

Results of Additional Monitoring Survey of  
Environmental Radioactivity Levels in Fukushima Prefecture

April 24, 2011

Disaster Provision Main Office of Fukushima Pref. (Nuclear Power Team)

1. Monitoring date

Friday, April 22, 2011

2. Monitored facilities

(1) Monitoring at school buildings and outdoor areas of schools, etc.

Target facilities: 28 facilities (nine elementary schools, six junior high schools, four kindergartens, and nine nurseries)

Monitored facilities: 27 facilities (one target facility has submitted a notification of discontinuance)

(2) Monitoring at the sites of urban parks, etc.

Target facilities: 19 facilities (six high schools and 13 parks)

Monitored facilities: 19 facilities

3. Monitoring results

As a result of the additional monitoring, no school, etc. indicated readings of air dose rates equal to or higher than the government's provisional standard value (3.8  $\mu\text{Sv/h}$ ).

As for urban parks, etc., air dose rates equal to or higher than the government's provisional standard value were observed at the following five facilities.

Category	Municipality	Monitored location	Monitored value ( $\mu\text{Sv/h}$ )	
			Present survey (April 22)	Previous survey (April 13–14)
			50 cm above ground	1 m above ground
Park	Fukushima City	Shinobuyama Kodomo No Mori Park	3.8	4.0
Park	Fukushima	Shinhama Park (one out of two	3.9	4.0

	City	locations)		
Park	Koriyama City	Sakabuta Park (three out of four locations)	3.8–3.9	3.9
Park	Nihonmatsu City	Nissho Park	3.9	3.5
Park	Motomiya City	Iwazuno Noson Park	3.9	3.6

#### 4. Measures to be taken

##### (1) Schools, etc.

Among the 27 facilities monitored, the 26 facilities at which the air dose rate was measured below the government's provisional standard value (3.8  $\mu\text{Sv/h}$ ) in both the present and previous surveys will not be restricted from use.

As for the one facility at which the rate exceeded the provisional standard value in the previous survey but fell below the provisional standard value in the present survey, an additional monitoring survey will be implemented roughly within a week.

##### (2) Sites of urban parks, etc.

###### (a) High schools

Among the six facilities monitored, the three facilities at which the air dose rate was measured below the government's provisional standard value (3.8  $\mu\text{Sv/h}$ ) in both the present and previous surveys will not be restricted from use.

As for the three facilities at which the rate exceeded the provisional standard value in the previous survey but fell below the provisional standard value in the present survey, their use will continue to be restricted and an additional monitoring survey will be implemented roughly within a week.

###### (b) Urban parks

Among the 13 facilities monitored, the eight facilities at which the air dose rate was measured below the government's provisional standard value (3.8  $\mu\text{Sv/h}$ ) will not be restricted from use.

As for the five facilities at which the rate exceeded the provisional standard value, requests will be made to the municipalities in charge of the respective parks to restrict the use of those parks.

For these five facilities, an additional monitoring survey will be implemented roughly within a week.

(Example) To Park Visitors

During the environmental radioactivity monitoring implemented on April 22, 2011, radioactivity levels exceeding the standard value were observed at XX Park. Therefore, visitors are advised to consider the following matters when using the park.

- Please do not use the park any longer than approximately one hour per day.
- Please wash your hands and face, and gargle, after using the park.
- Please refrain from using the sand pit, and be careful not to let any soil or sand enter your mouth.

