



# London regional report

## London 2012 Olympic and Paralympic Games

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### Introduction

During summer 2012 the Olympic and Paralympic Games were held in London. The main Olympic Park and Village were in Stratford in northeast London, but there were Olympic and Paralympic venues across all four sectors of London, covered by the four Health Protection Units. This report describes the working arrangements across London during Games time.

### Preparation

Preparation at a national level had identified that most mass gatherings do not produce incidents or outbreaks of infectious disease, although all have the potential to do so. This information was shared with staff around London at an early stage in preparation for Games time. The initial perception of staff was that international mass gatherings do result in large public health incidents, and it was important to share and disseminate knowledge of what they could expect. Such background information helped staff at local and regional levels to prepare for their public health roles in surveillance and response. Staff were also then able to plan for annual holidays and to allow people time off from work for volunteering duties and to attend sporting events.

### London Single Point of Contact

Between April and September 2012 the Unit Director for North East and North Central London Health Protection Unit was seconded out of the Unit to coordinate HPU activity across London and act as the single point of contact (SPOC) during Games time. This role was rotated via the other three Unit Directors during the period of Games activity.

Health protection was coordinated across London by the London Olympic Operational Cell (LOOC), which was collocated with the Olympic Coordinating Cell (OCC) at HPA Victoria. The LOOC was run by the LOOC Director supported by an administrator. The administrator role was filled by staff from all four London Health Protection Units (HPUs) on a rotational basis. The LOOC was staffed on a daily basis including weekends from 9 July to 12 September 2012.

The LOOC Director held a brief daily conference with NHS London to ensure excellent communications were maintained throughout the Olympic/Paralympic period. The LOOC Director also took part in a weekly teleconference hosted by the London Resilience Partnership to maintain contacts with the other Category 1 responders across London.

The LOOC Director contributed to the daily teleconference hosted by the OCC and provided a verbal and written report based on the activity in London and on the syndromic surveillance conducted via the Polyclinic.

### **Health Protection Units**

Prior to Games time each Health Protection Unit had provided letters to any training camp venues in their area reminding doctors of the requirement to report notifiable diseases to the Proper Officer. GPs were also reminded of the requirement to notify by the Royal College of General Practitioners.

Staff in each HPU were trained to record any possible connection of cases to an Olympic/Paralympic venue or event and to use an Olympic context in HP Zone to identify these cases. Staff at the Polyclinic in the Olympic Village were able to use HP Zone for North East and North Central London HPU to record cases.

Each HPU ran a query on a daily basis at 10am each day to determine whether there had been any cases recorded during the previous 24 hours with an Olympic context, and then provided a written report summarising the cases to LOOC by 11am. This report was also sent to the Regional Epidemiology Unit to supplement the Event Based Surveillance (EBS). The protocol for reporting was developed jointly between the LOOC Director and EBS team (see EBS report for detail of protocol).

In addition to written reporting each unit dialled in to a daily teleconference hosted by the LOOC director to discuss any ongoing incidents or operational problems within/across the 4 units.

### **Provision of support to HPUs in London or South West**

In recognition that the HPUs in London or the South West of England had the potential to become very busy if they needed to deal with an incident or outbreak, arrangements were made for HPUs around the country to provide surge capacity remotely if required. If one of the London or South West HPUs became too busy to provide an adequate response, having already accessed local mutual aid, then the HPU director could utilise the remote surge support. Two HPUs provided this support at any time and equal use should have been made of both to avoid overburdening either. Remote support was possible via use of the web-based database (HP Zone) which allowed access to information from anywhere in the country.

## **Provision of support within London**

All London HPU areas had Olympic or Paralympic venues and cultural events occurring during the summer, and all had visitors temporarily staying in their areas. However, the greatest concentration of visitors was in North East and North Central London HPU, in the Olympic Village.

Each unit was asked to manage their own duties in the usual way. Incidents or outbreaks associated with Olympic/Paralympic venues or visitors were managed by the relevant HPU. A team of three people were on standby, or surge, each day to provide assistance to whichever unit required help in dealing with an incident. The support team was only required to be called upon during normal working hours, but may have been expected to work into the evening if an incident occurred.

