

## Session 1

# Recent Initiatives and Other Activities of the Nuclear Disaster Resource Center

December 18, 2017

Red Cross Nuclear Disaster Resource Center (NDRC)



1. Hospitals with Nuclear Disaster Medical Response Advisors and the Advisor System
2. Nuclear Disaster Response Basic Training Sessions
3. Group Activity Program Using the Booklet, *Communication with Affected People during a Nuclear Disaster*
4. Connecting Digital Archiving Function with Harvard University
5. Observation of Nuclear Disaster Preparedness Drill in Miyagi Prefecture
6. International Support
  - Participated in an Italian Red Cross CBRN\* Workshop
  - Provided support for the IFRC to hold technical sessions at the World Bosai Forum
7. Others
  - Lectures, etc.
8. Future Issues

# 1. Hospitals with Nuclear Disaster Medical Response Advisors and the Advisor System

- In January 2018, Japanese Red Cross Otsu Hospital joined the group of hospitals having Nuclear Disaster Medical Care Advisors, augmenting the body to 28 advisors belonging to 14 hospitals.

Dr. Mineo Matsubara, Director of Emergency Department; Mr. Noriaki Takeda, Chief Radiologist, Department of Radiology

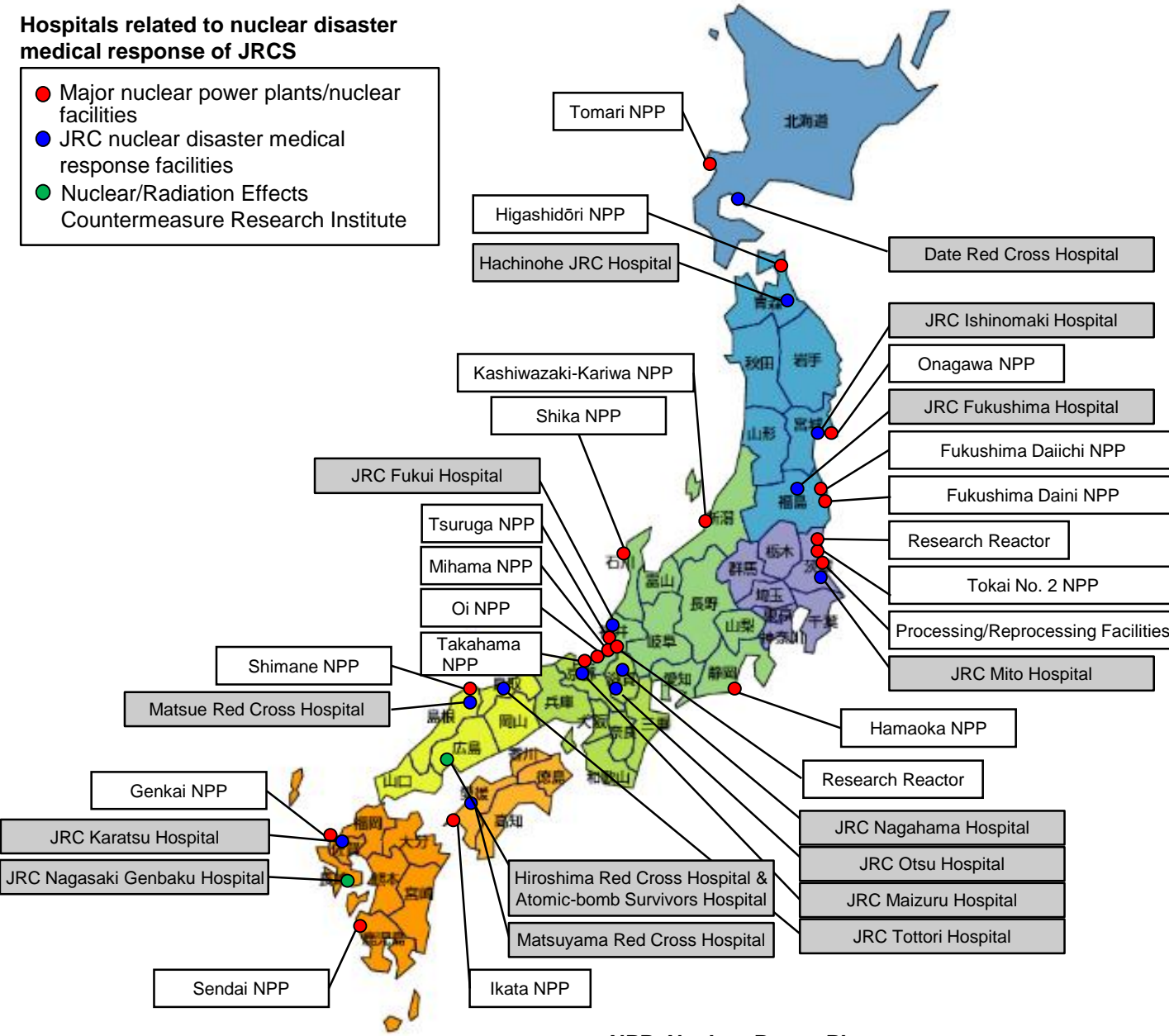
- Tenure of Dr. H. Hatanaka at Japanese Red Cross Maizuru Hospital has expired. The renewal process is being completed.

