

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

(Updated on 27 Dec 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	September-2023			October-2023			November-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	1	1	0	1	1	0	4	4
5<E≤10	0	39	39	0	45	45	0	69	69
1<E≤5	11	520	531	13	612	625	9	498	507
E≤1	1045	6084	7129	1057	6127	7184	1043	6316	7359
Total	1056	6644	7700	1070	6785	7855	1052	6887	7939
Maximum (mSv)	3.60	10.30	10.30	3.90	10.10	10.10	2.92	12.11	12.11
Average (mSv)	0.07	0.32	0.29	0.07	0.36	0.32	0.07	0.34	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 - October 2023			April 2021 - November 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	803	816	15	839	854	2	36	38
10<E≤20	52	1498	1550	52	1538	1590	0	40	40
5<E≤10	100	1416	1516	102	1489	1591	2	73	75
1<E≤5	332	2575	2907	336	2580	2916	4	5	9
E≤1	1231	7362	8593	1233	7459	8692	2	97	99
Total	1728	13654	15382	1738	13905	15643	10	251	261
Maximum (mSv)	27.52	48.72	48.72	28.04	49.77	49.77	-	-	-
Average (mSv)	1.60	4.58	4.24	1.63	4.66	4.33	-	-	-

(*) 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 - October 2023			April 2023 - November 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	345	345	1	468	469	1	123	124
5<E≤10	8	738	746	12	828	840	4	90	94
1<E≤5	130	1649	1779	146	1772	1918	16	123	139
E≤1	1226	6378	7604	1218	6407	7625	-8	29	21
Total	1364	9110	10474	1377	9475	10852	13	365	378
Maximum (mSv)	9.70	16.20	16.20	10.15	16.39	16.39	-	-	-
Average (mSv)	0.35	1.64	1.47	0.40	1.82	1.64	-	-	-

(*) 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.