## **Lessons identified**

Staff across London worked together to prepare for a response to a high profile incident or outbreak associated with the Olympic or Paralympic Games and rehearsed this through preparatory exercises. They demonstrated once again their collective skill and expertise as a London team. Although there was not a large incident or outbreak the team dealt expertly and professionally with a number of routine incidents which partner organisations or LOCOG appeared to regard as more serious. As we prepare to transition into Public Health England it is reassuring to note the Health Protection staff in London are able to function professionally as a single team, albeit dispersed geographically.

As a result of the detailed planning work leading up to the Games some people were in possession of personal mobile phone numbers of key members of staff and made use of these rather than the published official telephone numbers of relevant offices. For the most part the information was passed on directly to the relevant HPU but in some instances incidents were managed by regional or national level staff. This had the potential to create problems as staff managing an incident may not have had access to relevant local information or intelligence. In reality it did not cause such problems. This is not a criticism of regional or national staff but a learning point to note about how we manage during future level 3 or 4 incidents.

## **Annex 1: Risk assessment for chickenpox cases on the cruise ship in relation to athletes attending the London 2012 Olympic Games**

### **Context**

A cruise ship, currently moored in the on the Thames, is being used as accommodation for around 900 bus drivers contracted to LOCOG to transport athletes and team officials attending the Olympic Games.

The crew of the vessel are employed by the shipping line company and are understood to be mainly from South East Asia.

Three members of the ship's crew have been diagnosed with chickenpox during the last three weeks.

### **Disease**

Chickenpox is usually a benign childhood illness caused by the varicella virus. It is characterised by cold-like symptoms, tiredness and fever, followed by a rash consisting of small fluid-filled blisters. The virus is spread through airborne droplets or direct contact with fluid from the blisters. The incubation period is usually 14-16 days.

In the United Kingdom 90% of people reaching adulthood are immune to chickenpox as a result of previous childhood infection. In tropical countries more infection is seen in the adult population.

### **Risk assessment**

Given the timings, the first two cases do not pose an infectious risk to the drivers. Case 3 may have been infectious for two days prior to onset of rash and isolation. This person is employed in a position in which they are likely to have had minimal contact with any of the bus drivers.

90% of the bus drivers will be immune to chickenpox as they are from the adult UK population. The levels of immunity among the crew of the vessel may be lower than 90%, and there is a possibility that further members of the crew may develop the illness as a result of exposure to cases 2 and 3.

Given the incubation period it is possible that further cases amongst crew members will arise. A recommendation has been made to the shipping line company that use of varicella vaccine among the non-immune crew may reduce the number of future cases. This advice is for occupational health reasons and to improve business continuity for the shipping line rather than for public health impact.

Risk that bus drivers could be incubating chickenpox is minimal, as 90% are immune and their potential for direct contact with case 3 is also minimal. If any of the drivers is incubating the illness their likely onset of illness will be from 01/08/2012. At this point they would be in fairly minimal contact with athletes as the buses have a screen between drivers and passengers. The risk to athletes is negligible but an exposure of a non-immune athlete would result in possible illness from around 14/08/2012 at the earliest – after the Olympics has finished.

## **Health Protection Advice**

Public health advice given by the HPA is that there is no requirement to use varicella vaccine in the population of bus drivers in order to protect athletes from illness during the Games period.

Dr Deborah Turbitt  
Director, London Olympic Operational Cell  
Health Protection Agency

Approved:  
Dr Sue Ibbotson  
Director, Olympics Coordinating Centre  
Health Protection Agency  
22<sup>nd</sup> July 2012

## **Annex 2: Risk assessment re: drinking water quality and gastrointestinal disease associated with drinking water fountains in the Olympic Park at the London 2012 Paralympic Games**

### **Context**

This is an assessment of the risk of spread of infection in the context of the Paralympic Games to inform decision about the need for preventive public health action in respect of drinking water.

There is an extensive programme of routine sentinel sampling and testing of drinking water fountains at Paralympic sites of which the testing of these fountains is part. This is being done by MTD, the local authority and Thames Water. These are reported routinely to the Drinking Water Inspectorate (DWI).

A total of 6 water fountains have been found on sampling to show low numbers of coliforms. When these have been found the individual water fountains have been replaced with new disinfected fountains. Coliforms can be found from time to time in water taps but no E coli or enterococci have been found which are the key indicator organisms of faecal contamination. In this instance there has been no breach of water quality associated with the fountains associated with any of the Paralympic venues.

