Preventing asbestos exposures in the Northeast Japan tsunami disaster areas

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Onagawa, before the Northeast earthquake


Onagawa, May 2011

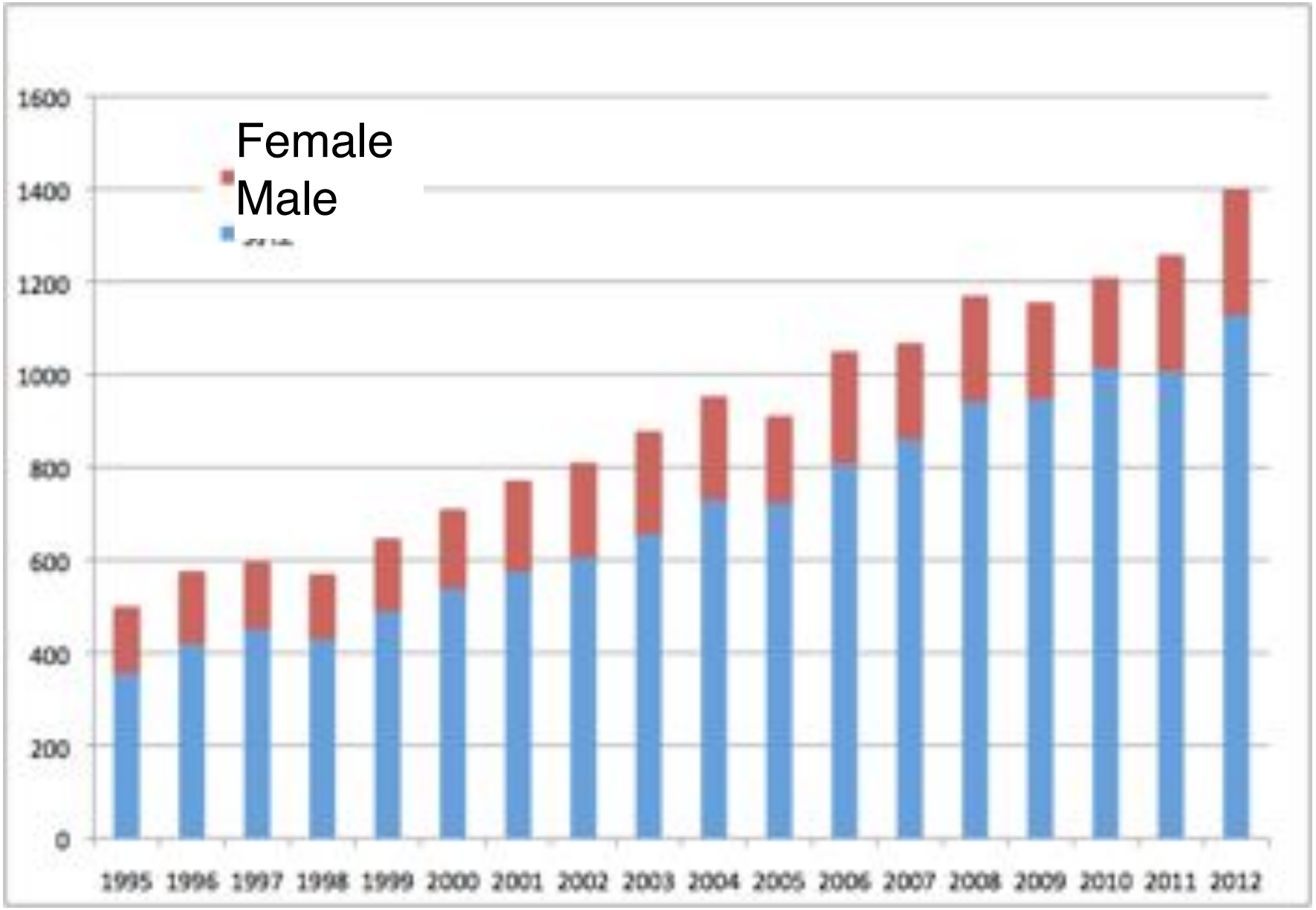

Onagawa, January 2014

