

**Mental Health Issues Following the
Complex Disasters of the
Great East Japan Earthquake and the
Fukushima Nuclear Power Plant Accident**

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福島県





**Condition in
Disaster-Affected
areas**

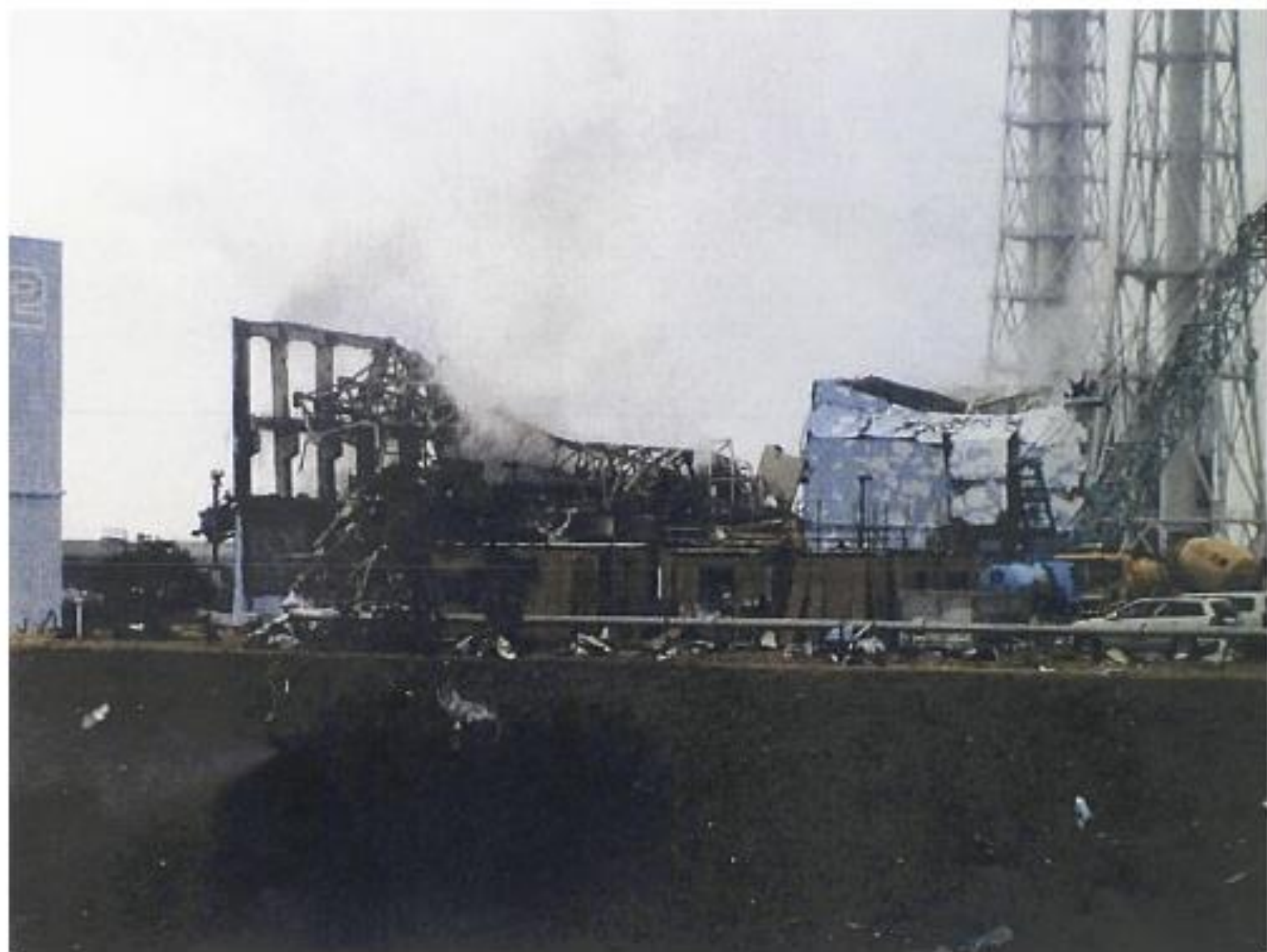


相馬市の海岸部 大正大学 野田文隆 先生より提供

Great East Japan Earthquake: Status of Fukushima Prefecture

- Damage sustained from earthquakes and tsunami
 - Death toll: 1,837 persons (as of September 9)
 - Missing persons: 123 persons
 - Total destruction of residential housing: 17,533 houses
- Impact from nuclear accident at Fukushima Dai-ichi Nuclear Power Plant