### **Disease**

There have been 76 gastrointestinal illnesses reported via the polyclinic since the 29<sup>th</sup> August 2012 but no obvious pattern or common organism (bacterial or viral) identified. We would expect some viral gastroenteritis (norovirus) at this time of year as it circulates all year round peaking in the winter months giving rise to community acquired diarrhoea and vomiting.

### **Risk Assessment**

There is no evidence of an outbreak of gastrointestinal disease associated with any of the Paralympic venues. There is nothing to indicate breach of water quality associated with the water fountains in any of the Paralympic venues. There are currently no grounds to suspect that drinking water fountains at Paralympic venues are causing any gastrointestinal illness. There is no national indication of viral gastrointestinal illness linked to the Olympic sites. It is now in the season for returning travellers from overseas and we expect to see some increase in gastrointestinal activity generally.

### **Health Protection Advice and intervention**

The Drinking Water Inspectorate (working with water companies and Local Authorities) will continue to monitor the quality of water at all Olympic venues and advise remedial action where necessary. The HPA will continue to monitor for and fully investigate all cases gastroenteritis. At present there is no requirement for any other public health action or intervention.

Dr Barry Walsh  
Deputy Regional Director London, Health Protection Agency  
3<sup>rd</sup> September 2012, 11.55

## **Annex 3: Risk assessment for chickenpox in the London 2012 Paralympic Village**

### **Context**

A Paralympic athlete has been diagnosed with clinically suspected chickenpox. The athlete has no childhood history of the illness and has not received vaccine. The doctor making the diagnosis is not sure and has requested testing on clinical samples taken today the results of which will be available tomorrow. The suspected case spent an afternoon with school age children at the training camp. The case has been in continuous contact with 3 other members of their team but has now self-isolated until the results of testing are available.

### **Disease**

Chickenpox is usually a benign childhood illness caused by the varicella virus. It is characterised by cold-like symptoms, tiredness and fever followed by a rash consisting of small fluid-filled blisters. The virus is spread through airborne droplets or direct contact with fluid from the blisters. The incubation period is usually 14-16 days.

In the United Kingdom 90% of people reaching adulthood are immune to chickenpox as a result of previous childhood infection. In tropical countries more infection is seen in the adult population.

### **Risk assessment**

The team to which the athlete belongs is from a tropical country and therefore other members of the team may be susceptible. However they are more than 5 days since first possible exposure and hence not eligible for varicella vaccine to have a preventive effect.

As the clinical opinion is that this may be possible chickenpox it would be worth waiting for results tomorrow prior to determining the full risk assessment as preventive public health actions are in place at present. The possible exposure is not documented as the contact with school age children was too soon to result in the current illness.

### **Health Protection Advice**

Public health advice given by the HPA is that results of varicella testing on clinical samples should be awaited before any further action is considered.

Dr Deborah Turbitt  
Director, London Olympic Operational Cell  
Health Protection Agency  
23<sup>rd</sup> August 2012

## Annex 4: Case study of chicken pox cases

### Background

During the Olympic and Paralympic Games LOCOG employed around 900 bus drivers to transport athletes and support staff between their accommodation and the various training venues and sports arenas. The bus drivers were recruited from across the United Kingdom. To provide accommodation for this workforce in proximity to the main Olympic Park LOCOG commissioned a cruise ship, which was moored in the Royal Docks on the River Thames.

