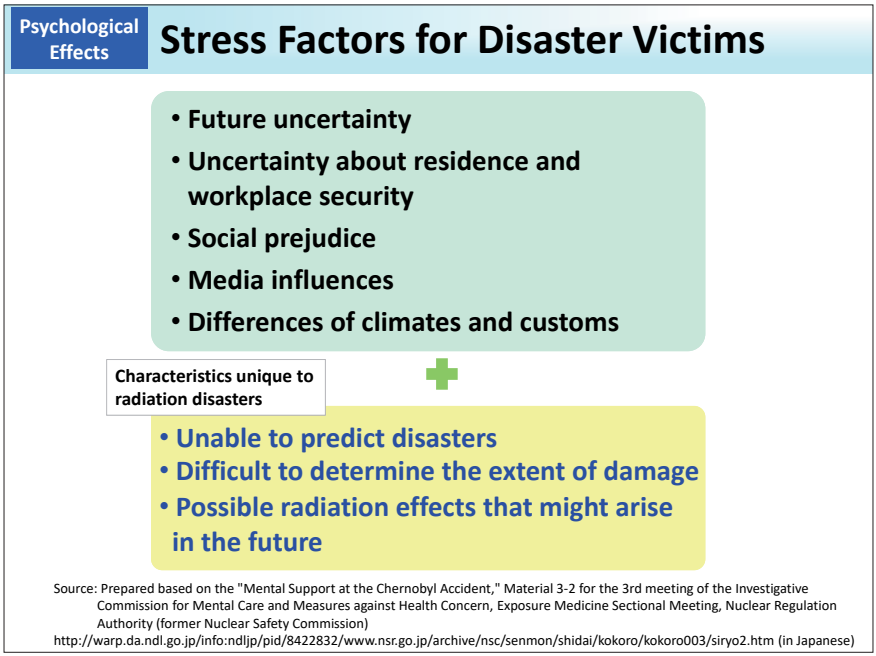


Source: Prepared based on the "Mental Support at the Chernobyl Accident," Material 3-2 for the 3rd meeting of the Investigative Commission for Mental Care and Measures against Health Concern, Exposure Medicine Sectional Meeting, Nuclear Regulation Authority (former Nuclear Safety Commission)
http://warp.da.ndl.go.jp/info:ndljp/pid/8422832/www.nsr.go.jp/archive/nsc/senmon/shidai/kokoro/kokoro003/siryo2.htm (in Japanese)

Generally, factors causing stress to the victims of disasters include future uncertainty, uncertainty about residence and workplace security, social prejudices, media influences, differences of climates and customs, etc. For radiation disasters, there are other stress factors as well, such as being unable to predict disasters, difficulty in determining the extent of damage, and radiation effects that might arise in the future (p.135 of Vol. 1, "Radiation Accidents and Health Concerns").

In particular, concerns over future radiation effects cause a huge stress as victims have to be worried for a long time about the possibility that they might someday develop cancer.

Included in this reference material on March 31, 2013
Updated on March 31, 2017

Psychological Effects

Radiation Accidents and Health Concerns

Anxiety caused by radiation accidents

- Anxiety over health effects of radiation
- Anxiety over health effects on children now and in the future

Psychological effects from protracted anxiety

- Possibility that mental health may deteriorate
- Possibility that mothers' anxiety may affect the mental state and growth of children

Factors that increase anxiety

- Unable to acquire reliable information
- Confusion caused by scientifically inaccurate information
- Stigmas and stereotypes

In the event of a radiation accident, people would be worried about the possibility of their exposure to radiation and about the extent of exposure and possible health effects if exposure occurred. Parents in particular would be concerned about the immediate and long-term health effects on their children.

People's mental health would deteriorate as a result of protracted anxiety over possible future health effects. It has also been pointed out that the anxiety of mothers might affect the mental state and growth of their children.

The anxiety could be heightened by being unable to acquire reliable and accurate information about radiation. It has also been reported that unreasonable public stigmas and discriminations (stereotypes) about people affected by contamination or exposure could exacerbate their mental health problems.*1*2

Source:

1: "Fukushima Psychological Care Manual," Fukushima Mental Health and Welfare Centre

2: Werner Burkart (Vienna) "Message to our friends affected by the nuclear component of the earthquake/tsunami event of March 2011 (August 26, 2013)"

(Werner Burkart: Professor for Radiation Biology at the Faculty of Medicine of the Ludwig Maximilians University in Munich, Former Deputy Director General of the International Atomic Energy Agency (IAEA)) (http://japan.kantei.go.jp/incident/health_and_safety/burkart.html)

Included in this reference material on March 31, 2013
Updated on March 31, 2017

Psychological Effects

Psychiatric Effects on Children

Possible psychological effects of radiation issues:

- Parents' anxiety over radiation proves that they are dedicated parents.
- Parents' excessive concern over radiation could affect children mentally and physically.

Regarding fetal exposure and neuropsychological disorders caused by the Chernobyl accident:

- The results of studies on the neuropsychological disorders of children who were fetuses at the time of the accident are not coherent.
- Although there is a report that exposure affected the IQ of the fetuses, no correlation has been found between thyroid exposure doses and children's IQs.

