

WHO SITREP NO 15

Japan earthquake and tsunami
Situation Report No. 15
24 March 2011
As of 14:30 hrs Manila Time



All times stated below are in Tokyo time.

SITUATION SUMMARY

- A 9.0 magnitude earthquake occurred on 11 March 2011 in Japan at 5:46:23 GMT, hitting the northeast coast of Honshu in Japan.
- Based on official figures of the Japan government, 9 523 persons are confirmed dead, 2 755 injured and more than 16 067 missing. There are 257 063 evacuees.
- Additional food sample results have been received from Japan, including meat products.
- Food sampling has been extended in Miyagi, Yamagata, Saitama, Chiba, Niigata and Nagano to include agricultural and livestock products.
- Hong Kong, China has reported that they have tested 288 consignments of imported food from Japan between 12 and 23 March. Three samples were found to exceed the Iodine-131 guideline established by Codex.
- The chief of Nuclear Safety Commission of Japan announced on 23 March that “fuel of reactor 1 may be melted at certain amount and continues to be most critical condition compared with reactor 2 or 3”.
- The Japan Medical Association started to ship insulin to affected sites but there has been difficulty in reaching the affected areas because of bad road conditions and lack of petrol.
- A physician from Niigata University conducted an investigation in a high risk population for deep vein thrombosis and pulmonary embolism and reported cases of embolism in the legs.
- Fukushima Daiichi nuclear power plant:
 - Electricity supply has resumed at reactors 5 and 6. Reactor 3 already had light in the control unit as of the evening of 22 March. The final check-up of electrical equipment is underway at reactors 1, 2 and 4 before they will turn on the electricity.
 - Water spraying and injecting operations are ongoing at reactors 3 and 4. Temperature of spent fuel storage pool for unit 4 was recorded 100C on 24 March.
 - Coolant pump did not work on 23 March for unit 5, a replacement will be done on 24 March.
 - Higher than expected radiation levels continue to be detected at the plant facility most recently at the main gate; however, radiation levels are continuing to fall.
 - On 24 March, white smoke/steam was observed from the Nos. 1-4 reactor building according to media.
- FAO-IAEA-WHO issued a Joint Statement on food safety issues following the Fukushima Daiichi nuclear emergency.

EVENT INFORMATION

Weather

(Source: Japan Meteorological Agency, 06:00, 23 March)

23 and 24 March: Northern part of Tohoku (Pacific side) and Kanto area may have snow or rain in the afternoon.

23-29 March: Minimum and maximum temperature will be lower than usual and it may drop below freezing in the morning and evening in Tohoku (Pacific side) and northern part of Kanto.

POPULATION STATUS

Combined deaths and missing counts are > 23 000.

Table 1: Confirmed number of deaths, missing, injured and evacuated persons (24 March)

Prefectures	Death	Missing	Injured	Evacuee
Hokkaido	1		3	
Aomori	3	1	66	367
Iwate	<u>2,939</u>	<u>4,947</u>	130	<u>44,271</u>
Miyagi	5,714	6,196	1030	<u>100,835</u> (Including evacuees from Fukushima)
Akita			8	
Yamagata	1		20	<u>3,595</u> (Evacuees from Fukushima and Miyagi)
Fukushima	<u>812</u>	<u>4,920</u>	220	83,778
Tokyo	7		77	740 (Evacuees from Fukushima and Miyagi)
Ibaragi	20	1	<u>662</u>	<u>3,137</u> (Including evacuees from Fukushima)
Tochigi	4		133	2,951 (Including evacuees from Fukushima)
Gunma	1		35	<u>3,323</u> (Evacuees from Fukushima and Miyagi)
Saitama			42	<u>3,396</u> (Evacuees from Fukushima etc.)
Chiba	<u>17</u>	<u>2</u>	194	<u>1,413</u> (Including evacuees from Fukushima and Miyagi)
Kanagawa	4		127	<u>537</u> (Evacuees from Fukushima)
Niigata			2	<u>7,519</u> (Evacuees from Fukushima)
Yamanashi			1	664(Evacuees from Fukushima and Miyagi)
Shizuoka			4	243(Evacuees from Fukushima)
Kouchi			1	
Nagano				294 (Evacuees from Fukushima)
Total	<u>9,523</u>	<u>16,067</u>	<u>2,755</u>	<u>257,063</u>

HEALTH STATUS, LIFELINE SERVICES AND RESPONSE

Communicable diseases

No further updates on cases of ILI and gastroenteritis.

