

WHO SITREP NO 13

Japan earthquake and tsunami
Situation Report No. 13
22 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, Japan.
- Based on official Japanese government figures 8 805 persons are confirmed dead, 2 628 injured with more than 12 664 missing.
- 319 121 have been evacuated. People in evacuation centres have started to move to other parts of the country.
- An Internet-based ad-hoc surveillance system was set up by the Infectious Disease Surveillance Center, National Institute of Infectious Diseases.
- Some influenza and gastroenteritis cases continue to be reported in the affected areas.
- Restrictive requirements shall apply to food business operators not to distribute the following foods produced in the respective prefectures: 1) spinach and kakina harvested in Fukushima, Ibaraki, Tochigi and Gun-ma prefectures; and 2) fresh raw milk produced in Fukushima Prefecture.
- 73 food samples exceed the provisional regulation value for Iodine-131 and 30 food samples exceed the provisional regulation value for Caesium (200 Bq/kg for milk and 500 Bq/kg for vegetables). Samples which exceeded the provisional regulation values originated from Gunma, Fukushima, Chiba, Ibaraki, Nagano and Tochigi prefectures.
- Fukushima Daiichi nuclear power plant:
 - While electricity from an outside source has not flowed into reactors at this time yet, all six reactors now have electric connections laid out.
 - Operations to supply electricity to cool reactors 1 and 2 were temporarily suspended due to white smoke from reactor 2 (21 March), but resumed again in the morning of 22 March; the white smoke is barely visible as of 12:00, 22 March.
 - Operations to inject water into reactors 3 and 4 were temporarily suspended due to grey smoke from reactor 3 (15:55, 21 March); the amount of smoke has decreased as of 12:00. Water injection activities are still planned for 22 March.
 - At the main gate of Daiichi plant, while radiation level peaked temporarily at 18:30 on 21 March, the level declined again at 07:30 on 22 March.
 - The maximum radiation level detected within the 60 km area of the Daiichi plant was the same for 20 and 21 March.
 - Radiation levels increased above background levels in the surrounding prefectures, including Tokyo, 21 March.

EVENT INFORMATION

Weather

The three prefectures most affected in the eastern Tohoku region are Miyagi, Iwate and Fukushima. It will be cloudy changing to sunny in the north area on 23 March. In Fukushima, it will be sunny changing to snowy. Temperature will be from -3C to 8C.

Central and western Tohoku prefectures (Aomori, Akita and Yamagata) will be cloudy on 23 March. The temperature will be from -2C to 4C with wind blowing generally from southeast to northwest at 1 to 6 m/s.

From 23 to 26 March, there will be a cold front entering the area with minimum temperatures below freezing.

POPULATION STATUS

Combined deaths and missing counts are > 20 000.

Table 1: Confirmed number of deaths, missing, injured, stranded, and evacuated persons

Prefectures	Death	Missing	Injured	Evacuee
Hokkaido	1		3	
Aomori	3	1	66	367
Iwate	2,650	5,018	108	45,687
Miyagi	5,364	3,265	950	113,223
Akita			8	
Yamagata	1		21	3,858 (Evacuees from Fukushima and Miyagi)
Fukushima	735	4,376	220	131,665
Tokyo	7		77	733 (Evacuees from Fukushima and Miyagi)
Ibaragi	19	1	636	3582 (Including evacuees from Fukushima)
Tochigi	4		133	3,201 (Including evacuees from Fukushima)
Gunma	1		35	2,983 (Evacuees from Fukushima and Miyagi)
Saitama			42	3,688(Evacuees from Fukushima etc.)
Chiba	16	3	194	1,220 (Including evacuees from Fukushima and Miyagi)
Kanagawa	4		127	252 (Evacuees from Fukushima)
Niigata			2	7,849 (Evacuees from Fukushima)
Yamanashi			1	457(Evacuees from Fukushima and Miyagi)
Shizuoka			4	163 (Evacuees from Fukushima)
Kouchi			1	
Nagano				193 (Evacuees from Fukushima)
Total	8,805	12,664	2,628	319,121