Results of Additional Monitoring Survey of Environmental Radioactivity Levels in Fukushima Prefecture (Elementary Schools/Junior High Schools/Kindergartens/Nurseries)

April 24, 2011

Disaster Provision Main Office of Fukushima Pref. (Nuclear Power Team)

No.	Municipality	Category	Monitored location	Monitoring date/time	Monitored air dose rate (μSv/h)										Weather	Average value inside the school building (near-window/near-center) (μSv/h)				Remarks
					Average value outside the school building		Concrete-covered ground		Average value inside the school building		Gymnasium		Near-window average	Near-center average						
					1 m	50 cm	1 m	50 cm	1 m	50 cm	1 m	50 cm				1 m	50 cm	1 m	50 cm	
1	Nihonmatsu City	Nonregistered nursery	Ohisama Nursery	4/22 14:50-15:50		3.1		2.4		1.0		—	Cloudy		1.3		0.84	Playground is grass-covered. Additional monitoring to be implemented. (Readings on April 7: 3.9 μSv/h)		
2	Koriyama City	Private kindergarten	Emporium Kindergarten	4/22 9:58-10:30		3.1		2.0		0.46		0.32	Cloudy		0.57		0.36			
3	Nihonmatsu City	Public elementary school	Nihonmatsu City Obama Elementary School	4/22 13:00-13:40		2.9		1.6		0.34		0.29	Cloudy		0.49		0.19			
4	Nihonmatsu City	Public kindergarten	Nihonmatsu City Odaira Kindergarten	4/22 9:35-11:10		2.8		1.6		0.38		0.22	Cloudy		0.53		0.22			
5	Koriyama City	Nonregistered nursery	Kyle's International School															No monitoring implemented due to submission of a notification of discontinuance.		
6	Fukushima City	Public elementary school	Fukushima City Aoki Elementary School	4/22 9:10-10:08		2.1		0.90		0.14		0.26	Cloudy		0.15		0.12			
7	Fukushima City	Public elementary school	Fukushima City Iino Elementary School	4/22 9:17-10:08		2.5		2.0		0.17		0.23	Cloudy		0.19		0.15			
8	Fukushima City	Public junior high school	Fukushima City Fukushima Dai-yon Junior High School	4/22 6:45-7:45	2.5		1.2		0.22		0.26		Cloudy	0.24		0.21				
9	Fukushima City	Public junior high school	Fukushima City Fukushima Dai-san Junior High School	4/22 15:14-16:13	2.3		1.0		0.35		0.22		Cloudy	0.56		0.14				
10	Fukushima City	Registered nursery	Kasuga Nursery	4/22 12:45-13:25		2.7		1.3		0.33		0.20	Cloudy		0.42		0.24			
11	Fukushima City	Nonregistered nursery	Tokujinkai Fuji Hospital Nursery	4/22 9:13-10:25		2.6		1.7		0.91		—	Cloudy		1.1		0.74			
12	Nihonmatsu City	Public elementary school	Nihonmatsu City Nihonmatsu Kita Elementary School	4/22 15:20-16:35		2.7		0.70		0.14		0.20	Cloudy		0.15		0.13			
13	Nihonmatsu City	Public junior high school	Nihonmatsu City Towa Junior High School	4/22 9:40-10:30	2.3		1.1		0.36		0.27		Cloudy	0.56		0.17				
14	Nihonmatsu City	Nonregistered nursery	Kirakira Nursery	4/22 8:45-9:15		3.1		2.1		0.99		1.1	Cloudy		1.3		0.73	A single location has been monitored once.		
15	Motomiya City	Public elementary school	Motomiya City Elementary School	4/22 9:00-11:20		2.5		1.9		0.22		0.20	Cloudy		0.20		0.16			
			Field No. 1			2.9														
			Field No. 2																	
16	Koriyama City	Private kindergarten	Tachibana Kindergarten	4/22 10:53-11:25		3.2		2.1		0.24		0.19	Sunny		0.31		0.17			
17	Koriyama City	Registered nursery	Tsurumidan Nursery	4/22 12:52-13:50		2.8		1.8		0.35		—	Sunny		0.37		0.20			
18	Fukushima City	Public elementary school	Fukushima City Fukushima Dai-yon Elementary School	4/22 10:00-11:30		2.9		2.0		0.16		0.38	Cloudy		0.17		0.15			
19	Fukushima City	Public junior high school	Fukushima City Iino Junior High School	4/22 10:48-11:30	2.3		1.2		0.18		0.23		Cloudy	0.22		0.14				
20	Fukushima City	Public kindergarten	Fukushima City Okayama Kindergarten	4/22 10:47-11:33		2.4		1.6		0.40		0.22	Cloudy		0.61		0.18			
21	Nihonmatsu City	Public elementary school	Nihonmatsu City Odaira Elementary School	4/22 11:20-13:05		2.1		1.6		0.24		0.27	Cloudy		0.32		0.15			
22	Nihonmatsu City	Registered nursery	Obama Nursery	4/22 14:45-15:20		3.0		2.3		0.85		0.86	Cloudy		0.93		0.77			
23	Motomiya City	Public junior high school	Motomiya City Motomiya Dai-ni Junior High School	4/22 11:40-13:00	2.1		1.4		0.48		0.30		Cloudy	0.58		0.38				
24	Motomiya City	Public junior high school	Motomiya City Shirasawa Junior High School	4/22 10:30-11:30	2.5		1.6		0.20		0.24		Cloudy	0.24		0.16				
25	Motomiya City	Registered nursery	Motomiya Dai-san Nursery	4/22 8:50-9:20		2.3		1.6		0.38		0.35	Cloudy		0.44		0.31			
26	Motomiya City	Registered nursery	Motomiya Dai-ichi Nursery	4/22 13:00-15:00		2.8		2.0		0.57		—	Cloudy		0.73		0.41			
27	Koriyama City	Public elementary school	Koriyama City Momomidai Elementary School	4/22 10:05-10:55		2.4		1.6		0.14		0.27	Cloudy		0.15		0.13			
28	Koriyama City	Public elementary school	Koriyama City Takakura Elementary School	4/22 9:00-10:20		2.8		2.0		0.25		0.26	Cloudy		0.30		0.19			