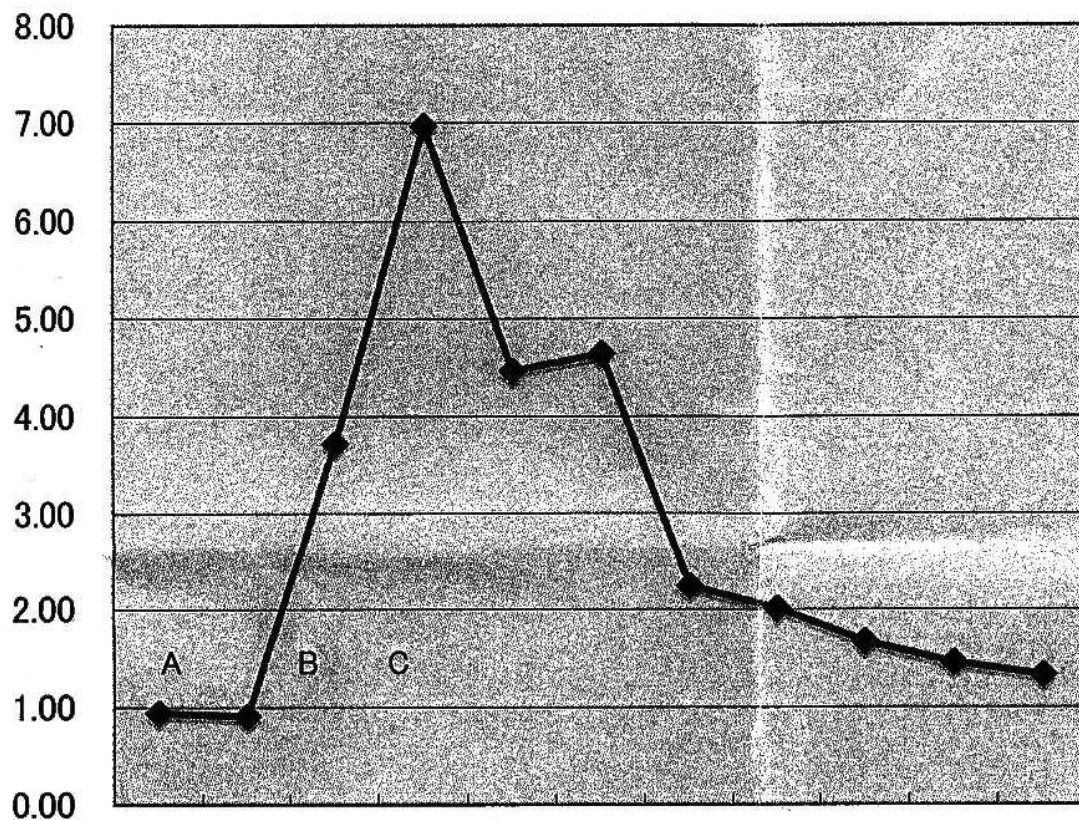
Rapid Response to Nuclear Accident



煙を上げる福島第一原発の3号機周辺(21日午後5時15分) = 東京電力提供

大学敷地内バックグラウンド放射線量の推移

観測値 ($\mu\text{Sv/h}$) 日ごと平均



◆ 観測値 ($\mu\text{Sv/h}$) 日ごと平均

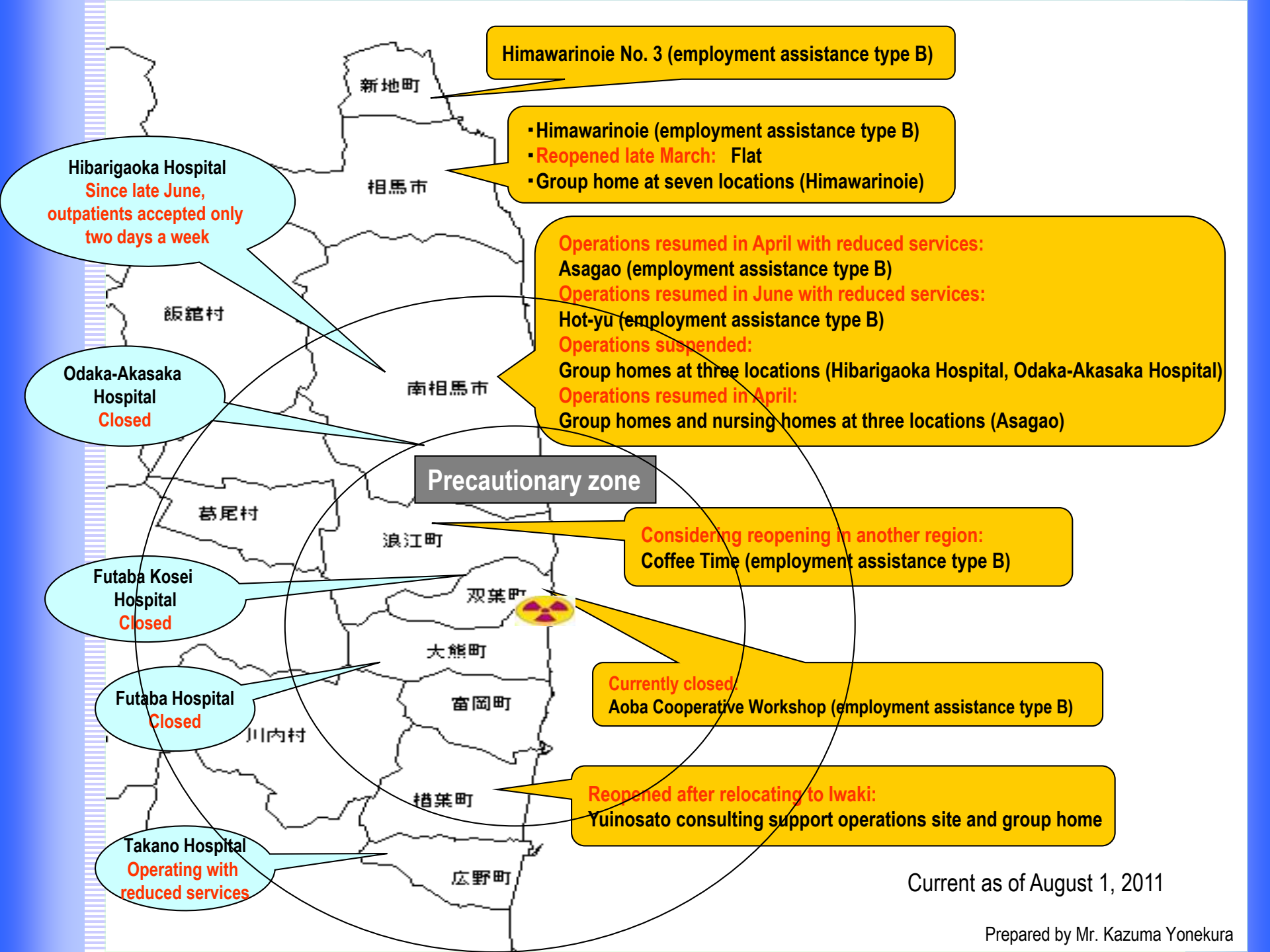
- A: 3号機建屋の水素爆発
- B: 2号機、4号機で爆発
- C: 2号機、3号機で漏出



**Conditions in Psychiatric Care and
Welfare services in the Disaster-
Affected Area**

舞子浜病院玄関付近車が建物に突っ込んでいる状況





Himawarinoie No. 3 (employment assistance type B)

新地町

Hibarigaoka Hospital
 Since late June,
 outpatients accepted only
 two days a week

相馬市

- Himawarinoie (employment assistance type B)
- Reopened late March: Flat**
- Group home at seven locations (Himawarinoie)

飯舘村

Operations resumed in April with reduced services:
 Asagao (employment assistance type B)
Operations resumed in June with reduced services:
 Hot-yu (employment assistance type B)
Operations suspended:
 Group homes at three locations (Hibarigaoka Hospital, Odaka-Akasaka Hospital)
Operations resumed in April:
 Group homes and nursing homes at three locations (Asagao)

南相馬市

Precautionary zone

Odaka-Akasaka Hospital
 Closed

Considering reopening in another region:
 Coffee Time (employment assistance type B)

葛尾村

浪江町

Futaba Kosei Hospital
 Closed

双葉町

大熊町

Currently closed.
 Aoba Cooperative Workshop (employment assistance type B)

Futaba Hospital
 Closed

富岡町

川内村

楢葉町

Reopened after relocating to Iwaki:
 Yuinosato consulting support operations site and group home

Takano Hospital
 Operating with
 reduced services

広野町

Current as of August 1, 2011



Activities of Care-Provider Teams



こころのケアチーム いわき地区へ



Details of Activities by Kokorono (Mental) Care Team at Fukushima Medical University

- ① Supporters make the rounds of 40–60 evacuation centers to offer care.

Care is provided to disaster victims in general, as well as to psychiatric patients.

Each team visits three to five evacuation centers each day.

Patients in follow-up cases are interviewed again once a week.

⇒ “persons who provide medical services to fill in the gap until medical institutions recover their functions”

- ② Provide individual consultations for public health centers and responsive action for cases in which patients are admitted to hospitals.

Details of Activities (continued)

③ Residential support

Residential visits are provided in early stages (a) for patients with a history of hospital admittance according to court papers, (b) for patients whose progress is monitored by public health centers, or (c) or when visits result in worrisome concerns.

