

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

(Updated on 24 April 2020)

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	January 2020			February 2020			March 2020		
	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	10	10	0	4	4
5<E≤10	0	54	54	0	61	61	0	46	46
1<E≤5	10	558	568	15	740	755	17	788	805
E≤1	982	5239	6221	918	5208	6126	900	5223	6123
Total	992	5852	6844	933	6019	6952	917	6061	6978
Maximum (mSv)	2.07	10.01	10.01	2.96	11.07	11.07	1.86	14.28	14.28
Average (mSv)	0.09	0.39	0.35	0.11	0.49	0.44	0.13	0.46	0.42

(*) 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 2016 (Internal and External)

Effective dose (E) mSv	April 2016 - February 2020			April 2016 - March 2020			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	12	12	0	13	13	0	1	1
50<E≤75	0	207	207	0	222	222	0	15	15
20<E≤50	63	1704	1767	67	1740	1807	4	36	40
10<E≤20	134	2278	2412	140	2324	2464	6	46	52
5<E≤10	187	2382	2569	182	2373	2555	-5	-9	-14
1<E≤5	592	4548	5140	597	4559	5156	5	11	16
E≤1	1304	9328	10632	1296	9437	10733	-8	109	101
Total	2280	20459	22739	2282	20668	22950	2	209	211
Maximum (mSv)	45.00	79.90	79.90	46.61	79.90	79.90	-	-	-
Average (mSv)	2.91	6.29	5.95	2.96	6.36	6.02	-	-	-

(*) 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 2019 (Internal and External)

Effective dose (E) mSv	April 2019 - February 2020			April 2019 - March 2020			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	8	753	761	13	923	936	5	170	175
5<E≤10	50	851	901	57	853	910	7	2	9

1<E≤5	279	2301	2580	287	2351	2638	8	50	58
E≤1	1040	5074	6114	1027	5197	6224	-13	123	110
Total	1377	8979	10356	1384	9324	10708	7	345	352
Maximum (mSv)	13.06	19.53	19.53	13.92	19.53	19.53	-	-	-
Average (mSv)	0.91	2.56	2.34	0.99	2.77	2.54	-	-	-

(*) 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.