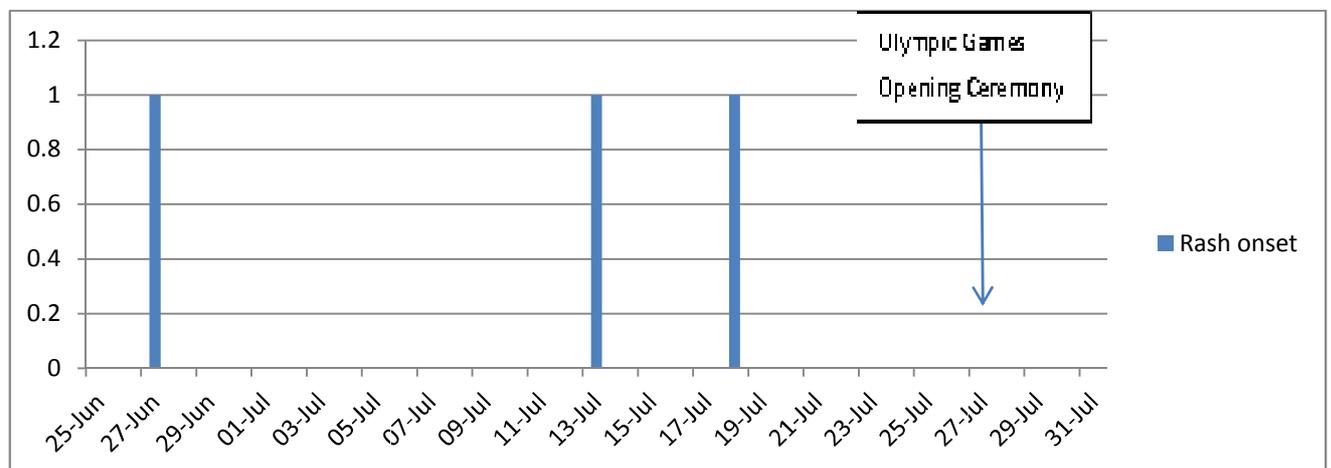
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In the United Kingdom 90% of people reaching adulthood are immune to chickenpox as a result of previous childhood infection. In tropical countries more infection is seen in the adult population.

### Notification of chicken pox case

Port Health Officers from London Port Health Authority visited a cruise ship to carry out a routine inspection as the vessel was being used as a floating hotel. During the course of the inspection the Port Health Officers were informed that there had been 3 recent cases of chicken pox among crew members on the vessel. Port Health reported the information to North East and North Central London Health Protection Unit.

### Investigation and timeline of cases



Index case. The first case was in a crew member who had returned to the vessel following a visit home to South East Asia and developed the rash. This crew member was isolated and then resumed duties.

The second case developed a rash consistent with an incubation period of 14-21 days following exposure to the index case. This person was also isolated from onset of symptoms and was also a crew member from South East Asia.

The third case, in another member of the South East Asian crew, developed symptoms on, again consistent with an exposure to the index case.

The ship had sailed from Rotterdam to London and docked in the Thames. Bus drivers using the vessel as accommodation started arriving on 13 July and may possibly have had contact with the third case while they were infectious before rash onset.

### **Risk assessment**

The potential threat to Olympic athletes was considered carefully in the assessment of whether public health action was required.

- The bus drivers were UK nationals and therefore 90% were likely to have immunity to varicella infection.
- The third case in a crew member was in a domestic member of staff responsible for cleaning rooms when unoccupied, therefore unlikely to have had much direct contact with the drivers
- Any susceptible driver who did develop the illness would not be in direct contact with the athletes, but driving behind a plexiglass screen.
- Susceptible drivers who were possibly infected could have been expected to develop symptoms between 30 July and 6<sup>th</sup> August 2012 i.e. during the Olympic Games.
- Susceptible athletes exposed to these drivers could then be expected to develop symptoms between 13 and 27 August i.e. after the Olympic Games had finished.
- There had been transmission of chickenpox among adult crew members who were all from South East Asia and therefore less likely to have immunity from childhood infection. Further cases might have been expected to occur among members of the crew from 1 August 2012.

### **Public health impact**

The risk to general public health was minimal so there was no recommendation to do anything in respect to cases of chicken pox among adult crew members.

### **Business continuity for the vessel**

Given the incubation period it was possible that further cases amongst crew members would arise from around 30/07/2012. A recommendation was made to the shipping line company that use of varicella vaccine among the non-immune crew may reduce the number of future cases. This advice was for occupational health reasons and to improve business continuity for the shipping line rather than for public health impact.

### **Outcome**

No further cases of chickenpox were reported among crew members from the ship during the Olympic and Paralympic Games. There were no reports of chickenpox in any of the bus drivers residing on the vessel.

There were 3 cases of chickenpox reported from a single Paralympic team during the Paralympic Games. Investigation of these cases suggested that the index case had an exposure while at a training camp outside London and then transmitted the infection to the other 2 team members.