Back ground

Trend of imported asbestos of Japan

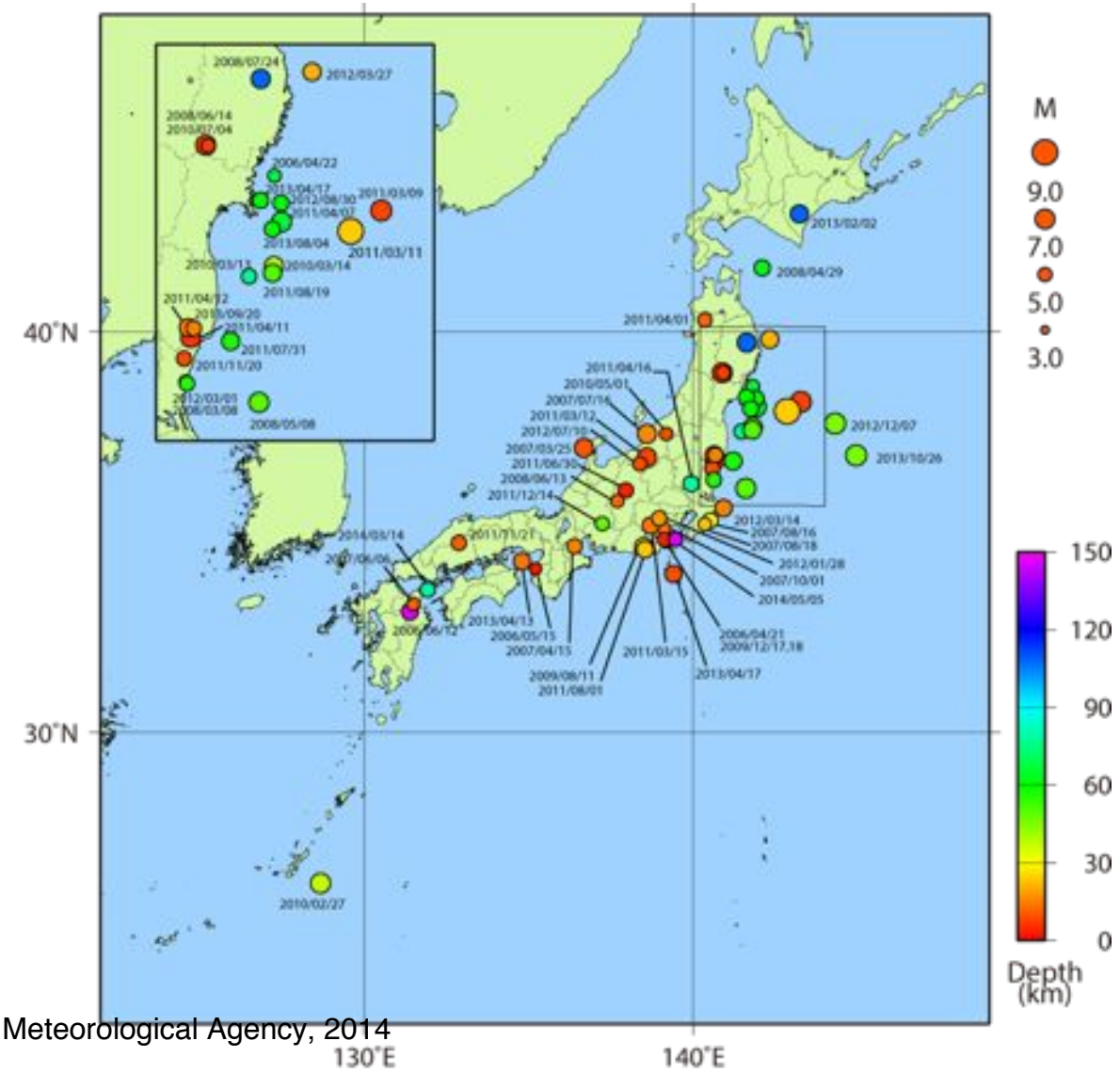
Back ground

Transition of the death toll of mesothelioma in Japan



Back ground

Large earthquakes in 2006-2014
the earthquake with the personal suffering: 57 times.



