

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

(Updated on 29 Nov 2024)

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	August-2024			September-2024			October-2024		
	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	2	2	0	0	0	0	0	0
5<E≤10	0	25	25	0	10	10	0	55	55
1<E≤5	13	347	360	10	378	388	17	558	575
E≤1	965	6084	7049	982	6147	7129	989	6292	7281
Total	978	6458	7436	992	6535	7527	1006	6905	7911
Maximum (mSv)	2.70	11.10	11.10	1.90	7.90	7.90	3.99	8.78	8.78
Average (mSv)	0.07	0.23	0.21	0.07	0.22	0.20	0.10	0.33	0.30

(*) 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 - September 2024			April 2021 - October 2024			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	40	40	0	47	47	0	7	7
20<E≤50	27	1174	1201	28	1205	1233	1	31	32
10<E≤20	65	1795	1860	67	1822	1889	2	27	29
5<E≤10	125	1622	1747	124	1661	1785	-1	39	38
1<E≤5	366	2762	3128	373	2830	3203	7	68	75
E≤1	1301	8502	9803	1301	8616	9917	0	114	114
Total	1884	15895	17779	1893	16181	18074	9	286	295
Maximum (mSv)	32.22	59.42	59.42	32.44	61.01	61.01	-	-	-
Average (mSv)	1.90	5.21	4.86	1.94	5.26	4.91	-	-	-

(*) 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 2024

Effective dose (E) mSv	April 2024 - September 2024			April 2024 - October 2024			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	116	116	0	216	216	0	100	100
5<E≤10	9	561	570	19	654	673	10	93	103
1<E≤5	110	1463	1573	130	1658	1788	20	195	215
E≤1	1207	6532	7739	1194	6585	7779	-13	53	40
Total	1326	8672	9998	1343	9113	10456	17	441	458
Maximum (mSv)	7.50	15.50	15.50	8.63	15.82	15.82	-	-	-
Average (mSv)	0.33	1.16	1.05	0.40	1.35	1.23	-	-	-

(*) 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.