Regarding a questionnaire on the emotions and behavior of children in Fukushima

Tendencies found through a survey using SDQ (Strengths and Difficulties Questionnaire) as an index to evaluate the mental health of children:

- The percentage of respondents whose SDQ score was 16 or higher was 9.5% in a previous study targeting the general Japanese population unaffected by any disasters. Compared with this, the survey revealed that the percentages of those scoring 16 or higher were high in both the 4-6 age and 6-12 age groups.
- However, the same percentages tend to be lower in both the 4-6 age and 6-12 age groups in the survey conducted in FY2014, compared to that in FY2011, i.e., the year of the accident.

SDQ：Strengths and Difficulties Questionnaire

Source:

- A debriefing report from "Mental Health and Lifestyle Survey," Fukushima Health Management Survey in FY2014, Fukushima Medical University, June 2016
- Kolominsky Y et al., J Child Psychol Psychiatry, 40 (2): 299-305, 1999

In some of the studies targeting children who were fetuses at the time of the Chernobyl accident, investigations on neuropsychological effects were also conducted.

Although the results of the studies are not necessarily coherent, a report that attests to emotional disorders of the children caused by the accident also points out other effects such as parents' anxiety as factors affecting their mental state, rather than merely pointing out radiation exposure as a direct effect.

The Radiation Medical Science Center in Fukushima conducts the Mental Health and Lifestyle Survey with the aim of handing down to the following generations accumulated knowledge on better mental care in an emergency or in the event of a natural disaster.

The survey uses the Strengths and Difficulties Questionnaire (SDQ)* as an index to evaluate children's mental health. The higher the percentage of those scoring high (16 or higher), the more support is needed. The survey conducted in FY2011 showed rather bad results (high scores) but considerable improvements are observed in the results of the one conducted in FY2014, which have come close to the results of the surveys conducted outside the affected regions (see p.141 of Vol. 2, "Mental Health and Lifestyle Survey: What Has Become Clear (4/4)" for details).

Included in this reference material on March 31, 2013
Updated on February 28, 2018

Psychological Effects **Response to the Accident at Tokyo Electric Power Company (TEPCO)'s Fukushima Daiichi Nuclear Power Station (NPS) and Local Communities (1/2)**

Conclusion from dialogue with the local residents 1

(View of the International Commission on Radiological Protection (ICRP))

- Participants recognized the importance of developing radiation protection culture to allow inhabitants to understand and evaluate the information on the consequences of the accident and to take informed actions for reducing radiological exposure.
- They recognized the need for a more detailed characterisation of the radiological situation to allow people to know where, when and how they are exposed.
- They underlined their concern about the future demographic pattern due to an acceleration in the younger generations leaving the prefecture and abandoning farming activities.
- They discussed with great emotion the issue of discrimination of people in the affected areas, especially for those of pre-marital age to marry and have children .
- The preservation of the traditional and popular activity of gathering wild vegetables (sansai) was identified as culturally important in maintaining the cohesion of the Fukushima community.

Source: Prepared based on Lochard, J (2012), the material for the 27th symposium of the Nuclear Safety Research Association

Providing useful information for helping disaster victims to solve or deal with real issues has been proven to be an effective means for offering psychological support.

In the event of a nuclear disaster, expert knowledge is required to understand the possible effects of radiation and to come up with measures for radiological protection.

After the Chernobyl NPS accident, as well as after the TEPCO's Fukushima Daiichi NPS accident, experts and local residents had dialogues. If disaster victims are able to solve radiation issues by themselves with experts' support, that is considered quite effective in reducing their psychological stress.

Included in this reference material on March 31, 2013
Updated on March 31, 2017

Psychological Effects

Response to the Accident at Tokyo Electric Power Company (TEPCO)'s Fukushima Daiichi Nuclear Power Station (NPS) and Local Communities (2/2)

Conclusion from dialogue with the local residents 2

(View of the International Commission on Radiological Protection (ICRP))

- Develop a mechanism to support projects proposed by local communities and residents to improve living conditions.
- Support community expectations that decisions on recovery actions reflect their priorities, be based on their knowledge of the local context, and support their current and future interests.
- Continue efforts to monitor individual internal and external exposures, and to provide information and tools in order to help people to make their own judgments.
- Create a forum for a permanent dialogue between all concerned parties (producers, distributers and consumers) on the issue of foodstuff.
- Promote the involvement of parents, grand-parents and teachers to develop radiation protection culture among children.
- Strengthen dialogue and cooperation with stakeholders elsewhere in Japan and abroad.

Source: Prepared based on Lochard, J (2012), the material for the 27th symposium of the Nuclear Safety Research Association

The ICRP provided some specific suggestions as a result of the dialogues between experts on radiological protection and the victims of the accident at TEPCO's Fukushima Daiichi NPS. The suggestions include the necessity to reflect the priorities of local communities, provide tools and information about radiation doses, create a permanent forum on foods, develop radiological protection culture, etc.