Japan Meteorological Agency, 2014

Back ground

1995 Kobe Earthquake

Poor asbestos control

Three mesothelioma victims (2013)

→1995 The Air Pollution Control Act revised

2005 Kubota Shock

Jun. Five mesothelioma victimes

Jun 2005

Back ground

1995 Kobe Earthquake

Poor asbestos prevention

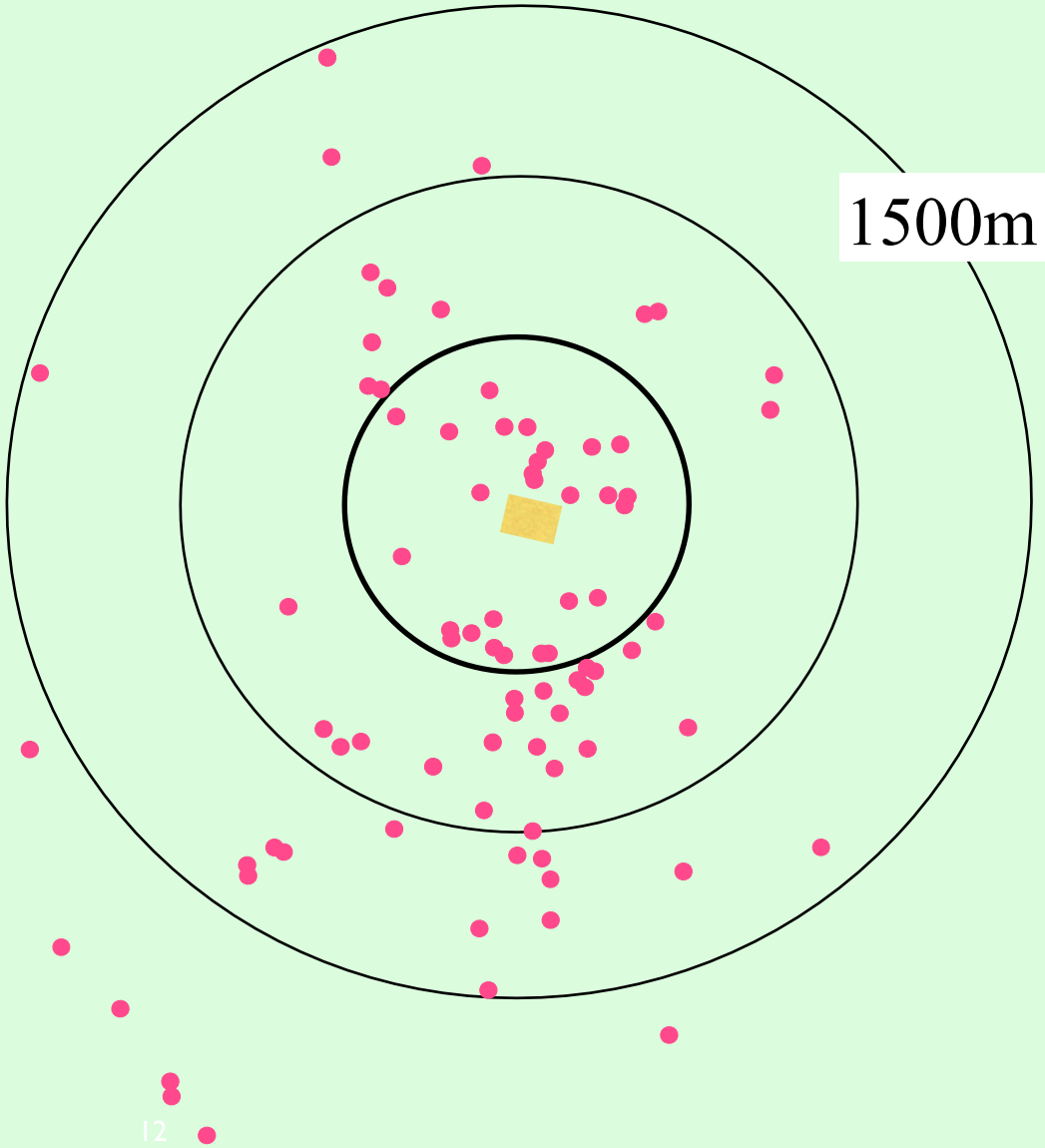
Three mesothelioma victims (workers)