An internet-based ad-hoc surveillance system has been developed by Infectious Disease Surveillance Center, National Institute of Infectious Diseases (<http://www.syndromic-surveillance.net/hinajo/index.html>), but is not functioning as of the morning of 23 March.

Non-communicable diseases

The Japan Medical Association started to ship insulin to affected sites but there has been difficulty in reaching the affected areas because of bad road conditions and lack of petrol.

Care of the elderly

It was reported that there were 15 out of 170 elderly who died within one week after evacuation.

Tsunami-related symptoms/aspiration pneumonia

- No updates on pneumonia cases.

Mental health

- MHLW is coordinating the needs by location and deployments of mental health workers to the sites.

Other health issues

A physician from Niigata University reported on an investigation in a high-risk population for deep vein thrombosis and pulmonary embolism (from staying in a vehicle at night). He covered three evacuation centres. He reported 11 among 39 subjects who had embolism in the legs. Advice was given to increase water intake among the evacuees.

Response to health and lifeline services

The National Emergency Management Committee, led by the Prime Minister, has been established to oversee and coordinate all response activities. A state of emergency has been declared. All prefectures have also activated the local government response.

Medical team activities

Public health nurse teams are being deployed to evacuation centres in Fukushima, Iwate and Miyagi (Table 2).

Table 2: Public health nurse teams are being deployed to evacuation centres and public health centres (24 March)

	Number of team	Location
Responding	89	Iwate(23)+Miyagi(38)+Fukushima(2)+Sendai city(26)
Mobilizing	5	Iwate(3)+Sendai city(1)+Sendai city(1)
Standby	11	Iwate(7)+Miyagi(4)
Total	105	Iwate(33), Miyagi(43)+Fukushima(2)+Sendai city(1)

Table 3: Mental health care teams have been deployed (24 March)

	Number of team	Location
Responding	15	Iwate(1)+Miyagi(12)+Sendai city(2)
Mobilizing	8	Iwate(6)+Sendai city(1)+Fukushima(1)
Standby	9	Iwate(2), Miyagi(5)+Sendai city(1)+Fukushima city(1)
Total	32	Iwate(9), Miyagi(17)+Sendai city(4) +Fukushima(1)+Fukushima city(1)

Communication

Improvement: 116 000 telephone lines remain out of service. A reported 820 base stations of mobile companies are not working. Some mobile companies provide free satellite phone, cell phone and charger as well as Disaster messaging services.

Buildings

There are 18 324 buildings completely destroyed while partially destroyed reported at 5 090.

Electricity

Gradual improvement: As of 24 March, approximately 210 000 households remain without power, mostly in the Tohoku region.

Gas

Slow improvement: 363 808 households remain without gas supply.

RADIATION AND NUCLEAR FACILITIES**Updates on Fukushima Daiichi plant**

- The chief of the Nuclear Safety Commission of Japan announced on 23 March that “fuel of reactor 1 may be melted at certain amount and continues to be most critical condition compared with reactor 2 or 3”.
- Electricity supply has resumed at reactors 5 and 6. Reactor 3 already had light in the control unit as of the evening of 22 March. The final check-up of electrical equipment is underway at reactors 1, 2 and 4 before they will turn on the electricity.
- Water spraying and injecting operations are ongoing at reactors 3 and 4. Temperature of spent fuel storage pool for unit 4 was recorded 100C on 24 March.
- Coolant pump did not work on 23 March for unit 5, then replacement will be done on 24 March.
- Higher than expected radiation levels continue to be detected at the plant facility, most recently at the main gate; however, radiation levels are continuing to fall.
- On 24 March, white smoke/steam was observed from the Nos. 1 - 4 reactor building according to media.

