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

(Updated on 30 Oct 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)	July-2024			August-2024			September-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>2</td><td>2</td><td>0</td><td>0</td><td>0</td></e≤20<>	0	0	0	0	2	2	0	0	0
5 <e≤10< td=""><td>0</td><td>42</td><td>42</td><td>0</td><td>25</td><td>25</td><td>0</td><td>10</td><td>10</td></e≤10<>	0	42	42	0	25	25	0	10	10
1 <e<u><5</e<u>	16	424	440	13	347	360	11	376	387
E≤1	923	6308	7231	965	6084	7049	981	6149	7130
Total	939	6774	7713	978	6458	7436	992	6535	7527
Maximum (mSv)	4.20	9.40	9.40	2.70	11.10	11.10	1.67	7.20	7.20
Average (mSv)	0.08	0.29	0.26	0.07	0.23	0.21	0.06	0.22	0.19

^(*) 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 - August 2024			April 2021 - September 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>29</td><td>29</td><td>0</td><td>40</td><td>40</td><td>0</td><td>11</td><td>11</td></e≤75<>	0	29	29	0	40	40	0	11	11
20 <e≤50< td=""><td>27</td><td>1155</td><td>1182</td><td>27</td><td>1173</td><td>1200</td><td>0</td><td>18</td><td>18</td></e≤50<>	27	1155	1182	27	1173	1200	0	18	18
10 <e≤20< td=""><td>64</td><td>1786</td><td>1850</td><td>65</td><td>1799</td><td>1864</td><td>1</td><td>13</td><td>14</td></e≤20<>	64	1786	1850	65	1799	1864	1	13	14
5 <e≤10< td=""><td>120</td><td>1600</td><td>1720</td><td>124</td><td>1623</td><td>1747</td><td>4</td><td>23</td><td>27</td></e≤10<>	120	1600	1720	124	1623	1747	4	23	27
1 <e≤5< td=""><td>366</td><td>2744</td><td>3110</td><td>366</td><td>2773</td><td>3139</td><td>0</td><td>29</td><td>29</td></e≤5<>	366	2744	3110	366	2773	3139	0	29	29
E≤1	1294	8417	9711	1302	8487	9789	8	70	78
Total	1871	15731	17602	1884	15895	17779	13	164	177
Maximum (mSv)	32.12	58.52	58.52	32.21	59.44	59.44	-	-	-
Average (mSv)	1.87	5.17	4.82	1.89	5.21	4.86	-	-	-

^(*) 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 2024

Effective dose (E)	April 2024 - August 2024			April 2024 - September 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>0</td><td>78</td><td>78</td><td>0</td><td>115</td><td>115</td><td>0</td><td>37</td><td>37</td></e≤20<>	0	78	78	0	115	115	0	37	37
5 <e≤10< td=""><td>7</td><td>446</td><td>453</td><td>9</td><td>564</td><td>573</td><td>2</td><td>118</td><td>120</td></e≤10<>	7	446	453	9	564	573	2	118	120
1 <e≤5< td=""><td>93</td><td>1334</td><td>1427</td><td>113</td><td>1499</td><td>1612</td><td>20</td><td>165</td><td>185</td></e≤5<>	93	1334	1427	113	1499	1612	20	165	185
E≤1	1203	6521	7724	1204	6494	7698	1	-27	-26
Total	1303	8379	9682	1326	8672	9998	23	293	316
Maximum (mSv)	6.60	15.50	15.50	7.49	15.50	15.50	-	-	-
Average (mSv)	0.29	1.02	0.92	0.33	1.15	1.04	-	-	-

- (*) 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≤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.