

Disaster Preparedness and Medical Services for the 2018 PyeongChang Winter Olympics

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Mass gatherings, such as the upcoming 2020 Tokyo Olympic Games or 2022 Winter Olympic Games in Beijing, place great stress on a country's safety and security systems. When hundreds of thousands or even millions of people congregate in one place, there can be acute risks to public health or terrorist attack. It will be make enormous pressure on the public health system and disaster preparedness for mass gathering. And there may be a significant increased risk potential for the gathering to contribute to the international spread of disease, ranging from pandemic influenza, meningitis, or measles to polio.

Epidemiological data and logistical details are crucial pieces of information for organizers of medical care at mass sporting events. I would like to introduce the medical services in the 2018 PyeongChang Winter Olympic Games.

Thirteen competition venues, sixteen non-competition venues and two Polyclinics (PyeongChang and Gangneung) were operated. Medical services were available at all venues. The Polyclinics housed an inter-disciplinary team of health-care professionals. The most outpatient services and minor operation were done in on-site venues and Polyclinics.

This Olympic winter sporting event had 5 venues (2 urbans, 3 rural venues). Medical staff (physicians, nurses, emergency medical technicians and other health professionals) were based in two polyclinics and 5 venue medical stations (VMS). The medical service operated for 55 days. Total 10,420 urgent and non-urgent cases were encountered in Olympic and Paralympic Olympic games. 3,838 injured patients were encountered in Olympic games (33% patients were athlete). Patients who infected norovirus and influenza infection also visited at the Polyclinic. The majority of patients could have been managed by doctors in polyclinic and VMS. Two hundred seventy-nine patients were transported to the hospital by ground ambulance and one by helicopter in venue site. The Alpine ski or snowboarder venue was characterized by significantly higher acuity and a long prehospital transfer phase.

We concluded that physician-based ALS teams were required for patient management at the VMS and polyclinics. The most severe injured patients happened at the rural Snowboarder and Alpine ski venue. Patients with norovirus and influenza are also expected to visit polyclinic, so Olympic Medical Services should be prepared in advance.