

Current major event

Hajj and MERS-CoV

As the time for this year's Hajj (1434 H) closes in, the public health concerns for global spread of MERS-CoV are also increasing. This was the subject of discussions in a recently concluded second international conference on mass gathering medicine hosted by the Global Centre for Mass Gatherings Medicine (GCMGM) of the Ministry of Health in the Kingdom of Saudi Arabia (KSA), a WHO Collaborating Centre for Mass Gatherings Medicine.

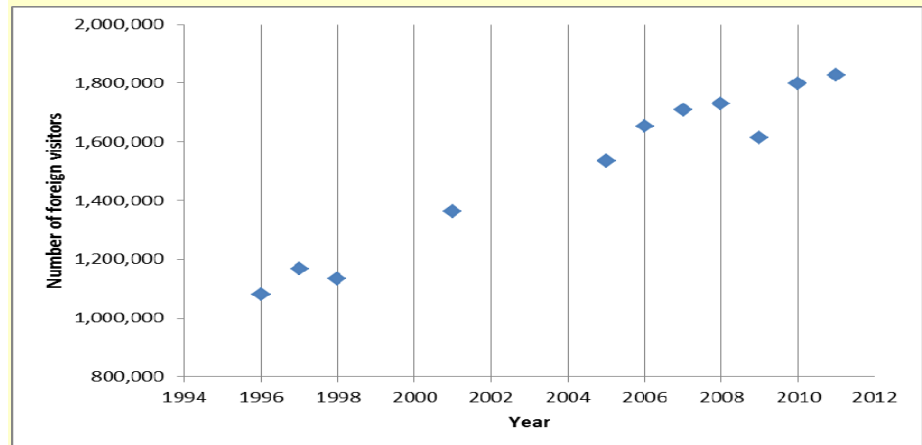
Editorial note

Mass gatherings continue to draw greater attention and pose several public health challenges, both within the host country and elsewhere. These events have significant implications for health security because of the high potential for spread of infectious diseases due to crowd density and population movement that takes place both during and after mass gatherings. One concern amongst host countries is the spread of respiratory disease. The risk of respiratory pathogen spread may, amongst other factors, depend on crowd density and length of stay, in addition to hygiene facilities, and the capacity for diagnostic and appropriate isolation.

Among the various mass gatherings, the Hajj and Umrah pilgrimages are unique. The Hajj takes place every year during the 12th month of the Islamic calendar. Hajj and Umrah, the two annual events, are the largest and most crowded mass gatherings in Saudi Arabia and are attended by over 3 million people from more than 180 countries every year (Fig-1). In the past, the epidemics of infectious disease during Hajj and its subsequent spread globally with the returnee pilgrims has been well documented (Please see the table).

The emergence of Middle East Respiratory Syndrome coronavirus (MERS-CoV) last year in the KSA raised the potential risk of global spread of MERS-CoV associated with the returnee pilgrims. However, the Hajj last year (1433 H/2012) was free from any reported

Figure-1: Annual counts of foreign visitors to the Hajj, 1996 to 2012



Source: Ministry of Health, KSA

International spread of outbreaks associated with Hajj

Year	Disease
1989	Cholera
2000	Meningococcal meningitis caused by W 135

case of MERS-CoV infection amongst the returnee pilgrims.

This year's Hajj (1434 H/2013), however, will be held in the background of 107 cases reported from the Kingdom including 49 deaths, so far, from MERS-CoV infection. In addition, small cluster of infections have been observed in the community as well as in health-care facilities in the recent past. Although the epidemiology of the disease and the patterns of transmission of MERS-CoV infection has not changed compared to what has been observed or seen last year, and majority of the cases reported from the KSA are outside of Mecca and Medina, the two major places for pilgrimage, concerns remain for the potential international spread of MERS-CoV outbreak associated with the Hajj.

Under the current situation, global public health vigilance will be important to prevent international spread of MERS-CoV. This will mean enhancement of surveillance amongst the returnee pilgrims for early detection of any suspected case to prevent local transmission. International collaboration between the KSA and the countries sending the pilgrims will be critical to make this year's Hajj free from any event like last year.

Update on outbreaks

in the Eastern Mediterranean Region

MERS-CoV in Saudi Arabia, UAE and Qatar; **Hepatitis E** in South Sudan; **Wild poliovirus** in Somalia.

Current public health events of international concern

[cumulative N° of cases (deaths), CFR %]

Avian influenza

Egypt	[173 (63), 36.4%]
Indonesia	[192 (160), 83.3 %]
Viet Nam	[125 (62), 49.6%]
Cambodia	[31 (27), 87.1%]
Global total	[629 (375), 59.6%]

Hepatitis E

South Sudan	[11,897 (235), 1.9%]#
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Novel Coronavirus (MERS-CoV)

Saudi Arabia	[107(49), 46%]
Italy	[2 (0)]
Jordan	[3 (2), 66%]
France	[1 (0)]
UAE	[7 (3), 42.8%]
Qatar	[5 (2), 40%]
Tunisia	[3 (1), 33 %]

Influenza A (H7N9) virus

China	[135 (44), 32.6%]
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Wild poliovirus

Somalia	[174 (0)]
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CFR=Case-Fatality Rate; # Suspected cases