

**ESTIMATES OF ABSORBED DOSE TO THYROID
OF PEOPLE IN JAPAN FOR THE FIRST YEAR
AFTER THE ACCIDENT AT THE FUKUSHIMA
DAIICHI NUCLEAR POWER STATION**

UNSCEAR 2020/2021 Report, Annex B, Levels and effects of radiation exposure due to the accident at the Fukushima Daiichi Nuclear Power Station: implications of information published since the UNSCEAR 2013 Report

Contents

This attachment details all the summary tables for the Committee's estimates of absorbed doses to the thyroid across Japan for the first year after the Fukushima Daiichi Nuclear Power Station accident. These summaries are provided for each age group (adults, 10-year-old children, 1-year-old infants and for the fetus) for non-evacuated municipalities within Fukushima Prefecture, and for adults, 10-year-old children and 1-year-old infants in some municipalities within some of the neighbouring prefectures (Ibaraki, Miyagi, Tochigi and Yamagata) and for other prefectures in the rest of Japan.

The population data are taken from the Japan Census [MIC, 2011].

Notes

For consistency, doses in this attachment are quoted, in general, to two significant figures. This should not be interpreted as an indication of their precision that is often much less.

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This publication has not been formally edited.

Table A-14.1. Estimated absorbed doses to the thyroids of adults in the first year after the accident for Fukushima Prefecture (excluding evacuated areas)

Municipality	Population in 2010 (persons)	Average deposition density of ¹³⁷ Cs on soil (Bq/m ²)	Estimated absorbed doses to thyroids of adults (mGy)						
			External (plume)	External (ground)	Inhalation (plume)	Ingestion	Total		
			Mean	Mean	Mean	Mean	Mean	5%ile	95%ile
Fukushima Prefecture									
Aizubange Machi	17 918	39 454	<0.001	0.67	0.16	0.43	1.3	0.70	2.7
Aizumisato Machi	24 631	14 523	<0.001	0.26	0.14	0.43	0.84	0.42	1.9
Aizuwakamatsu Shi	131 928	24 878	<0.001	0.52	0.16	0.43	1.1	0.60	2.4
Asakawa Machi	7 402	23 748	0.001	0.43	0.18	0.43	1.0	0.54	2.3
Bandai Machi	4 293	22 201	<0.001	0.45	0.40	0.43	1.3	0.63	3.1
Date Shi	69 963	147 228	0.009	2.4	3.3	0.43	6.2	2.7	17
Fukushima Shi	296 181	228 498	0.007	3.7	3.1	0.43	7.3	3.8	16
Furudono Machi	6 374	21 963	0.003	0.39	0.37	0.43	1.2	0.60	2.8
Hanawa Machi	10 663	19 976	0.002	0.36	0.38	0.43	1.2	0.57	2.9
Hinoemata Mura	696	2 434	<0.001	0.04	0.006	0.43	0.48	0.13	1.3
Hirata Mura	7 595	19 296	0.002	0.37	0.22	0.43	1.0	0.50	2.4
Inawashiro Machi	16 982	24 633	0.001	0.42	1.1	0.43	1.9	0.82	5.4
Ishikawa Machi	19 175	11 789	0.001	0.21	0.11	0.43	0.75	0.34	1.8
Iwaki Shi	354 297	26 385	0.009	0.74	1.5	0.43	2.7	0.97	7.7
Izumizaki Mura	6 949	55 888	0.001	0.94	0.15	0.43	1.5	0.83	3.1
Kagamiishi Machi	13 651	56 530	0.001	0.95	0.18	0.43	1.6	0.86	3.2
Kaneyama Machi	2 871	3 161	<0.001	0.05	0.008	0.43	0.49	0.18	1.3
Kawamata Machi	16 847	93 168	0.005	1.6	1.5	0.43	3.5	1.5	11
Kitakata Shi	55 824	20 684	<0.001	0.38	0.14	0.43	0.95	0.50	2.1
Kitashiobara Mura	3 791	49 371	0.001	0.85	0.59	0.43	1.9	0.88	4.7
Koori Machi	14 708	208 246	0.011	3.3	4.8	0.43	8.6	4.3	22
Koriyama Shi	341 781	162 070	0.002	2.6	0.52	0.43	3.5	2.1	6.8
Kunimi Machi	9 952	88 661	0.007	1.5	2.6	0.43	4.5	2.0	13
Miharu Machi	17 942	83 919	0.001	1.4	0.23	0.43	2.1	1.18	4.0
Minamiaizu Machi	19 896	5 101	<0.001	0.09	0.016	0.43	0.53	0.21	1.4
Minamisoma Shi	40 941	109 472	0.043	1.8	8.6	0.43	11	2.8	43
Mishima Machi	2 213	13 560	<0.001	0.23	0.028	0.43	0.69	0.31	1.6
Motomiya Shi	30 771	128 097	0.001	2.1	0.81	0.43	3.3	1.7	7.2
Nakajima Mura	4 865	25 332	0.001	0.46	0.12	0.43	1.0	0.52	2.3
Nihonmatsu Shi	63 751	197 153	0.004	3.1	2.1	0.43	5.7	2.9	13
Nishiaizu Machi	8 237	6 193	<0.001	0.10	0.054	0.43	0.59	0.25	1.5
Nishigo Mura	18 615	96 014	0.001	1.5	0.25	0.43	2.2	1.25	4.3
Ono Machi	11 983	21 434	0.002	0.38	0.33	0.43	1.1	0.50	3.0
Otama Mura	8 130	162 855	0.002	2.6	1.6	0.43	4.6	2.7	9.7
Samegawa Mura	4 259	21 146	0.002	0.40	0.30	0.43	1.1	0.59	2.5

Municipality	Population in 2010 (persons)	Average deposition density of ^{137}Cs on soil (Bq/m^2)	Estimated absorbed doses to thyroids of adults (mGy)						
			External (plume)	External (ground)	Inhalation (plume)	Ingestion	Total		
			Mean	Mean	Mean	Mean	Mean	5%ile	95%ile
Shimogo Machi	7 010	3 376	<0.001	0.20	0.026	0.43	0.65	0.27	1.6
Shinchi Machi	9 039	55 233	0.016	0.95	2.9	0.43	4.3	1.4	16
Shirakawa Shi	66 544	71 676	0.001	1.3	0.27	0.43	2.0	1.11	4.0
Showa Mura	1 632	12 200	<0.001	0.21	0.039	0.43	0.68	0.30	1.6
Soma Shi	38 187	54 612	0.022	0.92	4.0	0.43	5.4	1.6	20
Sukagawa Shi	78 819	73 261	0.001	1.2	0.23	0.43	1.9	1.01	3.9
Tadami Machi	5 277	5 311	<0.001	0.13	0.012	0.43	0.57	0.16	1.4
Tamakawa Mura	7 295	15 751	0.001	0.28	0.12	0.43	0.83	0.38	2.0
Tamura Shi	40 231	34 945	0.002	0.61	0.42	0.43	1.5	0.59	4.0
Tanagura Machi	15 702	45 108	0.003	0.75	0.54	0.43	1.7	0.87	4.2
Ten-ei Mura	6 589	115 367	0.001	1.8	0.35	0.43	2.6	1.5	5.2
Yabuki Machi	18 688	33 530	0.001	0.61	0.10	0.43	1.1	0.59	2.4
Yamatsuri Machi	6 821	6 324	<0.001	0.29	0.09	0.43	0.80	0.38	1.9
Yanaizu Machi	4 263	12 995	<0.001	0.23	0.075	0.43	0.73	0.34	1.8
Yugawa Mura	3 455	37 400	<0.001	0.65	0.17	0.43	1.2	0.69	2.7