Table 2: Estimated age groups for evacuees

Prefecture	Number of evacuation centers	Evacuees	Age 0<14	Age>15, <65	Age >65
Aomori	NA	367	48	235	84
Iwate	758	45687	5985	29240	10462
Miyagi	810	113223	14832	72463	25928
Yamagata	54	3858	505	2469	883
Fukushima	522	131665	17248	84266	30151
Tokyo	2	733	96	469	168
Ibaragi	100	3582	469	2292	820
Tochigi	56	3201	419	2049	733
Gunma	36	2983	391	1909	683
Saitama	38	3688	483	2360	845
Chiba	19	1220	160	781	279
Kanagawa	1	252	33	161	58
Niigata	77	7849	1028	5023	1797
Yamanashi	1	457	60	292	105
Nagano	NA	193	25	124	44
Shizuoka	NA	163	21	104	37
Total	2474	319121	41805	204237	73079

Displaced people

There are >2000 evacuation shelters for displaced persons. People in evacuation centres have started to move to other parts of the country. However, people continue to face cold temperatures with insufficient heating and many elderly persons have lost their daily medications. There are approximately 5-6 nurses available at each evacuation centre. The Japanese population by age group is as follows: 13% are 0-14 years, 64% are 15-64 years and 23% are 65 years and older. A large proportion of the evacuees are old.

HEALTH STATUS, LIFELINE SERVICES AND RESPONSE

Health care facilities

Of the 150 disaster-designated hospitals in the Kanto area, 130 are still accepting additional patients.

Communicable diseases

An Internet-based ad-hoc surveillance system was set up by Infectious Disease Surveillance Center, National Institute of Infectious Diseases (<http://www.syndromic-surveillance.net/hinajo/index.html>).

Cases of influenza-like illness (ILI) and gastrointestinal infection have been reported at various evacuation shelters (see table below). At least one case of pneumonia has also been reported.

Control measures include encouraging the use of face masks for persons with respiratory illness, use of alcohol disinfectants, and increasing fluid intake. The availability of masks and alcohol disinfectants is limited. A risk assessment of infectious diseases has been conducted by the National Institute of Infectious Diseases. An order has been made to make available influenza medications (antivirals) in stock to those who have been affected as a preventive measure.

On 21 March, Sendai City, Miyagi Prefecture reported testing for influenza by PCR from several clinics in the surrounding area. Results of 24 samples tested from ILI cases, had eight samples (33%) positive for H3N2. One emergency centre tested 211 people for influenza with an influenza rapid test kit. Results for the period 12-20 March showed 75 (36%) positive for influenza A and three positive for influenza B (Source: unpublished information from personal communication). Several cases of gastroenteritis were reported from Kesenuma and a gastroenteritis epidemic has been detected in Shiogama (21 March).

Table 3: ILI and gastroenteritis cases in evacuation centres as of 18 March (media)

Location of evacuation centre	ILI cases	Gastroenteritis cases
Kamaishi city, Iwate	1	10
Wakabayash-ku, Sendai city, Miyagi	7	-
Shichigahama town, Miyagi	2	-
Otsuchi town, Iwate	-	8

Hypothermia

- Hypothermia reported among the elderly population in the evacuation centres.
- Prevention messages sent out regarding using heating instruments indoors to prevent carbon monoxide poisoning (Ministry of Economy, Trade and Industry)

Tsunami-related symptoms/aspiration pneumonia

- One female adult was hospitalized due to difficulty in breathing. Current impression is aspiration pneumonia ("Tsunami Lung").

Mental Health

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

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.

There is a steady improvement in the supply of power, gas and water throughout the Tohoku region.

Medical team activity

- The National Center for Child Health and Development and Japanese Society of Emergency Pediatrics deployed a team to Miyagi prefectural Pediatric Hospital for assessing the pediatric medical needs.
- 112 teams from the National Hospital Institution, Japan Red Cross Society and Japan Medical Association, etc. are responding to Iwate, Miyagi and Fukushima.
- 66 pharmacists are deployed to Miyagi (51), Fukushima (10), Iwate (3), Ibaragi (2) by the Japan Pharmaceutical Association and Japanese Society of Hospital Pharmacists.

Public health nurse teams are being deployed to evacuation centres in Fukushima, Iwate and Miyagi (Table 4).

Table 4: Public health nurse teams deployed to evacuation centres and public health centres

	Number of teams	Location
Responding	77	Iwate(22), Miyagi(28)+Sendai city(26), Fukushima(1)
Mobilizing	8	Iwate(1), Miyagi(6), Fukushima(1)
Standby	19	Iwate(10), Miyagi(6)+Sendai city(3)
Total	104	Iwate(33), Miyagi(40)+Sendai city(29), Fukushima(2)

Table 5: Mental health care teams deployed as of 21 March

	Number of team	Location
Responding	7	Miyagi(5)+Sendai city(2)
Mobilizing	3	Miyagi(3)
Standby	16	Iwate(6), Miyagi(8)+Sendai city(2)
Total	26	Iwate(6), Miyagi(16)+Sendai city(4)

Food/water/essentials

The Ministry of Health, Labour and Welfare (MHLW) reported on 20 March that 1 016 069 households were without water. Food, water and other essential items continue to be supplied to affected areas.