2005 Kubota Shock

Jun. Five mesothelioma victimes (residents)

Nov. 85 mesothelioma victimes

Mesothelioma Residents around KUBOTA
Nov. 2011



85 mesothelioma victimes

Living : 12.6 [1.5–18.5] years
Latency : 41.0 [23–48] years
Die : 58.2 [26–87] age

Kurumatani (2005.11.23)

Back ground

1995 Kobe Earthquake

Poor asbestos prevention

Three mesothelioma victims (workers)

2005 Kubota Shock

Jun. Five mesothelioma victimes (residents)

Nov. 85 mesothelioma victimes

266 mesothelioma and cancer victimes

REAL asbestos control was started

2005 the Ordinance on Prevention of Asbestos Hazards

2011 Northeast Earthquake

ISHINOMAKI Project

Volunteers from residents, NGOs, Students,
Citizen groups and asbestos victims group.

Purpose

1) comprehend conditions of asbestos containing materials (ACM) in the disaster struck regions and assess the results;

2) propose and implement countermeasures for preventing asbestos exposures.

In Ishinomaki-city


ISHINOMAKI
Akita
Morioka
Iwate
Tsuruoka
Yamagata
Yamagata
Niigata
Fukushima
Nagaoka
Koriyama
Joetsu
Nagano
Kanazawa
Utsunomiya
Takasaki
Matsumoto
Fukui
Nagano
Ota
Tsukuba
Tokyo
Kashiwa
Fukui
Gifu
Sagamihara
Chiba
Nagoya
Yokohama
Kyoto
Shizuoka
Okazaki
Hamamatsu
Kobe
Nara
Osaka
Google