No.	Chapter	Category	Name	Facility Name	Job Title	Tenure
1	Hokkaido	Radiological Expert	Masafumi Sato	Date Red Cross Hospital	Vice President	Mar-1-2016 – Feb-28-2018
2		Radiological Support Member	Shuuji Yamauchi		Chief Radiologist, Department of Radiology	Mar-1-2016 – Feb-28-2018
3	Miyagi	Radiological Expert	Hirofumi Ichikawa	Japanese Red Cross Ishinomaki Hospital	Director of Department of Medical Welfare Work and Community Service Activities	Apr-1-2017 – Mar-31-2019
4		Radiological Support Member	Kouichi Nisugi		Radiological Technologist	Apr-1-2017 – Mar-31-2019
5	Fukushima	Radiological Expert	Yoichi Watanabe	Japanese Red Cross Fukushima Hospital	President	Apr-1-2017 – Mar-31-2019
6		Radiological Support Member	Takanori Kaito		Radiological Technologist	Apr-1-2017 – Mar-31-2019
7	Ibaraki	Radiological Expert	Kiyoshi Endo	Japanese Red Cross Mito Hospital	Director of Department of Neurosurgery and Deputy Director of Department of Medical Welfare Work & Community Service Activities	Apr-1-2017 – Mar-31-2019
8		Radiological Support Member	Masato Kitazawa		Radiological Technologist	Apr-1-2017 – Mar-31-2019
9	Fukui	Radiological Expert	Takeshi Tanabe	Japanese Red Cross Fukui Hospital	Director of Anesthesia Department and Manager of Intensive Care Unit	Apr-1-2017 – Mar-31-2019
10		Radiological Support Member	Yoshihiro Nishikoori		Manager, X-ray Technology, Department of Radiology	Apr-1-2017 – Mar-31-2019
11	Shiga	Radiological Expert	Tomoaki Nakamura	Japanese Red Cross Nagahama Hospital	Director of Emergency Department and Director of Medical Social Work Department	Apr-1-2017 – Mar-31-2019
12		Radiological Support Member	Hisao Matsui		Chief Radiologist, Department of Radiology	Apr-1-2017 – Mar-31-2019
13		Radiological Expert	Mineo Matsubara	Japanese Red Cross Otsu Hospital	Director of Emergency Department	Jan-1-2018 – Mar-31-2020
14	Radiological Support Member	Noriaki Takeda	Chief Radiologist, Department of Radiology		Jan-1-2018 – Mar-31-2020	
15	Kyoto	Radiological Expert	Sumitomo Kato	Japanese Red Cross Maizuru Hospital	Vice President	Apr-1-2017 – Mar-31-2019
16		Radiological Support Member	Hidenori Hatanaka		Assistant Manager of the First Radiological Technology Section	Jan-1-2016 – Dec-31-2017
17	Tottori	Radiological Expert	Masami Kobayashi	Japanese Red Cross Tottori Hospital	Director, Department of Radiology	Apr-1-2017 – Mar-31-2019
18		Radiological Support Member	Takeshi Yoneda		Assistant Manager of Radiology Management, Radiological Technology Section	Apr-1-2017 – Mar-31-2019
19	Shimane	Radiological Expert	Nobuo Morioka	Matsue Red Cross Hospital	Director of Radiology Department	Apr-1-2017 – Mar-31-2019
20		Radiological Support Member	Yasunori Isoda		Chief Radiologist, Department of Radiology	Apr-1-2017 – Mar-31-2019
21	Hiroshima	Radiological Expert	Shunichi Kasesda	Hiroshima Red Cross Hospital & Atomic-bomb Survivors Hospital	Vice President	Apr-1-2017 – Mar-31-2019
22		Radiological Support Member	Kenji Yamane		Manager of CT/MR Examination Section	Apr-1-2017 – Mar-31-2019
23	Ehime	Radiological Expert	Tomoaki Fujisaki	Matsuyama Red Cross Hospital	Director of First Internal Medicine Department	Apr-1-2017 – Mar-31-2019
24		Radiological Support Member	Kenji Takamoto		Radiological Technologist	Apr-1-2017 – Mar-31-2019
25	Saga	Radiological Expert	Masashi Sakai	Japanese Red Cross Karatsu Hospital	Director of Medical Social Work Department and Deputy Director of Second Surgery Department	Apr-1-2017 – Mar-31-2019
26		Radiological Support Member	Seiichiro Sakai		Assistant Manager of the First Radiological Technology Section, Department of Radiological Technology	Apr-1-2017 – Mar-31-2019
27	Nagasaki	Radiological Expert	Ikuo Kinoshita	Japanese Red Cross Nagasaki Genbaku Hospital	Vice President and Director of Neurology	Apr-1-2017 – Mar-31-2019
28		Radiological Support Member	Yusuke Maeda		Assistant Manager of Radiography	Apr-1-2017 – Mar-31-2019

