



# JMSDF Disaster Relief Operation

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3<sup>rd</sup> MNMMC held in Sep 2005

# *Disaster Relief for Indonesia*

## *~Recovery of Drowned Bodies*

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BURMA

LAOS

THAILAND

CAMBODIA

VIETNAM

TAIWAN

Andaman is

South china sea

Malacca str

MALAYSIA

SINGAPORE

Sumatra

INDONESIA

SRI LANKA

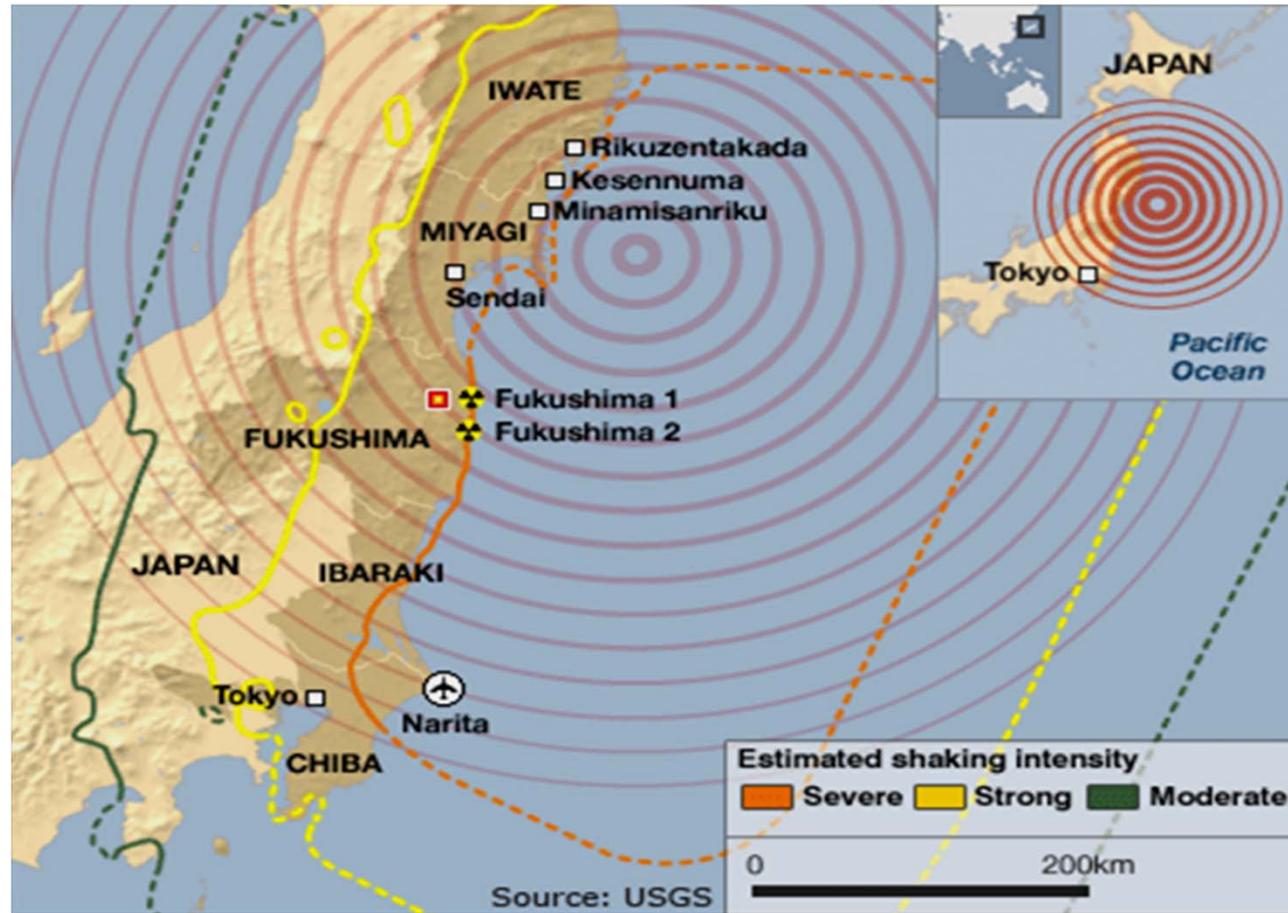


# Contents

- **Outline of the disasters**
- **Activities of JMSDF**
- **What we learned**



# Areas affected by the quake



BBC; U.S. Geological Survey

At 14:46 on March 11, 2011

- M9.0 earthquake attacked Tohoku region in Japan
- After the earthquake, Tsunami, more than 30 m in height, hit the seacoast.



