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

(Updated on 30 Apr 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)	January-2024			February-2024			March-2024		
mSv	TEPCO	Contractors	Total	TEPCO	Contractors	Total	TEPCO	Contractors	Total
100 <e< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e<>	0	0	0	0	0	0	0	0	0
75 <e≤100< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e≤100<>	0	0	0	0	0	0	0	0	0
50 <e≤75< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e≤75<>	0	0	0	0	0	0	0	0	0
20 <e≤50< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e≤50<>	0	0	0	0	0	0	0	0	0
10 <e≤20< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>4</td><td>4</td><td>0</td><td>0</td><td>0</td></e≤20<>	0	0	0	0	4	4	0	0	0
5 <e≤10< td=""><td>0</td><td>18</td><td>18</td><td>0</td><td>35</td><td>35</td><td>0</td><td>41</td><td>41</td></e≤10<>	0	18	18	0	35	35	0	41	41
1 <e<u><5</e<u>	9	380	389	3	468	471	11	463	474
E≤1	984	6457	7441	1041	6460	7501	1006	6395	7401
Total	993	6855	7848	1044	6967	8011	1017	6899	7916
Maximum (mSv)	1.90	8.00	8.00	1.90	10.80	10.80	4.02	7.84	7.84
Average (mSv)	0.06	0.24	0.22	0.06	0.30	0.26	0.08	0.28	0.25

^(*) 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)	April 2021 - February 2024			April 2021 - March 2024			Difference		
mSv	TEPCO	Contractors	Total	TEPCO	Contractors	Total	TEPCO	Contractors	Total
100 <e< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e<>	0	0	0	0	0	0	0	0	0
75 <e≤100< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e≤100<>	0	0	0	0	0	0	0	0	0
50 <e≤75< td=""><td>0</td><td>1</td><td>1</td><td>0</td><td>1</td><td>1</td><td>0</td><td>0</td><td>0</td></e≤75<>	0	1	1	0	1	1	0	0	0
20 <e≤50< td=""><td>21</td><td>956</td><td>977</td><td>22</td><td>994</td><td>1016</td><td>1</td><td>38</td><td>39</td></e≤50<>	21	956	977	22	994	1016	1	38	39
10 <e≤20< td=""><td>54</td><td>1648</td><td>1702</td><td>55</td><td>1694</td><td>1749</td><td>1</td><td>46</td><td>47</td></e≤20<>	54	1648	1702	55	1694	1749	1	46	47
5 <e≤10< td=""><td>99</td><td>1570</td><td>1669</td><td>105</td><td>1574</td><td>1679</td><td>6</td><td>4</td><td>10</td></e≤10<>	99	1570	1669	105	1574	1679	6	4	10
1 <e≤5< td=""><td>351</td><td>2640</td><td>2991</td><td>360</td><td>2661</td><td>3021</td><td>9</td><td>21</td><td>30</td></e≤5<>	351	2640	2991	360	2661	3021	9	21	30
E≤1	1224	7728	8952	1211	7822	9033	-13	94	81
Total	1749	14543	16292	1753	14746	16499	4	203	207
Maximum (mSv)	30.52	50.72	50.72	31.07	50.72	50.72	-	-	-
Average (mSv)	1.74	4.87	4.54	1.79	4.94	4.60	-	-	-

^(*) 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)	April 2023 - February 2024			April 2023 - March 2024			Difference		
mSv	TEPCO	Contractors	Total	TEPCO	Contractors	Total	TEPCO	Contractors	Total
100 <e< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e<>	0	0	0	0	0	0	0	0	0
75 <e≤100< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e≤100<>	0	0	0	0	0	0	0	0	0
50 <e≤75< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e≤75<>	0	0	0	0	0	0	0	0	0
20 <e≤50< td=""><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e≤50<>	0	0	0	0	0	0	0	0	0
10 <e≤20< td=""><td>3</td><td>705</td><td>708</td><td>5</td><td>810</td><td>815</td><td>2</td><td>105</td><td>107</td></e≤20<>	3	705	708	5	810	815	2	105	107
5 <e≤10< td=""><td>24</td><td>1101</td><td>1125</td><td>28</td><td>1145</td><td>1173</td><td>4</td><td>44</td><td>48</td></e≤10<>	24	1101	1125	28	1145	1173	4	44	48
1 <e<u>≤5</e<u>	161	2082	2243	184	2153	2337	23	71	94
E≤1	1214	6397	7611	1199	6421	7620	-15	24	9
Total	1402	10285	11687	1416	10529	11945	14	244	258
Maximum (mSv)	11.70	16.80	16.80	13.92	17.01	17.01	-	-	-
Average (mSv)	0.54	2.26	2.05	0.59	2.39	2.18	-	-	-

- (*) Exposure doses and the number of workers are subject to change due to the replacement of accumulated dosesmeasured 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< td=""><td>1</td></e<>	1				
75 <e≤100< td=""><td>191</td></e≤100<>	191				
50 <e≤75< td=""><td>233</td></e≤75<>	233				
20 <e≤50< td=""><td>267</td></e≤50<>	267				
10 <e≤20< td=""><td>186</td></e≤20<>	186				
5 <e≤10< td=""><td>129</td></e≤10<>	129				
1 <e≤5< td=""><td>145</td></e≤5<>	145				
E <u>≤</u> 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 Article7 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.