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2022 Fukushima Medical University International Symposium on the Fukushima Health Management Survey
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Office of Public Communications and International Cooperation, Radiation Medical Science Center for the Fukushima Health Management Survey,
Fukushima Medical University
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Introduction of *WHO framework for mental health and psychosocial support in nuclear emergencies*

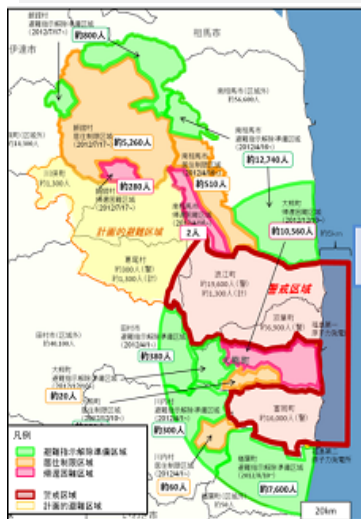
What should we learn from Fukushima disaster?

MAEDA MASAHARU

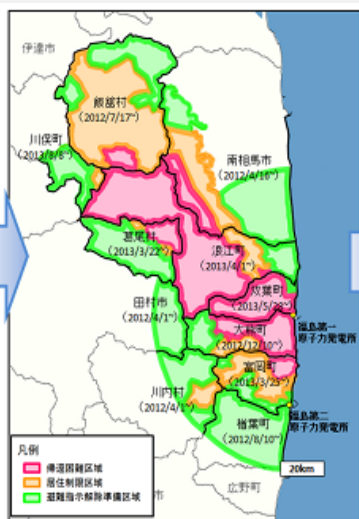
DEPARTMENT OF DISASTER PSYCHIATRY, FUKUSHIMA
MEDICAL UNIVERSITY, SCHOOL OF MEDICINE

Changes of evacuation areas

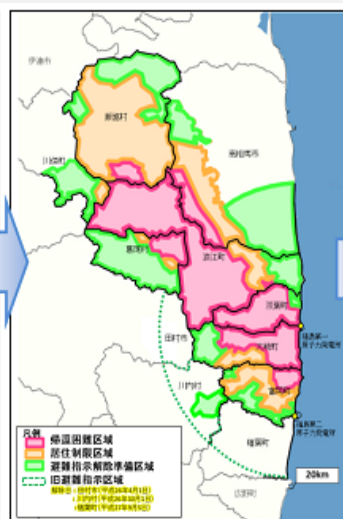
2012/12/11



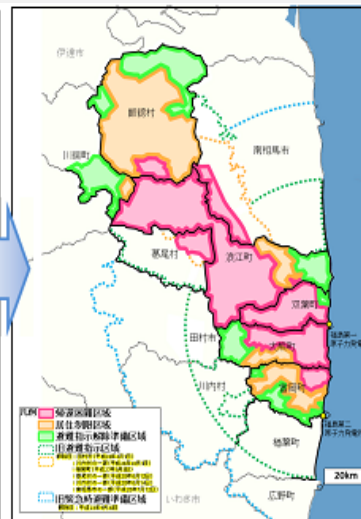
2013/8/8



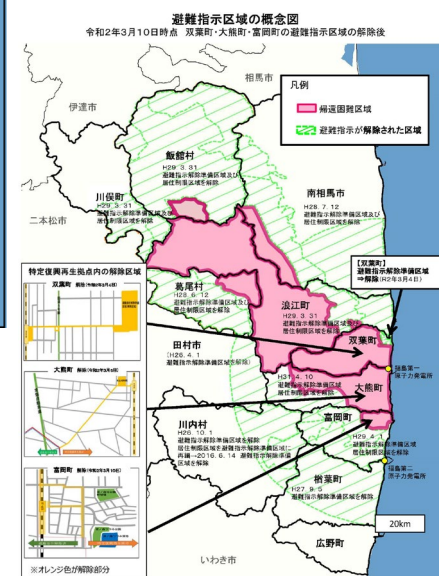
2015/9/5



2016/7/12- *



Current



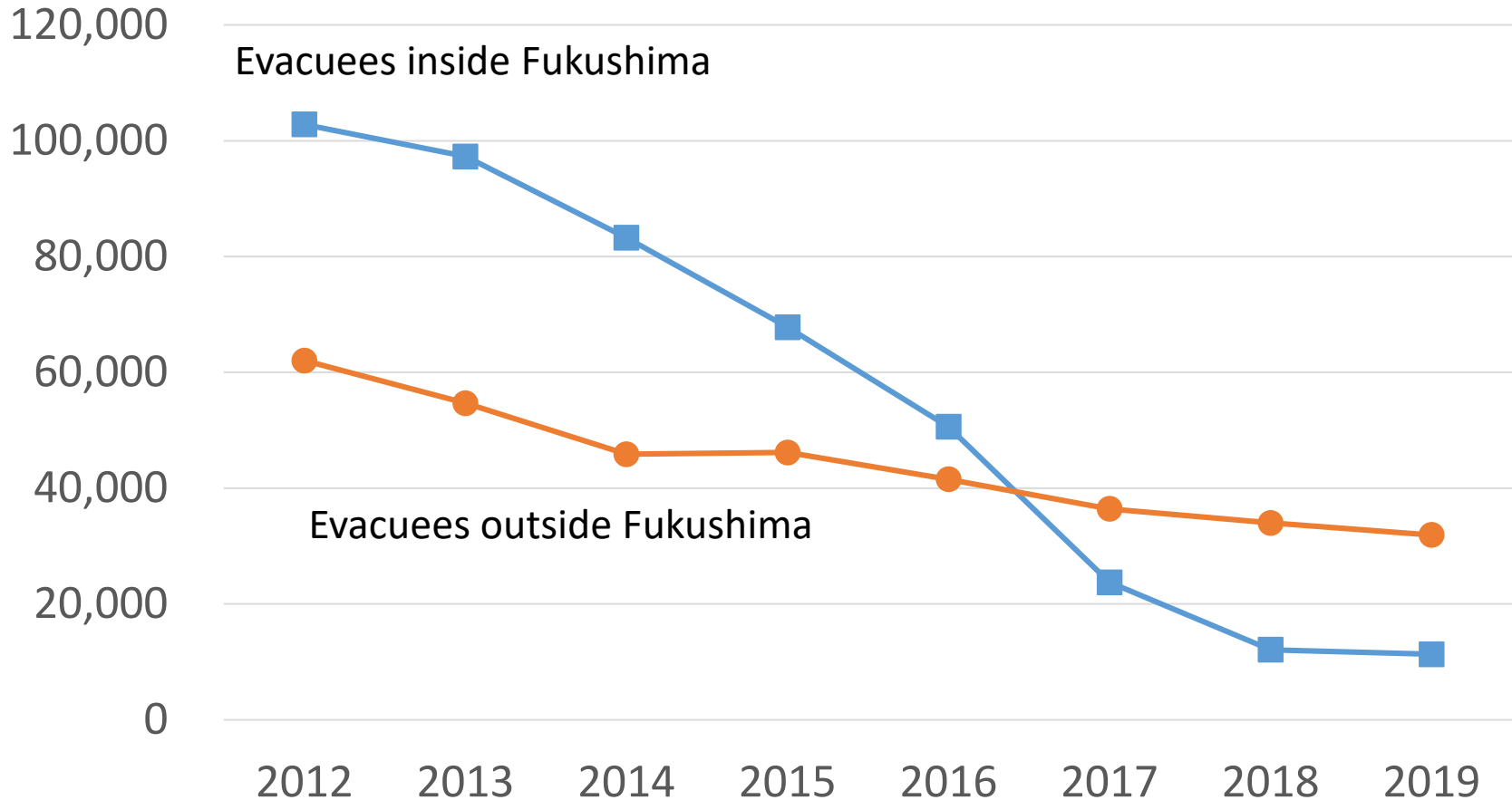
* As of July 12th 2016, Reconstruction Agency

