

# Syndromic Surveillance System for the G8 Hokkaido Toyako Summit Meeting 2008

Yasushi Ohkusa, Ph.D.<sup>1)</sup>, Tamie Sugawara, Ph.D.<sup>1)</sup>, Hiroaki Sugiura, M.D.<sup>2)</sup>,  
Kiyosu Taniguchi, M.D., Ph.D.<sup>1)</sup>, Tomoaki Imamura, M.D., Ph.D.<sup>2)</sup>,  
Nobuhiko Okabe, M.D., Ph.D.<sup>1)</sup>

1) National Institute of Infectious Diseases, 2) Department of Public Health, Health Management and Policy, Nara Medical University School of Medicine

## OBJECTIVE

We performed some syndromic surveillance system for the Hokkaido Toyako G8 summit meeting in July 2008 in Japan as a counter-measure to bioterrorism attack or other health emergency. This presentation shows the workable syndromic surveillance systems in Japan.

## BACKGROUND

Infection Control Law in Japan has asked doctors to cooperate in syndromic surveillance for pandemic flu and smallpox since 2007. However, doctors have to report by typing the number of patients on the web site, or by sending a fax to local public health centers. It imposes the heavy burden of reporting, and thus it has not worked well yet. Therefore, we need an automatic system for routine syndromic surveillance.

## METHODS

We have constructed and performed syndromic surveillance system for ambulance transfer, prescription drug, OTC and Web based report of health condition from general citizens. These system were performed since 23<sup>rd</sup> June, two weeks before the summit meeting to 23<sup>rd</sup> July, two weeks after the meeting.

Syndromic surveillance for prescriptions drug had performed two folds. One is full automatic and another one was manual input through web. Full automatic system of Syndromic surveillance for prescriptions drug have been provided by EM SYSTEMS Co.Ltd.

Similarly, we build full automatic syndromic surveillance for ambulance transfer, but we ask other fire departments to input data manually through Web.

We bought OTC sales data from two private research firms in Japan as syndromic surveillance for OTC drug sales.

Web based report of health condition required to ask their monitors, who contract with the private research company, their health condition through PC or cellular phone.

Though aberration signals are reported from statistical analysis, we have to check manually and decide

whether we require local public health centers to investigate so as to obtain more detailed information. Thus we have a joint meeting with the Hokkaido local government, local public health center, Hokkaido local public laboratory, National Institute of Infectious Diseases, and the Ministry of Health, Labor and Welfare everyday at ten o'clock A.M. even on the weekend.

## RESULTS

23 pharmacies full automatic system of syndromic surveillance for prescriptions drug, and 71 pharmacies corporate manual input.

One fire department which covers Toyakao and support team for VIP used fully automatic syndromic surveillance and seven fire department surrounding Toyako use manually input version.

79 drug stores provided OTC sales data, but data provision is delayed for one day and analysis could not be automated.

472 households corporate web search for their health conditions. It also automatically analyzed and feed backed.

Fortunately there is no remarkable outbreak during G8 summit meeting, but we found small outbreak of [convulsion with fever, and local public health center investigated and confirmed](#) severe Adeno virus [that these were not public health threat](#).

## CONCLUSIONS

No case was reported from doctors under the Infection Control Law, and thus we cannot evaluate its usefulness. Moreover, since high profile events is not only risk period and place, we need routine and fine syndromic surveillance so as to monitor the health risk. Therefore, full automatic system is the best solution for early detection of outbreak even though we could not help using manual input during Hokkaido Toyako G8 summit meeting. We showed our system is workable and useful. Routinely and full automatic without manual input system is the next step of syndromic surveillance in Japan.