# JRC\* Nuclear Disaster Medical Response Facilities, etc.

## Hospitals related to nuclear disaster medical response of JRCS

- Major nuclear power plants/nuclear facilities
- JRC nuclear disaster medical response facilities
- Nuclear/Radiation Effects Countermeasure Research Institute



NPP=Nuclear Power Plant

Nuclear Disaster Core Hospitals
JRC Ishinomaki Hospital
JRC Fukushima Hospital
JRC Fukui Hospital
JRC Nagahama Hospital
JRC Otsu Hospital
Matsuyama Red Cross Hospital
JRC Karatsu Hospital

Collaborating Organizations for Nuclear Disaster Medical Response
Date Red Cross Hospital
Hachinohe JRC Hospital
JRC Mito Hospital
JRC Maizuru Hospital
JRC Tottori Hospital
Matsue Red Cross Hospital

Nuclear/Radiation Effects Countermeasure Research Institutes
Hiroshima Red Cross Hospital & Atomic-bomb Survivors Hospital
JRC Nagasaki Genbaku Hospital

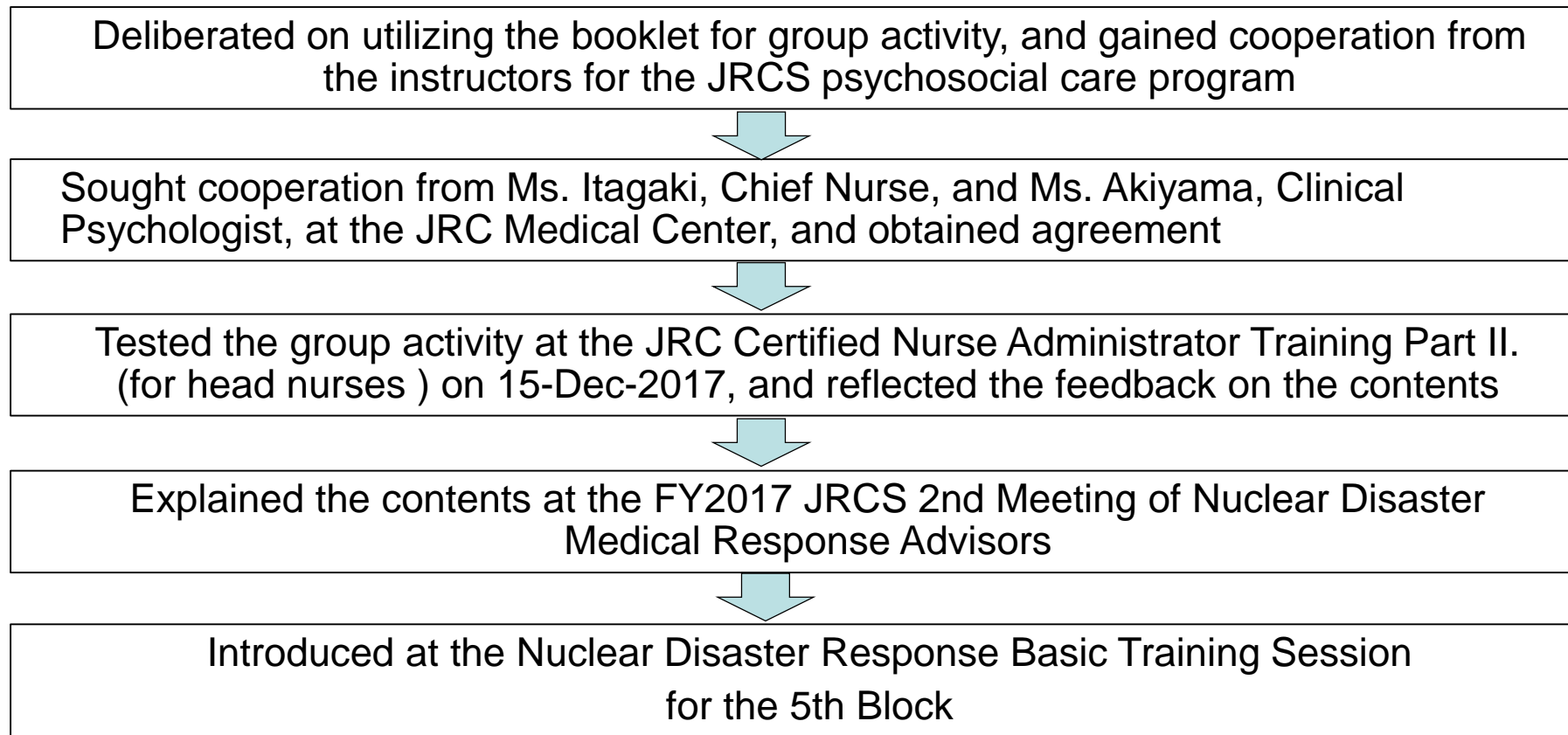
JRC=Japanese Red Cross

## 2. Nuclear Disaster Response Basic Training Sessions

- (1) Management of training: Disaster Management and Social Welfare Department → NDRC  
(Coordinate lecturers, design training programs, and provide ancillary operation support + coordinate availability of the block/chapter for hosting the training, prepare training materials/tools, and settle expenditures)
  - (2) Plan for FY2018 and FY2019: FY2018, 2<sup>nd</sup>/4<sup>th</sup>/6<sup>th</sup> Blocks; FY2019, 1<sup>st</sup>/3<sup>rd</sup>/5<sup>th</sup> Blocks  
(Planning for the 4<sup>th</sup> Block is ongoing: Shiga Chapter, at JRC Nagahama Hospital)
  - (3) The forthcoming nuclear disaster response basic training being held at Matsue Red Cross Hospital (January 24-25)