Table A-14.2. Estimated absorbed doses to the thyroids of 10-year-old children in the first year after the accident for Fukushima Prefecture (excluding evacuated areas)

Municipality	Population in 2010 (persons)	Average deposition density of ¹³⁷ Cs on soil (Bq/m ²)	Estimated absorbed doses to thyroids of 10-year-old children (mGy)						
			External (plume)	External (ground)	Inhalation (plume)	Ingestion	Total		
			Mean	Mean	Mean	Mean	Mean	5%ile	95%ile
Fukushima Prefecture									
Aizubange Machi	17 918	39 454	<0.001	0.76	0.26	0.95	2.0	1.1	4.8
Aizumisato Machi	24 631	14 523	<0.001	0.30	0.23	0.95	1.5	0.68	3.8
Aizuwakamatsu Shi	131 928	24 878	<0.001	0.59	0.26	0.95	1.8	0.92	4.2
Asakawa Machi	7 402	23 748	0.001	0.49	0.29	0.95	1.7	0.79	4.3
Bandai Machi	4 293	22 201	<0.001	0.51	0.65	0.95	2.1	1.0	5.3
Date Shi	69 963	147 228	0.010	2.8	5.5	0.95	9.3	3.6	27
Fukushima Shi	296 181	228 498	0.008	4.2	5.1	0.95	10	5.1	26
Furudono Machi	6 374	21 963	0.003	0.44	0.62	0.95	2.0	0.93	4.4
Hanawa Machi	10 663	19 976	0.002	0.41	0.63	0.95	2.0	0.97	5.3
Hinoemata Mura	696	2 434	<0.001	0.051	0.010	0.95	1.0	0.28	2.9
Hirata Mura	7 595	19 296	0.002	0.42	0.37	0.95	1.7	0.78	4.7
Inawashiro Machi	16 982	24 633	0.001	0.47	1.8	0.95	3.2	1.4	8.7
Ishikawa Machi	19 175	11 789	0.001	0.23	0.18	0.95	1.4	0.58	3.5
Iwaki Shi	354 297	26 385	0.010	0.84	2.4	0.95	4.2	1.5	13
Izumizaki Mura	6 949	55 888	0.001	1.1	0.25	0.95	2.3	1.2	5.3
Kagamiishi Machi	13 651	56 530	0.001	1.1	0.29	0.95	2.3	1.2	5.2
Kaneyama Machi	2 871	3 161	<0.001	0.056	0.013	0.95	1.0	0.43	3.0
Kawamata Machi	16 847	93 168	0.005	1.8	2.5	0.95	5.2	1.9	17
Kitakata Shi	55 824	20 684	<0.001	0.44	0.23	0.95	1.6	0.80	3.9
Kitashiobara Mura	3 791	49 371	0.001	0.96	0.95	0.95	2.9	1.3	7.8
Koori Machi	14 708	208 246	0.012	3.8	8.0	0.95	13	6.0	33
Koriyama Shi	341 781	162 070	0.002	2.9	0.86	0.95	4.8	2.6	9.7
Kunimi Machi	9 952	88 661	0.007	1.7	4.3	0.95	7.0	3.0	20
Miharu Machi	17 942	83 919	0.001	1.6	0.38	0.95	2.9	1.6	6.3
Minamiaizu Machi	19 896	5 101	<0.001	0.10	0.025	0.95	1.1	0.40	2.8
Minamisoma Shi	40 941	109 472	0.046	2.0	14	0.95	17	4.0	75
Mishima Machi	2 213	13 560	<0.001	0.27	0.045	0.95	1.3	0.47	3.2
Motomiya Shi	30 771	128 097	0.002	2.4	1.3	0.95	4.6	2.2	11
Nakajima Mura	4 865	25 332	0.001	0.52	0.20	0.95	1.7	0.89	4.3
Nihonmatsu Shi	63 751	197 153	0.004	3.5	3.5	0.95	8.0	3.9	20
Nishiaizu Machi	8 237	6 193	<0.001	0.12	0.088	0.95	1.2	0.47	3.4
Nishigo Mura	18 615	96 014	0.001	1.7	0.41	0.95	3.1	1.7	6.5
Ono Machi	11 983	21 434	0.002	0.43	0.55	0.95	1.9	0.86	5.4
Otama Mura	8 130	162 855	0.002	3.0	2.6	0.95	6.5	3.4	15
Samegawa Mura	4 259	21 146	0.002	0.45	0.50	0.95	1.9	0.93	4.4

Municipality	Population in 2010 (persons)	Average deposition density of ¹³⁷ Cs on soil (Bq/m ²)	Estimated absorbed doses to thyroids of 10-year-old children (mGy)						
			External (plume)	External (ground)	Inhalation (plume)	Ingestion	Total		
			Mean	Mean	Mean	Mean	Mean	5%ile	95%ile
Shimogo Machi	7 010	3 376	<0.001	0.23	0.042	0.95	1.2	0.48	3.3
Shinchi Machi	9 039	55 233	0.017	1.1	4.9	0.95	6.9	2.2	23
Shirakawa Shi	66 544	71 676	0.001	1.5	0.44	0.95	2.9	1.5	6.3
Showa Mura	1 632	12 200	<0.001	0.24	0.064	0.95	1.3	0.51	3.2
Soma Shi	38 187	54 612	0.024	1.0	6.7	0.95	8.7	2.5	36
Sukagawa Shi	78 819	73 261	0.001	1.4	0.38	0.95	2.7	1.4	6.1
Tadami Machi	5 277	5 311	<0.001	0.14	0.019	0.95	1.1	0.31	3.0
Tamakawa Mura	7 295	15 751	0.001	0.31	0.20	0.95	1.5	0.64	3.6
Tamura Shi	43 231	34 945	0.002	0.69	0.69	0.95	2.3	0.90	6.5
Tanagura Machi	15 702	45 108	0.003	0.85	0.90	0.95	2.7	1.3	7.2
Ten-ei Mura	6 589	115 367	0.002	2.1	0.58	0.95	3.6	2.0	7.7
Yabuki Machi	18 688	33 530	0.001	0.69	0.16	0.95	1.8	0.83	4.0
Yamatsuri Machi	6 821	6 324	<0.001	0.32	0.15	0.95	1.4	0.66	3.6
Yanaizu Machi	4 263	12 995	<0.001	0.26	0.12	0.95	1.3	0.57	3.4
Yugawa Mura	3 455	37 400	<0.001	0.73	0.27	0.95	2.0	1.0	4.4

Table A-14.3. Estimated absorbed doses to the thyroids of 1-year-old infants in the first year after the accident for Fukushima Prefecture (excluding evacuated areas)

