Introduction

The Surrey and Sussex Health Protection Unit (SSHPU) covers the area of Surrey, East Sussex, West Sussex, and Brighton and Hove. The HPU is based in Horsham and during the Olympic and Paralympic Games was the single point of contact (SPOC) for reporting incidents with possible links to the Games within this geographical area.

While the general resident population in this area is around 2.7 million, there is also a high transient population due to the South Coast's tourist industry, numerous visitor attractions and easy access to London and International airports. In relation to the Games this area was also host to the following sites and activities:

- Olympic Rowing Village (ORV), Royal Holloway, Egham, Surrey (16 July to 3 Sept) with Polyclinic
- Olympic Road Cycle races and time trials (28 & 29 July, 1 August, with expected visitor numbers in excess of 500,000 each day along the route)
- Paralympic road races (5-8 September)
- Olympic Torch relay (Sussex 16/17/18 July, Surrey 10, 20, 27 July) including Brighton, Hastings and Guildford evening events
- Olympic training camps (10)
- Olympic accommodation venues (11)
- Gatwick airport.

The Surrey and Sussex HPU also provided ‘on the ground surge support within 2 hours for the London HPUs during the weeks commencing 2 July and 17 September.

Pre-planning activities

Members of the HPU were also involved in local resilience pre-planning arrangements and exercises, including the Gatwick Resilience Planning Group and Health Responders Groups.

The HPU designated a Health Protection Practitioner to manage and oversee all Olympic/Paralympic cases and incidents, to aid effectiveness and consistency of investigations and communications. This role included contact with the polyclinic at the Olympic Rowing Village, and with all other relevant stakeholders.
The HPU also made preparations with the 24 local authority environmental health teams to raise awareness of the potential impacts from increased visitor numbers and local events, and the need for mutual aid in the event of increased numbers of outbreaks. As the local arrangements for investigation of gastro intestinal illness fall primarily to environmental health officer (EHO) colleagues, the questions to determine whether a case had Olympic connections were also shared with them. Particular close working arrangements were made with Runnymede EHOs, who would be responsible for investigating any food poisoning outbreaks linked to the Olympic Rowing Village.

At the start of July 2012, the HPU also reminded all GPs and hospitals in the area about notification of infectious diseases and the questions to determine whether a case had Games connections.

**Cases and incidents**

From 2 July to 30 September, HPZone records were reviewed daily between 10:00 and 10:30hrs for cases/incidents in the previous 24 hours with Olympic contexts. Written reports of new cases/incidents and updates on earlier ones were provided to the Event Based Surveillance team at Regional office by 11:00hrs each day including weekends. Additional afternoon reports were submitted where updates were considered relevant.

**Lessons identified**

1. **Pre-planning:**

During the pre planning stage key HPU staff attended Olympic planning exercises and were closely involved in the Gatwick and Surrey Local Resilience Forum planning for the Games. In the feedback provided by Surrey LRF, it was noted that the lack of involvement of LOCOG meant that procedures were unclear.

In particular there was also a lack of involvement of the Olympic Rowing Village during exercises, which meant that the development of expected working relationships and understanding of roles at a local level was hindered. To try and address this, the HPU contacted the ORV manager and dates were set for members of the HPU team to visit the ORV polyclinic to establish communication routes, clarify roles and build relationships. These dates were subsequently cancelled by the ORV manager and the despite attempts by the HPU to reschedule, they did not take place. As a consequence there were some difficulties encountered with the ORV polyclinic in the management of some early cases.

The HPU and local authority environmental health team covering the area of Surrey where the ORV was located already had a strong working relationship. Both organisations made unsuccessful attempts to meet with the ORV polyclinic manager. Therefore regular communication between the HPU and EH team was put in place to ensure that no ‘rumours’ were missed. The HPU also raised awareness amongst the other 23 local authorities in Surrey and Sussex on the potential impacts of large crowds and catering facilities at events and the need to make mutual aid arrangements between EH teams in case of large outbreaks.