Table 4: Status of reactors at Fukushima Daiichi plant (24 March)

Unit.No	Operation status prior to earthquake	INES assessment	Fire/Explosion	Damage to building of the unit	Fuel rod status	Pressure container	Spent fuel storage pool temperature	Water spraying/injection for spent fuel storage pool	Recovery of electricity	Recent operations (19-24 March)
Unit1 (460,000Kw)	Operating	Level 5 (18 Mar)	H-explosion (12 Mar); white smoke/steam (24Mar)	Severely damaged	Failure to cool the fuel rod	Maintained	Unable to measure		electric line is working from outside and checking up for electric equipment is underway(23 Mar)	Sea water pumping
Unit2 (784,000Kw)	Operating	Level 5 (18 Mar)	Sound of explosion (15 Mar); white smoke (21, 22 Mar); white smoke/steam (24Mar)	Damage on wall	Failure to cool the fuel rod	Suppression pool may be damaged (15 Mar)	52.0 (24Mar)	Injection: 58t	electric line from outside is working and checking up for electric equipment is underway(22 Mar)	Sea water pumping; water injection for spent fuel storage pool (20 Mar)
Unit3 (784,000Kw)	Operating	Level 5 (18 Mar)	H-explosion (14 Mar); greyish smoke (21, 22 Mar); black smoke(23 Mar, 4:20PM); white smoke/steam (24Mar)	Severely damaged	Failure to cool the fuel rod	Pressure is stable (21Mar)	Not able to measure	Spray and Injection: 3927t in total	lighted in central operating room(22Mar)	Sea water pumping; water spray by fire engine (19, 20, 22 Mar);water infection for spent fuel storage pool (23, 24Mar)
Unit4 (784,000Kw)	Under regular check-up	Level 3 (18 Mar)	Fire (15-16 Mar); white smoke/steam (24Mar)	Severely damaged	No fuel rod	Maintained	100C(24Mar)	Spray: 535t in total	electric line is working from outside and checking up for electric equipment is underway(23 Mar)	Water spray by fire engine (20, 21,22,23,24 Mar)
Unit5 (784,000Kw)	Under regular check-up		Nil	make a hole in the ceiling (18,19 Mar)	Not under operation	Maintained	45.1C (24Mar)		power supply from outside is working and replaced emergency generator function (22 Mar)	Emergency generator operating and cooling operation by pump started for spent fuel storage pool (19 Mar); Coolant pump became not working (23Mar) replacement will be done on 24 Mar
Unit6 (784,000Kw)	Under regular check-up		Nil	make a hole in the ceiling (18,19 Mar)	Not under operation	Maintained	23.5C (24Mar)		electric line is working from outside and checking up for electric equipment is underway (22 Mar)	Emergency generator operating and cooling operations started for spent fuel storage pool (19 Mar) ;

Radiation levels

Higher than expected radiation levels continue to be detected at the plant facility, most recently at the main gate, west of reactor 2; however, radiation levels are continuing to fall. Due to cooling and electric operations at the plant, radiation levels have not been consistently measured at the main gate since 17 March. Key measurement values, locations and dates are as follows:

SDF helicopters involved in the cooling operations (17 March):

- 4.13 milli Sv/h at 1000ft (300m);
- 87.7 milli Sv/h at 300ft (90m).

Measures taken at the control room:

- 18 March (3254 micro Sv/hr; 23:30);
- 19 March (2820 micro Sv/hr; 23:30);
- 20 March (2487 micro Sv/hr; 23:30);
- 21 March (2016 micro Sv/hr, 16:50)

Measurements taken near reactor 3:

- 20 March (2670 micro Sv/hr);
- 21 March (2319 micro Sv/hr).

Measurements taken at the Main gate, west of reactor 2:

- 17:40, 21 March (494 micro Sv/hr)
- 18:30, 21 March (1932 micro Sv/hr)
- 07:30, 22 March (261.6 micro Sv/hr)
- 08:30, 23 March (229.3 micro SV/hr)
- 14:30, 23 March (435.0)
- 16:20, 23 March (280.9)
- 23:50, 23 March (223.0)
- 08:00, 24 March (211.6)

Table 5: Levels of radiation measured at nearby prefectures (24 March)

	IBARAKI PREFECTURE Mito City	TOCHIGI PREFECTURE Utunomiya city	GUNMA PRERECTURE Maebashi city	SAITAMA PREFECTURE Saitama City	CHIBA PREFECTURE Ichihara City	TOKYO Shingyuku
Historic background level	0.036~0.056	0.030~0.067	0.017~0.045	0.031~0.060	0.022~0.044	0.028~0.079
15/3/2011 (7pm-8pm)	0.239	0.321	0.389	0.169	0.055	0.361
16/3/2011 (7pm-8pm)	0.241	0.212	0.109	0.067	0.040	0.053
17/3/2011 (3pm-4pm)	0.210	0.189	0.096	0.063	0.038	0.050
18/3/2011 (2pm-3pm)	0.189	0.167	0.086	0.058	0.034	0.050
19/3/2011 (6am-7am)	0.180	0.157	0.083	0.058	0.033	0.047
20/3/2011 (4pm-5pm)	0.174	0.153	0.072	0.052	0.032	0.045
21/3/2011 (4pm-5pm)	0.340	0.133	0.085	0.106	0.082	0.125
22/3/2011 (4pm-5pm)	0.378	0.148	0.110	0.114	0.106	0.142
23/3/2011 (4pm-5pm)*	0.343	0.141	0.096	0.120	0.104	0.146