Methods

1) identifying asbestos containing materials by ACM mapping by voluntary action,

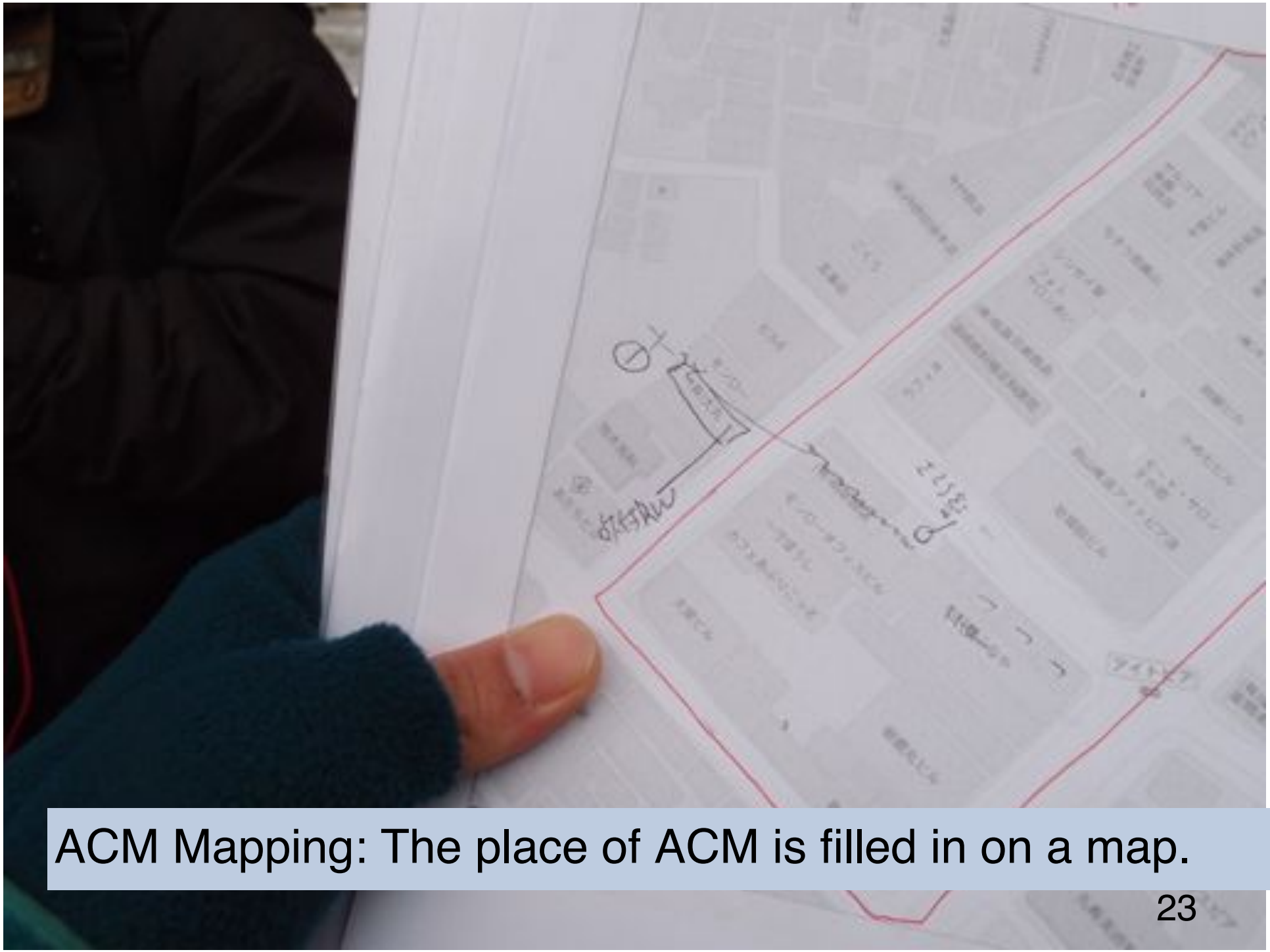
2) interview with workers, residents and public service officers, and

3) measurement of airborne asbestos concentrations.

ACM Mapping by volunteers' action

ACM Mapping: Spray-on materials

ACM Mapping: Corrugated slate boards



ACM Mapping: The place of ACM is filled in on a map.