Food safety

Individual local health authorities are responsible for advising on health and hygiene control for affected persons. The MHLW has provided general information and guidance to local governments: <http://www.mhlw.go.jp/stf/houdou/2r9852000001558e.html>.

Communication

Improvement: 225 959 telephone lines remain out of service. A reported 3 426 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.

Electricity

Gradual improvement: Approximately 223 770 households remain without power, mostly in the Tohoku region. Tokyo Electric Company will restart power outages for on 22 March.

Gas

Slow improvement: 439 728 households remain without gas supply.

Transport

As of 21 March, 1 703 roads were reported damaged from 11 prefectures (Aomori, Miyagi, Yamagata, Akita, Tokyo, Ibaragi, Tochigi, Saitama, Gunma, Chiba and Iwate). There were reports of 51 damaged bridges in four prefectures. Many roads and highways remained closed. Assessments from Fukushima are not yet completed.

RADIATION AND NUCLEAR FACILITIES

Updates on Fukushima Daiichi plant

- While electricity from an outside source has not flowed into the reactors at this time yet, all six reactors now have electric connections laid out.
- Reactors 5 and 6 are in controlled situation with water temperatures in spent-fuel storage pool at $\sim 40^{\circ}\text{C}$.
- Operations to supply electricity to cool reactors 1 and 2 were temporarily suspended due to white smoke from reactor 2, 21 March, but resumed again in the morning of 22 March; the white smoke is barely visible as of 12:00, 22 March.
- Operations to inject water into reactors 3 and 4 were temporarily suspended due to grey smoke from reactor 3, 15:55, 21 March; the amount of smoke has decreased as of 12:00. Water injection activities are still planned for 22 March.
- No change in radiation level before and after observation of smoke: 15:50 at 2 013 micro Sv/h; 16:30 at 2 015 micro Sv/h; in addition, at the main gate, while the radiation level peaked at 1 932 micro Sv/h at 18:30, 21 March, the level declined to 262 micro Sv/h at 07:30 on 22 March.

Table 6: Status of reactors at Fukushima Daiichi plant (22 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 for spent fuel storage pool	Recent operations (19-22 March)
Unit1 (460,000Kw)	Operating	Level 5 (18 Mar)	H-explosion (12 Mar)	Severely damaged	Failure to cool the fuel rod	Maintained	Unable to measure		Sea water pumping; electric line is working from outside and checking up for electric equipment is underway (22 Mar)
Unit2 (784,000Kw)	Operating	Level 5 (18 Mar)	Sound of explosion (15 Mar); white smoke (21, 22 Mar)	Damage on wall	Failure to cool the fuel rod	Suppression pool may be damaged (15 Mar)	Unable to measure	Injection: 40t	Sea water pumping; water injection for spent fuel storage pool (20 March); electric line from outside is working and checking up for electric equipment is underway (22 Mar)
Unit3 (784,000Kw)	Operating	Level 5 (18 Mar)	H-explosion (14 Mar); greyish smoke (21, 22 Mar)	Severely damaged	cool the fuel rod	Pressure is stable (21Mar)	Unable to measure	Spray: 3742t in total	Sea water pumping; water spray by fire engine (19, 20 March); electric line will be laid down
Unit4 (784,000Kw)	Under regular check-up	Level 3 (18 Mar)	Fire (15-16 Mar)	Severely damaged	No fuel rod	Maintained	Unable to measure	Spray: 255t in total	Water spray by fire engine (20, 21 Mar); electric line will be laid down
Unit5 (784,000Kw)	Under regular check-up		Nil	make a hole in ceiling (18,19 Mar)	Not under operation	Maintained	35.8C (22Mar)		Emergency generator operating and cooling operation by pump started for spent fuel storage pool (19 Mar); power supply from outside is working and replaced emergency generator function (22 Mar)
Unit6 (784,000Kw)	Under regular check-up		Nil	make a hole in ceiling (18,19 Mar)	Not under operation	Maintained	30.0C (22Mar)		Emergency generator operating and cooling operations started for spent fuel storage pool (19 Mar) ;electric line is working from outside and checking up for electric equipment is underway (22 Mar)

The Government of Japan raised the event in Fukushima Daiichi Units 1, 2 and 3 to Level 5 on the International Nuclear and Radiological Event Scale (INES).