https://www.reconstruction.go.jp/topics/main-cat15/nuclear/gensiryokusaigai_hukkou.html

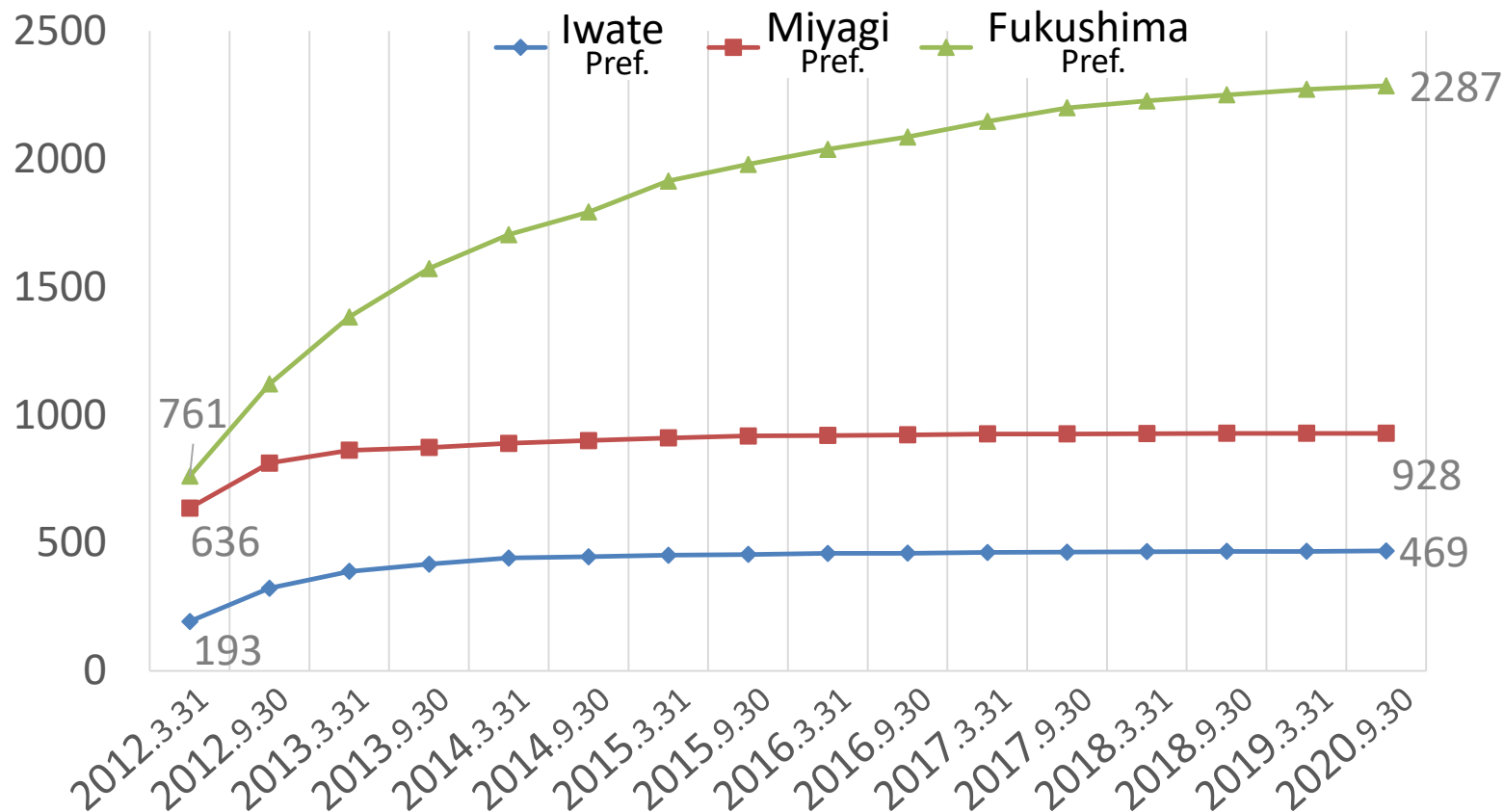
Fukushima Revitalization Station, Fukushima Prefectural Govt., Japan (As of March 10th 2020)

