

Exposure Dose Distribution of the Workers at Fukushima Daiichi Nuclear Power Plant

(Updated on 28 Oct 2022)

1 Radiation Exposure Dose Distributions

(1) The distribution of external exposure dose of the workers during the last 3 months

(Numbers of workers who entered each area every month)

Effective dose (E) mSv	July-2022			August-2022			September-2022		
	TEPCO	Contractors	Total	TEPCO	Contractors	Total	TEPCO	Contractors	Total
100<E	0	0	0	0	0	0	0	0	0
75<E≤100	0	0	0	0	0	0	0	0	0
50<E≤75	0	0	0	0	0	0	0	0	0
20<E≤50	0	0	0	0	0	0	0	0	0
10<E≤20	0	0	0	0	0	0	0	0	0
5<E≤10	0	18	18	0	8	8	0	27	27
1<E≤5	15	495	510	11	354	365	9	540	549
E≤1	992	5593	6585	1013	5677	6690	1066	5754	6820
Total	1007	6106	7113	1024	6039	7063	1075	6321	7396
Maximum (mSv)	4.37	10.00	10.00	1.49	6.35	6.35	4.48	7.65	7.65
Average (mSv)	0.09	0.32	0.29	0.07	0.23	0.21	0.08	0.32	0.28

(*) Exposure doses and the number of workers are subject to change due to the replacement of accumulated doses measured using PAD with monthly doses measured using an integrating dosimeter and the reflection of values for workers wearing only an integrating dosimeter (e.g., workers working only within a seismically isolated building).

(2) Combined Cumulative Effective Dose from April 2021 (Internal and External)

Effective dose (E) mSv	April 2021 - August2022			April 2021 - September2022			Difference		
	TEPCO	Contractors	Total	TEPCO	Contractors	Total	TEPCO	Contractors	Total
100<E	0	0	0	0	0	0	0	0	0
75<E≤100	0	0	0	0	0	0	0	0	0
50<E≤75	0	0	0	0	0	0	0	0	0
20<E≤50	0	128	128	0	180	180	0	52	52
10<E≤20	30	1085	1115	33	1115	1148	3	30	33
5<E≤10	74	1050	1124	75	1080	1155	1	30	31
1<E≤5	257	2385	2642	266	2429	2695	9	44	53
E≤1	1138	5484	6622	1144	5629	6773	6	145	151
Total	1499	10132	11631	1518	10433	11951	19	301	320
Maximum (mSv)	18.01	26.78	26.78	18.28	30.25	30.25	-	-	-
Average (mSv)	1.11	3.24	2.96	1.16	3.34	3.06	-	-	-

(*) Exposure doses and the number of workers are subject to change due to the replacement of accumulated doses measured using PAD with monthly doses measured using an integrating dosimeter and the reflection of values for workers wearing only an integrating dosimeter (e.g., workers working only within a seismically isolated building).

(3) Combined Cumulative Effective Dose from April 2022

Effective dose (E) mSv	April 2022-August 2022			April 2022-September 2022			Difference		
	TEPCO	Contractors	Total	TEPCO	Contractors	Total	TEPCO	Contractors	Total
100<E	0	0	0	0	0	0	0	0	0
75<E≤100	0	0	0	0	0	0	0	0	0
50<E≤75	0	0	0	0	0	0	0	0	0
20<E≤50	0	0	0	0	0	0	0	0	0
10<E≤20	0	19	19	0	79	79	0	60	60
5<E≤10	5	437	442	10	591	601	5	154	159
1<E≤5	147	1681	1828	160	1832	1992	13	151	164
E≤1	1142	5528	6670	1157	5562	6719	15	34	49
Total	1294	7665	8959	1327	8064	9391	33	399	432
Maximum (mSv)	7.77	15.38	15.38	8.24	16.32	16.32	-	-	-
Average (mSv)	0.39	1.11	1.00	0.45	1.30	1.18	-	-	-

(*) Exposure doses and the number of workers are subject to change due to the replacement of accumulated doses measured using PAD with monthly doses measured using an integrating dosimeter and the reflection of values for workers wearing only an integrating dosimeter (e.g., workers working only within a seismically isolated building).

(4) Distribution of sum of external exposure dose and internal exposure dose of workers engaged in specified high-dose work

(Specified high-dose work has not been performed since October 2015.)

Effective dose (E) mSv	March 2011 - September 2015
100<E	1
75<E≤100	191
50<E≤75	233
20<E≤50	267
10<E≤20	186
5<E≤10	129
1<E≤5	145
E≤1	51
Total	1203
Maximum (mSv)	102.69
Average (mSv)	36.49

(As specified high-dose work has not been performed since October 2015, the table shows the data up to September 2015.)

(*) Workers engaged in work to which dose limit (100 mSv) during emergency work is applied in line with Article 7 of the Ordinance on Prevention of Ionizing Radiation Hazards.

Specifically, these workers are those who are engaged in work to maintain the functions of a nuclear reactor facility or spent fuel storage pool, or in work to maintain functions to suppress or prevent the possible release of a large amount of radioactive materials due to a failure of or damage to the nuclear reactor facility at a location around the nuclear reactor facility, steam turbine, or accessory facility where hourly dose may exceed 0.1 mSv.

It should be noted that only TEPCO employees have so far been engaged in specified high-dose work.

- (*) The number of workers engaged in specified high-dose work is that of workers who were registered as such at least once during the period between March 2011 and September 2015.
- (*) Exposure doses and the number of workers are subject to change due to the replacement of accumulated doses measured using PAD with monthly doses measured using an integrating dosimeter and the reflection of values for workers wearing only an integrating dosimeter (e.g., workers working only within a seismically isolated building).
- (*) The results of re-evaluating committed doses in March 2011 reveal that maximum cumulative effective doses for the period between March 2011 and September 2015 exceeded 100.