Magnitude	Location	Year
9.5	Chile	1960
9.2	Alaska, USA	1964
9.1	Sumatra, Indonesia	2004
9.0	Tōhoku region, Japan	2011
9.0	Kamchatka, Russia	1952
8.8	Chile	2010



Kyodo

QT T-1

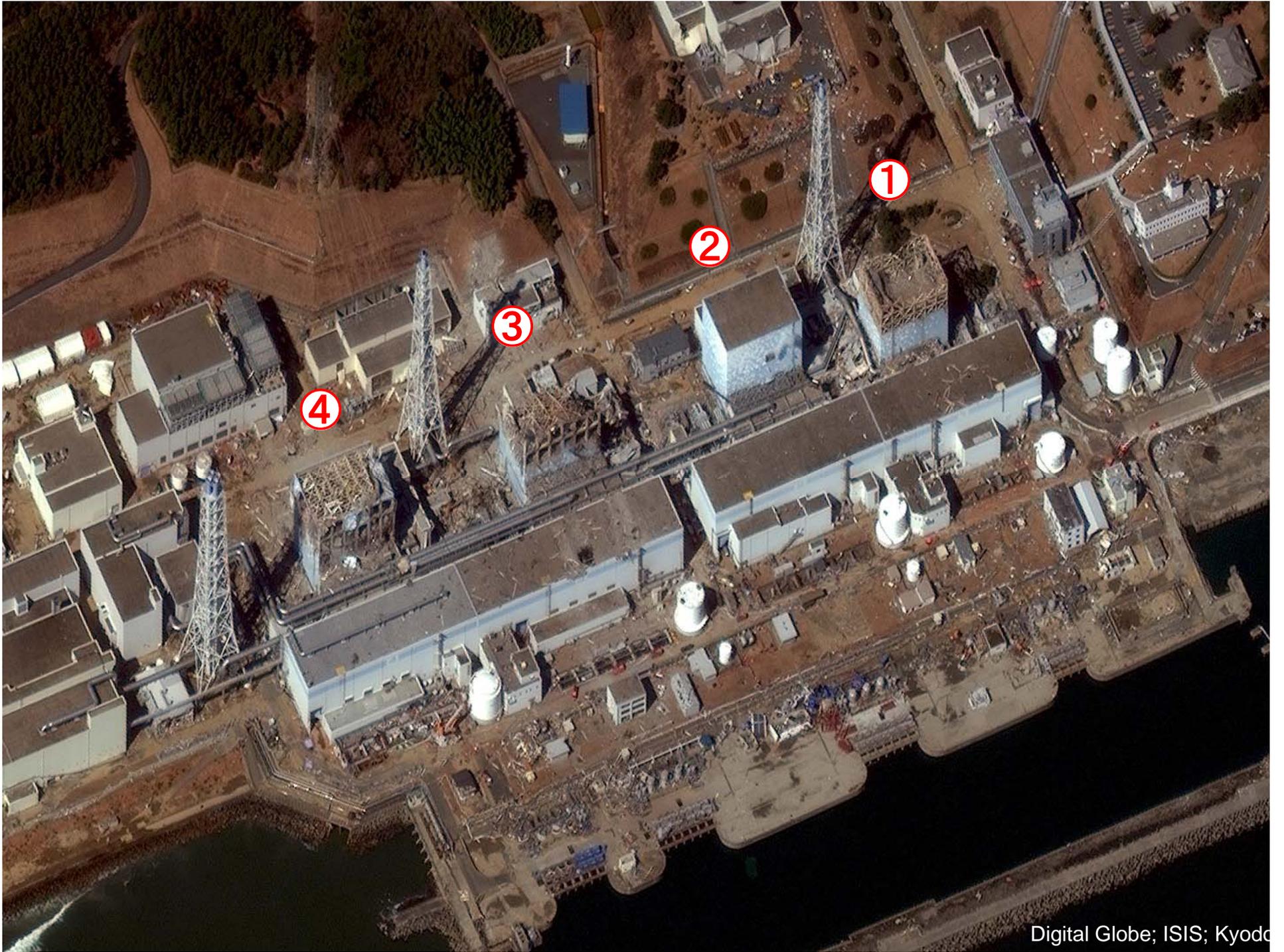
RP T-1

WMP T-1



# Fukushima nuclear power plant





# JMSDF's missions

- Search & Rescue
- Transportation of relief materials
- Daily Life Support  
& Medical Assistance
- Water supply for the nuclear reactors

