

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

(Updated on 29 Feb 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	November-2023			December-2023			January-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	1	1	0	2	2	0	0	0
5<E≤10	0	61	61	0	61	61	0	18	18
1<E≤5	9	499	508	17	522	539	9	414	423
E≤1	1059	6326	7385	1037	6378	7415	984	6423	7407
Total	1068	6887	7955	1054	6963	8017	993	6855	7848
Maximum (mSv)	2.90	11.60	11.60	3.70	10.20	10.20	2.02	7.59	7.59
Average (mSv)	0.07	0.34	0.30	0.08	0.33	0.29	0.06	0.24	0.22

(*) 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 - December 2023			April 2021 - January 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	1	1	0	1	1	0	0	0
20<E≤50	19	882	901	21	922	943	2	40	42
10<E≤20	50	1575	1625	50	1594	1644	0	19	19
5<E≤10	101	1517	1618	101	1551	1652	0	34	34
1<E≤5	343	2599	2942	349	2642	2991	6	43	49
E≤1	1230	7565	8795	1226	7608	8834	-4	43	39
Total	1743	14139	15882	1747	14318	16065	4	179	183
Maximum (mSv)	29.42	50.52	50.52	30.37	50.53	50.53	-	-	-
Average (mSv)	1.68	4.75	4.41	1.71	4.81	4.47	-	-	-

(*) 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 - December 2023			April 2023 - January 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	1	547	548	2	609	611	1	62	63
5<E≤10	20	955	975	24	1026	1050	4	71	75
1<E≤5	145	1843	1988	156	1985	2141	11	142	153
E≤1	1217	6413	7630	1210	6396	7606	-7	-17	-24
Total	1383	9758	11141	1392	10016	11408	9	258	267
Maximum (mSv)	10.30	16.50	16.50	10.62	16.76	16.76	-	-	-
Average (mSv)	0.46	2.00	1.81	0.50	2.12	1.92	-	-	-

(*) 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.