Included in this reference material on March 31, 2013
Updated on March 31, 2017

Psychological Effects

Overview of Health Effects - Chernobyl Accident -

Summary of effects on mental health

World Health Organization (WHO) Report issued in 2006 upon the 20th anniversary of the Chernobyl accident

- **Anxieties and medically unexplained physical symptoms including depression and Post Traumatic Stress Disorders (PTSD) are increasing as stress-related disorders among the group of disaster victims, compared to a control group.**
- **The effects of the Chernobyl accident on mental health have been the biggest health issue for the residents.**

Source: World Health Organization: Mental, psychological and central nervous system effects. Health effects of the UN Chernobyl accident and special health care programmes: report of the UN Chernobyl forum expert group "Health" (eds. Bennett B., et al), 93-97, WHO, Geneva 2006

The effects of the Chernobyl accident are often cited as an example of psychological effects of nuclear disasters.

According to summaries by the International Atomic Energy Agency (IAEA) and WHO, psychological effects surpassed direct health effects of radiation.

After the Chernobyl accident, many complained about health problems because of mental stress. This was not caused solely by the effects of radiation but is considered to have resulted from a complex combination of multiple factors including social and economic instability brought about by the collapse of the USSR at the time, which caused a great deal of mental stress to people.

Included in this reference material on March 31, 2013
Updated on March 31, 2017

Summary by WHO - Chernobyl Accident -

Studies in the 2006 World Health Organization (WHO) Report

(i) Stress-related symptoms

(ii) Concern over effects on brains in development (fetal effects)

(iii) Effects on decontamination workers

- High suicide rate
- Some scholars point out concerns over functional brain disorders

Source: World Health Organization: Mental, psychological and central nervous system effects. Health effects of the UN Chernobyl accident and special health care programmes: report of the UN Chernobyl forum expert group "Health" (eds. Bennett B., et al), 93-97, WHO, Geneva 2006

The WHO Report summarizes psychiatric consequences of stress from the nuclear disaster, pointing out the following four points:

The first is about stress-related symptoms. The study reports that the percentage of those claiming unexplainable physical symptoms or health problems based on self-assessment in a group of exposed people was 3 to 4 times larger than that in a control group.

Secondly, it was found that mothers who were pregnant when the accident happened have been deeply concerned about radiation effects on the brain functions of their children. For example, to a questionnaire question such as "if they believe their children have problems with their memory," 31% of mothers in mandatory evacuation areas answered yes, which is 4 times larger than the percentage (7%) of mothers in uncontaminated areas who answered yes.

The third and fourth points are radiation effects observed in decontamination workers.

A follow-up study on 4,742 Estonians who participated in decontamination operations found that 144 of them had been confirmed dead by 1993, with 19.4% of them dying by suicide, although no increases were seen in cancer incidence and mortality rates.

Additionally, there was a study report that functional brain disorders were found in decontamination workers with the highest exposure doses. However, such findings are criticized for a lack of scientific correctness as alleged by some researchers and are not confirmed individually.

Included in this reference material on March 31, 2013
Updated on February 28, 2018

Psychological Effects

Views of Expert Groups - Chernobyl Accident -

Summary by Bromet et al. (2011)

(1) Among workers who participated in emergency work immediately after the accident and decontamination operations, a significant percentage is still suffering from depression and PTSD, even after the lapse of 20 years from the accident.

(2) Different studies show different results about psychiatric effects on children in the highly contaminated areas.

(3) Studies on general populations have found that the percentages of self-reported health problems, clinical or preclinical depression, anxiety and PTSD are high.

(4) Mothers remain in a psychiatric high-risk group as they have been concerned about family health at all times.

Source: Bromet EJ, JM Havenaar, LT Guey. A 25 year retrospective review of the psychological consequences of the Chernobyl accident, Clin Oncol 23, 297-305, 2011

In 2011, a research group specialized in psychiatry and preventive medicine published a paper detailing what psychiatric effects of the Chernobyl accident were observed.

It has been found that among a group of workers who worked at the site immediately after the accident and who were exposed to high levels of radiation, a significant percentage is still suffering from depression and PTSD, even after the lapse of 20 years from the accident. Different studies show different results concerning radiation effects on toddlers and fetuses who lived around the plant or in the highly contaminated areas at the time of the accident. For example, studies conducted in Kiev, Norway and Finland on children who were exposed to radiation in their mothers' wombs suggest that they had specific psychiatric and psychological disorders, but other studies do not observe such health problems. Studies on general populations have found that the percentages of self-reported health problems, clinical or preclinical depression, anxiety and PTSD are high. Mothers remain in a high-risk group from a psychiatric viewpoint as they have been concerned about family health at all times.

In the case of the Chernobyl accident, all such symptoms are not attributed solely to concern over radiation. Distrust of the government, inappropriate communications, the collapse of the USSR, economic issues, and other factors would also have had some relevance and some of them would have had a combined effect, rather than one factor being the sole culprit.

Included in this reference material on March 31, 2013
Updated on March 31, 2017

Psychological Effects

View Different from the 2006 WHO Report

- Chernobyl Accident -

2006 World Health Organization (WHO) Report：
Mental health such as anxiety is the biggest problem for regional healthcare.