⇒ Preventing reactivation of illness.

④ Provide care for children, parents, and instructors at day care centers and kindergartens

⇒ Lectures, group or individual consultation with pediatricians.

⇒ Most are concerned about their children's abnormal behavior and radiation exposure.

Needs are extremely high.

⑤ Provide care for siblings and mothers when carrying out health checkups for infants at public health centers

⇒ Individual interviews are done in separate rooms for worrisome cases.

Mental Care for Children



こども達と折り紙で過ごした楽しい時間

出口貴美子先生作成

Status of Children

Children under the age of two appear to be reflecting the psychological conditions of their parents more than physical symptoms, revealing the particular impact of the environment on childrearing after afflicted by disaster. Three to five year olds show clear signs of their psychological condition by how they play games (tsunami or earthquake games) and by their from wearing underwear to wearing diapers), revealing problems iurinating habits (regressing and their development processes, such as sleep.

Infants under six months of age frequently experience problems associated with underdeveloped children in terms of their development processes. Thus, general advice on childrearing is more essential than mental care.

Reactions become complicated with children in elementary school. Children complain about specific stress reactions, such as flashbacks, revealing a complicated interweaving of instability in their actions and psychological processes, which requires individualized care that takes a lot of time to address.

Health Care Activities

Health Care Activities : Implementation at Public Health Centers from May 21

ちよつとここで 一休みの会

毎週**土曜日**開催します
時間・・・10時30分～12時00分
場所・・・相馬市保健センター



どなたでもご参加になれます。
お子さんも一緒にどうぞ・・・

リラックスする方法を練習します

順次、趣味講座なども開催していきます

ご希望があれば個別にお話を伺います

お茶を準備してお待ちしています
ので、気楽にいらして下さい。



福島県立医科大学
心のケアチームより

<Staff>

- Graduate School of Fukushima Medical University

Primarily students who have completed the psychiatric nursing program

- Fukushima Prefectural Yabuki Hospital:
OT, PSW, & CP

Prefectural University Mind and Body medical ward: OT

- Cooperation by volunteer organization (Team JAPAN 300)
- Others

Students majoring in psychology at graduate schools in and around Tokyo

Case Examples

Case Example K

- **Age: 7**
- **Gender: Female**
- **She was at home when the disasters struck, and her house was partially destroyed. She is unable to approach the house even for clean-up visits from the evacuation center and starts to cry as she gets near the house. Her parents consulted the care team to find out whether they should relocate.**
- **When the child was asked to draw a picture, she drew her own house being attacked by ghosts. When colored pencils were provided, she only used provocative colors, such as black and red.**

Case Example K (continued)

- **The mother has a nervous constitution, so the care team attended to her insecurity, showing complete sympathy. She eventually began to smile, and her insecurity was no longer transmitted to her child. Her interactions with her child changed, and she became increasingly capable of dealing with her child in a more tender manner, which resulted in a reduced number of crying episodes and occasions for regression.**
- ⇒ **The decision to relocate was postponed, and a suggestion was made to either remain at the evacuation center or rent a temporary home, with follow-ups to be made on a weekly basis while the child was able to attend school. Eventually, the family was able to return home safely.**

Case Example C: PTSD

- Age: 19
 - Gender: Female
 - Junior college student majoring in physical education. No past case history. Home located in Toyoma District.
 - Her home was completely destroyed by the tsunami, and she has been living at an evacuation center since the disaster. She became restless at the evacuation center around the same time of day at which the earthquake occurred and has been regressing and suffering from pronounced affective incontinence.
 - She often started crying suddenly during the day and continued into the night, and she often embraced her mother. Images of a tsunami appeared in her mind each time an aftershock occurred, causing her to shiver from fear, and she was unable to go near her home.
 - She was clearly having difficulties coping with daily life. Aftershocks that occurred about one month after the initial disaster deteriorated her condition even further. The care team intervened each week, and her best friends were asked to help by visiting her to encourage her to resume a normal life, and she returned to school. Her condition is improving, although very slowly.
- ⇒ **There has been no other case where I felt that the support of parents and friends offered such a level of comfort for the patient and proved effective to this extent.**

