

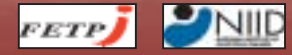
Web-based Japanese Syndromic Surveillance for FIFA World Cup 2002

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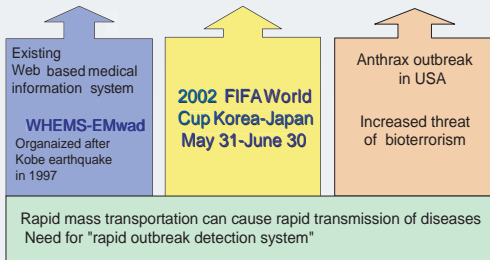
1) Field Epidemiology Training Program, National Institute of Infectious Diseases 2) Infectious Diseases Surveillance Center, National Institute of Infectious Diseases

3) Ministry of Health, Labor and Welfare

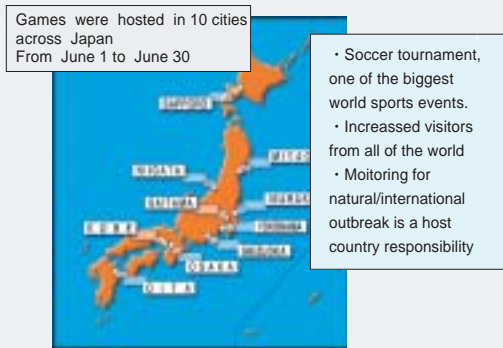


Background

Web-based Syndromic Surveillance for FIFA World Cup 2002

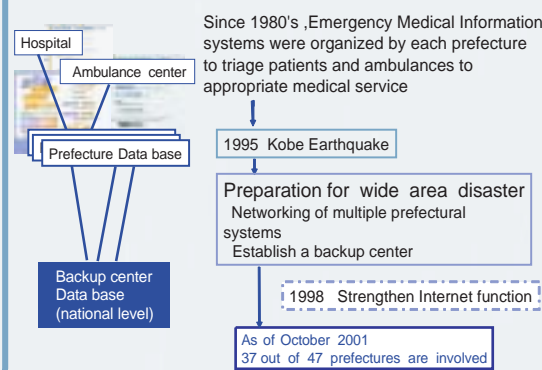


2002 FIFA World Cup Korea-Japan



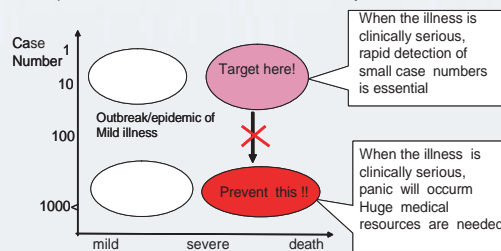
WHEMS-EMwad

(Welfare Health Medical System-Emergency Medical Wide area Accident Disaster)



Surveillance Target

Focus: severe cases which might have more public health importance
Hospitalization=indicator of disease severity



Preparation

January

Announcement of syndromic surveillance project to the local government

February

Pilot study

March

Computer system adjustment
Guideline and manual preparation

April

Meeting with Korea NIH about information sharing
Instruction Meeting with local government officers
Including two hour course exercise (software analysis)
Guideline and manual distribution
Selection and instruction of hospitals

May

ID and password distribution
Test run
Dummy data, practice using the web site



Other Bioterrorism Preparedness Activities

Strengthening routine surveillance
Administrative instruction for specific diseases
Strengthening diagnostic capacity and network
Laboratory support network
Telephone consulting system
Specialized preparedness for smallpox
Rapid response team, vaccine, guideline etc....