<https://www.pref.fukushima.lg.jp/site/portal/list271-840.html>

Changes in numbers of evacuees



Changes in deaths due to long-term evacuation

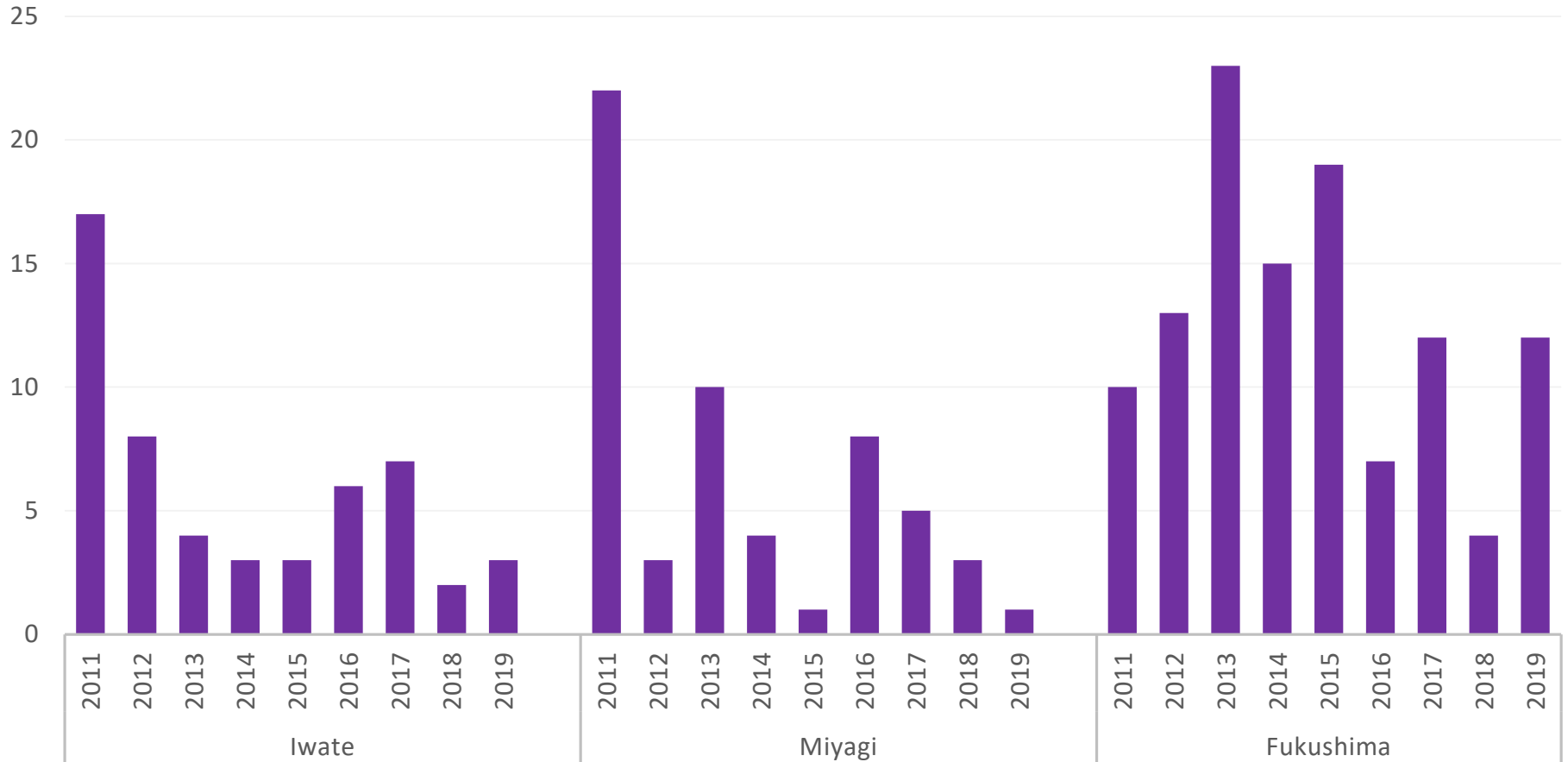


東日本大震災における震災関連死の死者数(令和元年9月30日現在), 復興庁

(Number of disaster-related deaths from Great East Japan Earthquake, as of 2020 September 30th, Reconstruction Agency)

<https://www.reconstruction.go.jp/topics/main-cat2/sub-cat2-6/20140526131634.html>

Changes in suicide cases due to long-term evacuation



Mental Health and Life style survey (MHLS)

Fukushima Medical University

Purposes

- To clarify current **mental health problems** and **lifestyle-related issues** among people who lived in the evacuation zone at the time of the disaster by using several questionnaires
- To provide brief interventions including psychoeducation and advice by telephone or mail mainly for people at risk of **PTSD, depression** and **other behavioral problems**.
- To share information with available resources in Fukushima such as **the Fukushima Care Center for Disaster Mental Health** or **psychiatric clinics** as needed

Target population

- **211,615** residents had once lived in 13 municipalities* which were ordered by the Japanese government for evacuation.

*Hirono Town, Naraha Town, Tomioka Town, Kawauchi Village, Okuma Town, Futaba Town, Namie Town, Katsurao Village, Iitate Village, Minamisoma City, Tamura City, Kawamata Town, and part of Date City