**Mental Care
- Issues and Orientation -**

Impact of Radiation Contamination

特集
東日本大震災

放射性物質 セシウム134、137の 蓄積量

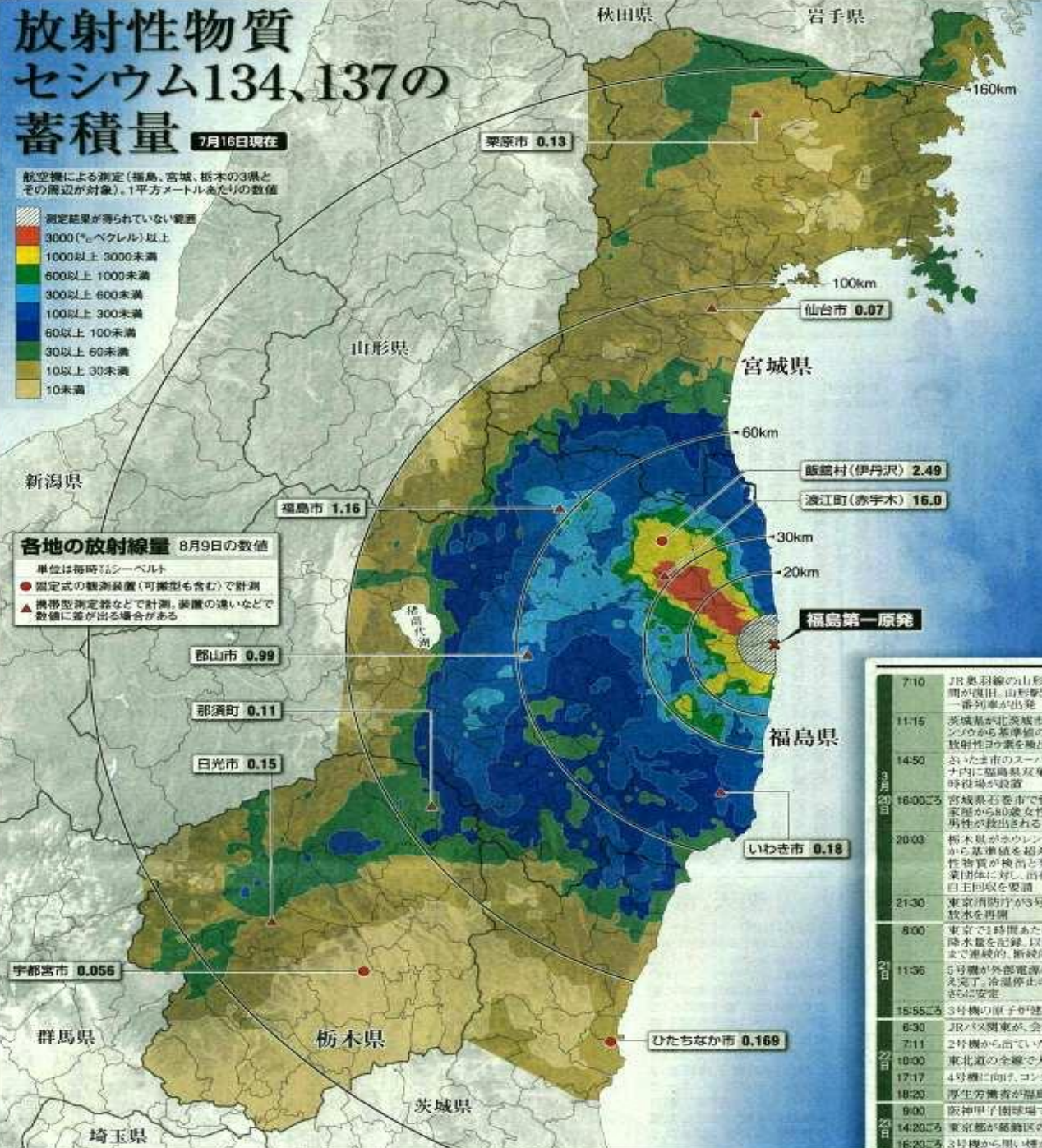
7月16日現在

航空機による測定(福島、宮城、栃木の3県とその周辺を対象)。1平方メートルあたりの数値



各地の放射線量 8月9日の数値

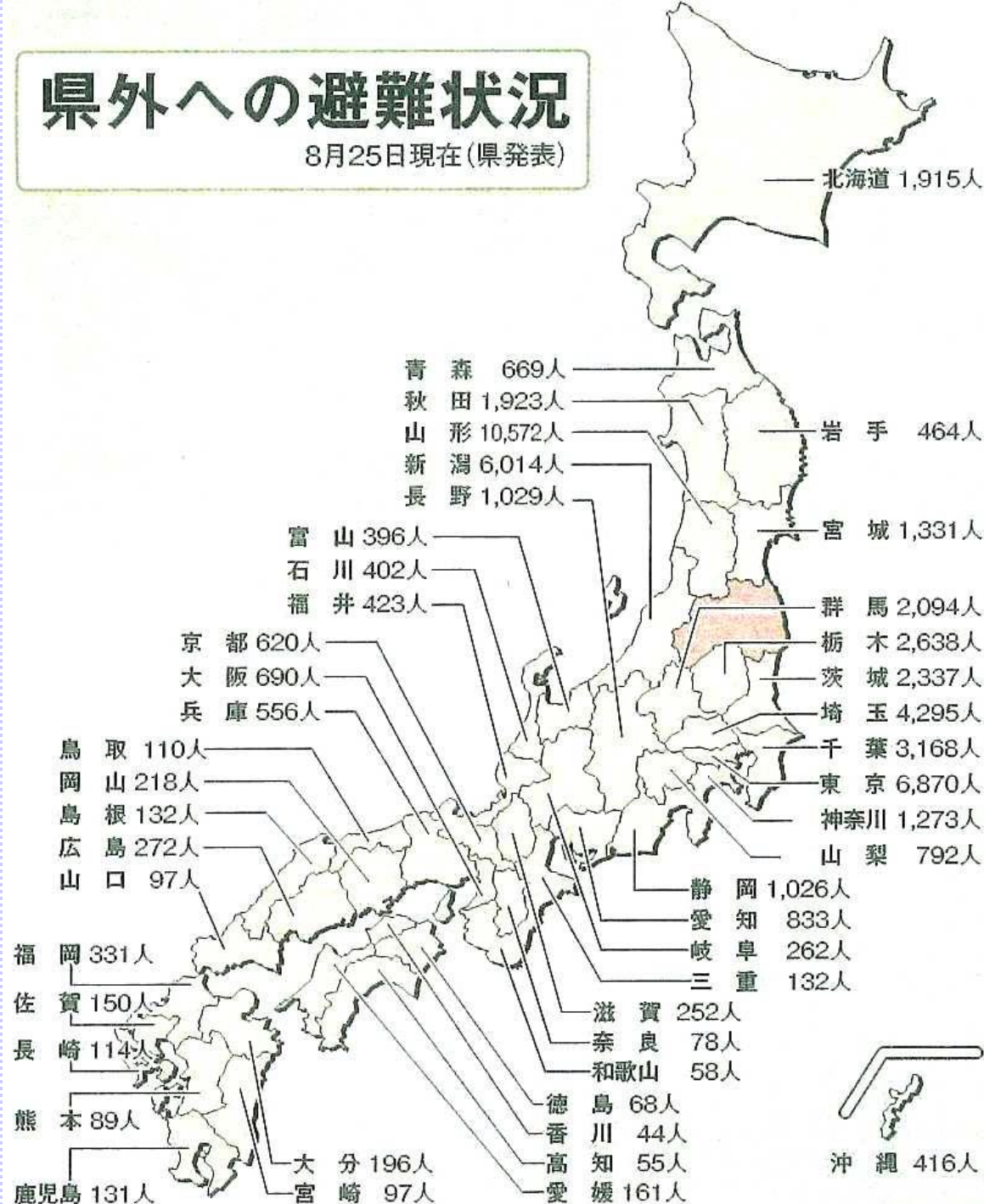
単位は毎時1シーベルト
 ● 固定式の観測装置(可搬型も含む)で計測
 ▲ 携帯型測定器などで計測。装置の違いなどで数値に差が出る場合がある



7:10	JR奥羽線の山形駅が復旧。山形駅一 番列車が発車。
11:15	茨城県が北茨城市 シノウから基準値の 放射性ヨウ素を検出
14:50	さいたま市のスーパー 内に福島県双葉 時役場が設置
16:00-25	宮城県石巻市で 家庭から80歳女性 男性が救出される
20:03	栃木県がホウレン から基準値を超え 放射性物質が検出と 業団体に対し、自治 体自主回収を要請
21:30	東京消防庁が3号 放水を再開
8:00	東京で2時間また 降水量を記録。以 前まで連続的。新幹線
11:36	5号機が外部電源 を完了。冷温停止が さらに安定
15:55-25	3号機の原子炉建
8:30	2Rバス開通が、会
7:11	2号機から出ている
10:00	東北道の全線で大
17:17	4号機に向け、コン
18:20	厚生労働省が福島
9:00	阪神甲子園球場で
14:20-25	東京都が葛飾区で
16:29-25	3号機から用い

県外への避難状況

8月25日現在(県発表)