    - Assignment of lecturers completed.
    - Lecture 4: Community disaster prevention plan/nuclear disaster medical response system  
(Coordination ongoing for sessions given by a person in charge at the Shimane Pref. Gov., Dr. N. Morioka, and a representative of the nuclear operator.)
    - A nuclear disaster medical response advisor's (JRC Otsu Hospital, Tottori) participation as an observer being considered.
  - (4) Consideration of appropriating the subsidies provided by the Cabinet Office
    - “*Subsidy for Safety Measures for Emergencies Occurring at Nuclear Power Facilities, etc.*”  
Projects eligible for the program include: (i) Projects to establish a communication system for emergencies, (ii) Projects to keep a reserve of gear and materials for disaster preparedness activities, and (iii) Projects to investigate/enhance emergency preparedness. A fixed sum of money is provided by the state government to the prefectures housing a NPP.
    - “*Commission for Outsourcing Projects for Nuclear Preparedness Training, etc.*”  
Projects eligible for the program are: (i) Projects to provide nuclear preparedness training, (ii) Projects to conduct research of nuclear preparedness, and (iii) Projects to conduct international investigations, etc. The state government outsources these projects to non-governmental organizations, etc.
- \*JRCS is exploring the feasibility of obtaining aid from the prefectural government, based on the characteristics of the scheme and the programs, etc. of the JRCS nuclear disaster response basic training.