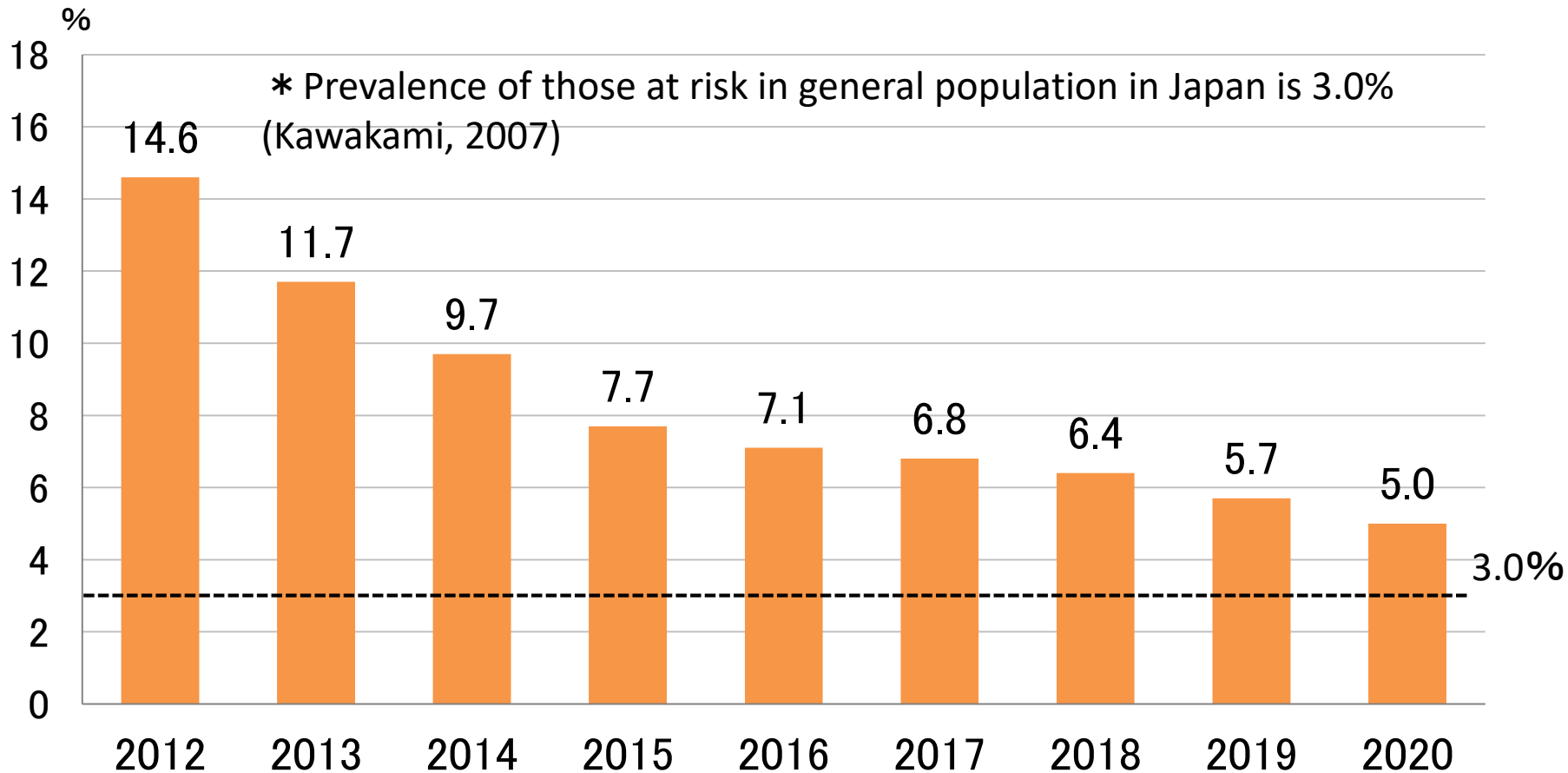
- We divided all the participants into the following 5 groups according to age.

- ① **Age 0-3** : 4,625
- ② **Age 4-6** : 5,047
- ③ **Primary School(age 7-12)** : 11,413
- ④ **Middle School (age 13-15)** : 6,023
- ⑤ **Adult (age >15)** : 184,507

*This survey has been performed in FY2013.



Annual change of people at risk of depression and anxiety disorders based on K-6 score

