

Information systems and their data items for disaster response in local governments in Japan

Ojima T¹, Takasugi T¹, Haraoka T², Tonai S³, Miyagawa S⁴, Ichikawa M⁵, Ikeda K⁶, Hattori K⁷, Soma Y⁸, Okuda H⁹, Ikeda M¹⁰, Yi T¹⁰, Suga M¹¹, Yoshimi I¹², Kubo T¹³, Tomio J⁹

1 Hamamatsu University School Of Medicine, Hamamatsu, Japan; 2 Matsumoto College of Nursing, Matsumoto, Japan; 3 Houhi Public Health Center, Oita Prefectural Government, Bungo-ono, Japan; 4 Keio University, Fujisawa, Japan; 5 Shibaura Institute of Technology, Saitama, Japan; 6 Iwade Public Health Center, Wakayama Prefectural Government, Iwade, Japan; 7 Ariake Public Health Center, Kumamoto Prefectural Government, Tamana, Japan; 8 Department of Welfare and Public Health, Niigata Prefectural Government, Niigata, Japan; 9 National Institute of Public Health, Wako, Japan; 10 National Research Institute for Earth Science and Disaster Resilience, Tsukuba, Japan; 11 Kansai University, Takatsuki, Japan; 12 National Institute of Infectious Diseases, Tokyo, Japan; 13 Hiroshima University, Hiroshima, Japan

Among the local governments with public health centers, 69.1% have information systems that can be used for disaster response in Japan

Objective

Disaster response is an important international issue to protect people's health. Gathering and analyzing information is key to disaster response and disaster epidemiology.

The aim is **to identify** the state of arrangements for **information systems and their data items for disaster response** in local governments in Japan.

Methods

An **e-mail survey** about disaster response was conducted of **all 157 local governments** (47 prefectures, 110 cities or wards) in Japan that have health centers in 2023.

Results

A total of 149 (94.9%) local governments responded. Among the respondents, **69.1% of local governments have information systems** that can be used for disaster response other than the national disaster health information systems. The main results are shown in the figure.

Figure. Functions or data items of information system



Discussion

Many local governments have information systems to be used for disaster response in Japan. Though rapid information gathering and rapid assessment are challenges, many sectors including various disaster assistant teams are working to respond. The information includes quantitative data as well as qualitative data. How to analyze and summarize information and **build intelligence for decision-making** is another challenge. The techniques of **epidemiology and mixed methods research** will be helpful.