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 there have fallen again. 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; 23:30pm);
- 19 March (2820 micro Sv/hr; 23:30pm);
- 20 March (2487 micro Sv/hr; 23:30pm);
- 21 March (2016 micro Sv/hr, 16:50pm)

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:

- 5:40pm, 21 March (494 micro Sv/hr);
- 6:30pm, 21 March (1932 micro Sv/hr)
- 7:30am, 22 March (261.6 micro Sv/hr)

In the Fukushima area, the highest measurements from areas within ~60 km was 110 micro Sv/hour, 21 March (see figure below – the parentheses in the figure refer to location number and the number below refers to the radiation level detected in micro Sv). The areas with the highest detection measure were detected ~30km northwest of the Daiichi facility. The highest measurement levels have been declining, but the maximum measurement was the same on 20 and 21 March; 17 March (170 micro Sv); 18 March (150 micro Sv); 19 March (136 micro Sv); 20 March (110 micro Sv); 21 March (111 micro Sv). The reason this particular area detected the highest measures is unknown.

Radiation levels increased yesterday (21 March). According to the media, the weather (e.g. rain and wind patterns) is believed to have increased the detected levels

Table 7. Levels of radiation measured at nearby prefectures.

Radiation level reported by prefecture in micro Sv/hour (source: Japan Ministry of Education)

	IBARAKI PREFECTURE Mito City	TOCHIGI PREFECTURE Utsunomiya city	GUNMA PREFECTURE 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 (7-8pm)	0.239	0.321	0.389	0.169	0.055	0.361
16/3/2011 (7-8pm)	0.241	0.212	0.109	0.067	0.04	0.053
17/3/2011 (3-4pm)	0.21	0.189	0.096	0.063	0.038	0.05
18/3/2011 (2-3pm)	0.189	0.167	0.086	0.058	0.034	0.05
19/3/2011 (6-7am)	0.18	0.157	0.083	0.058	0.033	0.047
20/3/2011 (4-5pm)	0.174	0.153	0.072	0.052	0.032	0.045
21/3/2011 (4-5pm)*	0.34	0.133	0.085	0.106	0.082	0.125
COMMENTS: Yellow indicates higher than background level; all times in Tokyo time						

*Increase in radiation levels believed to be due to rain;

Various media are reporting detection of abnormal levels of radiation on passengers travelling from Japan to other countries and areas (Republic of Korea, Taiwan, Province of China, United States of America). Radiation was detected on a plane in China that had flown from Japan and radiation testing will continue in China (media, 18 March). The Republic of Korea has strengthened radiation testing of Japanese imported food such as pork, seafood and chicken. Thailand and India started testing of Japanese food products (media).

TEPCO has issued a press release on 22 March announcing that Iodine-131, Cesium(Cs)-134, and Cs-137 were detected on 21 March in the seawater near the drainage gate of the Fukushima Daiichi Nuclear Power Plant, which exceeds the standard concentration limit, respectively 126.7 times (regarding I-131), 24.8 times (Cs-134), and 16.5 times (Cs-137). TEPCO is going to conduct another sampling survey tomorrow morning (23 March). There is no immediate threat to humans as residents have been evacuated. TEPCO will sample from four sites; the same site approximately 100 m from the plant and three additional sites, to get more information on the radiation levels within an area of ~10km of the plant (media).

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 and Futaba. People residing between 20 and 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).
- The US government is offering support and has deployed nuclear/radiation experts to Japan. A special US fire truck is also assisting with the cooling operation.
- The cooling response at Daiichi involves teams from the Self Defense Force, Police, and fire departments from Tokyo. Additional fire department members from Osaka, Yokohama and Kawasaki will join in cooling operation response. Monitoring and safety of workers are prioritized. Electrical work operations are also ongoing. A concrete pumper for pumping water into reactor 4 is being considered for deployment to pump out water.
- The Ministry of Education and MHLW have activated the National Institute of Radiological Sciences to monitor and assess the situation. This includes deployment of experts from Nagasaki University, driving of radiation monitoring cars, deployment of medical experts on radiation, and setting up of radiation Q&A hotline services. Radiation Effects Research Foundation (RERF) has also been consulted. For workers on site, the accepted level of radiation has been raised from the legal 100 milli Sv to 250 milli Sv (the international standard is 500 milli Sv).