### 3. Group Activity Program Using the booklet, *Communication with Affected People during a Nuclear Disaster*

#### ➤ Flow of events following FY2017 JRCS 1st Meeting of Nuclear Disaster Medical Response Advisors



#### ➤ Issues requiring deliberation

- Maintaining of the system to procure lecturers
  - Instructors for the JRCS psychosocial care program located in adjoining areas/the hosting area for the next training session; or from a Nuclear Disaster Core Hospital?
  - Taking over of the lecture contents/maintaining lecturers' expertise level

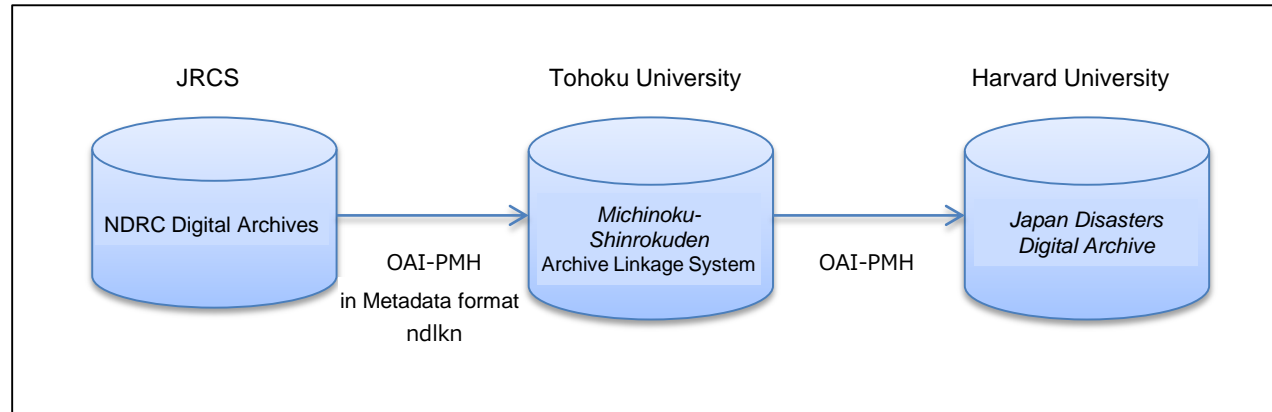
# 4. Connecting Digital Archive Function with Harvard University

## ➤ Background

The Edwin O. Reischauer Institute of Japanese Studies at Harvard University, along with its partner, the International Research Institute of Disaster Science at Tohoku University, approached the NDRC for building links in their archiving function.

## ➤ Manner of Connection

The content archived in the NDRC Digital Archives' repository can be retrieved from the Reischauer Institute's *Japan Disasters Digital Archive* via Tohoku University's archive project, *Michinoku-Shinrokuden*, with which they have established linkage.



Linkage Concept Chart

## ➤ Likely Effect

- Establish proven alliance with academic organizations such as Tohoku University and Harvard University.
- Enhance the use of the NDRC Digital Archives' content for academic purposes
- Increase access to the NDRC Digital Archives from overseas, thereby promoting awareness