**50 Vessels**

**200 Airplanes/Helicopters**

**15,000 Personnel**



# Activities of JMSDF

Search & Rescue



896 rescued  
by 25Apr2011



Ministry of Defense



# Transportation





# Daily Life Support



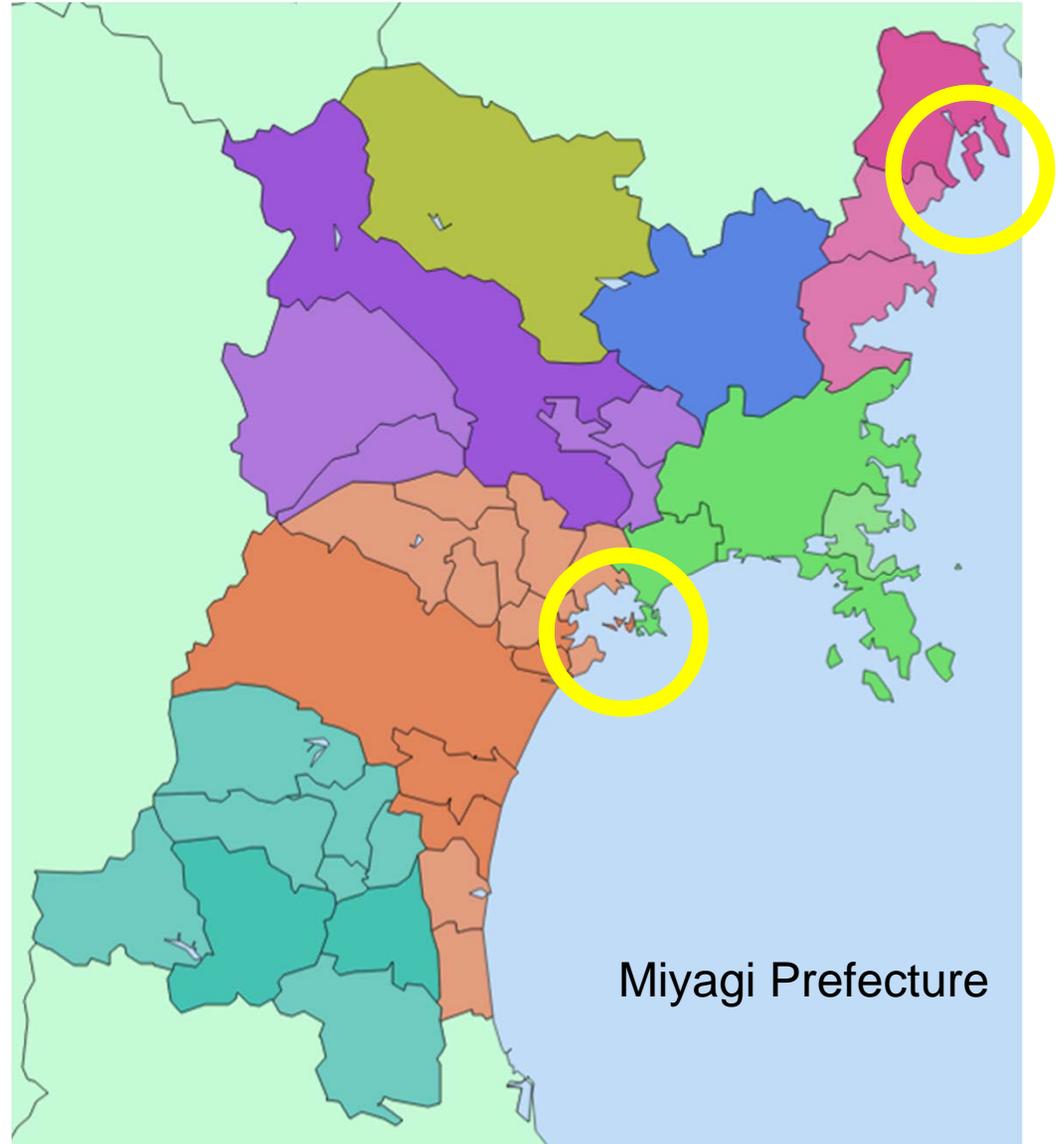
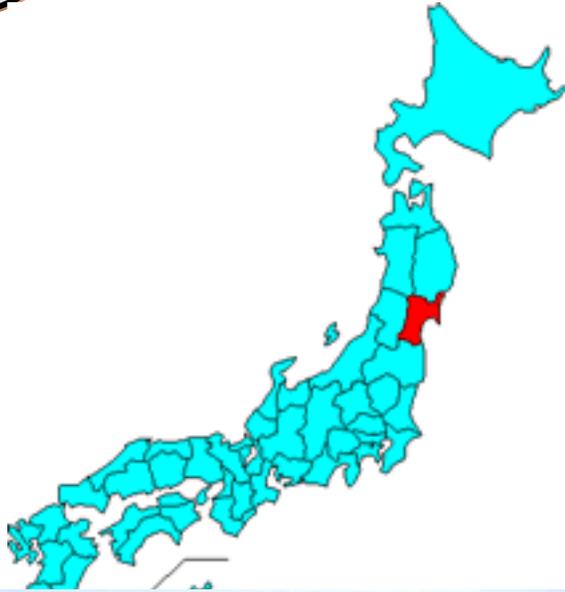