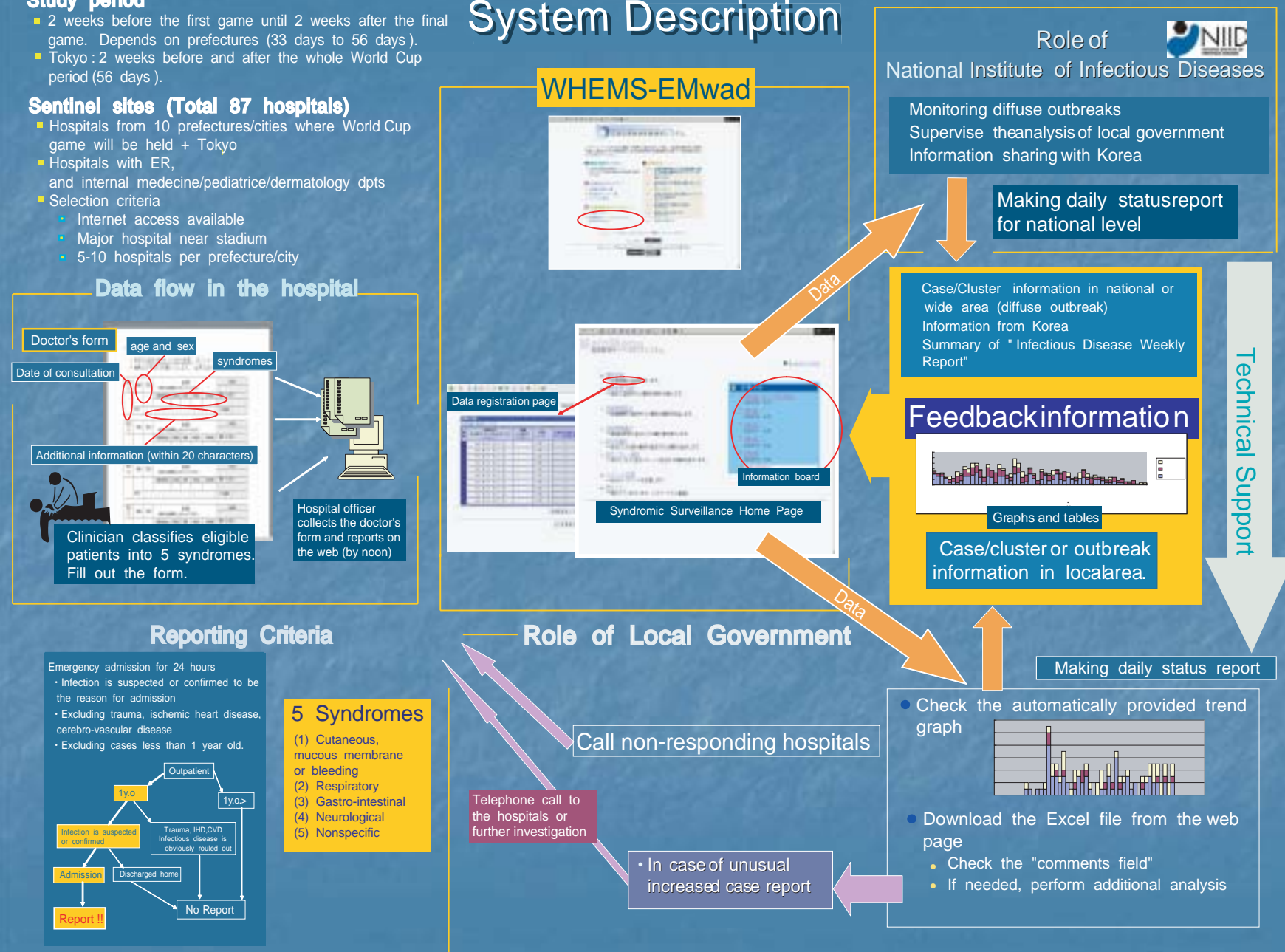
Study period

- 2 weeks before the first game until 2 weeks after the final game. Depends on prefectures (33 days to 56 days).
- Tokyo: 2 weeks before and after the whole World Cup period (56 days).

Sentinel sites (Total 87 hospitals)

- Hospitals from 10 prefectures/cities where World Cup game will be held + Tokyo
- Hospitals with ER, and internal medicine/pediatrics/dermatology dpts
- Selection criteria
 - Internet access available
 - Major hospital near stadium
 - 5-10 hospitals per prefecture/city

System Description

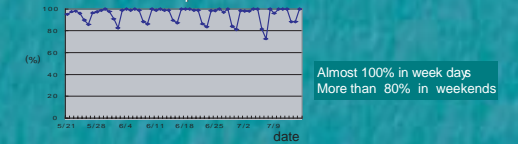


Results

3444 cases were reported from 87 hospitals during May 20 to July 14 (56 days)

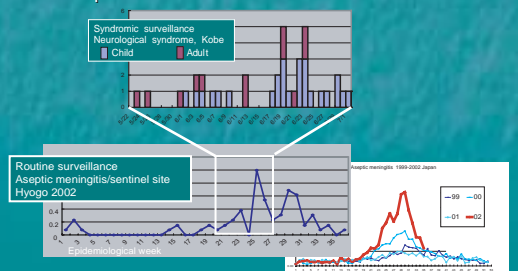
Cutaneous, mucous membrane, or bleeding syndrome	248 cases (7.2%)
Respiratory syndrome	1914 cases (55.6%)
Gastro-intestinal syndrome	607 cases (17.6%)
Neurological syndrome	231 cases (6.7%)
Nonspecific syndrome	444 cases (12.9%)

High reporting rate of hospitals sustained throughout the surveillance period.



Probable aseptic meningitis epidemic first detected as neurological syndrome.

There was an aseptic meningitis epidemic in Japan



Conclusion

- Web based syndromic surveillance was performed successfully with 11 prefectures throughout Japan for two months.
- Aseptic meningitis epidemic was detected as a "neurological syndrome in children".
- Web based syndromic surveillance is a feasible and effective real time communication tool in public health.

Evaluation and Further Study

Now on going ...

- Further analysis of surveillance data
- Retrospective comparison with routine surveillance data
- Questionnaire survey to
 - Local government officers in charge
 - Hospital officers in charge
 - Clinicians in involved hospitals
- Analysis of Web page access record