COMMENTS: Yellow indicates higher than background level; all times in Tokyo time

*for Saitama, last measure done at 14:00-15:00

Monitoring of seawater quality

TEPCO has reported contamination of seawater with radioactive iodine and cesium. The levels reported were as follow:

Distance south of Fukushima No. 1 nuclear plant (m)	Sampling Date	Number of times guideline value* is exceeded		
		Iodine-131	Cesium-134	Cesium-137
10	21-Mar 14:30	126.7	24.8	16.5
330	22-Mar 06:30	29.8	2.5	1.7
8000	22-Mar 00:38	80.3	1.3	0.9
10000	22-Mar 14:28	28.5	0.8	0.4
16000	22-Mar 15:06	16.7	0.7	0.5

* Guidance values are 40 Bq/L (I-131); 60 Bq/L (Cs-134) and 90 Bq/L(Cs-137)

Japanese authorities have reported that they will measure radioactivity in the marine environment around the Fukushima Daiichi nuclear power plant. The monitoring will be

conducted from 22 to 23 March by the Japan Agency for Marine-Earth Science and Technology (JAMSTEC). Sea water sampling from eight locations will be sampled and analysed by the Japan Atomic Energy Agency (JAEA), and results will be provided on 24 March. The analysis will include radionuclide concentrations found in sea water and dose rate. The IAEA will continue to follow this information. (Source: <http://www.iaea.org/newscenter/news/tsunamiupdate01.html>) The Ministry of Education, Culture, Sport, Science and Technology (MEXT), Japan will also conduct a sampling and analysis of sea water near the Fukushima Daiichi nuclear plant that covers 8 locations 30 km off the coast at 10 km intervals east of Fukushima Daiichi nuclear plant. The first set of data based on sampling on 23 March has just been reported. Three out of 8 points were found to exceed the Japanese guidance level for radioactive iodine of 40 Bq/L. The reported values were 76.8, 54.7 and 42 Bq/L. All samples were within the guidance value for Cesium-137.

National response to radiation/nuclear facility issues

- Due to potential radiation exposure, all people within a 20-km radius have been evacuated from the towns of Okuma, Tomioka, Naraha, Futaba. People residing between 20 to 30 km of the Daiichi plant like people from Kawauchi village, Tamura city, Hirono town, Iwaki city, Iitate village, Minamisoma city, Katsurao village and Namie town, have been advised to stay indoors and avoid the use of ventilator systems, close windows and not to bring laundry hanging outside indoors. The government has also issued a warning to avoid contact with rain water and if exposed to wash with clean water, given the rainy weather expected in southern Tohoku and Kanto regions.
- The "direction to administer the stable Iodine during evacuation from the evacuation area (20 km radius)" was issued on 16 March by the Local Emergency Response Headquarter to the Prefectural Governor and the heads of cities, towns and villages (Tomioka Town, Futaba Town, Okuma Town, Namie Town, Kawauchi Village, Naraha Town, Minamisoma City, Tamura City, Katsurao Village, Hirono Town, Iwaki City and Iitate Village) (News release, Ministry of Economy, Trade and Industry).

Food safety and drinking-water quality

Monitoring of food in terms of radionuclide contamination

As of 17 March, all local food safety inspection authorities were directed to monitor/investigate radionuclide levels in foods for identification/prevention of potential food safety risks associated with radioactive nuclide contaminations. The notice indicates the provisional regulation values for radionuclide in different types of foods. Foods that exceed these levels are regulated under the Food Sanitation Act. As such, actions to prevent consumption of foods that exceed the provisional levels must be applied.