Municipality	Population in 2010 (persons)	Average deposition density of ¹³⁷ Cs on soil (Bq/m ²)	Estimated absorbed doses to the thyroid of 1-year-old infants (mGy)						
			External (plume)	External (ground)	Inhalation (plume)	Ingestion	Total		
			Mean	Mean	Mean	Mean	Mean	5%ile	95%ile
Fukushima Prefecture									
Aizubange Machi	17 918	39 454	<0.001	0.88	0.30	1.1	2.3	1.2	6.0
Aizumisato Machi	24 631	14 523	<0.001	0.34	0.27	1.1	1.8	0.83	4.4
Aizuwakamatsu Shi	131 928	24 878	<0.001	0.68	0.30	1.1	2.1	1.1	4.9
Asakawa Machi	7 402	23 748	0.001	0.57	0.35	1.1	2.1	0.97	5.3
Bandai Machi	4 293	22 201	<0.001	0.59	0.75	1.1	2.5	1.2	6.0
Date Shi	69 963	147 228	0.009	3.2	6.6	1.1	11	4.2	31
Fukushima Shi	296 181	228 498	0.007	4.8	6.1	1.1	12	6.0	30
Furudono Machi	6 374	21 963	0.003	0.51	0.75	1.1	2.4	1.1	5.8
Hanawa Machi	10 663	19 976	0.002	0.47	0.76	1.1	2.4	1.2	6.7
Hinoemata Mura	696	2 434	<0.001	0.058	0.012	1.1	1.2	0.33	3.5
Hirata Mura	7 595	19 296	0.002	0.48	0.45	1.1	2.1	1.0	6.4
Inawashiro Machi	16 982	24 633	0.001	0.54	2.0	1.1	3.7	1.6	10
Ishikawa Machi	19 175	11 789	0.001	0.27	0.22	1.1	1.6	0.72	4.0
Iwaki Shi	354 297	26 385	0.010	0.97	2.9	1.1	5.1	1.7	17
Izumizaki Mura	6 949	55 888	0.001	1.2	0.30	1.1	2.7	1.3	5.9
Kagamiishi Machi	13 651	56 530	0.001	1.2	0.35	1.1	2.7	1.3	5.6
Kaneyama Machi	2 871	3 161	<0.001	0.064	0.014	1.1	1.2	0.54	3.9
Kawamata Machi	16 847	93 168	0.005	2.1	2.9	1.1	6.1	2.2	22
Kitakata Shi	55 824	20 684	<0.001	0.50	0.26	1.1	1.9	0.94	4.6
Kitashiobara Mura	3 791	49 371	0.001	1.1	1.1	1.1	3.4	1.3	8.5
Koori Machi	14 708	208 246	0.012	4.3	9.5	1.1	15	7.0	39
Koriyama Shi	341 781	162 070	0.002	3.4	1.0	1.1	5.5	3.1	11
Kunimi Machi	9 952	88 661	0.007	1.9	5.1	1.1	8.2	3.4	25
Miharu Machi	17 942	83 919	0.001	1.8	0.45	1.1	3.4	1.9	6.9
Minamiaizu Machi	19 896	5 101	<0.001	0.12	0.029	1.1	1.3	0.47	3.3
Minamisoma Shi	40 941	109 472	0.044	2.4	17	1.1	21	4.7	93
Mishima Machi	2 213	13 560	<0.001	0.31	0.052	1.1	1.5	0.61	3.9
Motomiya Shi	30 771	128 097	0.001	2.7	1.5	1.1	5.4	2.6	13
Nakajima Mura	4 865	25 332	0.001	0.60	0.24	1.1	2.0	0.97	4.6
Nihonmatsu Shi	63 751	197 153	0.004	4.0	4.1	1.1	9.3	4.4	23
Nishiaizu Machi	8 237	6 193	<0.001	0.14	0.10	1.1	1.4	0.54	3.8
Nishigo Mura	18 615	96 014	0.001	2.0	0.49	1.1	3.6	2.0	7.7
Ono Machi	11 983	21 434	0.002	0.49	0.66	1.1	2.3	1.1	6.9
Otama Mura	8 130	162 855	0.002	3.4	3.0	1.1	7.6	4.1	16
Samegawa Mura	4 259	21 146	0.002	0.52	0.60	1.1	2.3	1.2	4.3

Municipality	Population in 2010 (persons)	Average deposition density of ¹³⁷ Cs on soil (Bq/m ²)	Estimated absorbed doses to the thyroid of 1-year-old infants (mGy)						
			External (plume)	External (ground)	Inhalation (plume)	Ingestion	Total		
			Mean	Mean	Mean	Mean	Mean	5%ile	95%ile
Shimogo Machi	7 010	3 376	<0.001	0.26	0.048	1.1	1.4	0.56	3.6
Shinchi Machi	9 039	55 233	0.017	1.2	5.9	1.1	8.3	2.5	27
Shirakawa Shi	66 544	71 676	0.001	1.7	0.53	1.1	3.4	1.7	7.5
Showa Mura	1 632	12 200	<0.001	0.28	0.073	1.1	1.5	0.59	3.2
Soma Shi	38 187	54 612	0.023	1.2	8.1	1.1	10	3.0	44
Sukagawa Shi	78 819	73 261	0.001	1.6	0.45	1.1	3.2	1.6	7.3
Tadami Machi	5 277	5 311	<0.001	0.17	0.022	1.1	1.3	0.36	3.6
Tamakawa Mura	7 295	15 751	0.001	0.36	0.25	1.1	1.7	0.79	4.1
Tamura Shi	40 231	34 945	0.002	0.79	0.82	1.1	2.8	1.1	7.5
Tanagura Machi	15 702	45 108	0.003	0.98	1.09	1.1	3.2	1.5	9.3
Ten-ei Mura	6 589	115 367	0.002	2.4	0.69	1.1	4.2	2.3	8.2
Yabuki Machi	18 688	33 530	0.001	0.79	0.20	1.1	2.1	1.0	4.9
Yamatsuri Machi	6 821	6 324	<0.001	0.37	0.18	1.1	1.7	0.77	4.9
Yanaizu Machi	4 263	12 995	<0.001	0.29	0.14	1.1	1.6	0.72	3.6
Yugawa Mura	3 455	37 400	<0.001	0.84	0.31	1.1	2.3	1.4	5.4

Table A-14.4. Estimated absorbed doses to the thyroids of adults in the first year after the accident for prefectures neighbouring Fukushima Prefecture

