

Communicable Diseases, post 2010 Football World Cup in South Africa- returning travellers

Updated 29 July 2010

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1. Introduction

The 2010 Football World Cup took place in 9 cities around the country. This event posed specific challenges given its size, the diversity of attendees and the potential for transmission of imported and/or endemic communicable diseases. Endemic diseases include those circulating as a result of current outbreaks, as well as those occurring only in specific regions of the country. During the period of the World Cup a programme of enhanced surveillance was conducted by the National Institute of Communicable Diseases (NICD) and the Provincial and National Departments of Health to detect and respond to public health incidents as effectively as possible; thereby reducing the impact of infectious disease threats on visitors and the community. The NICD produced a regular situation report on relevant public health threats and on trends in incidence for priority diseases across the country, so that changing disease trends could be identified and acted upon early either nationally or internationally. Reference to specific diseases and updates can be found on the NICD website (www.nicd.ac.za).

2. Food and water safety

A number of foodborne illness outbreaks were reported during the World Cup period, mostly involving small numbers of people and without serious illness.

3. Hepatitis A

Hepatitis A is endemic in Southern Africa and should be considered in the differential diagnosis in persons with acute febrile illness with laboratory evidence of a hepatitis. Risks to travellers would be low if precautions for safe water and food were followed.

4. Influenza

As of 29 July 2010 the influenza activity as monitored through the national influenza surveillance programmes is starting to decrease and is currently at low to moderate levels. Influenza B is predominant, followed by influenza A (H3N2) and a small number of cases of pandemic (H1N1) 2009.

The 2010 southern hemisphere influenza vaccine includes pandemic influenza A (H1N1) as part of the triple formulation.

5. Malaria

The malaria risks for visitors to South Africa should be low considering the low transmission season is from May to September, the successes of the National Malaria Control Programme, and that all the stadia are outside recognised malaria transmission areas. A high index of suspicion for malaria must be considered in visitors with a febrile illness who travelled to game parks, such as the Kruger National Park, and neighbouring countries, even if chemoprophylaxis was taken.

Plasmodium falciparum is the predominant species in the region. Artemisinin-combination therapy is used as first-line therapy treatment for uncomplicated malaria.

Figure 1: Map of the Endemic Malaria areas within South Africa



6. Measles

Measles (updated) A measles outbreak that started in early 2009 in Gauteng Province has spread to all provinces. As of the 29th July, measles activity is ongoing. A few cases of measles have been confirmed in visitors attending the soccer events.

7. Meningococcal disease

As expected, sporadic cases continue to be diagnosed, with the usual seasonal increase being seen, but there is no increase in the number of cases as compared to 2009. Sporadic cases of meningococcal disease occur year-round with a seasonal increase from May to October. Serogroup W135 is currently the predominant serogroup. Pre-travel vaccination is not routinely recommended.

8. Polio

South Africa is considered polio-free and there have been no wild-type polio cases since 1989.

9. Rabies

Rabies is endemic to South Africa and human infection is predominantly through exposure to rabid dogs. Mongooses, cats, cattle, bat-eared foxes and other animals may also be infected. The risk to visitors is generally low and post-exposure prevention with vaccine and rabies immunoglobulin is available in the event of exposure. Visitors should avoid contact with stray animals. Rabies has been confirmed recently in three domestic dogs in a suburb on the western boundary with Johannesburg, Gauteng province. This is an unusual event for urban areas in Gauteng. There were no human exposures that would pose a rabies transmission risk. A canid strain with origin in KwaZulu Natal has been identified. A rabies vaccination campaign for domestic animals in the area is ongoing.

10. Rift Valley fever

No further human cases have been identified with date of onset of illness after the 18th July 2010. Direct contact with animal carcasses in the Northern Cape province was identified as the most likely risk factor in this most recent case. The number of new human cases has decreased significantly in the past month. As of 29 July 2010, there have been 229 laboratory-confirmed human cases with 26 deaths. The outbreak mainly affected the Free State, Northern Cape, Eastern Cape and North West provinces. Some areas of Western Cape Province have also been affected. Most humans ($\geq 80\%$) with Rift Valley fever infection are asymptomatic or have unapparent mild disease and are not tested. Only symptomatic, ill persons were tested in the current outbreak; therefore, the true burden of disease and case fatality rate cannot be calculated. The vast majority of human cases have been due to direct contact with infected animal tissue in occupationally at-risk persons. The majority of farms affected are outside areas typically visited by tourists.

Rift Valley fever was excluded by a number of laboratory tests as the cause of illness in a German tourist initially reported as testing positive after visiting South Africa. Tick bite fever was confirmed as the cause of illness, presenting as a fever with rash (see also 12: Tick bite fever). The risks of African haemorrhagic fever viruses, notably Crimean-Congo haemorrhagic fever, would be expected to be low given the season and unlikely exposure risk.

11. Sexually transmitted infections

The increased risk of acquiring a sexually transmitted infection (STI) during mass gatherings should be noted. This is of particular relevance for South Africa, where the antenatal HIV prevalence rate in 15-49 year-old women stands at 29% (Department of Health, 2009). Since quinolone-resistant gonorrhoea is widespread, third generation cephalosporins or cefixime are recommended to treat gonococcal infections, and together with doxycycline and metronidazole constitute first-line syndromic management of vaginal discharge- and male urethritis- syndromes in South Africa. Healthcare practitioners faced with a febrile returning traveller from South Africa need to bear in mind HIV-seroconversion illness and STIs as a potential cause.

12. Tick bite fever

Tick bite fever should be part of the differential diagnosis of persons with febrile illness. The finding of a classical eschar and, if present, a maculopapular rash, must prompt early treatment with doxycycline.

13. Tuberculosis (TB)

South Africa has a high prevalence of tuberculosis (TB). TB is spread through close contact with respiratory secretions from persons with active TB, so travellers who are likely to have casual contact with ill persons are at very low risk. All soccer matches will be held outdoors in the presence of natural ventilation and sunlight, both of which limit transmission. BCG vaccine is not recommended as it does not prevent infection with TB. Travellers should avoid close contact for a prolonged time with known TB patients in crowded, enclosed environments.

14. Yellow fever

South Africa is not a yellow fever-affected country and there is NO risk of contracting yellow fever.