

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

(Updated on 29 Nov 2023)

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-2023			September-2023			October-2023		
	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	1	1	0	1	1
5<E≤10	0	12	12	0	39	39	0	47	47
1<E≤5	4	326	330	11	520	531	15	616	631
E≤1	1029	6045	7074	1045	6084	7129	1055	6121	7176
Total	1033	6383	7416	1056	6644	7700	1070	6785	7855
Maximum (mSv)	2.60	7.60	7.60	3.60	10.30	10.30	4.03	10.42	10.42
Average (mSv)	0.05	0.21	0.19	0.07	0.32	0.29	0.07	0.35	0.32

(*) 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 2023			April 2021 - October 2023			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	13	757	770	13	803	816	0	46	46
10<E≤20	49	1442	1491	52	1501	1553	3	59	62
5<E≤10	102	1389	1491	100	1407	1507	-2	18	16
1<E≤5	328	2561	2889	332	2583	2915	4	22	26
E≤1	1228	7210	8438	1231	7360	8591	3	150	153
Total	1720	13359	15079	1728	13654	15382	8	295	303
Maximum (mSv)	24.92	47.41	47.41	27.55	48.85	48.85	-	-	-
Average (mSv)	1.56	4.50	4.16	1.60	4.57	4.24	-	-	-

(*) 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 2023

Effective dose (E) mSv	April 2023 - September 2023			April 2023 - October 2023			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	235	235	0	351	351	0	116	116
5<E≤10	4	647	651	8	732	740	4	85	89
1<E≤5	106	1546	1652	132	1684	1816	26	138	164
E≤1	1242	6268	7510	1224	6343	7567	-18	75	57
Total	1352	8696	10048	1364	9110	10474	12	414	426
Maximum (mSv)	7.60	16.20	16.20	9.81	16.27	16.27	-	-	-
Average (mSv)	0.29	1.43	1.28	0.35	1.63	1.46	-	-	-

(*) 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.