Municipality	Population in 2010 (persons)	Average deposition density of ¹³⁷ Cs on soil (Bq/m ²)	Estimated absorbed doses to the thyroids of adults (mGy)						
			External (plume)	External (ground)	Inhalation (plume)	Ingestion	Total		
			Mean	Mean	Mean	Mean	Mean	5%ile	95%ile
Ibaraki Prefecture									
Daigo Machi	22 077	9 233	0.001	0.17	0.15	0.11	0.43	0.10	1.0
Hitachi Shi	14 753	27 366	0.008	0.48	1.2	0.11	1.8	0.39	7.1
Hitachiomiya Shi	2 512	8 220	0.001	0.15	0.13	0.11	0.39	0.10	0.90
Hitachiota Shi	5 188	6 358	<0.001	0.14	0.08	0.11	0.34	0.08	0.72
Kitaibaraki Shi	49 847	16 821	0.004	0.52	0.62	0.11	1.3	0.27	3.9
Takahagi Shi	32 207	26 854	0.008	0.76	1.3	0.11	2.2	0.48	7.9
Miyagi Prefecture									
Higashimatsushima Shi	43 611	7 050	0.008	0.13	1.2	0.11	1.4	0.32	5.9
Iwanuma Shi	42 842	16 081	0.004	0.29	0.9	0.11	1.3	0.30	4.5
Kakuda Shi	33 783	37 016	0.004	0.64	0.9	0.11	1.7	0.38	5.0
Kawasaki Machi	10 517	9 496	0.001	0.18	0.4	0.11	0.67	0.12	2.9
Marumori Machi	16 632	49 610	0.004	0.88	1.0	0.11	2.0	0.44	5.6
Murata Machi	12 390	14 629	0.001	0.26	0.3	0.11	0.72	0.15	2.1
Natori Shi	75 306	14 709	0.004	0.37	1.0	0.11	1.5	0.34	5.5
Ogawara Machi	23 398	33 604	0.002	0.58	0.5	0.11	1.2	0.28	2.8
Rifu Cho	32 611	14 720	0.008	0.26	1.8	0.11	2.2	0.53	8.4
Sendai Shi	1 014 208	10 674	0.001	0.19	0.3	0.11	0.60	0.13	1.8
Shibata Machi	39 490	29 017	0.002	0.49	0.46	0.11	1.1	0.24	2.8
Shichigahama Machi	22 259	7 680	0.004	0.14	0.74	0.11	1.0	0.28	4.2
Shichikashuku Machi	1 871	9 264	0.001	0.18	0.21	0.11	0.51	0.11	1.4
Shiogama Shi	56 266	13 640	0.007	0.25	1.45	0.11	1.8	0.47	7.5
Shiroishi Shi	39 696	31 054	0.001	0.53	0.35	0.11	1.0	0.19	2.8
Tagajo Shi	64 922	15 380	0.007	0.28	1.50	0.11	1.9	0.59	9.2
Watari Cho	35 776	26 777	0.008	0.46	1.54	0.11	2.1	0.28	12
Yamamoto Cho	17 248	42 626	0.013	0.70	2.48	0.11	3.3	0.60	14
Zao Machi	13 073	18 296	0.002	0.33	0.89	0.11	1.3	0.26	5.2
Tochigi Prefecture									
Nakagawa Machi	19 903	18 800	0.002	0.33	0.58	0.11	1.0	0.26	3.1
Nasu Machi	26 691	51 525	0.001	0.88	0.13	0.11	1.1	0.26	1.9
Nasushiobara Shi	118 463	52 368	0.001	0.93	0.23	0.11	1.3	0.30	2.3
Nikko Shi	85 261	7 203	<0.001	0.29	0.02	0.11	0.42	0.10	0.73
Otawara Shi	75 385	23 434	0.002	0.47	0.34	0.11	0.92	0.22	2.6

Municipality	Population in 2010 (persons)	Average deposition density of ^{137}Cs on soil (Bq/m^2)	Estimated absorbed doses to the thyroids of adults (mGy)						
			External (plume)	External (ground)	Inhalation (plume)	Ingestion	Total		
			Mean	Mean	Mean	Mean	Mean	5%ile	95%ile
Yamagata Prefecture									
Kaminoyama Shi	36 118	5 580	<0.001	0.10	0.13	0.11	0.34	0.079	0.89
Nan-yo Shi	35 110	4 540	<0.001	0.087	0.18	0.11	0.39	0.079	1.2
Takahata Machi	26 358	4 240	0.001	0.080	0.75	0.11	0.94	0.21	3.4
Yamagata Shi	257 936	5 880	<0.001	0.11	0.08	0.11	0.31	0.07	0.69
Yonezawa Shi	92 876	3 434	0.001	0.093	0.81	0.11	1.0	0.26	4.0

Table A-14.5. Estimated absorbed doses to the thyroids of 10-year-old children in the first year after the accident for prefectures neighbouring Fukushima Prefecture

Municipality	Population in 2010 (persons)	Average deposition density of ¹³⁷ Cs on soil (Bq/m ²)	Estimated absorbed doses to the thyroids of 10-year-old children (mGy)						
			External (plume)	External (ground)	Inhalation (plume)	Ingestion	Total		
			Mean	Mean	Mean	Mean	Mean	5%ile	95%ile
Ibaraki Prefecture									
Daigo Machi	22 077	9 233	0.001	0.19	0.24	0.25	0.69	0.15	1.8
Hitachi Shi	14 753	27 366	0.009	0.55	2.0	0.25	2.8	0.56	12
Hitachiomiya Shi	2 512	8 220	0.001	0.17	0.21	0.25	0.64	0.15	1.5
Hitachiota Shi	5 188	6 358	0.001	0.16	0.14	0.25	0.55	0.12	1.3
Kitaibaraki Shi	49 847	16 821	0.004	0.59	1.0	0.25	1.9	0.37	6.3
Takahagi Shi	32 207	26 854	0.009	0.86	2.1	0.25	3.2	0.67	13
Miyagi Prefecture									
Higashimatsushima Shi	43 611	7 050	0.008	0.15	2.0	0.25	2.4	0.50	9.8
Iwanuma Shi	42 842	16 081	0.005	0.33	1.5	0.25	2.1	0.46	7.4
Kakuda Shi	33 783	37 016	0.004	0.72	1.5	0.25	2.5	0.54	8.0
Kawasaki Machi	10 517	9 496	0.001	0.20	0.62	0.25	1.1	0.18	4.8
Marumori Machi	16 632	49 610	0.004	1.00	1.6	0.25	2.9	0.61	8.8
Murata Machi	12 390	14 629	0.001	0.30	0.57	0.25	1.1	0.22	3.4
Natori Shi	75 306	14 709	0.005	0.41	1.7	0.25	2.3	0.51	9.0
Ogawara Machi	23 398	33 604	0.002	0.66	0.78	0.25	1.7	0.38	4.3
Rifu Cho	32 611	14 720	0.008	0.29	3.0	0.25	3.5	0.82	14
Sendai Shi	1 014 208	10 674	0.001	0.22	0.49	0.25	1.0	0.20	2.9
Shibata Machi	39 490	29 017	0.002	0.56	0.77	0.25	1.6	0.33	4.4
Shichigahama Machi	22 259	7 680	0.004	0.16	1.2	0.25	1.6	0.44	6.9
Shichikashuku Machi	1 871	9 264	0.001	0.20	0.34	0.25	0.80	0.17	2.3
Shiogama Shi	56 266	13 640	0.007	0.28	2.4	0.25	3.0	0.73	12
Shiroishi Shi	39 696	31 054	0.001	0.61	0.58	0.25	1.4	0.26	4.3
Tagajo Shi	64 922	15 380	0.007	0.31	2.5	0.25	3.1	0.91	15
Watari Cho	35 776	26 777	0.008	0.53	2.6	0.25	3.3	0.39	20
Yamamoto Cho	17 248	42 626	0.014	0.79	4.1	0.25	5.2	0.87	23
Zao Machi	13 073	18 296	0.002	0.37	1.5	0.25	2.1	0.39	8.5
Tochigi Prefecture									
Nakagawa Machi	19 903	18 800	0.003	0.37	0.95	0.25	1.6	0.38	5.0
Nasu Machi	26 691	51 525	0.001	1.0	0.22	0.25	1.5	0.33	2.7
Nasushiobara Shi	118 463	52 368	0.001	1.1	0.38	0.25	1.7	0.38	3.3
Nikko Shi	85 261	7 203	<0.001	0.32	0.026	0.25	0.60	0.13	1.2
Otawara Shi	75 385	23 434	0.002	0.53	0.56	0.25	1.3	0.30	4.1