\* Considering the possible variance in rates by the monitored location, additional monitoring will be implemented for parks with readings of 3.4 μSv/h or higher, which is 10% stricter than the standard value (3.8 μSv/h).

Results of Additional Monitoring Survey of Environmental Radioactivity Levels in Fukushima Prefecture (High Schools/Parks)

No.	Municipality	Category	Monitored location	Monitoring date/time	Monitored air dose rate (μSv/h)								Weather	Average value inside the school building (window side/middle of building) (μSv/h)				Remarks
					Average value outside the school		Concrete-covered ground		Average value inside the school		Gymnasium			Window side average		Middle of building average		
					1 m	50 cm	1 m	50 cm	1 m	50 cm	1 m	50 cm		1 m	50 cm	1 m	50 cm	
1	Fukushima City	High school	Fukushima Toryo High School	4/22 10:25-11:40	3.2		1.6		0.25		0.22		Cloudy	0.30		0.19		Additional monitoring to be implemented (Readings on April 13: 4.2 μSv/h)
2	Fukushima City	High school	Fukushima Seikei High School	4/22 12:05-13:10	3.2		1.6		0.20		0.19		Cloudy	0.32		0.09		Additional monitoring to be implemented (Readings on April 13: 4.1 μSv/h)
3	Fukushima City	High school	Tachibana High School	4/22 13:00-14:15	3.1		2.0		0.33		0.20		Cloudy	0.47		0.19		Additional monitoring to be implemented (Readings on April 13: 3.8 μSv/h)
4	Fukushima City	High school	Fukushima Chuo High School/Fukushima Minami High School	4/22 13:00-14:30	3.4		1.8		0.31		0.26		Cloudy	0.46		0.17		
5	Koriyama City	High school	Koriyama Commercial High School	4/22 13:06-14:35	2.7		1.9		0.33		0.25		Cloudy	0.49		0.16		
6	Fukushima City	High school	Fukushima Higashi High School	4/22 10:30-11:30	2.7		1.3		0.26		0.26		Cloudy	0.39		0.13		