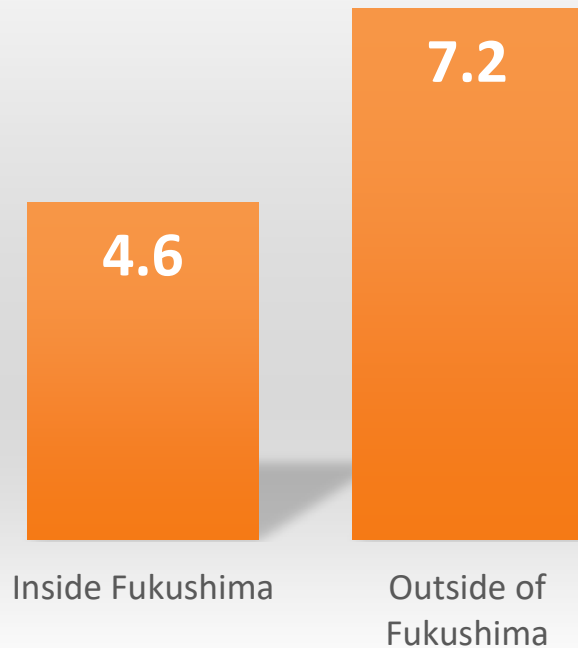


Prevalence of respondents at risk of depression and anxiety disorders

The Prefectural Oversight Committee Report 2021

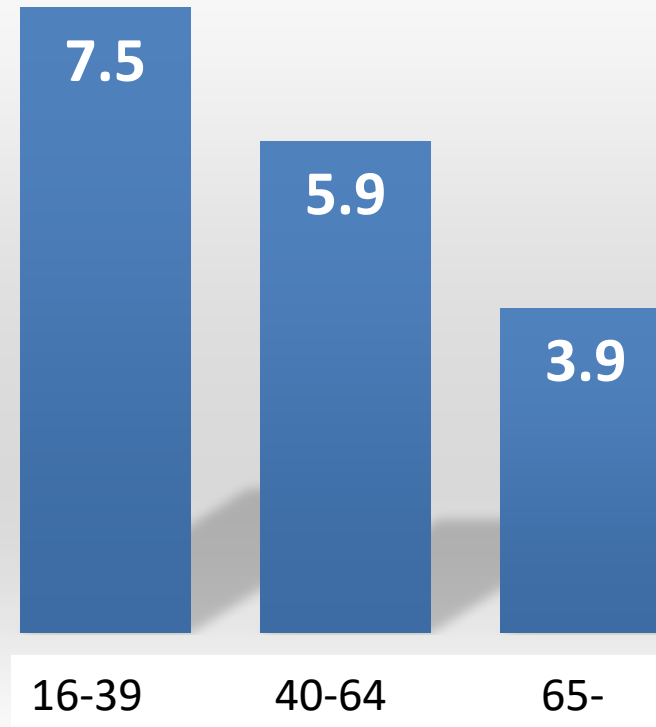
%

Comparison between inside and outside of Fukushima

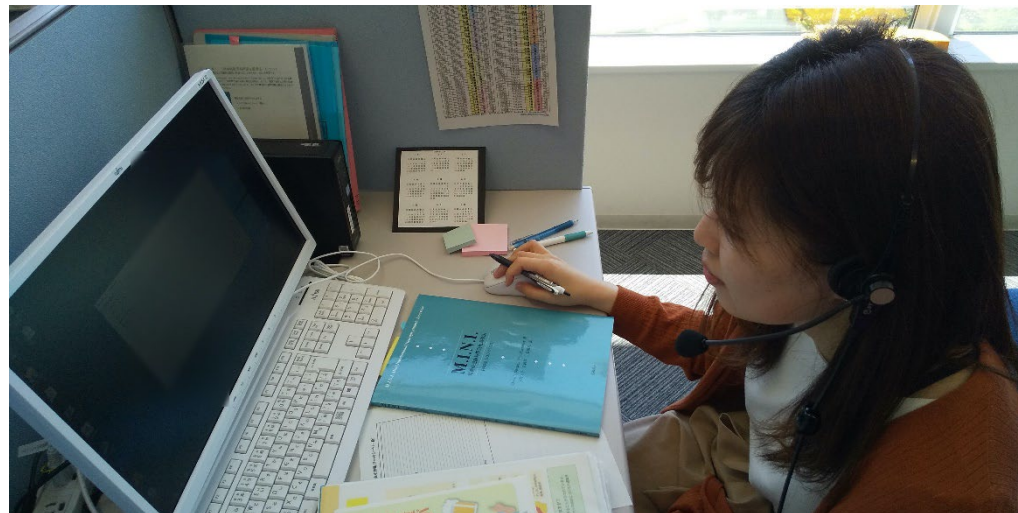
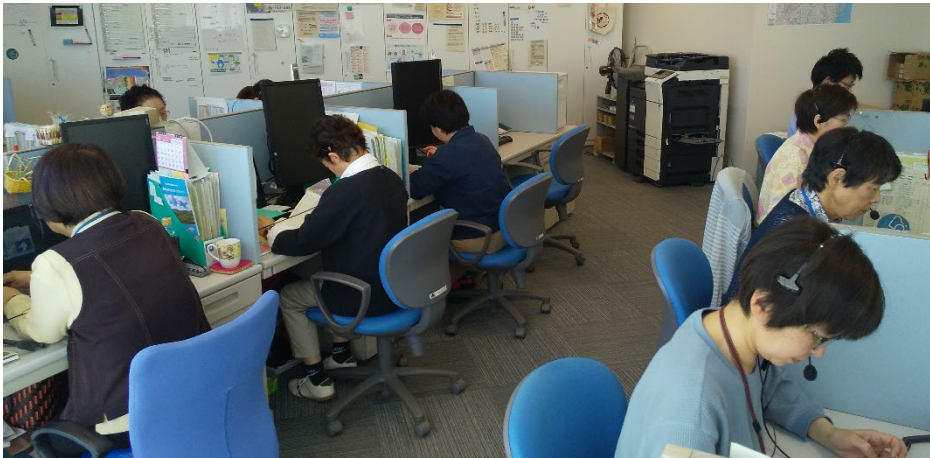


%

Comparison among 3 age groups



Telephone support based on MHLS



Results and achievements of FMLS

- **Results of telephone support**

- The total number of the telephone support cases for 8 years (2012-2019) reached 29,956 for adults and 3,334 for children (4,152 cases per year on average). The interview survey for the respondents in 2014 showed high satisfaction for the support.

- **Academic achievements**

- As of January 2022, 72 scientific articles have been published, reporting non-radiological health effects mainly due to long-term evacuation and emphasizing significance of providing care.



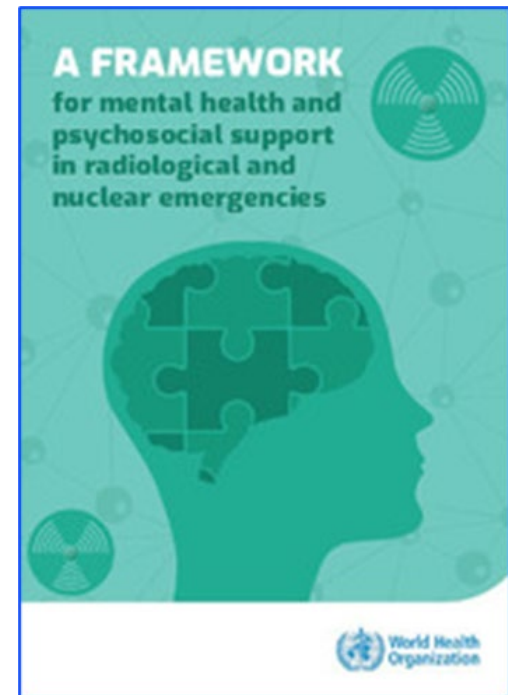
World Health Organization

WHO framework for mental health and psychosocial support in nuclear emergencies

原子力災害時における心のケア・フレームワークについて

WHO framework for mental health and psychosocial support in nuclear emergencies

- ◆ World Health Organization (WHO) issued *A framework for mental health and psychosocial support in radiological and nuclear emergencies* as an expert recommendation based on preexisting mental health guideline published by WHO and IASC.
- ◆ This framework aimed to integrate mental health care with radiation protection and promote them, targeting different stakeholders and experts who engage in planning and risk management for radiation protection, and/or health professionals dealing with mental health problems in emergency settings



WHO framework for mental health and psychosocial support in nuclear emergencies

This framework is based on numerous lessons from the Fukushima and Chernobyl accidents.

Staff of the Department of Disaster Psychiatry translated this into Japanese in 2021 with permission from WHO.