県人口流出続く 33年ぶり200万人割れ

仮設住宅着工状況

※5日現在（県調べ）

所在市町村	戸数	妻崎市町村別戸数
福島市	1,382	浪江 924
		双葉 120
		飯館 338
二本松市	1,069	浪江 1,069
伊達市	126	飯館 126
本宮市	475	浪江 475
国見町	100	国見 63
		飯館 37
桑折町	300	桑折 14
川俣町	230	浪江 286
		川俣 230
大玉村	648	富岡 648
郡山市	1,273	富岡 622
		川内 401
		双葉 250
須賀川市	194	須賀川 194
田村市	360	田村 360
三春町	770	富岡 330
		葛尾 440
鏡石町	100	鏡石 100
白河市	260	白河 140
矢吹町	85	双葉 120
西郷村	42	矢吹 85
会津若松市	884	西郷 42
		双葉 879
会津美里町	259	双葉 5
猪苗代町	10	橋本 259
相馬市	1,500	双葉 10
		相馬 1,000
		飯館 164
南相馬市	2,134	南相馬 243
		浪江 93
新地町	573	南相馬 2,134
いわき市	2,673	新地 573
		いわき 189
		広野 678
		橋本 975
		富岡 292
		双葉 259
		大川 50

本県の避難状況

⇒ 矢印は役場機能の移転状況

総人口
 震災前 202万4,401人(3月1日現在)
 震災後 199万7,400人(7月1日現在)

震災後の公立学校の県外転校者数
 小学生 5,710人 (7月15日現在)
 中学生 1,962人 (7月15日現在)
 高校生 1,028人 (8月1日現在)

1次避難所
 ピーク時(9月16日現在) 7万3,608人(403カ所)
 9月6日現在 241人(8カ所)

2次避難所
 ピーク時(6月2日現在) 1万7,902人(541カ所)
 9月6日現在 3,668人(249カ所)

仮設住宅
 9月5日現在
 着工戸数 15,447戸
 入居戸数 10,191戸

借り上げ住宅
 9月5日現在 2万1,226戸



警戒区域
 計画時の避難区域
 緊急時避難準備区域



橋本由利子様作成

Impact of Life as a Refugee

被災者の心悲鳴

広がるうつ・アルコール依存 地域での支援必要

被災地では、うつやアルコール依存の手防への取り組みも始まっている。

久里浜アルコール症センターでは、避難所で健康教室を開くなど、住民や保健師関係者らに

予防訴える専門家

アルコール依存への関心と知識を高め、もっと活動を続けている。松下山生園院長は、うつやアルコール依存の危険が高まっているという。「保健師が長期間同士の悩みを聞き合っている。地域のコミュニティが残る被災地では、互いに支え合っていくことが必要だが、被災地では保健師が足りない。周囲で気になる人がいたら早めに受診を勧めてほしい」と訴えている。

東日本震災の被害者に、うつやアルコール依存が広がっている。家族や家を失った喪失感や先の見えない暮らしへの不安、避難所や仮設住宅の生活でのストレスが原因だ。専門家は、「コミュニティや地域社会によるケアの必要性訴えている」。

「生きているのがやだなあ」

家に戻れず悲観

「死んだ方がいいのか、近は効かなくなり、1時間も生まれてからずっと間どくに目が覚める。1日(同じ)町に住んでいた。1回は「生きているのが死んだ」。東京電

力福島第一原発から約25キロ離れた避難所。避難所では、福島県田代町から同県いわきのホテルに避難した女性86人が泊っていた。5年前に夫を病気で亡くした。30年以上住んだ家に戻れる見込みはない。避難後、眠れなくなり、睡眠薬を処方されているが、最

いと呼ばれる夢を見る。うつしく眠れない。男性は避難所で、夜に叫ぶ。他の避難者から、いい加減にしてほしいと言われること。



肉科専攻の新田目病院は新規患者が割増えた。うつは自害の原因にもなる。

福島県若松市などの避難所を月まで巡回していた東京都の「心のケアチーム」は6000人を診察した。このうち震災が原因とみられる反応性うつと診断された患者は51人(19.6%)だった。

「朝8時40分から」コップ2杯

仕事なく酒量増

アルコール依存症患者も目立ち始めている。7月中旬、久里浜アルコール症センター(神奈川県)の「心のケアチーム」が、岩手県大船渡市の仮設

「朝8時40分から」コップ2杯。岩手県大船渡市の仮設。被災者は、震災後は、がれき除去の仕事が入らない限り、やるべきがない。集落の仲間を訪ねれば、朝から飲む日が続々。別の仮設住宅でも、一人暮らしの男性67人が酒を飲みながら待っていた。マツコ漁船に乗っていたが、11年前に足を痛め、仕事を失った。「酒を飲めたら、何が楽しみなんだ。同士の真実重仁、精神科医長によると、継続訪問している20人中、8人がアルコール依存問題を抱えているという。「朝から飲む人は入院が必要だが、定期的に見守ることで、少しでも抑圧力になるが、これはと話す。」(青木美希、岡崎明子)

