

2012 Olympics: Mass Gathering Could Cause 'Global Spread Of Disease'

Huffington Post UK [Felicity Morse](#) First Posted: 16/1/12 11:41 GMT Updated:



The London 2012 Olympics could be the ideal breeding ground for fostering dangerous infectious diseases, scientists have warned.

As thousands prepare to flock to England's capital for the games, it's not just London that is playing host.

Bacteria and viruses are also likely to make their way to the Olympics, and with [so many people packed together](#), the danger of disease spreading is greatly increased.

A study published in [The Lancet Infectious Disease journal on Monday](#) suggests that mass gatherings such as the 2012 Olympics have "potentially serious implications to health, security, and economic activity worldwide".

The impact of such mass gatherings can cause problems long after the crowds have dispersed, public health experts explained.

Exchanged pathogens can travel back to different countries when visitors journey home, whilst lingering diseases can remain at the host site.

Disease control in relation to crowd clusters is an area that still not sufficiently developed enough to address the complexity of the situation, the study said.

It suggested that Olympic organisers could look to Saudi Arabia's management of the millions that make their pilgrimage during the annual Hajj to Mecca, to learn how to cope with the public health challenge posed the massive muster.

"Saudi Arabia's experience of Hajj medicine contains rapidly developing public health solutions to several global challenges," Professor Ziad Memish from the Ministry of Health, Riyadh, Saudi Arabia, who authored the report, said.

"Multiagency and multinational approaches to public health challenges are likely to become major factors in the specialty of global health diplomacy, engaging societies globally, and drawing the west a little closer to the east."

But it is not just increased disease that needs to be monitored, the report said. Mass gatherings also prove high risk for stampedes and violence. Heatstroke is another major threat to public health during such events.

The report suggested a number of solutions to reduce public health risks during large events.

Special computer models which monitor crowd activity could be used to predict the way in which disease might spread through proximity, as well as auditing trends such as air travel patterns. The authors noted that as many people arrive by air, understanding flight paths is an important part of predicting the spread of bacteria.

Bio.Diaspora is a technology that tracks worldwide patterns of air travel to help [anticipate the global spread of infectious diseases](#). (see video above) The internet can also be used to track if and where disease is appearing. The [health map](#) is one such tool listed by the report.

Real-time [infectious disease surveillance](#) efforts were used for the 2010 Winter Olympic Games in Vancouver. Dr Kamran Khan from St Michael's Hospital in Toronto, Canada, lead author of the paper identified that the vast majority of passengers travelling to Vancouver at the time of the Games originated from just 25 cities. Khan explained how technology like this can help.

“An integrated platform of this kind could help identify infectious disease outbreaks around the world that could threaten the success of MGs at the earliest possible stages, provide insights into which of those outbreaks are most likely to result in disease spread into the MG, and identify the most effective public health measures to mitigate the risk of disease importation and local spread, all in near real-time”

Professor Brian McCloskey, who is in charge of the Health Protection Agency's preparations for London 2012 is using data from nearby hospitals and walk in centres to compile a picture of disease during the games. [He told the BBC](#): "The history of the Olympic Games suggests infection doesn't happen often.

"The issue for us is to make sure the right system is in place to respond."

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