No.	Municipality	Category	Monitored location	Monitoring date/time	Monitored air dose rate (μSv/h)										Weather	Average value inside the park (μSv/h)		Remarks
					Four corners average								Middle of park average			1 m	50 cm	
					1 m	50 cm	1 m	50 cm	1 m	50 cm	1 m	50 cm	1 m	50 cm				
1	Fukushima City	Park	Shinobuyama Kodomo No Mori Park	4/22 13:40-14:00		3.3		3.3		4.3		4.2		3.7	Cloudy		3.8	Additional monitoring to be implemented (Readings on April 13: 4.0 μSv/h)
2	Fukushima City	Park	Shinhama Park	4/22 12:20-12:40		3.9		4.0		3.9		3.7		4.1	Cloudy		3.9	Additional monitoring to be implemented (Readings on April 13: 4.0 μSv/h)
				4/22 12:00-12:20		2.8		3.1		3.0		2.9		3.1			3.0	
3	Koriyama City	Park	Sakabuta Park	4/22 9:15-9:25		4.2		3.7		3.9		4.0		3.8	Cloudy		3.9	Additional monitoring to be implemented (Readings on April 14: 3.9 μSv/h)
				4/22 8:55-9:10		3.5		4.2		3.7		3.8		4.2			3.9	
				4/22 9:04-9:19		3.7		3.5		3.3		4.0		3.3			3.6	
				4/22 8:45-8:58		3.7		3.8		3.9		3.8		3.7			3.8	
4	Fukushima City	Park	Sugawara Park	4/22 9:10-10:00		2.9		3.4		2.8		2.8		2.9	Cloudy		3.0	
5	Fukushima City	Park	Nankodai Dai-san Park	4/22 11:10-11:20		3.5		3.6		3.6		3.8		4.0	Cloudy		3.7	
6	Nihonmatsu City	Park	Sugita-Nakanouchi Danchi Park	4/22 8:45-8:58		3.5		3.6		3.4		3.4		3.7	Cloudy		3.5	Northern part
				4/22 9:00-9:12		2.8		2.8		2.5		3.2		3.1			2.9	Western part
				4/22 9:19-9:30		3.3		3.3		3.0		3.0		3.0			3.1	Southern part
7	Motomiya City	Park	Iwazuno Noson Park	4/22 9:10-10:10		4.1		3.9		3.8		3.7		4.1	Cloudy		3.9	Additional monitoring to be implemented (Readings on April 13: 3.6 μSv/h)
8	Nihonmatsu City	Park	Kanairo-Kubo Park	4/22 9:15-9:45		2.5		2.3		2.2		2.1		2.6	Cloudy		2.3	
9	Nihonmatsu City	Park	Nissho Park	4/22 13:15-13:45		4.3		3.9		3.9		3.8		3.5	Cloudy		3.9	Additional monitoring to be implemented (Readings on April 13: 3.5 μSv/h)
10	Fukushima City	Park	Inaba Park	4/22 10:30-11:20		3.1		3.1		3.1		2.9		3.4	Cloudy		3.1	
11	Nihonmatsu City	Park	Wakamiya Park	4/22 10:23-10:37		2.8		3.0		3.2		3.2		3.3	Cloudy		3.1	
12	Nihonmatsu City	Park	Mukaihara Park	4/22 8:35-8:50		2.5		2.5		2.5		2.6		2.8	Cloudy		2.6	
13	Nihonmatsu City	Park	Shonan Danchi Park	4/22 10:37-10:47		3.2		3.3		2.3		2.8		3.2	Cloudy		3.0	Northern part
				4/22 10:21-10:31		2.4		2.7		2.7		2.5		2.8			2.6	Western part

\* Considering the possible variance in rates by the monitored location, additional monitoring will be implemented for parks with readings of 3.4 μSv/h or higher, which is 10% stricter than the standard value (3.8 μSv/h).