Against this,

concerns have been raised over the decrease in international investigations since the 2006 WHO Report.

(i) It has been pointed out that the physical effects and damage from the Chernobyl accident might be greater than the estimate in the WHO Report, and that it would be necessary to continue international investigations.[*1]

(ii) There has been a criticism that the WHO's view would make people less wary of foods from the contaminated areas and could impede future investigations and research.[*2]

*1: This view is based on the fact that in Rivne in Ukraine, the incidence of neural tube defects is 22.2 per 10,000 people, the highest throughout Europe. (Wertelecki, Pediatrics, 125, e836, 2010)
However, it has not been clear what is causing this.
*2: Holt, Lancet, 375, 1424 - 1425, 2010

There are also reports arguing that the WHO Report overestimates mental health aspects such as anxiety and underestimates physical effects.

These reports rely primarily on a report that people living as an isolated Polish community in the Rivne province of Ukraine, called "Polishchuks," have a high incidence of neural tube defects. Because the effects of consanguineous marriage are also suspected and neural tube defects could be also caused by folate deprivation and maternal alcohol use, it is unclear whether the high incidence of neural tube defects in the Rivne province has been caused by radiation from the Chernobyl accident or other effects, or their combinations.

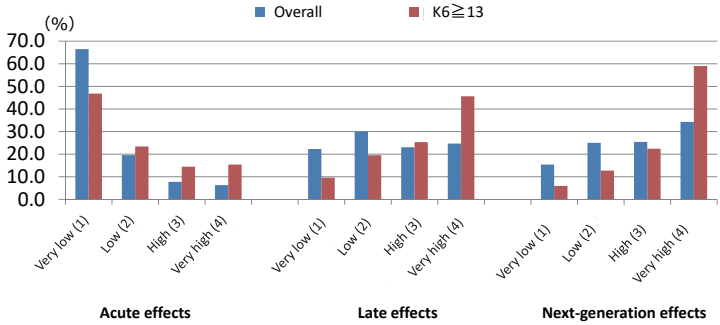
(Related to p.101 of Vol. 1, "Knowledge on Malformation Induction - Chernobyl Accident -")

Included in this reference material on March 31, 2013
Updated on March 31, 2015

Psychological Effects

Relationship between Mental Health and Perception of Risks Concerning Health Effects of Radiation

Results of the Mental Health and Lifestyle Survey of the FY2011 Fukushima Health Management Survey



*K6 is a self-recording scale to measure general levels of mental health. Scores exceeding 13 show strong depression and anxiety symptoms.

- **Overall trend**
  The majority answered that the possibility of acute effects is very low. Opinions vary with regard to late effects. The largest number of respondents chose the option "very high" for next-generation effects.
- **Among people with mental disorders**
  The percentages of respondents who chose the option "very high" were large for all three types of effects.

Prepared based on Suzuki Y, et. al., Bull World Health Organ, 2015
(http://dx.doi.org/10.2471/BLT.14.146498)

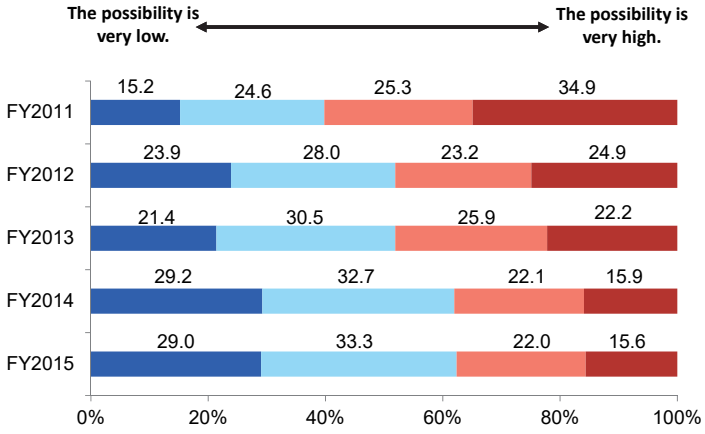
As part of the Fukushima Health Management Survey, Fukushima Prefecture conducts the Mental Health and Lifestyle Survey targeting disaster victims every year (see p.135 to p.141 of Vol. 2, "10.5 Mental Health and Lifestyle Survey" for details). The 2011 survey asked about the perception of (i) acute effects (hair loss and bleeding), (ii) late effects (thyroid cancer and leukemia), and (ii) any next-generation effects of radiation. As a result, the following were found.

- There are very few disaster victims worrying about acute exposure, but the majority have concerns over late effects and next-generation effects.
- Those worrying about radiation effects as indicated in their responses to all three questions clearly show worse mental health conditions and have depression and anxiety symptoms.

Given these, it can be said that disaster victims who are apt to have negative perception of risks are highly likely to have strong depression and anxiety symptoms as well.