Translation team: Masaharu Maeda, Noriko Seto, Tomoyuki Kobayashi, Hideki Sato, Yui Takebayashi and Rie Mizuki



* WHO 「A Framework for Mental Health and Psychosocial Support in Radiological and Nuclear Emergencies」 (2020)

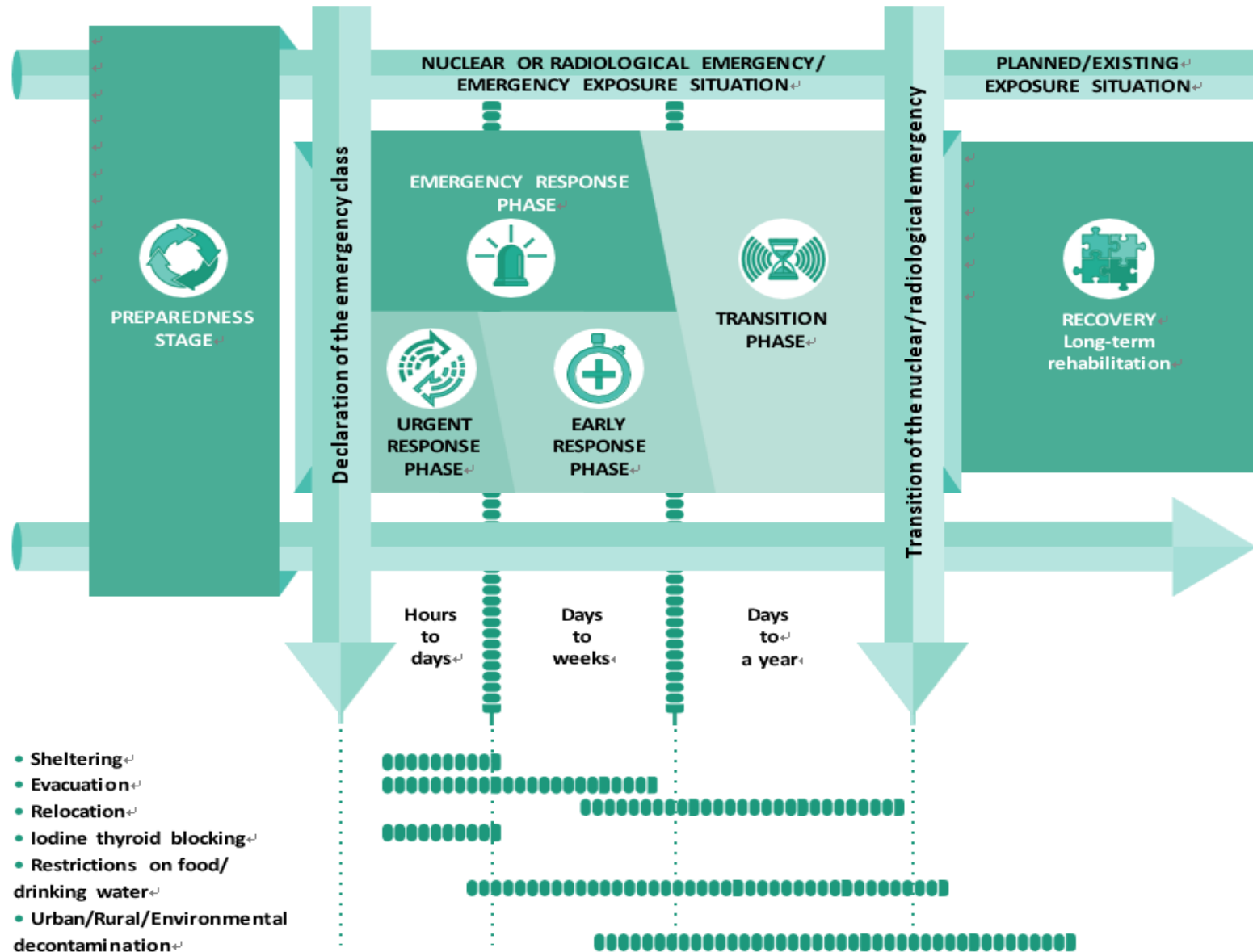
Examples of radiation emergencies include, among others:

- **Nuclear installation accidents**, such as those in Fukushima, Japan in 2011, in Chernobyl, Ukraine in 1986, and the Three Mile Island accident in Pennsylvania, USA in 1979;
- **Radiological accidents related to lost sources and radioactive waste**, such as Goiania accident in Brazil in 1987
- **Radiotherapy accidents** that may affect a few people or hundreds of people, such as the accident in Epinal, France in 2004;
- **Malevolent events**, such as a dirty bomb explosion or the Polonium-210 poisoning incident in the UK in 2006.