Municipality	Population in 2010 (persons)	Average deposition density of ¹³⁷ Cs on soil (Bq/m ²)	Estimated absorbed doses to the thyroids of 10-year-old children (mGy)						
			External (plume)	External (ground)	Inhalation (plume)	Ingestion	Total		
			Mean	Mean	Mean	Mean	Mean	5%ile	95%ile
Yamagata Prefecture									
Kaminoyama Shi	36 118	5 580	<0.001	0.11	0.21	0.25	0.57	0.13	1.5
Nan-yo Shi	35 110	4 540	<0.001	0.10	0.30	0.25	0.65	0.13	2.0
Takahata Machi	26 358	4 240	0.001	0.09	1.2	0.25	1.6	0.32	5.6
Yamagata Shi	257 936	5 880	<0.001	0.13	0.14	0.25	0.52	0.12	1.2
Yonezawa Shi	92 876	3 434	0.001	0.11	1.3	0.25	1.7	0.41	6.5

Table A-14.6. Estimated absorbed doses to the thyroids of 1-year-old infants in the first year after the accident for prefectures neighbouring Fukushima Prefecture

Municipality	Population in 2010 (persons)	Average deposition density of ¹³⁷ Cs on soil (Bq/m ²)	Estimated absorbed doses to the thyroids of 1-year-old infants (mGy)						
			External (plume)	External (ground)	Inhalation (plume)	Ingestion	Total		
			Mean	Mean	Mean	Mean	Mean	5%ile	95%ile
Ibaraki Prefecture									
Daigo Machi	22 077	9 233	0.001	0.22	0.29	0.31	0.83	0.18	2.1
Hitachi Shi	14 753	27 366	0.008	0.63	2.5	0.31	3.4	0.67	14
Hitachiomiya Shi	2 512	8 220	0.001	0.20	0.26	0.31	0.77	0.18	1.9
Hitachiota Shi	5 188	6 358	0.001	0.18	0.17	0.31	0.66	0.15	1.5
Kitaibaraki Shi	49 847	16 821	0.004	0.68	1.2	0.31	2.2	0.44	7.6
Takahagi Shi	32 207	26 854	0.008	0.99	2.6	0.31	3.9	0.79	15
Miyagi Prefecture									
Higashimatsushima Shi	43 611	7 050	0.008	0.17	2.4	0.31	2.9	0.60	12
Iwanuma Shi	42 842	16 081	0.004	0.38	1.8	0.31	2.5	0.55	8.9
Kakuda Shi	33 783	37 016	0.004	0.83	1.8	0.31	3.0	0.64	9.6
Kawasaki Machi	10 517	9 496	0.001	0.23	0.75	0.31	1.3	0.22	5.8
Marumori Machi	16 632	49 610	0.004	1.2	1.9	0.31	3.4	0.7	11
Murata Machi	12 390	14 629	0.001	0.34	0.69	0.31	1.3	0.27	4.1
Natori Shi	75 306	14 709	0.005	0.48	2.0	0.31	2.8	0.60	11
Ogawara Machi	23 398	33 604	0.002	0.76	0.94	0.31	2.0	0.45	5.2
Rifu Cho	32 611	14 720	0.008	0.33	3.6	0.31	4.3	1.0	17
Sendai Shi	1 014 208	10 674	0.001	0.25	0.60	0.31	1.2	0.24	3.5
Shibata Machi	39 490	29 017	0.002	0.64	0.93	0.31	1.9	0.39	5.3
Shichigahama Machi	22 259	7 680	0.004	0.18	1.5	0.31	2.0	0.52	8.4
Shichikashuku Machi	1 871	9 264	0.001	0.24	0.41	0.31	1.0	0.20	2.7
Shiogama Shi	56 266	13 640	0.007	0.32	2.9	0.31	3.6	0.88	15
Shiroishi Shi	39 696	31 054	0.001	0.70	0.70	0.31	1.7	0.30	5.2
Tagajo Shi	64 922	15 380	0.007	0.36	3.0	0.31	3.7	1.1	19
Watari Cho	35 776	26 777	0.008	0.61	3.1	0.31	4.0	0.47	25
Yamamoto Cho	17 248	42 626	0.014	0.91	5.0	0.31	6.3	1.0	27
Zao Machi	13 073	18 296	0.002	0.43	1.8	0.31	2.5	0.46	10
Tochigi Prefecture									
Nakagawa Machi	19 903	18 800	0.003	0.43	1.1	0.31	1.9	0.45	6.0
Nasu Machi	26 691	51 525	0.001	1.2	0.27	0.31	1.7	0.38	3.1
Nasushiobara Shi	118 463	52 368	0.001	1.2	0.46	0.31	2.0	0.44	3.9
Nikko Shi	85 261	7 203	<0.001	0.37	0.031	0.31	0.72	0.16	1.4
Otawara Shi	75 385	23 434	0.002	0.61	0.68	0.31	1.6	0.35	4.9

<i>Municipality</i>	<i>Population in 2010 (persons)</i>	<i>Average deposition density of ¹³⁷Cs on soil (Bq/m²)</i>	<i>Estimated absorbed doses to the thyroids of 1-year-old infants (mGy)</i>						
			<i>External (plume)</i>	<i>External (ground)</i>	<i>Inhalation (plume)</i>	<i>Ingestion</i>	<i>Total</i>		
			<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>5%ile</i>	<i>95%ile</i>
Yamagata Prefecture									
Kaminoyama Shi	36 118	5 580	<0.001	0.13	0.25	0.31	0.69	0.15	1.8
Nan-yo Shi	35 110	4 540	<0.001	0.11	0.35	0.31	0.78	0.15	2.4
Takahata Machi	26 358	4 240	0.001	0.10	1.4	0.31	1.8	0.38	6.5
Yamagata Shi	257 936	5 880	<0.001	0.14	0.16	0.31	0.62	0.14	1.5
Yonezawa Shi	92 876	3 434	0.001	0.12	1.5	0.31	1.9	0.47	7.6

Table A-14.7. Estimated absorbed doses to the fetal thyroids of infants born in March-October 2011 in Fukushima Prefecture (excluding evacuated areas)