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2011年(平成23年)8月10日

福島の転校1.4万人

公立小中 全児童・生徒の1割

福島県内で公立の小中学校に通う約1万4千人の児童・生徒が、既に県内外に転校したか、夏休み中の転校を希望していることが同県教育委員会のまとめで分かった。全児童・生徒の1割近くにあたる。多くは「放射線への不安」を理由に挙げたという。

県教委によると、7月15日時点で県外に転校した児童・生徒が7672人、県内の転校が4575人いた。夏休み中に転校を希望して

いる児童・生徒は、県外が1081人、県内が755人だった。東京電力福島第一原発のある「浜通り」地域だけではなく、福島市や郡山市など「中通り」地域からの転校も多いという。

夏休み中の転校希望者に理由を聞いたところ、県外転校希望の約4分の3が「放射線への不安」と回答。県内転校希望の約半数は「仮設住宅への引っ越し」を理由にした。

県教委は「事故の収束が

見えず、転校を決めた家庭が少なくないのでは。保育

園や幼稚園児を含めると、子どもの県外流出は深刻な問題だ」としている。

Results of Survey Conducted by the Town of Naraha, Where All of the Households Have Been Evacuated (August 2011)

Response rate: 1,995 out of 2,900 households (68.8%)

Has any family member become ill?

A family member has become slightly ill	53.8%
A family member has become very ill	17.7%

Can any family members be described in the following manner?

Future prospects are unclear and difficult to deal with psychologically	72.2%
Has difficulty getting much sleep	Over 30%
Feels life is not worth living, as there is nothing to do	Over 30%
Frequency and amount of alcohol consumption has increased	17.8%
Lost all of his or her income	21.7%

(Excerpted from page 12 of *Asahi Shimbun* newspaper dated October 1, 2011.)

Problem of Suicides

The number of people committing suicide has increased rapidly since the earthquake disaster.

2011.7.16 00:15

The number of people committing suicide is increasing rapidly. In particular, May recorded an increase of almost 40%, figures that indicate the full impact of the earthquake disaster.

- **June 11: A 55 year old male dairy farmer from Soma City in Fukushima Prefecture committed suicide. His Philippino wife and son both returned to the Philippines due to the impact of the nuclear accident at the Fukushima Dai-ichi power plant. On the wall of his compost shed, the man wrote, "If only the nuclear power plant did not exist."**
- **A 102 year old man was found dead in Iitate Village. His family had all evacuated from the village, and he was living on his own. It is believed that he committed suicide because he suffered from living away from his family.**
- **In late June, a 93 year old woman committed suicide in Minamisoma City, leaving a suicide note indicating, "I am evacuating to the grave because an old person simply drags everyone down."**

Issues of Mental Care

Issues Regarding Mental Care

1. Continuing and sustaining treatment for psychiatric patients
2. Intervening early in new occurrences of PTSD and alcohol dependency due to the earthquake disaster and nuclear accident
3. Implementing measures to combat insecurity about radiation contamination
4. Preventing the reduction of cognitive functions for the elderly
5. Deterring suicides
6. Improving mental health care provided by medical and welfare staff

Effective Framework for Mental Care

- 1. Integrate medical, public health, and welfare services**
- 2. Cherish relationships in regions**
- 3. Maintain the restructuring of patients' lives as the fundamental objective**

**Project for Establishing a New
Psychiatric, Medical, Public Health,
and Welfare System in Sousou**

Conceptual diagram of the Project for Establishing a New Psychiatric, Medical, Public Health, and Welfare System in Sousou

Approaching temporary housing (Shinchi Town, Soma City, and Minamisoma City)



- "Itsumo Kokode Hitoyasumino Kai" (club where you can have a break any time)
- Salon
- Visiting all households (November, March, and July)

Activities at Soma City Public Health Center and Haramachi Public Health Center in Minamisoma City

- "Chotto Kokode Hitoyasumino Kai" (club where you can have a little break)



Mental consultation at annual personal/medical checkups

- Soma wide area firefighters
- High school teachers
- Shinchi homes
- Municipal government offices/ municipal government personnel



Support for implementation of treatment for persons who have not had any checkups and those whose treatment has been suspended

- Consultations
- Visits

Contacting psychiatric, medical, public health, and welfare related personnel

- Workshops
- Periodic meetings
- Preparation of DVDs

Small-scale psychiatric day care services

Visiting nurses (responding around the clock)

Hospital beds for inpatients (2-3 beds) (crisis intervention and respite care)

Outreach psychiatric clinic (beds available)

Soma Wide Area Mental Health Care Center "Nagomi" (tentative name)

Welfare facilities (regional activities support centers/ group homes, etc.)

Establishing means of transportation



Transport to hospital on Nakadori Avenue

Visits

Own home

Operation of patrolling vehicles