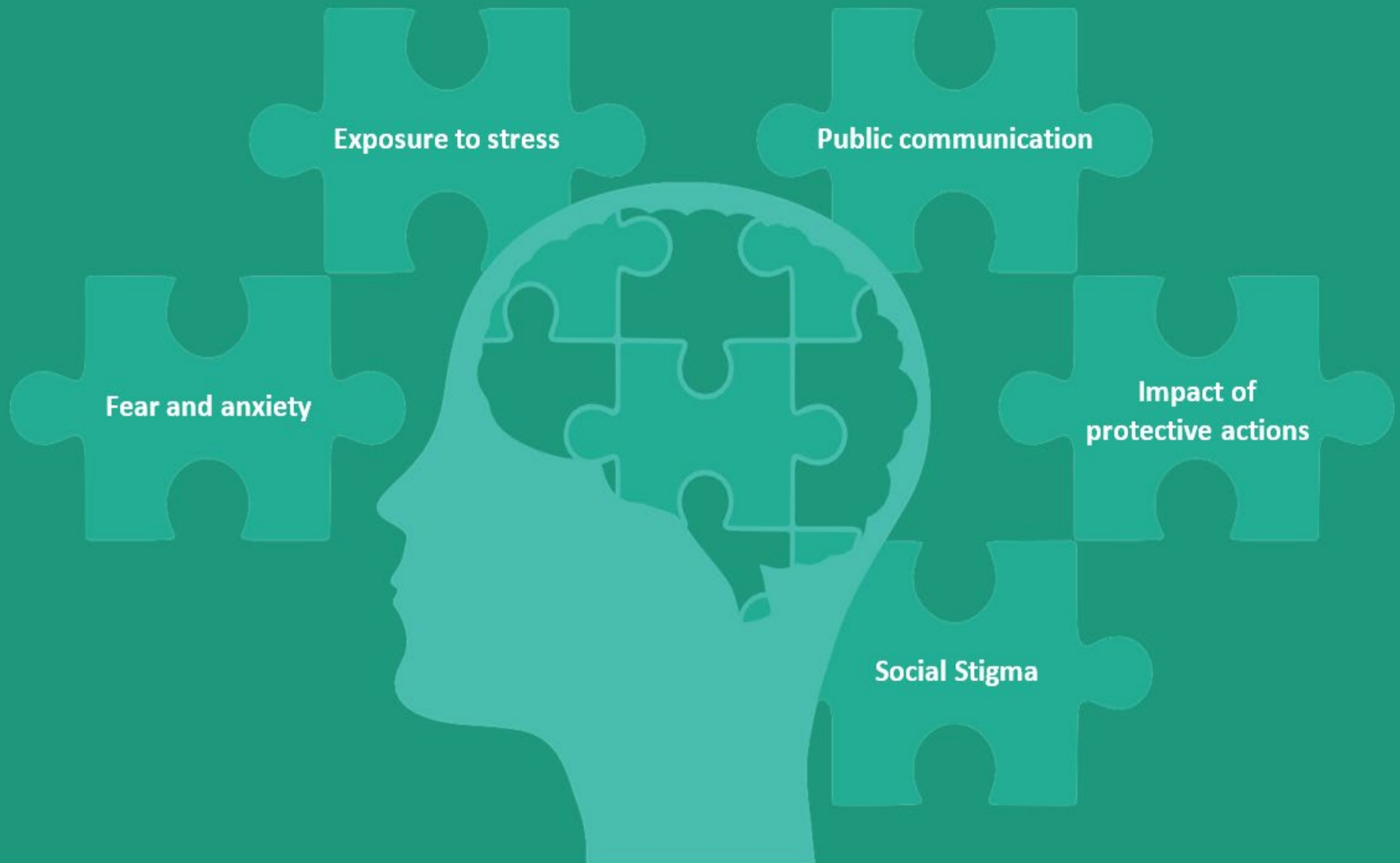
※ “These events may also be particularly distressing and become precursors to further mental-health related risks, even when the mortality rate may be low” → A major difference from natural disasters



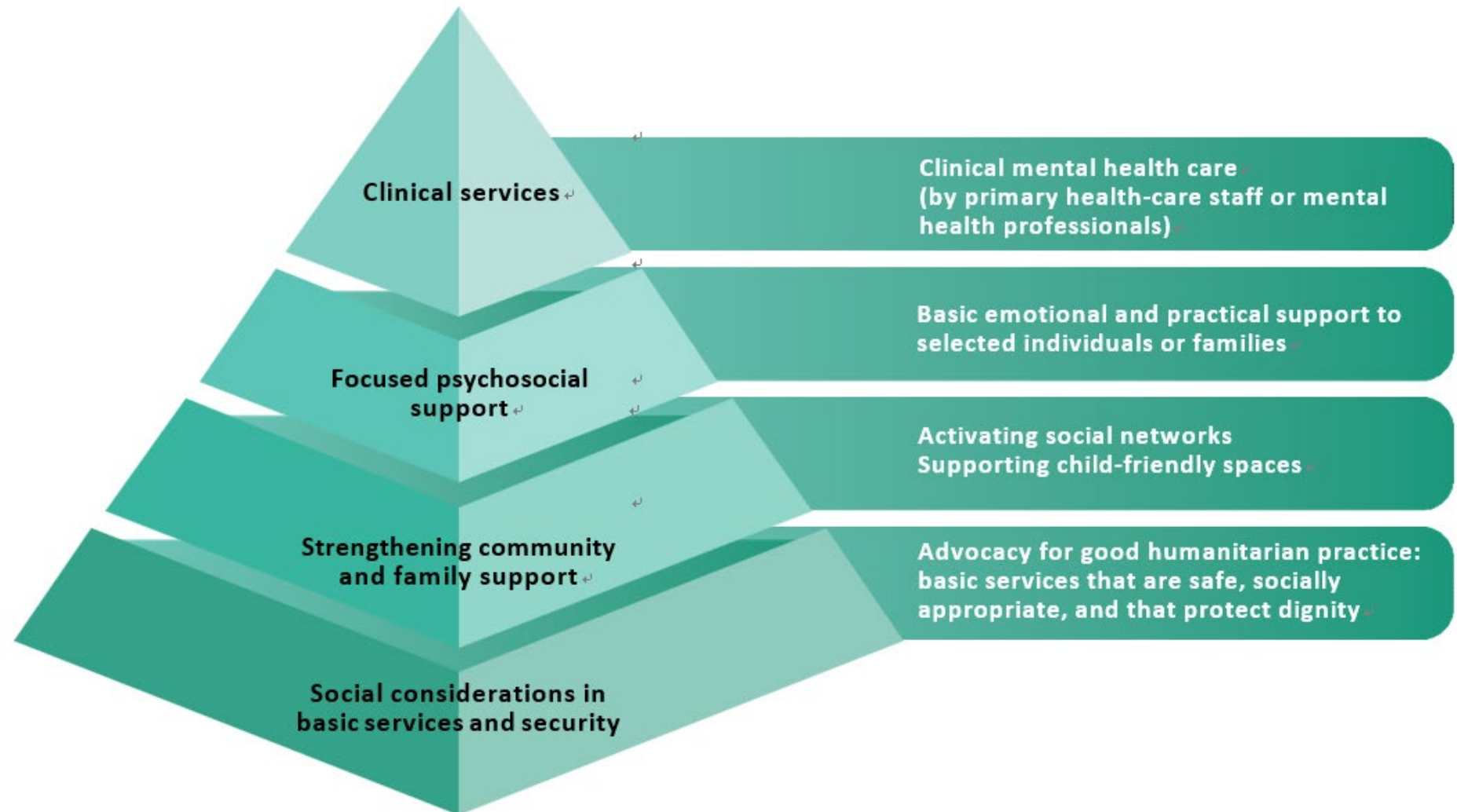
Phases of a radiation emergency cycle



Psychological trauma on affected people



The IASC Intervention pyramid for MHPSS in emergencies



Cross-cutting MHPSS considerations for the entire emergency cycle

Coordination

- Coordination through **inter-sectoral MHPSS working groups** can guide action.
- Coordination must involve functional lines of communication, clear operating procedures and agreed roles and responsibilities.

