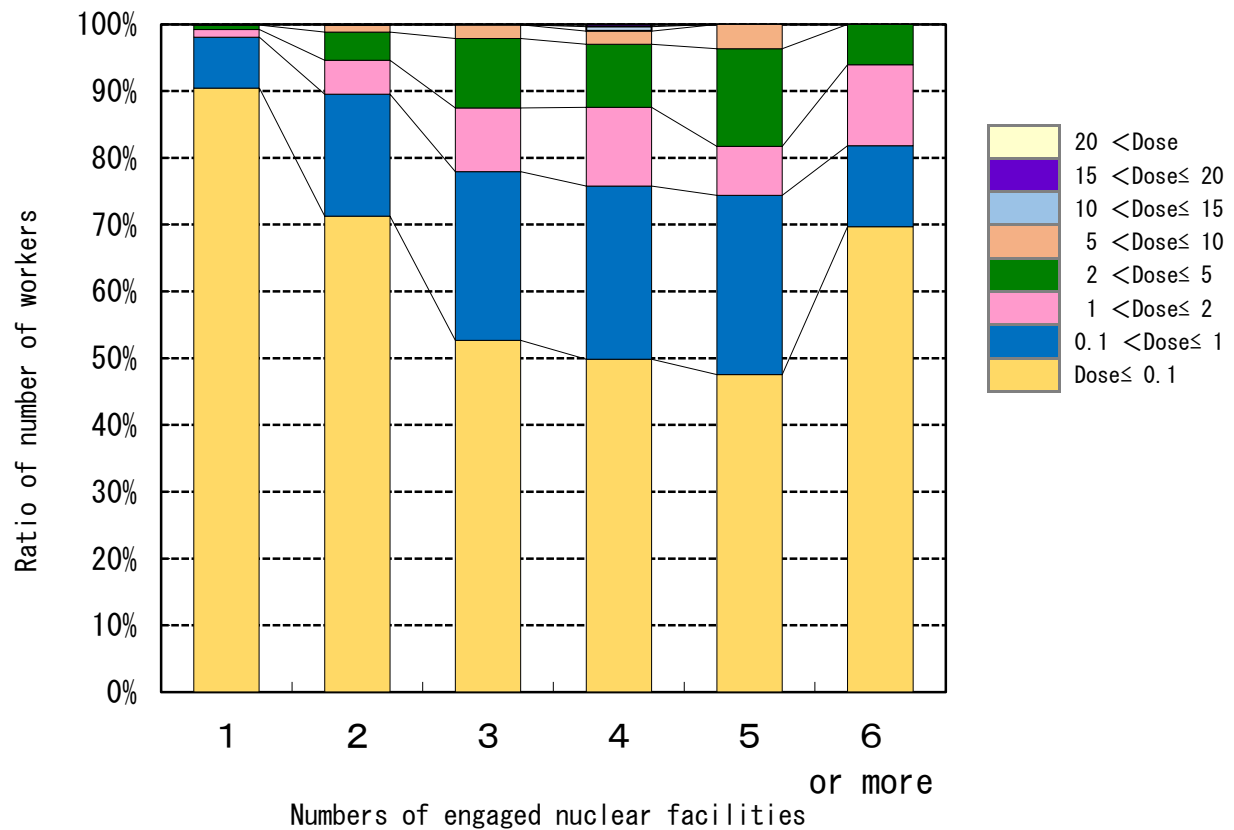
Dose (mSv) \ No. of Work sites	Number of workers						Total No. of workers (%)
	1	2	3	4	5	6 or more	
Dose $\leq$ 0.1	44,057	3,858	584	148	39	23	48,709 (87.5)
0.1 < Dose $\leq$ 1	3,711	989	280	77	22	4	5,083 (9.1)
1 < Dose $\leq$ 2	559	274	106	35	6	4	984 (1.8)
2 < Dose $\leq$ 5	337	230	115	28	12	2	724 (1.3)
5 < Dose $\leq$ 10	55	59	23	6	3	0	146 (0.3)
10 < Dose $\leq$ 15	1	4	0	2	0	0	7 (0.0)
15 < Dose $\leq$ 20	1	1	1	1	0	0	4 (0.0)
20 < Dose	0	0	0	0	0	0	0 (0.0)
Total No. of workers (%)	48,721 (87.6)	5,415 (9.7)	1,109 (2.0)	297 (0.5)	82 (0.1)	33 (0.1)	55,657 (100.0)
Mean dose (mSv)	0.1	0.4	0.7	0.9	1.0	0.4	0.1