Included in this reference material on February 28, 2018

Psychological Effects — Changes in Perception of Radiation Risks (Next-generation Effects)



Prepared based on the materials of the 29th Prefectural Oversight Committee Meeting for Fukushima Health Management Survey

As shown on p.143 of Vol. 1, "Relationship between Mental Health and Perception of Risks Concerning Health Effects of Radiation," the Fukushima Health Management Survey examines perception of risks concerning health effects of radiation (late effects and next-generation effects) every year. The percentages of respondents answering that the possibility is high are gradually decreasing for both questions. However, what should be noted is the fact that a larger number of people every year worry about next-generation effects rather than late effects. The figure shows changes over the years in responses to questions about next-generation effects. The percentage of people worrying about next-generation effects is decreasing gradually but still remains at around 40% as of FY2015, showing little change from FY2014.

Such worries over next-generation effects of radiation tend to cause discrimination and prejudice and doubt about future chances of getting married or having children. As shown in the survey results, if disaster victims themselves feel in this manner or have self-stigmas (self-prejudice), their confidence and identity may be shaken significantly and their future life plans may be affected accordingly. It is necessary to note the sensitiveness of such worries and prejudice for disaster victims.

Included in this reference material on February 28, 2018

Psychological Effects

Increase in Induced Abortions in Europe
- Chernobyl Accident -

The Chernobyl accident occurred on April 26, 1986.

Increase in induced abortions in remote places

Greece: sharp decline in birthrate in January 1987

⇒Induced abortions for 23% of fetuses in the early stage of fetation in May 1986 (estimation)

Italy: Approx. 28 to 52 unnecessary abortions per day for five months after the accident (estimation)

Denmark: Slight increase

Sweden, Norway, Hungary: None

Source: Proceedings of the Symposium on the effects on pregnancy outcome in Europe following the Chernobyl accident. Biomedicine & Pharmacotherapy 45/No 6, 1991

Excessive concern over the health effects of radiation could be harmful both physically and mentally.

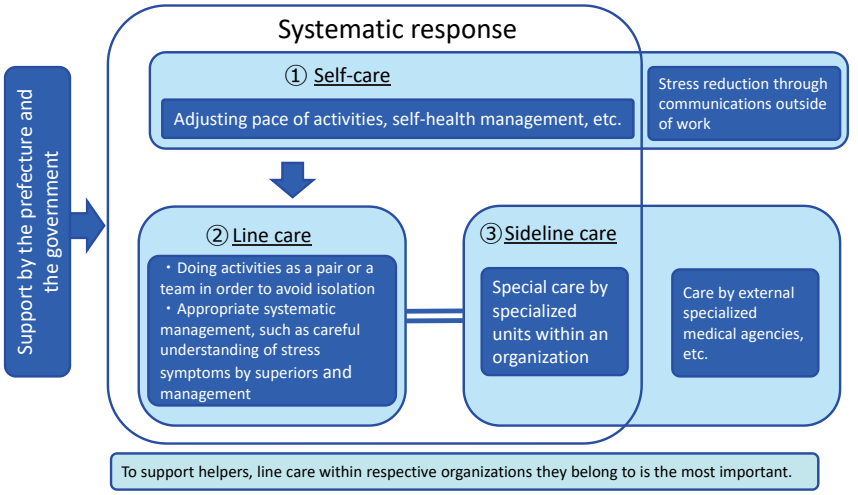
For example, resulting suicide attempts and alcohol addiction are harmful to the body.

There is a report that spontaneous abortions increased because of stress after the Chernobyl accident. There is also a report that induced abortions increased even in areas remote from the Chernobyl plant. In Greece, the effect of the Chernobyl accident was minor within the level below 1 mSv, but the number of pregnant women who chose abortion increased in the next month after the accident and the number of births sharply declined in January of the next year. Based on the birth rate, it is estimated that 23% of fetuses in the early stage of fetation were aborted. On the other hand, in such countries as Hungary, where abortion is not allowed unless fetal exposure dose exceeds 100 mSv, no abortions were performed.

Included in this reference material on March 31, 2013
Updated on March 31, 2015

Fukushima and Psychological Care

Support for Helpers: Three Stages of Care



Prepared based on "Psychological Care to Disaster Victims, Prefecture-Level Guidelines," Cabinet Office, March 2012; "Fukushima Psychological Care Manual," Fukushima Mental Health and Welfare Centre, 2012; "Manual on Post-Disaster Psychological Care at Workplaces," Japan Labor Health and Welfare Organization, June 2005; "Current Situations and Issues with the Mental Health of Disaster Victims in Fukushima," Masaharu Maeda, Firefighting Science and Information

Support service providers to disaster victims, such as civil servants and medical personnel, are often in positions to closely witness the agony of the disaster victims and tend to feel helpless or guilty as no immediate solutions are available.

To provide psychological care to them, support within respective organizations they belong to is the most important and such support would help maintain the stability and constancy of the organizations. However, in Fukushima Prefecture, issues to be handled are too wide-ranging, long-term, and complex to find goals or processes for their solutions, so it is difficult to provide support solely by respective organizations.

It is important for such helpers to care for themselves by being aware of their difficult situation and trying to relieve stress by themselves in the first place. Secondly, it is also important for superiors, management or coworkers to detect any problematic symptoms at an early stage and provide care within respective organizations. Furthermore, establishing a specialized unit outside the organization that offers support would be one option. In order to construct such a support system, psychological education and awareness-raising activities targeting managers (also for their own sake) would be very important.