14 buildings have a spraying material

140 buildings have corrugated slate boards

The results of mapping on Google map

Dec 14, 2011

Measurement of airborne asbestos concentration

Asbestos concentration around the building having spraying asbestos

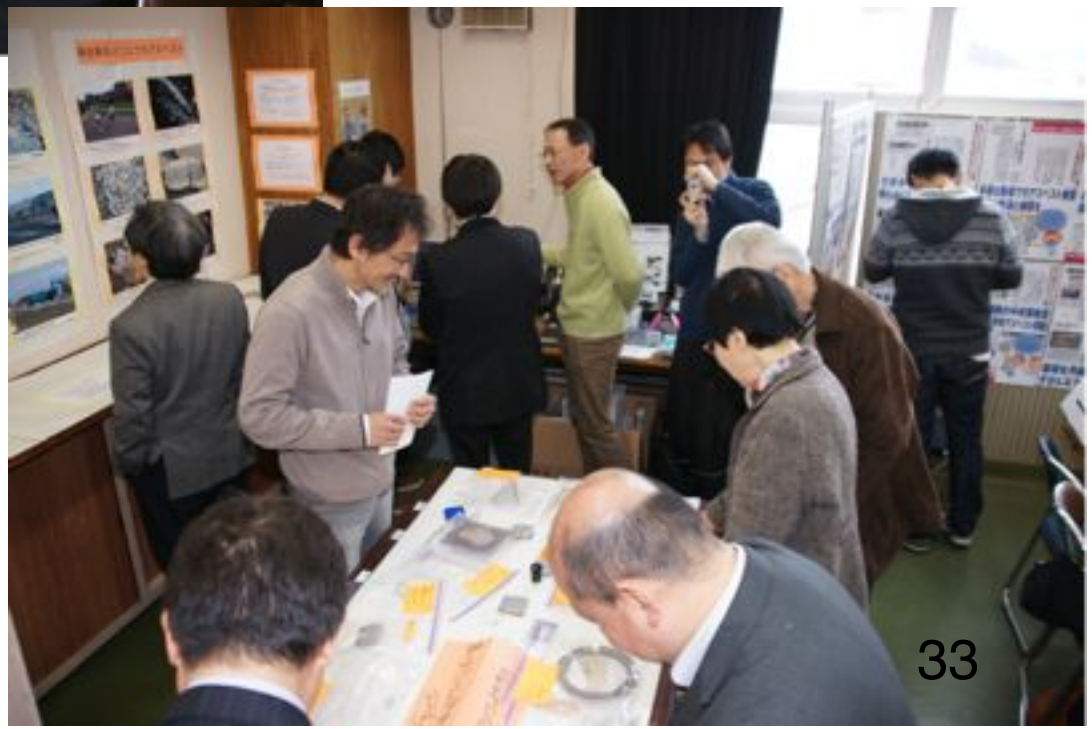
2012/1/23-24

As risk communication

We have organized feedback meetings for the local people distributing leaflets and posters, provided training courses to learn means of identifying and treating ACM and the use of respirators.


アスベストから
被災地を守るために
私たちができること

May 20, 2012
Meeting in Ishinomaki
60 participants gathered



Jan 18, 2013
Meeting in disaster emergency makeshift house
10 participants gathered

Results

1) the features of asbestos risk in the disaster regions were disclosed and reflected in the revised regulations,


建築物等の解体等の作業に関する届出
目視による


CAT

Dec 14, 2011


Mar 8, 2012
Asbestos Removal


不適切な
Aug 30, 2012
Building disassembling


2012/8/30
41


2012/8/30
42


2012/8/30
43

2012/8/30

Results

1) the features of asbestos risk in the disaster regions were disclosed and reflected in the revised regulations,

2) training courses for workers working at construction demolition sites were provided in cooperation with a local government,

Results
2) training courses for workers

Local government of Ishinomaki, provided training courses of asbestos protection for workers and we support the training to send a trainers. 450 workers learned in the training courses.

Results

1) the features of asbestos risk in the disaster regions were disclosed and reflected in the revised regulations,

2) training courses for workers working at construction demolition sites were provided in cooperation with a local government, and

3) good practices of prevention of asbestos exposures were observed and expanded.

Conclusion

1) Asbestos concentration in the general environment was low,

2) Accidents and leaking asbestos on removal sites of spray-on asbestos were observed,

The results of airborne asbestos concentration investigations in asbestos removal sites by the Ministry of Health, Labour and Welfare

Asbestos leak 16.3%

Fisical Ye	Nu sites measrued	nber of sites which asbestos leaked
2011	22	4
2012	38	4
2013	20	5
計	80	13

Conclusion

1) Asbestos concentration in the general environment was low,

2) Accidents and leaking asbestos on removal sites of spray-on asbestos were observed,

3) regulations for non-friable ACM was ignored on almost of construction demolition sites,

4) Asbestos mapping before disasters is necessary in Japan.