Food safety and water quality

Overall radionuclide contamination monitoring

The Government has taken necessary action as a whole, by following the above mentioned National Guideline for Monitoring Radionuclide in Environment, to monitor actual radionuclide levels in different areas. Test results in different samples from environments, including waters are available at the following sites (available only in Japanese).

- <http://www.pref.fukushima.jp/j/>
- http://www.mext.go.jp/a_menu/saigaijohou/syousai/1303723.htm

Monitoring of food in terms of radionuclide contamination

The Food Safety Department of the Ministry of Health, Labour and Welfare issued a notice dated 17 March 2011 and addressed to all local food safety inspection authorities that they must 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. These levels are set taking into account scientific evidence and data, including those available in ICRP. 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, on 22 March, the Prime minister ordered that the following order shall to take place, under the authority of the Director-General of the Nuclear Emergency Response Headquarters, following Article 20.3 of the Act on Special Measures Concerning Nuclear Emergency Preparedness (Act No. 156, 1999).

Restrictive requirements shall apply to food business operators concerned not to distribute the following foods produced in the respective prefectures:

- 1) Spinach and Kakina harvested in Fukushima, Ibaraki, Tochigi and Gun-ma prefectures; and
- 2) Fresh raw milk produced in Fukushima Prefecture.

The Prime Minister clarified that the decision is in respect of the long-term effect on human body. It was emphasized that this level of radioactivity does not give any immediate effect to human body. Depending on the results of continuous monitoring, there might be more products to be added to the list if necessary. Lastly, there would be compensations for the farmers concerned by TEPCO and possibly by the Government.

Food sampling results have been received from Gunma, Fukushima, Chiba, Ibaraki, Nagano, Niigata, Saitama, Tochigi, Tokyo prefectures. Approximately 262 samples have been taken, including milk and produce and Iodine-131 and Caesium were analysed. 73 samples exceed the provisional regulation value for Iodine-131 (300 Bq/kg for milk and 2000 Bq/kg for vegetables) and 30 samples exceed the provisional regulation value for Caesium (200 Bq/kg for

milk and 500 Bq/kg for vegetables). Samples which exceeded the provisional regulation values originated from Gunma, Fukushima, Chiba, Ibaraki, Nagano and Tochigi prefectures.

In the Western Pacific Region, the following countries have put in place additional monitoring procedures associated with imported food from Japan: China, Malaysia, Philippines, Republic of Korea and Taiwan, China (based on reports from media); and Hong Kong, China and Singapore (official information).

Hong Kong, China has reported that it has tested 214 consignments of imported food from Japan between 12 and 18 March 2011. All results are satisfactory.

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; official information has been requested).

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

The US FDA is enhancing monitoring of food for radiation (e.g. increasing the number of samplings) and working with the Japanese government. FDA has stated that since produce import from Japan is low and there is already no transport of food products from the earthquake-affected areas, there is no immediate risk (media).

Drinking water quality

The level of radioactive iodine found in drinking water in Iitate-mura, roughly 30 km from the Fukushima No. 1 plant decreased from 965 Bq/kg (sampled on 20 March) to 492 Bq/kg based on samples collected on 21 March. This is still more than the guideline value (300 Bq/kg) set by the Nuclear Safety Commission of Japan for restriction of drinking water intake. MHLW maintains its advice to the villagers to refrain from drinking the tap water although there is no immediate effect on health if it is taken temporarily. There is also no issue for the use of the water for non-drinking purposes. The prefecture of Fukushima is preparing to provide about 4 000 people in the village with bottled water. In another Fukushima town of Kawamata, 45 km from the plant, 308 Bq/kg of Iodine-131 was found in tap water on 17 March. But the level dropped to 155 Bq/kg on 18 March and 123 Bq/kg on 19 March (media).

Tap water from Kooriyama-shi, Fukushima-shi, Shirakawa, Iwaki-shi and Soma was also tested positive for radioactive iodine (samples results from 17 to 19 March) but levels (< 100 Bq/kg) are below the Japanese guideline value.

Monitoring is ongoing and reported from the Fukushima-ken Environmental Radioactivity Monitoring Centre Fukushima Branch Office. Values of Cesium-134 and Cesium-137 were at non-detectable levels since 17 March. Reported values of Iodine-131 ranged from non-detectable to 180 Bq/kg (17 March, 23:00). All detected levels were below the Japanese guideline value.