In addition to these measures, the following restrictions are in place following Article 20.3 of the Act on Special Measures Concerning Nuclear Emergency Preparedness (Act No. 156, 1999):

Prefecture	Risk Management Action
Fukushima	Consumption and distribution of all leafy vegetables, flowerhead brassicas (broccoli, cauliflower), and milk produced in Fukushima (n.b milk and turnip – distribution limited only) have been stopped.
	Voluntary ban (which has been implemented) on consumption and distribution for all agricultural products from <30 km from Daiichi (implemented 19 March)
Ibaraki	Consumption and distribution of all spinach, kakina, parsley and milk produced in Ibaraki have been stopped.
Gunma	Consumption and distribution of all spinach and kakina in Gunma have been stopped.
Tochigi	Consumption and distribution of all spinach and kakina in Tochigi have been stopped.

Food sampling results have been received from Gunma, Fukushima, Chiba, Ibaraki, Kanagawa, Nagano, Niigata, Saitama, Tochigi, Tokyo prefectures. Results of 379 (363) milk and produce samples have been obtained from the MHLW and prefecture websites. Some 25 samples exceed the provisional regulation value for Iodine-131 for milk (300 Bq/kg): Fukushima (19) and Ibaraki (6). 87 samples exceed the provisional regulation value for Iodine-131 for vegetables (2000 Bq/kg): Chiba (2), Gunma (4), Ibaraki (36), Tochigi (16), Fukushima (22), Ibaraki (6), Nagano (1). No samples exceed the provisional regulation value for Caesium-134 for milk (200 Bq/kg). Some 55 samples exceed the provisional regulation value for Caesium-134 for vegetables (500 Bq/kg): Gunma (2), Ibaraki (21), Tochigi (10), Fukushima (22). Two samples from Fukushima exceed the provisional regulation value for Caesium-137 for milk (200 Bq/kg). Some 23 samples from Fukushima exceed the provisional regulation value for Caesium-137 for vegetables (500 Bq/kg).

No fruits have exceeded the provisional regulation value for radioactive iodine and caesium for 14 strawberries tested (Niigata, Tochigi, Ibaraki), 1 watermelon (Ibaraki). No meat products exceeded the provisional regulation value for radioactive iodine and caesium among samples: 2 beef, 2 pork, 1 chicken, 2 chicken eggs tested (Ibaraki).

Figure in brackets indicates samples above provisional regulatory value for radioactive iodine and caesium, one sample may have more than one result.

On 23 March, Miyagi, Yamagata, Saitama, Chiba, Niigata and Nagano prefectures were instructed to extend monitoring tests for agricultural and livestock products (similar to what Fukushima, Ibaraki, Tochigi and Gunma have been doing).

Seafood testing has been put in place in Ibaraki and Chiba Prefectures.

Within 3.5 km from south to north and 1.5 km to east (ocean side) from Fukushima Daiichi, no commercial fishing has been allowed both prior and since the explosion at Fukushima Daiichi.

Since the explosion, no ship can go inside within 30 km from Fukushima Daiichi (media information).

On 22 March, the Food Safety Commission met and agreed to review the provisional regulation values.

In the Western Pacific Region, the following countries have put in place additional monitoring procedures associated with imported food from Japan: Malaysia, New Caledonia, Republic of Korea and Taiwan, China (unofficial information); and Australia, China, Hong Kong, China, Philippines and Singapore (official information). New Zealand is assessing the situation and has not put in place specific monitoring procedures associated with this event.

Outside of the Western Pacific Region, several countries have also put in additional monitoring procedures, of particular note is the European Commission and the US FDA.

Taiwan, China reported imported fava beans from Kagoshima Prefecture (in southern Japan) have low level radiation levels (11 Bq/kg Iodine and 1 Bq/kg Caesium) (media report only).

Frequently asked questions on the food contamination issues have been updated and are available at: http://www.wpro.who.int/media_centre/jpn_earthquake/FAQs/faqs_foodcontamination.htm

Drinking-water quality

Fukushima prefecture

Based on sampling on 21 March, the MHLW has released the following results and recommendations:

- The level of radioactive iodine at Iitate-mura still exceeded the Japanese guideline value of 300 Bq/kg set for restriction for intake of drinking-water. The recorded levels were 450 Bq/kg and 430 Bq/kg. The residents should hence refrain from consuming the drinking-water, although there is no immediate health impact if consumed temporarily.
- The levels of radioactive iodine in drinking-water samples collected from Date city (120 Bq/kg), Kawamata town (130 Bq/kg, 174 Bq/kg), Koriyama city (150 Bq/kg), Tamura city (161 Bq/kg, 19 March), Minamisoma city (220 Bq/kg, 137 Bq/kg) and Iwaki city (103 Bq/kg) exceeded the guideline value for use by infants which is set at 100 Bq/kg. This water should hence not be fed to infants. The level of radioactive iodine at Tamura city has decreased to 52.3 Bq/kg for sample collected on 21 March.