Municipality	Population in 2010 (persons)	Average deposition density of ¹³⁷ Cs on soil (Bq/m ²)	Estimated absorbed doses to fetal thyroids of infants (mGy)					
			External exposure ^a	Inhalation	Ingestion of ¹³¹ I	Inhalation and ingestion of Cs radionuclides	Total	
			Mean	Mean	Mean	Mean	Mean	95%ile
Fukushima Prefecture								
Aizubange Machi	17 918	39 454	0.39	0.12	0.36	0.020	0.89	1.7
Aizumisato Machi	24 631	14 523	0.16	0.11	0.36	0.020	0.65	1.4
Aizuwakamatsu Shi	131 928	24 878	0.34	0.12	0.36	0.020	0.84	1.6
Asakawa Machi	7 402	23 748	0.26	0.13	0.36	0.020	0.78	1.5
Bandai Machi	4 293	22 201	0.29	0.30	0.36	0.020	0.97	1.9
Date Shi	69 963	147 228	1.4	2.5	0.36	0.020	4.3	10
Fukushima Shi	296 181	228 498	2.1	2.3	0.36	0.020	4.8	10
Furudono Machi	6 374	21 963	0.23	0.28	0.36	0.020	0.89	1.8
Hanawa Machi	10 663	19 976	0.21	0.28	0.36	0.020	0.88	1.8
Hinoemata Mura	696	2 434	0.03	0.005	0.36	0.020	0.41	1.1
Hirata Mura	7 595	19 296	0.22	0.17	0.36	0.020	0.77	1.5
Inawashiro Machi	16 982	24 633	0.24	0.81	0.36	0.020	1.4	3.4
Ishikawa Machi	19 175	11 789	0.12	0.08	0.36	0.020	0.59	1.3
Iwaki Shi	354 297	26 385	0.54	1.1	0.36	0.020	2.0	4.7
Izumizaki Mura	6 949	55 888	0.54	0.11	0.36	0.020	1.0	1.8
Kagamiishi Machi	13 651	56 530	0.54	0.13	0.36	0.020	1.1	1.9
Kaneyama Machi	2 871	3 161	0.03	0.006	0.36	0.020	0.42	1.1
Kitakata Shi	55 824	20 684	0.23	0.10	0.36	0.020	0.72	1.4
Kitashiobara Mura	3 791	49 371	0.50	0.44	0.36	0.020	1.3	2.6
Koori Machi	14 708	208 246	1.9	3.6	0.36	0.020	5.9	14
Koriyama Shi	341 781	162 070	1.4	0.39	0.36	0.020	2.2	3.7
Kunimi Machi	9 952	88 661	0.85	2.0	0.36	0.020	3.2	7.8
Miharu Machi	17 942	83 919	0.79	0.18	0.36	0.020	1.3	2.3
Minamiaizu Machi	19 896	5 101	0.05	0.012	0.36	0.020	0.45	1.1
Minamisoma Shi	40 941	109 472	1.0	6.4	0.36	0.020	7.8	23
Mishima Machi	2 213	13 560	0.14	0.021	0.36	0.020	0.54	1.2
Motomiya Shi	30 771	128 097	1.2	0.61	0.36	0.020	2.1	3.9
Nakajima Mura	4 865	25 332	0.28	0.089	0.36	0.020	0.74	1.5
Nihonmatsu Shi	63 751	197 153	1.7	1.6	0.36	0.020	3.7	7.6
Nishiaizu Machi	8 237	6 193	0.06	0.04	0.36	0.020	0.48	1.2
Nishigo Mura	18 615	96 014	0.87	0.19	0.36	0.020	1.4	2.4
Ono Machi	11 983	21 434	0.22	0.25	0.36	0.020	0.85	1.8
Otama Mura	8 130	162 855	1.45	1.2	0.36	0.020	3.03	6.0

Municipality	Population in 2010 (persons)	Average deposition density of ^{137}Cs on soil (Bq/m^2)	Estimated absorbed doses to fetal thyroids of infants (mGy)					
			External exposure ^a	Inhalation	Ingestion of ^{131}I	Inhalation and ingestion of Cs radionuclides	Total	
			Mean	Mean	Mean	Mean	Mean	95%ile
Samegawa Mura	4 259	21 146	0.24	0.23	0.36	0.020	0.85	1.7
Shimogo Machi	7 010	3 376	0.17	0.019	0.36	0.020	0.57	1.2
Shinchi Machi	9 039	55 233	0.56	2.2	0.36	0.020	3.1	8.4
Shirakawa Shi	66 544	71 676	0.73	0.20	0.36	0.020	1.3	2.2
Showa Mura	1 632	12 200	0.13	0.029	0.36	0.020	0.54	1.2
Soma Shi	38 187	54 612	0.53	3.0	0.36	0.020	3.9	11
Sukagawa Shi	78 819	73 261	0.70	0.17	0.36	0.020	1.3	2.1
Tadami Machi	5 277	5 311	0.09	0.009	0.36	0.020	0.48	1.1
Tamakawa Mura	7 295	15 751	0.16	0.093	0.36	0.020	0.64	1.3
Tanagura Machi	15 702	45 108	0.42	0.41	0.36	0.020	1.2	2.4
Ten-ei Mura	6 589	115 367	1.04	0.26	0.36	0.020	1.7	2.8
Yabuki Machi	18 688	33 530	0.37	0.074	0.36	0.020	0.82	1.5
Yamatsuri Machi	6 821	6 324	0.23	0.067	0.36	0.020	0.68	1.4
Yanaizu Machi	4 263	12 995	0.13	0.056	0.36	0.020	0.57	1.2
Yugawa Mura	3 455	37 400	0.38	0.12	0.36	0.020	0.88	1.6

^a Average external fetal dose from deposited radionuclides to thyroid of infants born in the period mid-March to mid-October 2011 in a particular municipality of Fukushima Prefecture was calculated as the average absorbed dose to the mother's colon over the relevant period of fetal development after 15 March 2011.

Table A-14.8. Estimated absorbed doses to the thyroids of adults in the first year after the accident for prefectures in Japan distant from Fukushima Prefecture