** 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

(Source: Official website of the Japan Ministry of Foreign Affairs)

The number of countries/areas that have offered assistance to Japan remains to be 128 and 33 international organizations (Information as of 18:00, 19 March).

Turkey's aid/rescue team starts its operation, with 32 personnel travelling to Miyagi Prefecture. The team will work in the disaster-affected areas of Miyagi.

A Special Headquarters for Measures to Assist the Lives of Disaster Victims was launched and has begun its work. The headquarters is engaged in the preparation for plans for people affected by the disaster to be evacuated in groups across a wide area outside their home prefectures. The headquarters also works to minimize the burden imposed on local governments in areas that will accept the evacuees, and is also advancing concrete arrangements to provide support when the time comes for these people to move back.

International organisations that have offered support include Asian Development Bank (ADB), Association of Southeast Asian Nations (ASEAN), Black Sea Economic Cooperation (BSEC), Caribbean Community (CARICOM), Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), European Union (EU), Global Environment Facility (GEF), International Atomic Energy Agency (IAEA), International Criminal Police Organization (ICPO), International Committee of the Red Cross (ICRC), Inter-American Development Bank (IDB), International Federation of Red Cross and Red Crescent Societies (IFRC), International Labour Organisation (ILO), International Narcotics Control Board (INCB), International Organization for Migration (IOM), International Telecommunications Satellite Organization (ITSO), International Telecommunication Union (ITU), Mercado Comun del Cono Sur (MERCOSUR), North Atlantic Treaty Organization (NATO), Office for the Coordination of Humanitarian Affairs (OCHA), Organisation for Economic Co-operation and Development (OECD), United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), United Nations Population Fund (UNFPA), United Nations High Commission for Refugees (UNHCR), United Nations Educational, Scientific and Cultural Organization (UNESCO), UN-HABITAT, United Nations Children's Fund (UNICEF), Universal Postal Union (UPU), World Bank, World Food Programme (WFP), World Health Organization (WHO), and World Trade Organization (WTO).

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.
- Forward planning for assessment of status, risk and planning for response for potential nuclear and human health needs continues.

TRAVEL ADVISORIES

WHO websites (HQ and WPRO) advise travelers who do not have essential reasons to travel to Japan should give careful consideration to deferring travel to any areas where there has been considerable disruption to the normal infrastructure and where authorities are responding to urgent humanitarian needs.

Travelers to Japan are also advised to monitor local media, follow the advice and instructions issued by local authorities and register their travel and location details with their respective embassy or consulate.

Websites of the World Health Organization, Japan's Nuclear and Industrial Safety Agency (NISA), International Atomic Energy Agency (IAEA) and the International Civil Aviation Organization are referred to for more information on travel advisories.

RISK COMMUNICATION

Updates from monitoring mainstream and social media

- Stores and restaurants across Asia dropped Japanese food from shelves and menus.
- Some municipal governments in Fukushima Prefecture distributed pills containing nonradioactive iodine without waiting for the central government's go-ahead.
- High levels of radioactive substances have been found in seawater near the damaged Fukushima Daiichi nuclear power plant (CNN).
- Still top tweets: Japan, food and radiation.
- WHO News: At this time, radiation levels found in food in Japan cause no immediate health risk.

- The U.S government is making iodine available to their personnel and dependents residing in several prefectures in Japan. However, it says that no one should take iodine at this time.
- IAEA said crisis at the Fukushima Daiichi has not been resolved and the situation remains serious.
- The Japanese government loosens level for mandatory decontamination from 6 000 cpm to 100 000 cpm following advice from nuclear experts (domestic) and IAEA (Twitter).

WHO actions

- Update on Japan nuclear energy plant event available in the HQ website
- Updated talking points on food safety; UN voluntary evacuation of families and non-essential staff; and travel
- Monitoring of reports from the mainstream and social media

CONTACTS FOR MORE INFORMATION

WPRO Situation Room: GPN: 89250; SITROOM@wpro.who.int
 + 63-2 528 9035
 + 63-2 528 9650
 + 63-2 528 9249
 + 63-2 528 9341

For further information: Mr Peter Cordingley
 Public Information Officer
 Mobile: +63 918 963 0224

Dr Art Pesigan
 Emergency and Humanitarian Action
 Mobile: +63 918 917 8053