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Medical resources deployed for the 2019 World Athletics Championships in Doha, Qatar

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ABSTRACT

Background: International sporting events such as the World Athletics (WA) competition require proper medical coverage to ensure the wellbeing of athletes, support teams, and spectators¹. Several factors may have an impact on people's requirements for medical attention such as the climate, altitude, and intensity of the sporting competition on the athletes^{2,3}. The International Association of Athletics Federations (IAAF) held its 2019 competition in Doha, Qatar, and this study reports on the medical resources deployed to cover the event based on risk assessment.

Case presentation: Although the competition was held for 10 days across two venues. The medical cover started 3 days earlier and also encompassed warm-up/training venues and official hotels (Table 1). It involved multiple healthcare organizations providing equipment, manpower, medical tents/clinics, and vehicles in case of transportation to the hospital was required.

Results: Resources were allocated to various locations based on the risk assessment (Table 1) and depending on the number of people competing, training, or attending, and the size of the venue. Environmental factors were accounted for with the provision of cold-water immersion recovery baths at multiple locations and ample manpower with rostering of clinical staff from various relevant healthcare professions (Table 2). All resources were deployed on a rotational shift basis in the official locations well ahead of the start of each event until an hour or two after the completion of the event.

Conclusion: Proper planning, communication, and collaboration among organizers, hosts, medical services providers, and other authorities play a vital role in the safety of athletes, support team members, and spectators. Such large events impose huge strain on the resources which can impact aspects of daily healthcare delivery to the rest of the community and hence need to be carefully considered. It is worth noting that the medical coverage provided was not overwhelmed by patient demand, hence; the medical coverage was appropriate.

Keywords: Athletics, Medical coverage, Qatar, Championships, Sporting event

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Table 1. Key planning and risk assessment elements for the 2019 World Athletics Competition in Doha, Qatar.

<p>Key figures:</p> <ul style="list-style-type: none"> - 24 September 2019 to 6 October 2019 (13 days) - Minimum-Maximum temperatures of 28-36°C (Feeling like: 31-42°C) and humidity of 32-71% in Doha. - 206 teams - 1,772 athletes - 49 events - 2 competition venues (Khalifa stadium and Corniche) - 1 training venue - 1 warm up venue - Multiple official hotels for the teams <p>Risk assessment aspects:</p> <ul style="list-style-type: none"> - Hazards due to time of year/weather/location of the event. - Increased ambulance staff personnel coverage in anticipation of athletes and events workforce feeling unwell because of the heat and humidity. - Dedicated command and control mechanisms put into place in the event of a mass casualty incident. - Dedicated communications pathways for the event. - Dedicated pathways for medical emergencies. - Collaboration between all medical teams/disciplines where rehearsed and documented in the event that a scenario became an eventuality.

Table 2. Medical staff provision at various locations. (This does not account for the fact that some national teams have their own medical staff as well).

	Stadium	Corniche (Long distance events)	Warm up venue	Training venue	Official Hotels
Venue medical officers	2	2	2		1
Sport medicine physicians	6	2		1	2
Physicians	4				1
Intensive care unit physicians		3			
Orthopaedic surgeon	1				
Anaesthetist	1				
Podiatrist		2			
Pharmacist		2			
Physiotherapists	3	5	6	2	4
Nurses	10	10	2	3	4
Intensive care unit nurses		4			
Massage therapists			3		4
Paramedics	29	43	6	4	
Critical Care Paramedics	4	4			
Volunteers	3	38	5		
Emergency Care supervisors	2	2			
Total	65	120	24	10	16
Ambulances	6	7	1	1	
Medical golf carts	1	5	1	1	
Medical bicycles		6			

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