# Water supply for Fukushima





# Where did we deploy for medical support?









## Mobile Medical & Dental Unit

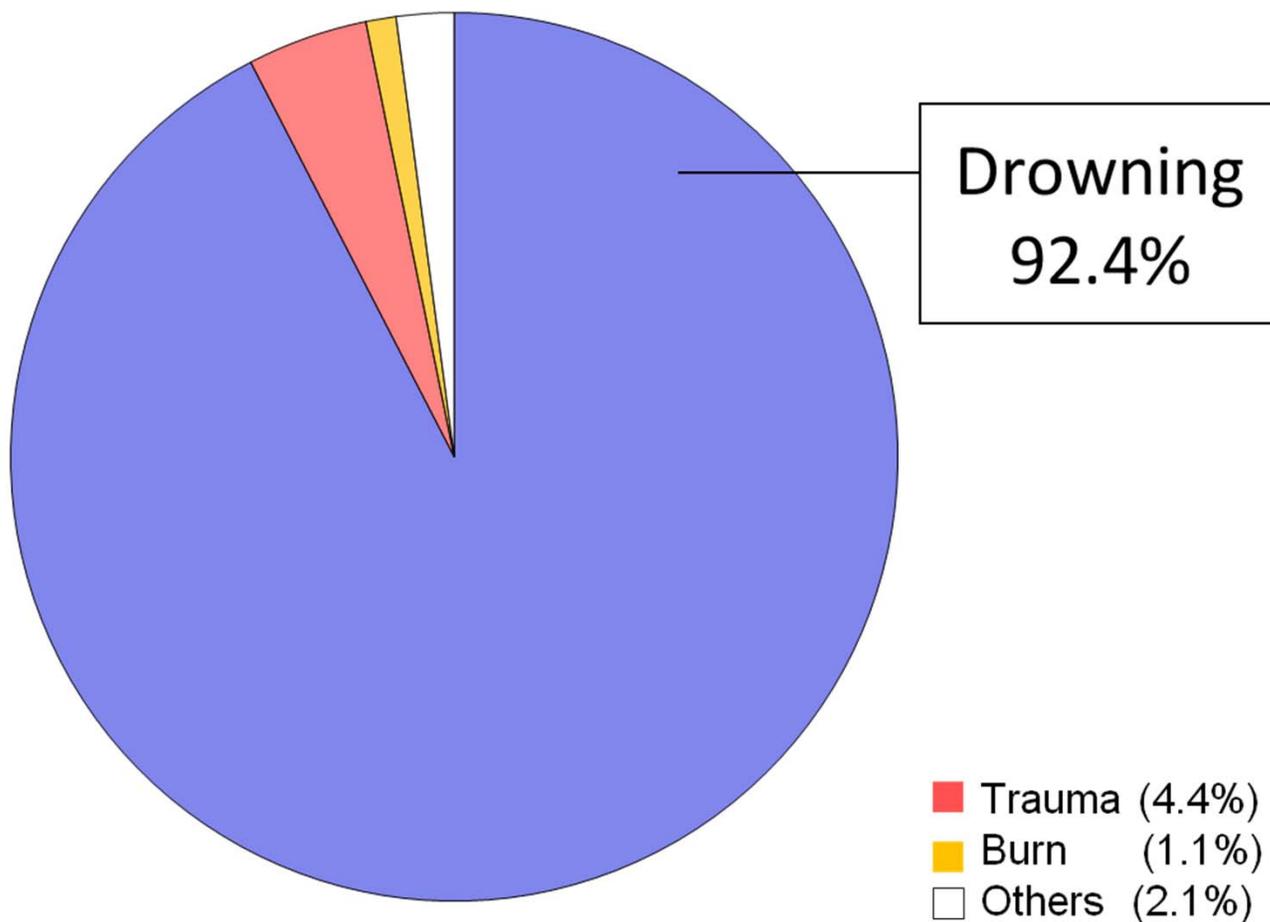
1525 treated  
1089 cared  
by 27Apr2011