Fukushima Prefecture and the government are providing support for psychological care to the disaster victims directly and indirectly through psychological care support projects for the disaster victims, etc.

Included in this reference material on March 31, 2016

Stress Measures for Helpers

Support for helpers within respective organizations

1. **Set work goals**
   - Clarify the importance and goals of jobs
   - Keep daily reports, diary or a note of activities to organize thoughts
2. **Maintain the pace of life**
   - Get enough sleep, nutrition and water
3. **Take rest when possible**
4. **Figure out how to get refreshed**
   - Take a deep breath, close eyes, meditate, do stretches
   - Take a walk, do exercise, listen to music, have meals, take a bath, etc.
5. **Socialize as a way of relieving stress**
   - Contact family, friends, etc. when possible (preferably people unrelated to work)

Self-support of helpers

a. **Avoid overworking**
   - Know your limits and adjust the pace of activities

b. **Be aware of stress**
   - Manage your own health and detect stress symptoms at an early stage

c. **Try to relieve stress**
   - Relaxation, body care, refreshment
   - Communicate with people outside work (family, friends, etc.)

d. **Avoid isolation**
   - Work as a pair or a team

e. **See things differently**

Source: "Fukushima Psychological Care Manual," Fukushima Mental Health and Welfare Centre, 2012

"Fukushima Psychological Care Manual" by the Fukushima Mental Health and Welfare Centre provides guidelines regarding stress measures for helpers.

Helpers' self-support efforts include avoiding overworking and being aware of their own stress, etc. It might be difficult to avoid overworking given the situation they are in, but it is important for individuals to know their own limits so that they can adjust the pace of activities and to hand off work to someone else in order to avoid meeting too many disaster victims in a day. Having stress symptoms is not something to be ashamed of but an important clue for self-health checks. It is necessary to manage health by oneself and notice any symptoms at an early stage. Relaxation, body care, refreshment, and communication with people outside work (family, friends, etc.) are effective in relieving stress. Isolation should be avoided as much as possible in a situation where one can easily become stressed out, so it would be necessary to work as a pair or a team and to have opportunity to share experience (disaster situations individual helpers witnessed and their feelings) with coworkers on a periodic basis or to be given instructions from senior workers, etc. It is natural that individuals cannot change everything on their own, especially in difficult situations after disasters, so it is better to rate one's own activities positively and there is no need at all to have negative thoughts considering not being fit or competent for the job.

The manual also cites some concrete ways to provide care for helpers within respective organizations.

- Feeling guilty about taking a rest alone while others are working is a sign of stress.
- When noticing any physical or psychological symptoms, consult with a superior or coworkers at an early stage.
- Exchange words with coworkers as often as possible to encourage each other.
- Be careful about one's own health and coworkers' health and tell the relevant person and the supervisor if someone has too much workload.

Included in this reference material on March 31, 2016

Fukushima and Psychological Care

When Feeling Depressed or Anxious

Consult a public health nurse, a nurse or a special institution nearby if you are aware of any change as follows in yourselves. It is important to share everything and be listened to.

Signs of depression - Signs you can notice yourselves

- Feel sad, gloomy, down
- Easy to get tired, feeling unwell (lethargic)
- Hard to sleep, get up earlier than usual in the morning
- Feel worse in the morning than in the evening
- Unable to overcome failure, sorrow, disappointment
- Disinterested in everything, have no fun
- Feel weaker, less motivated, less focused (dull)
- Less appetite, in no mood to meet people
- Unable to get rid of worries, paranoid
- Blame yourself, feel worthless, etc.

("Do you know what depression is like?" (pamphlet for the general public (draft)), Ministry of Health, Labour and Welfare; http://www.mhlw.go.jp/shingi/2004/01/s0126-5d.html)

Below are consultation services you can turn to when you have problems with yourselves or your family, such as worries, anxiety, loneliness and alcohol problems.

Consultation service	Phone number	Business hours
Fukushima Mental Care Centre Telephone Counselling Service for Disaster Victims, Fukukoko Line	024-925-8322	9:00-12:00 and 13:00-17:00 from Mon. to Fri. (except national holidays and the year-end and New Year holidays)
Telephone Mental Health Counselling Service (For people residing in Fukushima Prefecture) (For people residing outside Fukushima Prefecture)	024-535-5560 0570-064-556	9:00-17:00 from Mon. to Fri. (except national holidays)
Fukushima Counselling Service	024-536-4343	10:00-22:00 every day (open 365 days a year)
Fukushima Mental Health and Welfare Centre	024-535-3556	9:00-17:00 from Mon. to Fri. (except national holidays and the year-end and New Year holidays)

Child counseling (under age 18): If you have any concerns, turn to the nearest health center in your municipality.

Source: Prepared based on the "List of Other Counseling Services," Radiation Medical Science Center for the Fukushima Health Management Survey, Fukushima Medical University

Depression is considered to be caused when the part of the brain associated with emotions and willingness becomes underactive.