Prefecture	Population in 2010 (persons)	Average soil deposition of ¹³⁷ Cs (Bq/m ²)	Estimated absorbed doses to the thyroids of adults (mGy)				
			External (plume)	External (ground)	Inhalation (plume)	Ingestion	Total
			Mean	Mean	Mean	Mean	Mean
Remainder of Japan							
Aichi Prefecture	7 410 719	9	<0.001	<0.001	<0.001	0.034	0.034
Akita Prefecture	1 085 997	175	<0.001	0.004	0.001	0.034	0.038
Aomori Prefecture	1 373 339	67	<0.001	0.001	<0.001	0.034	0.035
Chiba Prefecture	6 216 289	20 931	<0.001	0.37	0.084	0.034	0.48
Ehime Prefecture	1 431 493	7	<0.001	<0.001	<0.001	0.034	0.034
Fukui Prefecture	806 314	31	<0.001	0.001	<0.001	0.034	0.034
Fukuoka Prefecture	5 071 968	1	<0.001	<0.001	<0.001	0.034	0.034
Gifu Prefecture	2 080 773	16	<0.001	<0.001	<0.001	0.034	0.034
Gunma Prefecture	2 008 068	13 639	<0.001	0.24	0.052	0.034	0.33
Hiroshima Prefecture	2 860 750	4	<0.001	<0.001	<0.001	0.034	0.034
Hokkaido Prefecture	5 506 419	9	<0.001	<0.001	<0.001	0.034	0.034
Hyogo Prefecture	5 588 133	8	<0.001	<0.001	<0.001	0.034	0.034
Ishikawa Prefecture	1 169 788	13	<0.001	<0.001	<0.001	0.034	0.034
Iwate Prefecture	1 330 147	11 880	<0.001	0.21	0.049	0.034	0.29
Kagawa Prefecture	995 842	6	<0.001	<0.001	<0.001	0.034	0.034
Kagoshima Prefecture	1 706 242	1	<0.001	<0.001	<0.001	0.034	0.034
Kanagawa Prefecture	9 048 331	3 857	<0.001	0.071	0.015	0.034	0.12
Kochi Prefecture	764 456	36	<0.001	0.001	<0.001	0.034	0.035
Kumamoto Prefecture	1 817 426	0	<0.001	<0.001	<0.001	0.034	0.034
Kyoto Prefecture	2 636 092	7	<0.001	<0.001	<0.001	0.034	0.034
Mie Prefecture	1 854 724	27	<0.001	0.001	<0.001	0.034	0.034
Miyazaki Prefecture	1 135 233	6	<0.001	<0.001	<0.001	0.034	0.034
Nagano Prefecture	2 152 449	1 251	<0.001	0.024	0.005	0.034	0.063
Nagasaki Prefecture	1 426 779	2	<0.001	<0.001	<0.001	0.034	0.034
Nara Prefecture	1 400 728	7	<0.001	<0.001	<0.001	0.034	0.034
Niigata Prefecture	2 374 450	49	<0.001	0.001	<0.001	0.034	0.035
Oita Prefecture	1 196 529	1	<0.001	<0.001	<0.001	0.034	0.034
Okayama Prefecture	1 945 276	4	<0.001	<0.001	<0.001	0.034	0.034
Okinawa Prefecture	1 392 818	4	<0.001	<0.001	<0.001	0.034	0.034
Osaka Prefecture	8 865 245	9	<0.001	<0.001	<0.001	0.034	0.034
Saga Prefecture	849 788	1	<0.001	<0.001	<0.001	0.034	0.034
Saitama Prefecture	7 194 556	6 284	<0.001	0.11	0.025	0.034	0.17
Shiga Prefecture	1 410 777	7	<0.001	<0.001	<0.001	0.034	0.034
Shimane Prefecture	717 397	6	<0.001	<0.001	<0.001	0.034	0.034
Shizuoka Prefecture	3 765 007	643	<0.001	0.013	0.003	0.034	0.049

<i>Prefecture</i>	<i>Population in 2010 (persons)</i>	<i>Average soil deposition of ¹³⁷Cs (Bq/m²)</i>	<i>Estimated absorbed doses to the thyroids of adults (mGy)</i>				
			<i>External (plume)</i>	<i>External (ground)</i>	<i>Inhalation (plume)</i>	<i>Ingestion</i>	<i>Total</i>
			<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>
Tokushima Prefecture	785 491	8	<0.001	<0.001	<0.001	0.034	0.034
Tokyo	13 159 388	8 499	<0.001	0.15	0.033	0.034	0.22
Tottori Prefecture	588 667	11	<0.001	<0.001	<0.001	0.034	0.034
Toyama Prefecture	1 093 247	16	<0.001	<0.001	<0.001	0.034	0.034
Wakayama Prefecture	1 002 198	10	<0.001	<0.001	<0.001	0.034	0.034
Yamaguchi Prefecture	1 451 338	3	<0.001	<0.001	<0.001	0.034	0.034
Yamanashi Prefecture	863 075	208	<0.001	0.004	0.001	0.034	0.039

Table A-14.9. Estimated absorbed doses to the thyroids of 10-year-old children in the first year after the accident for prefectures in Japan distant from Fukushima Prefecture

Prefecture	Population in 2010 (persons)	Average soil deposition of ^{137}Cs (Bq/m^2)	Estimated absorbed doses to the thyroids of 10-year-old children (mGy)				
			External (plume)	External (ground)	Inhalation (plume)	Ingestion	Total
			Mean	Mean	Mean	Mean	Mean
Remainder of Japan							
Aichi Prefecture	7 410 719	9	<0.001	<0.001	<0.001	0.073	0.073
Akita Prefecture	1 085 997	175	<0.001	0.004	0.001	0.073	0.078
Aomori Prefecture	1 373 339	67	<0.001	0.002	<0.001	0.073	0.075
Chiba Prefecture	6 216 289	20 931	<0.001	0.41	0.14	0.073	0.63
Ehime Prefecture	1 431 493	7	<0.001	<0.001	<0.001	0.073	0.073
Fukui Prefecture	806 314	31	<0.001	0.001	<0.001	0.073	0.074
Fukuoka Prefecture	5 071 968	1	<0.001	<0.001	<0.001	0.073	0.073
Gifu Prefecture	2 080 773	16	<0.001	<0.001	<0.001	0.073	0.073
Gunma Prefecture	2 008 068	13 639	<0.001	0.27	0.088	0.073	0.43
Hiroshima Prefecture	2 860 750	4	<0.001	<0.001	<0.001	0.073	0.073
Hokkaido Prefecture	5 506 419	9	<0.001	<0.001	<0.001	0.073	0.073
Hyogo Prefecture	5 588 133	8	<0.001	<0.001	<0.001	0.073	0.073
Ishikawa Prefecture	1 169 788	13	<0.001	<0.001	<0.001	0.073	0.073
Iwate Prefecture	1 330 147	11 880	<0.001	0.24	0.083	0.073	0.39
Kagawa Prefecture	995 842	6	<0.001	<0.001	<0.001	0.073	0.073
Kagoshima Prefecture	1 706 242	1	<0.001	<0.001	<0.001	0.073	0.073
Kanagawa Prefecture	9 048 331	3 857	<0.001	0.080	0.025	0.073	0.18
Kochi Prefecture	764 456	36	<0.001	0.001	<0.001	0.073	0.074
Kumamoto Prefecture	1 817 426	0	<0.001	<0.001	<0.001	0.073	0.073
Kyoto Prefecture	2 636 092	7	<0.001	<0.001	<0.001	0.073	0.073
Mie Prefecture	1 854 724	27	<0.001	0.001	<0.001	0.073	0.074
Miyazaki Prefecture	1 135 233	6	<0.001	<0.001	<0.001	0.073	0.073
Nagano Prefecture	2 152 449	1 251	<0.001	0.027	0.008	0.073	0.11
Nagasaki Prefecture	1 426 779	2	<0.001	<0.001	<0.001	0.073	0.073
Nara Prefecture	1 400 728	7	<0.001	<0.001	<0.001	0.073	0.073
Niigata Prefecture	2 374 450	49	<0.001	0.001	<0.001	0.073	0.074
Oita Prefecture	1 196 529	1	<0.001	<0.001	<0.001	0.073	0.073
Okayama Prefecture	1 945 276	4	<0.001	<0.001	<0.001	0.073	0.073
Okinawa Prefecture	1 392 818	4	<0.001	<0.001	<0.001	0.073	0.073
Osaka Prefecture	8 865 245	9	<0.001	<0.001	<0.001	0.073	0.073
Saga Prefecture	849 788	1	<0.001	<0.001	<0.001	0.073	0.073
Saitama Prefecture	7 194 556	6 284	<0.001	0.13	0.041	0.073	0.24
Shiga Prefecture	1 410 777	7	<0.001	<0.001	<0.001	0.073	0.073
Shimane Prefecture	717 397	6	<0.001	<0.001	<0.001	0.073	0.073