[Notes]

- This table was compiled by excluding the data for Fukushima-Daiichi Nuclear Power Plant. The dose data of workers at Fukushima-Daiichi Nuclear Power Plant are shown in HP of Tokyo Electric Power Company Holdings, Inc.
- How to read the numbers in table above : The number "39" in the box for the dose row of "Dose $\leq$ 0.1" and the No. of work sites of "5" column means that there were 39 workers who were engaged in five nuclear sites and whose radiation doses were less than 0.1 mSv in FY 2025.

12. Dose Distribution of Workers by Number of Work Sites {FY 2025}

(Excluding the Data for Fukushima-Daiichi Nuclear Power Plant)



* This figure is based on the data in the Table 11 "Dose Distribution of Workers by Number of Work Sites {FY 2025}".

13. Transient Dose Distribution of Workers by Number of Work Sites
in Latest five Years {FY 2021–2025}

No. of work sites in five years Dose (mSv)	Number of workers								Total No. of workers (%)
	1	2	3	4	5	6	7	8 or more	
Dose ≤ 1	74, 645	13, 367	3, 669	1, 251	424	167	80	71	93, 674 (85. 4)
1 < Dose ≤ 5	4, 757	1, 817	899	469	221	109	57	33	8, 362 (7. 6)
5 < Dose ≤ 10	1, 772	636	275	154	84	47	22	11	3, 001 (2. 7)
10 < Dose ≤ 15	1, 146	307	143	94	38	21	14	8	1, 771 (1. 6)
15 < Dose ≤ 20	612	180	77	25	15	12	3	1	925 (0. 8)
20 < Dose ≤ 25	404	110	37	20	7	7	1	3	589 (0. 5)
25 < Dose ≤ 30	314	99	31	3	2	2	5	1	457 (0. 4)
30 < Dose ≤ 40	341	97	22	8	7	2	2	2	481 (0. 4)
40 < Dose ≤ 50	187	56	11	4	0	0	0	0	258 (0. 2)
50 < Dose ≤ 60	112	27	4	1	0	0	0	0	144 (0. 1)
60 < Dose ≤ 70	49	8	2	0	0	0	0	0	59 (0. 1)
70 < Dose ≤ 80	19	0	0	0	0	0	0	0	19 (0. 0)
80 < Dose ≤ 90	0	0	0	0	0	0	0	0	0 (0. 0)
90 < Dose ≤ 100	0	0	0	0	0	0	0	0	0 (0. 0)
100< Dose	0	0	0	0	0	0	0	0	0 (0. 0)
Total no. of workers (%)	84, 358 (76. 9)	16, 704 (15. 2)	5, 170 (4. 7)	2, 029 (1. 8)	798 (0. 7)	367 (0. 3)	184 (0. 2)	130 (0. 1)	109, 740 (100. 0)
Mean dose (mSv)	1. 2	1. 8	2. 1	2. 6	3. 1	3. 8	4. 3	3. 5	1. 4

[Notes]

- The statutory dose limits for radiation workers are 100 mSv per five years and 50 mSv per year. Five-year period started from April 2001, so that FY 2021–2025 data are given above.
- How to read the numbers in table above : The number "154" in the box for the dose row of "5< Dose ≤10" and in column of the No. of work sites in three years of "4"column means that there were 154 workers who engaged in radiation works at four work sites in five years and whose radiation doses were greater than 5 and less than or equal to 10 mSv from FY 2021 to 2025.