Outside Fukushima prefecture

Areas where advisory has been given for restricting the use of drinking-water for use by infants below one year old are listed below:

Location	Date of sampling	Levels detected (Bq/kg)
Tokyo (Kanamachi treatment plant, Katsushika-ku)	22 March	210
	23 March	190
	24 March	79
Saitama (Kawaguchi-shi)	22 March	120
	24 March	46*
Ibaraki (Hitachiota treatment plant)	23 March	245
Ibaraki (Tokaimura treatment plant)	23 March	189
Chiba (Chiba-Nogikunosato treatment plant, Matsudo city)	23 March	220
Chiba (Kuriyama treatment plant, Matsudo city)	23 March	180

* Advisory note for restricted use by infants has been lifted.

Based on sampling results from 22 March, the Tokyo Metropolitan government announced on 23 March that 210 Bq/kg of radioactive iodine was detected in treated water from the Kanamachi treatment plant in the Katsushika ward of Tokyo. The reason for the elevated levels is currently unclear. It was noted that the Kanamachi plant uses water from the Edo River watershed. The Japanese government advised residents from the 23 wards of Tokyo and suburbs of Musashino, Machida, Tama, Inashiro and Mitaka in western Tokyo not to feed the water to infants below the age of one. The Japanese authority has distributed 240 000 of 500 ml water bottles, with families with infants below one year old as priority. The bottled water producers have also been requested to increase production to meet the current shortage of bottled water. MHLW also suggested for pregnant and breast-feeding women to follow the guidance value of 100 Bq/kg (media).

The latest sampling result on 24 March was 79 Bq/kg of radioactive iodine. Water samples were also collected from Ozaku treatment plant in Hamura City, Tokyo and Asaka treatment plant in Asaka City, Saitama Prefecture (just north of Tokyo). The results were 32 Bq/kg at Ozaku and non-detectable at Asaka at 09:00 on 22 March. The water sources are from Tama River and Ara River respectively.

The other detected levels of radioactive iodine in tap water collected in the other prefectures, as well as Shinjuku, Tokyo (up to 22 March) are listed below. All reported values were below 100 Bq/kg.

Place	I-131 (Bq/kg)			Cs-137 (Bq/kg)		
	20 Mar	21 Mar	22 Mar	20 Mar	21 Mar	22 Mar
Iwate (Morioka City)	ND	ND	3.4	ND	ND	ND
Akita (Akita City)	ND	ND	0.76	ND	ND	ND
Yamagata (Yamagata City)	ND	ND	3.9	ND	ND	ND
Ibaraki	12	58	12	0.48	18	4.8

Tochigi (Utsunomiya City)	10	13	15	2.8	6	5.3
Gunma (Maebashi City)	5.9	4.7	9.3	1.2	0.72	0.37
Saitama (Saitama city)	2.0	3.4	9.2	ND	ND	ND
Chiba (Ichihara City)	0.68	0.59	0.48	ND	ND	ND
Niigata (Niigata City)	3.6	3.2	3	ND	ND	ND
Kanagawa (Chigasaki City)	ND	-	0.93	ND	ND	ND
Yamanashi (Kofu City)	0.24	ND	ND	ND	ND	ND
Shizuoka (Shizuoka City)	ND	ND	0.14	ND	ND	ND
Tokyo (Shinjuku ward)	2.9	5.3	19	ND	0.22	0.31

ND = Non-detectable

Source: Ministry of Education, Culture, Sports, Science and Technology (www.mext.go.jp)

The Nuclear Safety Commission of Japan, a unit of the Government of Japan established the guideline value for restriction for intake of drinking water as:

I-131* 300Bq/kg

Cesium-134, -137* 200Bq/kg

* MHLW advised that materials exceeding 100 Bq/kg are not used in milk supplied for use in powdered baby formula or for direct drinking to baby.