Plan for Additional Monitoring Survey of  
Environmental Radioactivity Levels in Fukushima Prefecture

April 20, 2011

Disaster Provision Main Office of Fukushima Pref.(Nuclear Power Team)

1. Purpose

Yesterday, the national government indicated an "interim policy regarding decisions on whether to utilize school buildings and outdoor areas within Fukushima Prefecture" and an "interim policy regarding decisions on whether to utilize buildings and outdoor areas of nurseries, etc. within Fukushima Prefecture," in which it advised that facilities with outdoor areas where radioactivity readings were equal to or higher than 3.8  $\mu\text{Sv/h}$  be restricted from use. Accordingly, additional monitoring will be implemented at schools, urban parks, etc. (excluding facilities subject to monitoring by the national government) in order to ensure the safety and security of the living environments of the residents of Fukushima Prefecture.

2. Target areas and monitoring timing

(1) Monitoring at school buildings and outdoor areas of schools, etc.

Among the elementary schools, junior high schools, special support schools, kindergartens, and nurseries where monitoring was implemented by Fukushima Prefecture, additional monitoring of the radiation dose will be implemented based on the monitoring method indicated by the national government at those facilities with a schoolyard or playground where readings were equal to or higher than 3.4  $\mu\text{Sv/h}$ , which is 10% stricter than the limit value (excluding the 14 facilities in zones that are planned to be designated as Planned Evacuation Zones and Emergency Evacuation Preparation Zones and the 52 facilities with readings equal to or higher than 3.7  $\mu\text{Sv/h}$  where additional monitoring was implemented by the national government).

Monitoring targets: 28 locations

Monitored spots: Five spots in the schoolyard or playground; six spots in a building; one spot in the gymnasium; and one spot on a concrete-covered site outdoors.

(2) Monitoring at the sites of urban parks, etc.

Among the high schools and urban parks where monitoring was implemented by Fukushima Prefecture, additional monitoring of radiation doses will be implemented based on the monitoring method indicated by the national government at those high schools with outdoor areas or urban parks with sites where readings were equal to or higher than 3.4  $\mu\text{Sv/h}$  (excluding the two facilities in zones that are planned to be designated as Planned Evacuation Zones and Emergency Evacuation Preparation Zones).

Monitoring targets: 6 high schools and 13 urban parks (total of 19 facilities)

Monitored spots: In the case of high schools, five spots in the schoolyard, six spots in a building, one spot in the gymnasium, and one spot on a concrete-covered site outdoors.

In the case of urban parks, five spots on the site.

(3) The monitoring will be carried out promptly during clear weather, and will be generally completed within the same day.

3. Personnel framework

(1) Cooperation of the facility manager, etc.

Each school, etc. will cooperate in making prior selection of the monitoring spots in the outdoor areas and buildings of the school, etc. and in guiding the monitoring team within the facility. The same shall apply to urban parks.

(2) Survey teams

Survey teams will be formed as follows with the cooperation of the members of the Federation of Electric Power Companies of Japan, etc.

20 teams (40 members)

Each team will carry out monitoring at three facilities per day.

4. Monitoring method, etc.

(1) Elementary schools, kindergartens, and nurseries

The air dose at 50 cm above ground will be monitored both indoors and outdoors.