<i>Prefecture</i>	<i>Population in 2010 (persons)</i>	<i>Average soil deposition of ¹³⁷Cs (Bq/m²)</i>	<i>Estimated absorbed doses to the thyroids of 10-year-old children (mGy)</i>				
			<i>External (plume)</i>	<i>External (ground)</i>	<i>Inhalation (plume)</i>	<i>Ingestion</i>	<i>Total</i>
			<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>
Shizuoka Prefecture	3 765 007	643	<0.001	0.014	0.004	0.073	0.091
Tokushima Prefecture	785 491	8	<0.001	<0.001	<0.001	0.073	0.073
Tokyo	13 159 388	8 499	<0.001	0.17	0.056	0.073	0.30
Tottori Prefecture	588 667	11	<0.001	<0.001	<0.001	0.073	0.073
Toyama Prefecture	1 093 247	16	<0.001	<0.001	<0.001	0.073	0.073
Wakayama Prefecture	1 002 198	10	<0.001	<0.001	<0.001	0.073	0.073
Yamaguchi Prefecture	1 451 338	3	<0.001	<0.001	<0.001	0.073	0.073
Yamanashi Prefecture	863 075	208	<0.001	0.005	0.001	0.073	0.079

Table A-14.10. Estimated absorbed doses to the thyroids of 1-year-old infants in the first year after the accident for prefectures in Japan distant from Fukushima Prefecture

Prefecture	Population in 2010 (persons)	Average soil deposition of ^{137}Cs (Bq/m^2)	Estimated absorbed doses to the thyroids of 1-year-old infants (mGy)				
			External (plume)	External (ground)	Inhalation (plume)	Ingestion	Total
			Mean	Mean	Mean	Mean	Mean
Remainder of Japan							
Aichi Prefecture	7 410 719	9	<0.001	<0.001	<0.001	0.087	0.087
Akita Prefecture	1 085 997	175	<0.001	0.005	0.001	0.087	0.093
Aomori Prefecture	1 373 339	67	<0.001	0.002	0.001	0.087	0.090
Chiba Prefecture	6 216 289	20 931	<0.001	0.47	0.18	0.087	0.74
Ehime Prefecture	1 431 493	7	<0.001	<0.001	<0.001	0.087	0.087
Fukui Prefecture	806 314	31	<0.001	0.001	<0.001	0.087	0.088
Fukuoka Prefecture	5 071 968	1	<0.001	<0.001	<0.001	0.087	0.087
Gifu Prefecture	2 080 773	16	<0.001	<0.001	<0.001	0.087	0.088
Gunma Prefecture	2 008 068	13 639	<0.001	0.31	0.11	0.087	0.51
Hiroshima Prefecture	2 860 750	4	<0.001	<0.001	<0.001	0.087	0.087
Hokkaido Prefecture	5 506 419	9	<0.001	<0.001	<0.001	0.087	0.087
Hyogo Prefecture	5 588 133	8	<0.001	<0.001	<0.001	0.087	0.087
Ishikawa Prefecture	1 169 788	13	<0.001	<0.001	<0.001	0.087	0.088
Iwate Prefecture	1 330 147	11 880	<0.001	0.27	0.11	0.087	0.46
Kagawa Prefecture	995 842	6	<0.001	<0.001	<0.001	0.087	0.087
Kagoshima Prefecture [Kagoshima]	1 706 242	1	<0.001	<0.001	<0.001	0.087	0.087
Kanagawa Prefecture	9 048 331	3 857	<0.001	0.091	0.033	0.087	0.21
Kochi Prefecture	764 456	36	<0.001	0.001	<0.001	0.087	0.088
Kumamoto Prefecture	1 817 426	0	<0.001	<0.001	<0.001	0.087	0.087
Kyoto Prefecture	2 636 092	7	<0.001	<0.001	<0.001	0.087	0.087
Mie Prefecture	1 854 724	27	<0.001	0.001	<0.001	0.087	0.088
Miyazaki Prefecture	1 135 233	6	<0.001	<0.001	<0.001	0.087	0.087
Nagano Prefecture	2 152 449	1 251	<0.001	0.031	0.011	0.087	0.13
Nagasaki Prefecture	1 426 779	2	<0.001	<0.001	<0.001	0.087	0.087
Nara Prefecture	1 400 728	7	<0.001	<0.001	<0.001	0.087	0.087
Niigata Prefecture	2 374 450	49	<0.001	0.001	<0.001	0.087	0.089
Oita Prefecture	1 196 529	1	<0.001	<0.001	<0.001	0.087	0.087
Okayama Prefecture	1 945 276	4	<0.001	<0.001	<0.001	0.087	0.087
Okinawa Prefecture	1 392 818	4	<0.001	<0.001	<0.001	0.087	0.087
Osaka Prefecture	8 865 245	9	<0.001	<0.001	<0.001	0.087	0.087
Saga Prefecture	849 788	1	<0.001	<0.001	<0.001	0.087	0.087
Saitama Prefecture	7 194 556	6 284	<0.001	0.15	0.053	0.087	0.29
Shiga Prefecture	1 410 777	7	<0.001	<0.001	<0.001	0.087	0.087
Shimane Prefecture	717 397	6	<0.001	<0.001	<0.001	0.087	0.087

<i>Prefecture</i>	<i>Population in 2010 (persons)</i>	<i>Average soil deposition of ¹³⁷Cs (Bq/m²)</i>	<i>Estimated absorbed doses to the thyroids of 1-year-old infants (mGy)</i>				
			<i>External (plume)</i>	<i>External (ground)</i>	<i>Inhalation (plume)</i>	<i>Ingestion</i>	<i>Total</i>
			<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>
Shizuoka Prefecture	3 765 007	643	<0.001	0.016	0.005	0.087	0.11
Tokushima Prefecture	785 491	8	<0.001	<0.001	<0.001	0.087	0.087
Tokyo	13 159 388	8 499	<0.001	0.20	0.072	0.087	0.36
Tottori Prefecture	588 667	11	<0.001	<0.001	<0.001	0.087	0.087
Toyama Prefecture	1 093 247	16	<0.001	<0.001	<0.001	0.087	0.088
Wakayama Prefecture	1 002 198	10	<0.001	<0.001	<0.001	0.087	0.087
Yamaguchi Prefecture	1 451 338	3	<0.001	<0.001	<0.001	0.087	0.087
Yamanashi Prefecture	863 075	208	<0.001	0.006	0.002	0.087	0.094

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