Communication

- Implementing **emergency risk communication (ERC) strategies** – developed during the preparedness stage and involving all stakeholders – increases the effectiveness of protective actions and can reduce fear.
- ERC should include clear messaging about protective actions that is inclusive, adapted and disseminated by **trained communicators** who will listen to concerns.

Community Engagement

- Affected people should be viewed as leaders in designing and implementing **MHPSS activities that build upon existing community support networks.**
- Emergency response planners should identify trusted community leaders and involve them in decision-making throughout the emergency cycle.

Capacity Building

- Health-care workers, first responders and MHPSS providers **should be trained** in basic psychosocial support and in basic radiation protection.
- Policies and procedures should be established to support the mental health and well-being of first responders, clean-up and plant workers and health-care staff.

Core ethics

- Care must be taken to ensure the primacy of community needs and protection from **exploitation, abuse and discrimination.**
- **Local culture and values should be respected and confidentiality maintained.**

AT-RISK GROUPS THAT REQUIRE MHPSS



People in close proximity to extremely stressful events, such as an explosion at an accident site



First responders, health workers, clean-up workers, reporters and other responders working under hazardous or stressful conditions



Parents and future parents concerned about the long-term effects of radiation and health of their children



People in residential facilities/institutions (assisted living, retirement homes, correctional facilities)



Children from affected areas, who may face discrimination, stigmatization and bullying at school



Evacuees, as well as the members of hosting communities, whose lives were affected by the evacuation.



People with additional physical health needs, such as those ill, older or with a disability



People with pre-existing mental health and psychosocial needs



People with a low level of literacy, who may struggle to follow advice and instructions provided by risk communicators



The workers (and their families) of the nuclear facility where the accident took place, who may be blamed for the accident

Stigma and discrimination

- Stigma and discrimination can be just as pronounced following exposure to ionizing radiation (25, 47). For instance, the Japanese word “**hibakusha**” – which refers to atomic bomb survivors – has been used to stigmatize survivors of the atomic bombings in Hiroshima and Nagasaki (1, 23). (p 29)
- In Chernobyl, clean-up workers, people evacuated, and those residing in the areas contaminated by radioactive fallout, were officially labelled “Chernobyl victims” and were compensated in various ways... This reinforced the stigmatization of the affected people and led to the perception of their reliance on external support, which eventually led to hostility towards Chernobyl victims by the surrounding communities that had initially accepted them (2) (p 29)
- Fear of discrimination may lead to **self-stigma**, when people lose self-confidence and suffer from social isolation (P29)

Rethinking words used in risk communication

- The English word contamination when translated to some other languages often has a negative connotation and is expressed by words synonymous to words like dirty and filthy.
- When communicating to the public and developing communication materials, leaflets, and so on, emergency responders and planners should be mindful of this issue and make sure the messages to the public are clear and free from such connotations. Careful and sensible language may be required, and clarification may be needed to explain the use of specific terminology.

⌘ Risk communication should be based on the concept of *trauma-informed care*



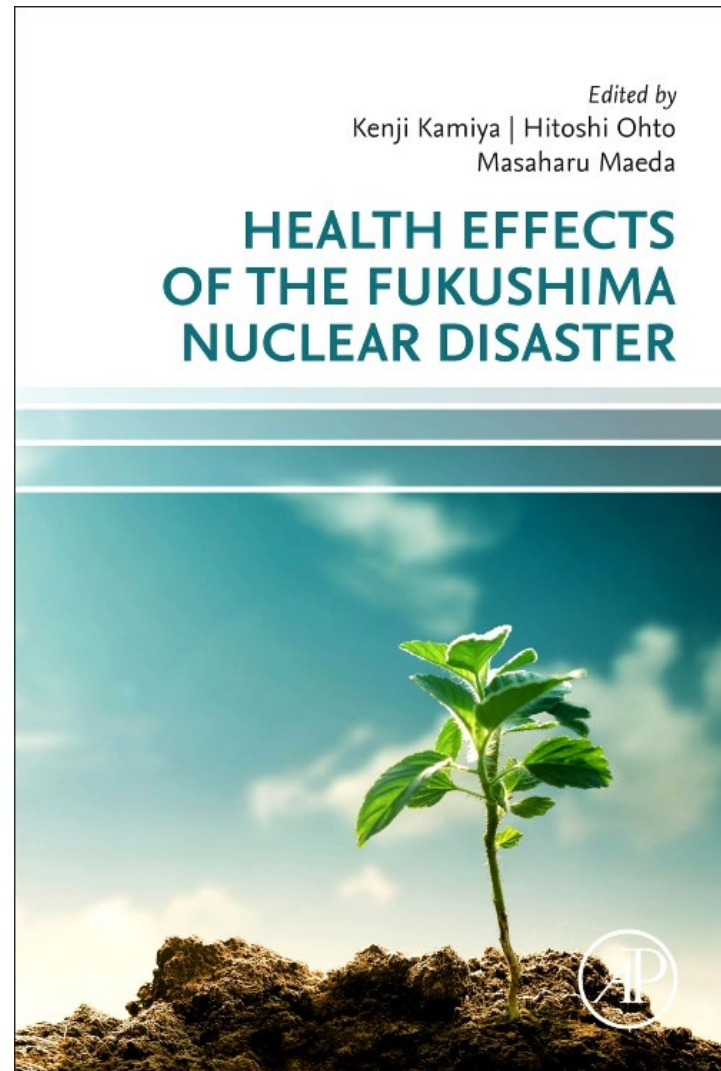
Coordination and communication in pre-disaster phase

- Similar to radiation emergency management, MHPSS is a **cross-cutting issue** where no one agency is responsible for solely delivering it within emergency settings. Effective MHPSS programming requires inter-sectoral coordination among diverse actors and stakeholders even in pre-disaster phase. (P13)
- General health and mental health professionals should advocate and work in partnership with other sectors (for instance, communication, education, community development, disaster coordination, child protection, police) (P 14)
- **Resource mapping** for communities is required when establishing a coordination plan.



Thank you for your
attention!

We appreciate your
continuous cooperation for
MHLS



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