## 5. Observation of Nuclear Disaster Preparedness Drill in Miyagi Prefecture 日本赤十字社 Japanese Red Cross Society

- (1) Date/Time: November 14, 2017; 8:30-14:00
- (2) Organized by Miyagi prefecture: 25,000 people (news release) participated in from 7 cities/towns located in the urgent protective action planning zone (UPZ) surrounding the Onagawa Power Plant
- (3) Participating organizations:
  - JRC Ishinomaki Hospital/Sendai Medical Center/Tohoku University Hospital/Hirosaki University
  - The fire defense headquarters of Ishinomaki Wide Area Co-administrative Partnership/Sendai City Fire Bureau
  - Tohoku Electric Power Co., Inc.
- (4) Scenario: An earthquake that occurred off the coast of Miyagi Prefecture causes collapse of contaminated equipment at a testing area for check valve disassembly in the controlled section of the reactor unit 3 of the Onagawa Nuclear Power Station (Tohoku Electric Power Co., Inc.), which results in the release of highly radioactive substances into the environment, involving 4 plant workers (sustain body-surface contamination/radiation exposure; one of them suffers suspected internal radiation exposure)
- (5) Response actions to practice:
  - Collaborative alliance between organizations associated with radiation emergency medicine (Miyagi prefecture, medical institutions, transport service organizations, vendors)
  - Triage of multiple victims of radiation contamination (at JRC Ishinomaki Hospital), coordination of facilities to transfer the victims to
  - Transfer of contaminated victims by transport service organizations (the fire defense headquarters of Ishinomaki Wide Area Co-administrative Partnership/Sendai City Fire Bureau)
  - Medical treatment for contaminated victims at medical institutions



## 5. Observation of Nuclear Disaster Preparedness Drill in Miyagi Prefecture 日本赤十字社 Japanese Red Cross Society

### (6) Details observed in the drill for accepting contaminated victims at JRC Ishinomaki Hospital



- Confirmed collaboration with the nuclear plant operator, Miyagi prefecture, medical institutions, and transport service organizations
- Triage of 4 contaminated victims and coordinating facilities to transfer them to
- Taking over patients from a transport service organization, passing patients to a transport service organization
- Confirmed decontamination/medical treatment for contaminated victims and the procedure
- Surface protection of decontamination tents, medical supplies/equipment, and patient reception area, and confirmed the activity flow in the contaminated/non-contaminated areas
- How to deal with the media

- Attended a CBRN workshop hosted by the Italian Red Cross (Oct. 21-24, 2017 in Trento)
  - (1) Objective/Background: Hosted by the Italian Red Cross, the workshop was attended by sister societies with proven contribution to the CBRN countermeasures in Europe. The meeting was an occasion for discussion, rather than for training, about the future direction of the CBRN antidote, including the standardization of CBRN countermeasures across the whole Red Cross, how the minimum standards should be, and so on. The JRCS participated in at the strong request of the IFRC.
  - (2) Attendees (approximately 15 people): NDRC (M. Fujimaki), IFRC (Individuals in charge of CBRN, Health, and the European region), ICRC, and national Red Cross Societies (Italy, Germany, Spain, Israel, Austria, etc.)
  - (3) Topics
    - Systems standardized for each CBRN event and establishing SOP
    - CBRN initiatives ongoing at respective national societies and ability mapping
    - A Framework of global response to major CBRN events in Europe
    - Strengthening capabilities of the entire Red Cross/sister societies (training programs)

CBRN: Chemical, Biological, Radiological, Nuclear

IFRC: International Federation of Red Cross and Red Crescent Societies

ICRC: International Committee of the Red Cross

SOP: Standard Operating Procedure

➤ Attended a CBRN workshop hosted by the Italian Red Cross (Oct. 21-24, 2017 in Trento)

(4) Presentation by the NDRC (40 minutes)

- Lessons learned from the Fukushima Daiichi Nuclear Power Plant accident
- Activity standards for relief teams in times of disaster (activity area/radiation dose limits for individuals )
- Contents of the Nuclear Disaster Response Basis Training for relief team members
- Disseminating information via Digital Archives

(5) Special notes/prospect

- Strong interest shown by national societies having CBRN capabilities, in international expansion of their response abilities
- Attaching CBRN function to the existing response abilities such as ERU and RDRT
- Feasibility of the initiatives discussed at the meeting is doubtful because of the limited number of participating sister societies