It should also be noted that the Japanese guideline value is an order lower than the internationally agreed Operational Intervention Levels (OIL's) for I-131 (3,000 Bq/kg), Cs-134 (1,000 Bq/kg) and Cs-137 (2,000 Bq/kg). Iodine-131 is not a significant source of radiation because of its low specific activity (ref. IAEA General Safety Guide No. 2:

http://www-pub.iaea.org/MTCD/publications/PDF/Pub1467_web.pdf

INTERNATIONAL RESPONSE

As of 23 March, 2011 (18:00), Japan has received offers of assistance from the 131 countries and areas (increased from 130 in the previous press release) and 33 international organizations. The country that made new offer is Tanzania. To date, Japan has accepted relief items from 15 countries. (Source: Japan Ministry of Foreign Affairs)

The United Nations Disaster Assessment and Coordination (UNDAC) has officially handed over reporting and some other functions to the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) which has a temporary presence in Japan, and is being supported by United Nations High Commissioner for Refugees (UNHCR) staff. The OCHA Team will be visiting Sendai and the affected areas in Miyagi Prefecture on 24 March with the Ministry of Foreign Affairs and Cabinet Secretary's Office. (Source: OCHA Sitrep No. 12).

As of 21 March 2011, 43 Japanese Red Cross medical response teams are active on the ground. A total of 230 medical response teams composed of approximately 1,200 doctors, counselors, nurses and support staff have been deployed during this response. These teams are operating field and mobile health clinics to provide medical and emotional support to affected people. There also is a specialized psychological support team operating in Ishinomaki hospital in Miyagi prefecture, helping survivors who have lost loved ones in the disaster. (Source: Red Cross)

Japan Red Cross continues to provide emergency relief, medical services and psychosocial support to affected communities. A total of 249 medical missions involving more than 735 persons were deployed to the affected prefectures, with over 125,000 blankets and 20,700 emergency relief packs distributed at time of reporting. A website supporting restoring family links in five languages was also launched, with over 5,100 registrations to date. (Source: IFRC sitrep No. 4).

NGOs such as HuMA and AMDA are providing medical assistance in Miyagi (Minamisanriku-cho, Kesenuma, Natori-cho, Ofunato), Iwate (Rikuzentakata, Kamaishi, Otsuchi-cho) and Fukushima.

WHO/WPRO RESPONSE

- WPRO closely coordinates with the Ministry of Health, Labour and Welfare of Japan for updates on radiation concerns, food safety issues, health situation in the evacuation centres, and other post-disaster health issues. The National IHR Focal Point of Japan has been designated as the contact person of WHO on the event.

TRAVEL ADVISORIES

The International Civil Aviation Organization (ICAO), on behalf of the International Atomic Energy Agency (IAEA), International Maritime Organization (IMO), the World Health Organization (WHO) and the World Meteorological Organization (WMO), issued a joint statement on the continued safety of air transport operations in Japan.

These five organizations confirmed that there are no restrictions to normal air transport operations at Japan's major airports, including both Haneda and Narita.

The ICAO statement further confirmed that there are no health reasons that would require the screening of passengers emanating from Japan. Moreover the Organizations confirmed that there is no health risk associated with increased levels of radiation that have been detected at some airports.

RISK COMMUNICATION

Updates from monitoring mainstream and social media

- Austrian expert from Central Institute for Meteorology and Geodynamics said Japan iodine release is lower than Chernobyl. The release of two types of radioactive particles in the first three to four days of Japan's nuclear crisis is estimated to have reached 20-50 percent of the amounts from Chernobyl in 10 days. (Reuters)
- Japan Ministry of Foreign Affairs said 25 nations have either closed their embassies in Tokyo or moved them elsewhere in the country. (Twitter)
- Restriction on food from Japan widen amid radiation concerns.
- Australia restricts food imports from Japan due to concerns over contamination by radiation.
- Singapore suspended food import from areas near nuclear plant.
- Hong Kong bars some Japanese agricultural products after finding radiation levels 10 times higher than the level the city allows in food.
- Bottled water now scarce across Japan
- US FDA release on Detention Without Physical Examination of Products from Japan Due to Radionuclide Contamination
- Reuters came up with a list of country restrictions on Japan imports

WHO Actions

- Joint FAO-IAEA-WHO statement in the website
- Updated FAQs on food safety (on HQ website, and will be updated in the WPRO website).

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