(2) Junior high schools and high schools

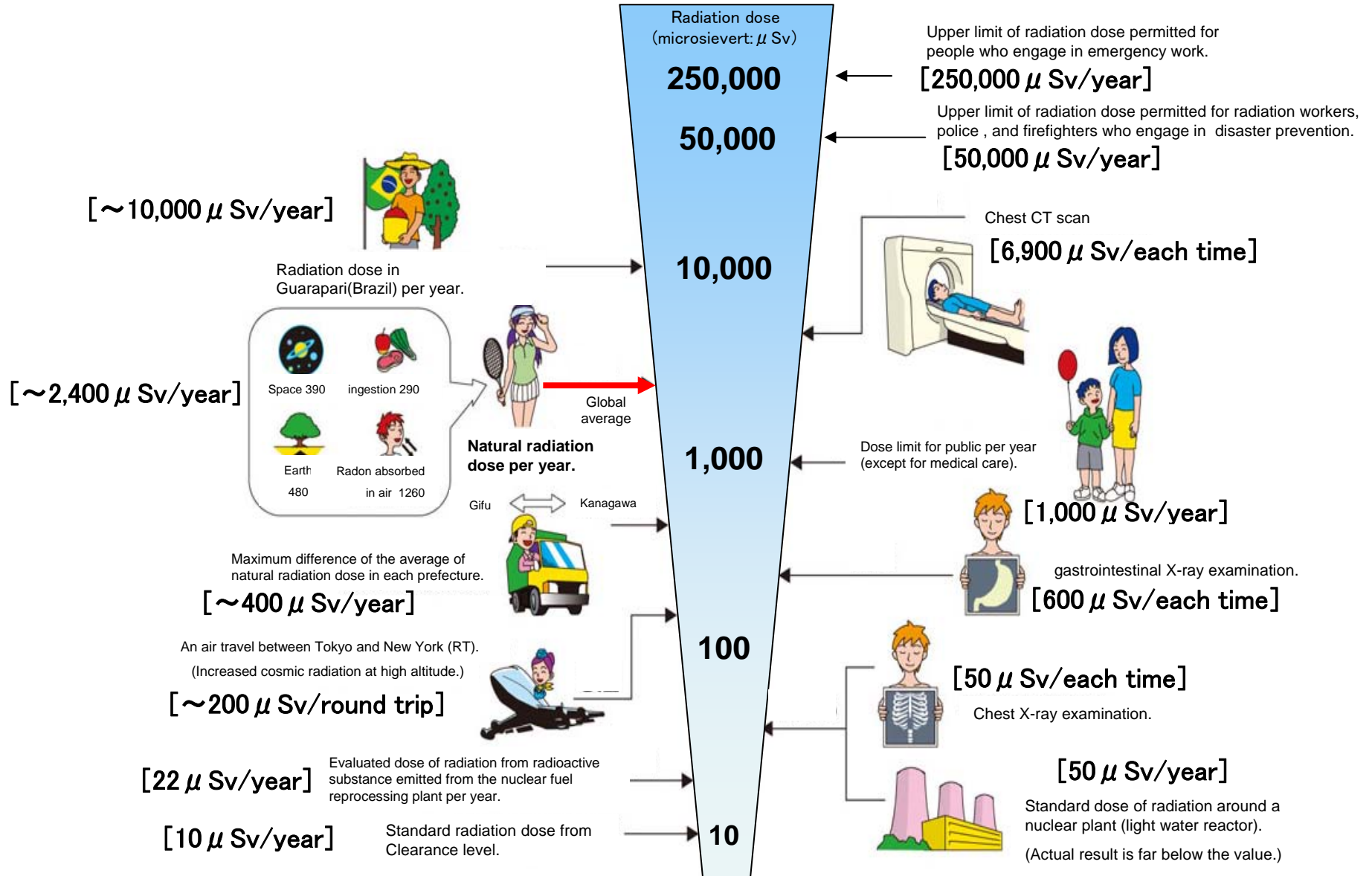
The air dose at 1 m above ground will be monitored both indoors and outdoors.

(3) Urban parks

The air dose at 50 cm above ground will be monitored outdoors.

# Radiation in Daily-life

※Unit :  $\mu\text{Sv}$



※  $\text{Sv}$  [Sievert] = Constant of organism effect by kind of radiation (※)  $\times$  Gy [gray]

※ It is 1 in case of X ray and  $\gamma$  ray.