RDRT: Regional Disaster Relief Training  
ERU: Emergency Response Unit



- Helped the IFRC provided technical sessions at the World Bosai Forum
  - (1) Objective/Background: The IFRC presented sessions named *Prepare and Respond Better for Emerging Technological Hazards* at the World Bosai Forum, for which the JRCS provided technical/financial support.
  - (2) Attendees from the IFRC: Jamilah Mahmood, Under Secretary General for Partnerships-IFRC, Gwendolyn Pang, Head of the East Asia Country Cluster for the IFRC, and Martin Krottmayer, Senior Officer, Nuclear and Radiological Accidents Preparedness Programme Services Div.-IFRC
  - (3) Sessions presented by the attendees from the IFRC
    - *A Global Outlook on Disaster Science* (a report launched by Elsevier) by J. Mahmood
    - *Prepare and Respond Better for Emerging Technological Hazards* by G. Pang and M. Krottmayer
    - *Build back Better* (presented by Tohoku University at the 2017 National Disaster Prevention Meet) by G. Pang
    - *Enhancing Scientific Research into Disaster Science and Contribution to International Society* (introduced by APRU) by G. Pang
  - (4) Presentations relevant to the JRCS
    - JRCS's response in the Great East Japan Earthquake and Tsunami, restoration/recovery programs
    - "*Protect Life and Promulgate Disaster Prevention Effort*" and disaster prevention education
    - Establishing links with digital archives of academic organizations such as Tohoku University and Harvard
    - Disseminating information via the NDRC Digital Archives

- The JRC Certified Nurse Administrator Training Part I./First level curriculum for Certified Nurse Administrators accredited by Japanese Nursing Association
  - (1) Date/Time: July 10, 2017, 9:30-12:30 (3 hours)
  - (2) Name of lecture: The JRCS's Initiatives for Nuclear Disaster
  - (3) Presentation: *The JRCS's Initiatives to Tackle Nuclear Disaster* (Masahito Yamazawa, Director General, NDRC)
    - Lessons learned in the Great East Japan Earthquake and Tsunami/Recounting of relief team members involved in the operation in Fukushima
    - Relief activities in radioactive circumstances/Nuclear Disaster Guidelines for Preparedness, Response and Recovery
  
- The JRC Certified Nurse Administrator Training Part II./Second level curriculum for Certified Nurse Administrators accredited by Japanese Nursing Association
  - (1) Date/Time: December 15, 2017, 9:30-12:30 (3 hours)
  - (2) Name of lecture: Uncommon Disaster and Its Effect—Nuclear Disaster
  - (3) Presentation: *The JRCS's System to Tackle Nuclear Disaster* (Eiji Onda, Director, NDRC)
    - Protective measures according to the *Nuclear Emergency Response Guidelines*/Basics of radiation (Mitsuhiro Fujimaki, Program Officer, NDRC)
    - Group activity using *Communication with Affected People during a Nuclear Disaster* (Keiko Akiyama, Clinical Psychologist, Department of Psychiatry, JRC Medical Center)



- Lecture at the FY2017 1st training seminar for the JRC disaster medical care coordinators
  - (1) Date/Time: September 15 (Fri), 2017, 13:25 - (20 minutes)
  - (2) Name of lecture: To understand coordination of disaster medical care provided by the JRCS
  - (3) Presentation: *The JRCS's Response and Coordination in Times of Nuclear Disaster* (Masahito Yamazawa, Director General, NDRC)
    - Following the FY2016 2nd training seminar, it turned out to be a good opportunity to explain the JRCS's system in times of nuclear disaster to the JRC disaster medical care coordinators. The seminar is expected to result in the alliance between the NDRC and the JRC disaster medical care coordinators should a nuclear disaster occur.

## [Issues being currently addressed]

- Facility evacuation of JRC hospitals
  - Acceptance of inpatients from the affected area
    - ⇒ A manual being formulated
  - Establishment of a support team deployment system for affected hospitals

## [Issues being suspended]

- Screening of JRC emergency responders
- Keeping a reserve of iodine tablets

- Issues addressed through regular activities.
- Issues being currently worked on.
- Issues already resolved.

## [Issues identified while designing the *Guidelines*]

Issues	
1	Bringing the Guidelines into practice.
2	Cooperating with the nuclear disaster response of the community.
3	Alliance between the JRCS, administrative bureaus, and scientific organizations during the initial phase of disaster
4	Communication in times of disaster
5	Attending to those who require special consideration.
6	Operation to secure safety of emergency responders (staff residing in the affected area)
7	Providing support to affected people and others who stay temporarily in the mandatory evacuation area.
8	Facility evacuation of JRC hospitals.
9	Providing support to evacuees who have left the prefecture.
10	Activities for restoration/recovery.
11	International support provided by the JRCS.