We are exposed to a lot of stress as we have worries or are under pressure in our daily lives. Getting enough sleep or a good rest can reduce such stress to some extent. This is because our bodies have natural healing power.

However, if we keep worrying or are under pressure for a long time or if we continue overwork, we may become more likely to develop depression. The symptoms of depression or symptoms suspected of being related to depression are as follows:

(i) Symptoms related to emotions and willingness, such as feeling down, unmotivated, having a hard time concentrating, losing the power to think;

(ii) Symptoms related to sleep, such as having a hard time falling asleep, waking up in the middle of the night, having a hard time getting a good night's sleep or waking up earlier than usual in the morning;

(iii) Symptoms related to appetite, such as having no appetite, food not tasting good, having an upset stomach.

If you have any of the above, it is important to call a specialized institution or counselling service without hesitation.

Reference: "Depression and Depressive States," Fukushima Mental Care Centre, supervised by Misato Oe

Included in this reference material on March 31, 2017

Psychological Care

Reference Materials on General Psychological Care (1/3)
General Information on Psychological Care

	Title	Issued by	Issued in	URL
(i)	Psychological First Aid (PFA) Field Guide	World Health Organization (WHO) Japanese translation: National Center of Neurology and Psychiatry, Care Miyagi, (Public Interest Incorporated Foundation) Plan Japan	2011	http://saigai-kokoro.ncnp.go.jp/pdf/who_pfa_guide.pdf
(ii)	Guidelines for Local Mental Health Care Activities after a Disaster	Ministry of Health, Labour and Welfare, Health and Labour Science Research Grants Health and Labor Science Special Research Program	Updated in March 2011	http://saigai-kokoro.ncnp.go.jp/document/medical_personnel05.html
(iii)	Roadmap for Local Mental Health Care Activities after a Disaster	National Center of Neurology and Psychiatry, National Information Center of Disaster Mental Health	Updated in March 2011	http://saigai-kokoro.ncnp.go.jp/document/pdf/mental_info_map.pdf
(iv)	Mental Health Manual for Disaster Rescuers and Helpers	National Center of Neurology and Psychiatry, National Information Center of Disaster Mental Health	Updated in March 2011	http://saigai-kokoro.ncnp.go.jp/document/pdf/mental_info_saigai_manual.pdf
(v)	Guide for Providing Psychological Support in the Event of a Nuclear Disaster - How to Respond to Local Residents -	(Public Interest Incorporated Foundation) Nuclear Safety Research Association (Project commissioned by the Ministry of Education, Culture, Sports, Science and Technology)	March 2009	http://saigai-kokoro.ncnp.go.jp/document/pdf/mental_info_nuclear.pdf

This table shows reference materials on general psychological care as well as the health effects of disasters and radiation.
(i) is a guide for Psychological First Aid (PFA) translated in Japanese. It provides points that supporters should consider in practicing PFA, such as what to do and what not to do.
(ii) is a guideline on how to manage stress after a disaster. It is directed to doctors, public health nurses, nurses, psychiatric social workers, other professionals, and administrative officials and explains specific measures to deal with the psychological effects of disasters on local residents.
(iii) is a roadmap showing psychiatric health activities that should be implemented immediately after a disaster and over mid and long terms. It is directed to health and medical personnel and explains the psychological and mental reactions of disaster victims and corresponding activities.
(iv) is a manual on how disaster helpers should manage stress. It is directed to health and medical personnel and explains the mental and physical reactions of helpers and how to manage stress.
(v) is a guide showing how to provide psychological care in the event of a nuclear disaster. It provides examples of typical psychological reactions after a disaster and first-aid methods for people with anxiety, and recommends consulting with doctors promptly if helpers notice such reactions. It also recommends using a check sheet to check symptoms that are likely to be seen in helpers, and taking appropriate measures.

Included in this reference material on March 31, 2015
Updated on February 28, 2018

Psychological Care

Reference Materials on General Psychological Care (2/3)
Post-Disaster Care to Children

	Title	Purpose and Target	Issued by	Issued in	URL
(i)	Child-friendly Space Guidebook, Part 1 (Key concepts)	・Purpose: To create a space where children can stay safe with peace of mind in an emergency and explain how to make preparations therefor and actual procedures to be followed ・Target: Children	(Public Interest Incorporated Foundation) UNICEF Japan National Center of Neurology and Psychiatry, National Information Center of Disaster Mental Health	Updated in December 2016	https://www.unicef.or.jp/kinkyu/japan/pdf/cfs.pdf
(ii)	To Those who Support Child Disaster Victims - About Acute Psychological Support-	・Purpose: To provide psychological support to children immediately after the disaster ・Target: Children	The Japanese Society for Child and Adolescent Psychiatry, Disaster Contingency Planning Committee	March 2011	http://saigai-kokoro.ncnp.go.jp/document/pdf/mental_info_childs_02.pdf
(iii)	To Those who Support Child Disaster Victims - About Mid- and Long-term Psychological Support -	・Purpose: To provide mid- and long-term support to child disaster victims ・Target: Children	The Japanese Society for Child and Adolescent Psychiatry, Disaster Contingency Planning Committee	July 2011	http://child-adolesc.jp/wp-content/uploads/tebiki_chuuchouki.pdf
(iv)	To Helpers - Guideline on How to Deal with Disabled Children after a Disaster	・Purpose: To deal with physical, psychological and behavioral issues in supporting disabled children after a disaster ・Target: Disabled children and their guardians	The Japanese Society for Child and Adolescent Psychiatry	March 2011	http://saigai-kokoro.ncnp.go.jp/document/pdf/mental_info_handicapped_child.pdf

The table shows reference materials on general psychological care for disasters, mainly on child care.