Ministry of Defense



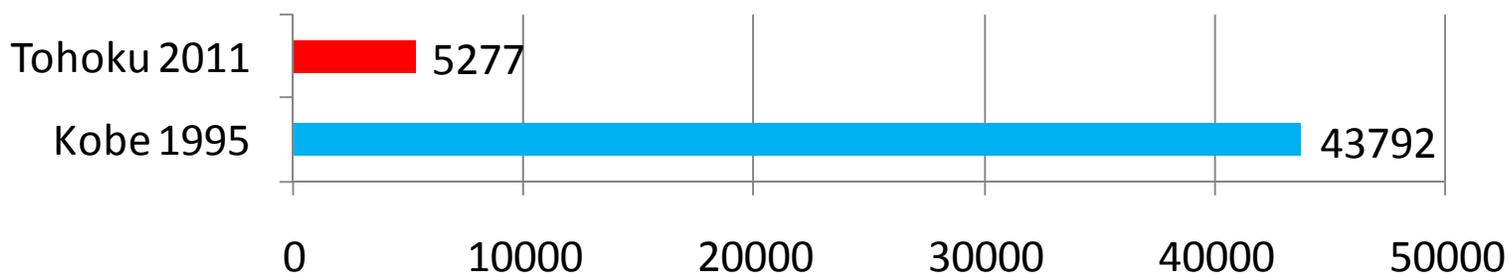
# Causes of Death



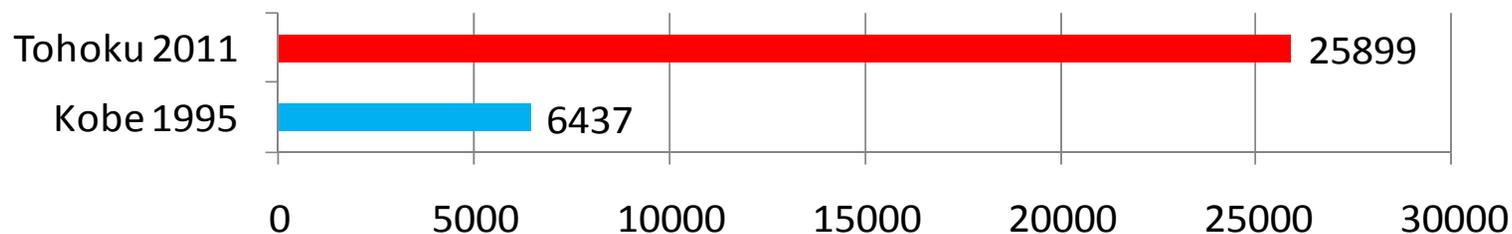


# Tohoku 2011 and Kobe 1995

## Injured



## Dead or Missing





**No reds, no yellows.  
Greens or blacks only.**

*---by a doctor on the site*





# The characteristics of current disaster and problems in consequent management

## Compound and complex disaster

- Earthquake
- Tsunami
- Nuclear power plant

## Problems in civilian sector

- Difficult to evaluate medical need for refugee
  - Ex. A team says no need in X place, but soon later B team says a lot in X place.
- Functional failure of headquarter in prefectural government office



# What we knew later

**Current recognition; Retrospective and with disappointment**

## **Limitation of capability of JMSDF**

- “Definite” superiority is in transportation ability, comparing civilian sector.
- Medical services; suitable for emergency medicine and acute care, but not for chronic diseases
- When the ports were completely destroyed
  - Lacking power projection capability
- Delay; MEDVAC of acute patients done by helicopters without medical personnel immediately after disaster
- Lacking unity in basic operational policy of dispatched mobile medical teams
- Differences in medical supplies according to each dispatched teams



# Lessons and Learned

## Capacity building and development

- Need to develop education system at SDF hospital Yokosuka where disaster and emergency medicine are fully given
- Need to develop experts in JMSDF
  - CBERN
  - Disaster medicine
  - Public health
  - Forensic medicine, forensic dental medicine
  - Medical officers working for strengthening interoperability between USN and JMSDF

Still under analysis



# Lessons and Learned

## Operational plan

- **Command operation:**
  - Strengthening medical function on surface ships
  - Strengthening information gathering regarding the activities of mobile medical and dental teams
  - Proceeding mental health care for ship crew after entering port
  - Strengthening the function of office of surgeon general and medical staff of self-defense fleet
  - Increasing the number of supply staffs
- **Medical operation:**
  - Need to establish operational standard
    - For medical & dental team, and pharmaceutical officer
  - Providing sufficient education for mobile medical team
  - Providing sufficient education for forensic dentists
- **Supply and administration:**
  - Need to establish the standard of:
    - patients' report, medical supply
  - Need to obtain emergency electric power supply

**Still under analysis**