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

(Updated on 31 July 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)	April 2020			May 2020			June 2020		
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>1</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></e≤20<>	0	1	1	0	0	0	0	0	0
5 <e≤10< td=""><td>0</td><td>28</td><td>28</td><td>0</td><td>25</td><td>25</td><td>0</td><td>51</td><td>51</td></e≤10<>	0	28	28	0	25	25	0	51	51
1 <e≤5< td=""><td>18</td><td>591</td><td>609</td><td>9</td><td>561</td><td>570</td><td>18</td><td>695</td><td>713</td></e≤5<>	18	591	609	9	561	570	18	695	713
E≤1	807	4737	5544	773	4762	5535	929	4914	5843
Total	825	5357	6182	782	5348	6130	947	5660	6607
Maximum (mSv)	3.37	10.40	10.40	1.81	8.80	8.80	3.00	9.10	9.10
Average (mSv)	0.11	0.39	0.35	0.09	0.38	0.34	0.13	0.44	0.40

^(*) 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)	April 2016 - May 2020			April 2016 - June 2020			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>21</td><td>21</td><td>0</td><td>23</td><td>23</td><td>0</td><td>2</td><td>2</td></e≤100<>	0	21	21	0	23	23	0	2	2
50 <e≤75< td=""><td>0</td><td>242</td><td>242</td><td>0</td><td>257</td><td>257</td><td>0</td><td>15</td><td>15</td></e≤75<>	0	242	242	0	257	257	0	15	15
20 <e≤50< td=""><td>69</td><td>1815</td><td>1884</td><td>72</td><td>1836</td><td>1908</td><td>3</td><td>21</td><td>24</td></e≤50<>	69	1815	1884	72	1836	1908	3	21	24
10 <e≤20< td=""><td>144</td><td>2310</td><td>2454</td><td>141</td><td>2315</td><td>2456</td><td>-3</td><td>5</td><td>2</td></e≤20<>	144	2310	2454	141	2315	2456	-3	5	2
5 <e≤10< td=""><td>187</td><td>2380</td><td>2567</td><td>192</td><td>2440</td><td>2632</td><td>5</td><td>60</td><td>65</td></e≤10<>	187	2380	2567	192	2440	2632	5	60	65
1 <e≤5< td=""><td>592</td><td>4583</td><td>5175</td><td>597</td><td>4604</td><td>5201</td><td>5</td><td>21</td><td>26</td></e≤5<>	592	4583	5175	597	4604	5201	5	21	26
E≤1	1296	9607	10903	1337	9695	11032	41	88	129
Total	2288	20958	23246	2339	21170	23509	51	212	263
Maximum (mSv)	46.94	81.30	81.30	48.60	82.71	82.71	-	-	-
Average (mSv)	3.02	6.47	6.13	3.00	6.52	6.17	-	-	-

^(*) 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)	April 2020 - May 2020			April 2020 - June 2020			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>8</td><td>8</td><td>0</td><td>32</td><td>32</td><td>0</td><td>24</td><td>24</td></e≤20<>	0	8	8	0	32	32	0	24	24
5 <e≤10< td=""><td>0</td><td>130</td><td>130</td><td>0</td><td>377</td><td>377</td><td>0</td><td>247</td><td>247</td></e≤10<>	0	130	130	0	377	377	0	247	247
1 <e≤5< td=""><td>38</td><td>911</td><td>949</td><td>86</td><td>1060</td><td>1146</td><td>48</td><td>149</td><td>197</td></e≤5<>	38	911	949	86	1060	1146	48	149	197
E≤1	856	4825	5681	939	4934	5873	83	109	192
Total	894	5874	6768	1025	6403	7428	131	529	660
Maximum (mSv)	3.74	13.20	13.20	4.96	17.09	17.09	-	-	-
Average (mSv)	0.17	0.69	0.63	0.27	1.03	0.92	-	-	-

^(*) 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)	March 2011 - September 2015
mSv	•
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 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.