(i) is an emergency guidebook. It is directed to staff of evacuation centers, private organizations and municipalities, as well as people in the fields of medicine, welfare, and education, and summarizes what should be understood and basic strategies to keep in mind when creating a space where children can stay safe with peace of mind. Additionally, it provides examples of preparations necessary for creating a child-friendly space and actual procedures to be followed.

(ii) and (iii) show how to provide psychological care to children, immediately after a disaster (ii) and over mid- and long-terms (iii), directed to nurses, public health nurses, psychologists, and school nurses.

(iv) is a guideline on how health and medical personnel support disabled children. It summarizes how to deal with physical, psychological, and behavioral issues. It also contains how to support guardians.

Included in this reference material on March 31, 2015
Updated on February 28, 2018

Reference Materials on General Psychological Care (3/3)
Post-disaster Psychological Care for Each Disease

	Title	Purpose and Target	Issued by	Issued in	URL
(i)	A Manual on How to Promote Measures against Depression - for Prefectural and Municipal Officials -	・Purpose: To appropriately treat depression ・Target: Local residents	Ministry of Health, Labour, and Welfare Regional Anti-Depression Committee	January 2004	http://www.mhlw.go.jp/shingi/2004/01/s0126-5.html#1
(ii)	A Manual on How to Deal with Depression - for Health and Medical Personnel -	・Purpose: To appropriately treat depression ・Target: Local residents	Ministry of Health, Labour, and Welfare Regional Anti-Depression Committee	January 2004	http://www.mhlw.go.jp/shingi/2004/01/s0126-5.html#2
(iii)	Drinking Problems after Disasters	・Purpose: To treat people suffering from alcoholism ・Target: Alcohol addicts after a disaster	National Center of Neurology and Psychiatry, National Information Center of Disaster Mental Health	Updated in April 2011	http://saigai-kokoro.ncnp.go.jp/document/pdf/mental_info_alcohol.pdf
(iv)	To Support People Inclined toward Suicide - Guideline for Counselors -	・Purpose: To confirm the basic knowledge and action guideline required for counseling and supporting activities ・Target: People inclined toward suicide, including survivors of suicide attempts, suicide repeaters, and people contemplating suicide	Ministry of Health, Labour and Welfare, Health and Labour Science Research Grants Mental Health Science Research Program	January 2009	http://www.mhlw.go.jp/bunya/shougaihoken/jisatsu/dl/02.pdf
(v)	A Guideline on Evaluating and Supporting Social Recluses	・Purpose: It is created as a practical guideline on how to evaluate and support social recluses. ・Target: People who fall under the category of social recluses	Ministry of Health, Labour and Welfare, Health and Labour Science Research Grants Mental Health Science Research Program	May 2010	http://www.zmhwc.jp/pdf/report/guidebook.pdf
(vi)	A Manual on How to Support Disaster Victims Suffering from Dementia and Their Family (for Medical Purposes)	・Purpose: For medical purposes ・Target: People with dementia living in evacuation centers and their family	Japan Society for Dementia Research	April 2016	http://dementia.umin.jp/iryou419.pdf
(vii)	A Manual on How to Support Disaster Victims Suffering from Dementia and Their Family (for Nursing Purposes)	・Purpose: For nursing purposes ・Target: People with dementia living in evacuation centers and their family and nursing personnel	Japan Society for Dementia Research	April 2016	http://dementia.umin.jp/kaigo419.pdf

The table shows reference materials on general psychological care after disasters, particularly in relation to depression, stress, drinking habits, suicide, social recluses, dementia, etc.

(i) and (ii) are manuals for regional administrative officials and health and medical personnel to implement general anti-depression measures. They provide precautions in making conversation with people with anxiety, and specific examples of how to explain or ask questions.

(iii) explains how health and medical personnel should deal with alcohol addicts after disasters.

(iv) assumes people inclined toward suicide, including survivors of suicide attempts, suicide repeaters and people contemplating suicide as targets. It provides the basic knowledge and action guideline required for workers in healthcare centers and mental health welfare centers, municipal officials, case workers and children's social workers in providing counseling and support activities.

(v) is a guideline providing examples of social recluses, which is a practical material for use by institutions specialized in mental health, medical care, welfare and education in evaluating and supporting social recluses.

(vi) and (vii) are manuals on people with dementia living in evacuation centers and their family. (vi) is directed to medical personnel such as doctors and nurses treating dementia in disaster-stricken areas. (vii) is aimed at supporting nursing personnel.

Included in this reference material on March 31, 2015
Updated on February 28, 2018