Within the HPU, all staff were regularly informed of Olympic updates, and written information was provided on key event dates and locations, training camp and accommodation sites. The HPU also appointed a specific HPP Olympic role (4 months) to be the lead co-ordinator of all cases / incidents with connections to the Olympics, with the key aims of being the main contact with the ORV polyclinic and providing continuity. This role worked well as the post holder was present throughout the Games period, held personal phone numbers for key staff, and had the key contact details for all agencies.
2. During the Games:

At an early stage in the Games an athlete was diagnosed with chickenpox. HPU provided infection control, exclusion and immunisation advice to the ORV polyclinic that only nine individual team members were to be warned and informed. This advice was overridden by the ORV polyclinic manager, who proceeded to warn and inform all teams and all contractors. Subsequent to this it was established that the ORV polyclinic manager was not clinically trained, and therefore the HPU changed procedure when contacting the ORV polyclinic to ensure that only a clinical member of the ORV was contacted about individual case management. During the investigation of this chickenpox case it was also difficult to locate where samples taken by the ORV polyclinic were initially being analysed. After many hours tracking this down, it was found that a private lab was being used, and not the HPA authorised laboratories. The HPU overall conclusion following this incident was that it would have been extremely beneficial to have either had HPU presence at the ORV polyclinic on daily basis, or easy access as and when required.
Annex 1 - Risk assessment for chickenpox infection in athlete at Olympic Rowing Village in relation to athletes attending the London 2012 Olympic Games

1. Background to the risk assessment
SSHPU were informed by Thames Valley HPU about an athlete with suspected chickenpox. who is apyrexial but feels well enough to continue to train. There are nine other athletes in his team. ORV treating athlete with antivirals and a sample was taken to confirm the clinical diagnosis.

2. 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 UK 90% of adults are immune to chickenpox. In tropical countries more infection is seen in the adult population.

3. Risk assessment
The disease is unlikely to be UK acquired. Given the incubation period it is possible that further cases may arise amongst the team. The team have been warned and informed. The ORV asked about VZIG for the athlete, this request was discussed and it was agreed that VZIG was not indicated for a healthy young adult. The athlete had not been in contact with any pregnant or immunocompromised individuals.

The HPU have advised on isolation for the athlete in the ORV and transportation to Eton Dorney (driver should not be pregnant or immunocompromised) where the athlete wants to train in isolation. We have advised that a close watch should be kept on his fluid filled blisters as there will be a small infection risk from contact with water in the lake.

Information has been received from the ORV doctor that the athlete’s racing partner has a history of previous chickenpox infection. If further cases arise in the team, there is a possibility that this could happen after the Olympics have finished due to the incubation period.

The athlete concerned is due to race on … and by then the lesions are likely to be crusted over and therefore the athlete should be able to compete.

The HPU staff confirmed with the team doctor who said that the team had received chickenpox vaccine 1-2 years ago. Therefore the team are not going to be giving chickenpox vaccination. Multiple calls made by HPU to find out which lab has tested athlete’s blood sample. Advised that the result should be available at 15.00 from a private laboratory.

4. Health Protection Advice
No requirement to use VZIG. Isolation advised, warning and informing and vigilance re athlete concerned. Racing partner has history of previous chickenpox infection. Following discussion, a decision was taken to offer post exposure chickenpox vaccine to nine team members if there was no previous clinical history of chickenpox. However, subsequently informed by team that team have previously received chickenpox vaccine.

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Date: 2/8/12
Annex 2 - Risk assessment for parvovirus B19 infection in volunteer at Olympic village in relation to athletes attending Olympic Games, London 2012

1. Background to the risk assessment

A volunteer at Olympic village was diagnosed with parvovirus B19 infection at Stratford polyclinic via the Laboratory at Colindale. Case was working at the Athletes Village Stratford as a volunteer in Team London Ambassador. Started working Wednesday 1st August 2012. Presented to the Polyclinic on Friday 3rd August 2012 with a 48hr history (date of onset 1st August 2012) of fever, sore throat with swollen tonsils, painful swollen joints (legs) and lower limb rash. Case had serology sent to both The Royal London Hospital and Colindale. He has not worked at Olympic venue since 3/8/12.

2. Disease

Parvovirus B19 infection is common and occurs worldwide. The disease is not notifiable in the UK and surveillance relies on laboratory-confirmed cases.

Infection is most common in children aged 6-10 years, but can occur at any age. Antibody prevalence studies have shown that approximately 60 per cent of adults in the UK have serological evidence of past infection with parvovirus B19. One attack is thought to confer lifelong immunity.

For most individuals, no specific treatment is required for parvovirus B19 infection. Pregnant women should be given information about parvovirus B19, and those who have had recent exposure should have access to advice and serological tests.

3. Risk assessment

The case had no contact with any Olympic athletes during the time he worked at Olympic Village. He was in contact with one pregnant volunteer at the Athletes Village in his team (Team London Ambassadors) on the stand at the entrance. She is being followed up by local HPU and her midwife.

4. Health Protection Advice

No actions necessary with respect to Olympic Village.

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