Cyclospora outbreak related to travel to Mexico

50/3201 As at 5 August 2016, 204 confirmed and probable cases of Cyclospora infection had been reported in the UK since 1 June 2016, of which 148 (73%) were associated with travel to Mexico (travel history was pending for 53 cases). Cases had stayed at 24 different hotels and resorts in Mexico, but predominantly on the Riviera Maya coast. Cases were equally distributed between males and females, with the range of ages affected being 12-76 years. Travellers returning to Scotland accounted for 98 of the cases. UK public health authorities have shared information with the Mexican authorities and the travel industry to support investigations in Mexico.


A similar increase in Cyclospora cases in travellers returning from Mexico was detected last year, with a total of 79 cases reported in UK travellers between 1 June and 22 September 2015 (see Current note 49/4402 at [http://www.hps.scot.nhs.uk/ewr/redirect.aspx?id=65837](http://www.hps.scot.nhs.uk/ewr/redirect.aspx?id=65837)). Those cases had stayed at a range of hotels and resorts in the Riviera Maya and it was suggested that the source might be a food product that was distributed to several hotels in the region.

Most Cyclospora cases in the UK in recent years have been reported between weeks 23 and 33 (in June and July), which coincides with the summer holiday period. Typically, around 30 cases are reported each year in the UK, with various tropical and subtropical countries of travel reported. In 2015, there was a multistate outbreak in the USA in which fresh cilantro (coriander) from Puebla, Mexico, was implicated as the cause of cluster-associated cases in three states, large outbreaks in Texas in 2013 and 2014 having also been associated with Mexican salad products.

Cyclospora cayetanensis is a coccidian protozoan parasite that infects humans and other primates. Infection is characterised by diarrhoea, fatigue, muscle pain, anorexia, weight loss, abdominal cramping and flatulence, nausea and low-grade fever, and is commonly acquired from food or water contaminated by Cyclospora oocysts. The oocysts of this organism are not infectious until approximately 10 days after they are passed in faeces, therefore direct person-to-person transmission does not occur. The foods
previously involved in *Cyclospora* outbreaks include soft fruits, such as raspberries, and salad products such as coriander, basil and lettuce.

There may be substantial under-ascertainment and reporting of *Cyclospora* cases, because not all patients are tested, and not all positives are reported by laboratories. In addition, these organisms can be difficult to spot and recognise in unstained wet films or concentrates. Faecal samples can be examined using a wet preparation and concentration technique. Any structures resembling *Cyclospora* are further examined under UV light for parasite autofluorescence or confirmed using modified Ziehl-Neelson stain and accurate measurement.

In view of the ongoing outbreak, PHE and HPS recommend that *Cyclospora* be considered a possible cause of gastrointestinal infection in patients returning from Mexico. Cases should be reported to the local Health Protection Team. Positive samples should be referred to the appropriate reference laboratory for confirmation: The Scottish Parasite Diagnostic and Reference Laboratory in Glasgow (Scotland), National Parasitology Reference Laboratory, Hospital for Tropical Diseases in London (England), or the Cryptosporidium Reference Unit in Swansea (Wales). [Text adapted from Health Protection Report, 5 August 2016. https://www.gov.uk/government/publications/health-protection-report-volume-10-2016/hpr-volume-10-issue-25-news-5-august#Cyclospora-outbreak-related-to-travel-to-mexico]

**Surveillance of Healthcare Associated Infection in Scottish Intensive Care Units**

**50/3202** A report of data from the Surveillance of Healthcare Associated Infection in Scottish Intensive Care Units programme was published on 9 August 2016 within the Scottish Intensive Care Society Audit of Critical Care in Scotland 2016: Reporting on 2015.

Data related to bloodstream infections (BSI), pneumonia and central venous catheter (CVC) related infections (including CVC related BSI) were reported from patients admitted to 21 adult intensive care units across Scotland during 2015. Infection rates remain unchanged from 2014 and in total 2.8% of patients included in surveillance developed an HAI. Of the patients included, 1.3% developed pneumonia and 1.5% had a bloodstream infection.

The key points from the report were:

- The data indicate that for most bloodstream infections, there was a central venous catheter in place around the time of infection;
- units should continue to collect high quality surveillance data. With the growing threat of antimicrobial resistance, units should focus on the complete collection of antimicrobial resistance data for all infections;
- surveillance of HAI in ICUs is a mandatory requirement for all NHS boards.


**Hepatitis C in the UK - annual report**

**50/3203** The eighth annual Hepatitis C in the UK report was published on World Hepatitis Day, 28 July 2016.

According to the report (accessible at [https://www.gov.uk/government/publications/hepatitis-c-in-the-uk](https://www.gov.uk/government/publications/hepatitis-c-in-the-uk)), preliminary data indicate that mortality attributable to hepatitis C-related end-stage liver disease and liver cancer fell in the UK for the first time in 2015 (having more than doubled over the preceding decade). This suggests that improved access to treatments may be having a positive impact in controlling a virus with which more than 200,000 people in the UK are chronically infected.
However, there was no evidence to suggest that incidence of infection was falling: data from UK surveys of people who inject drugs (PWID) - the principal risk group - suggested that numbers of new HCV infections have remained relatively stable over recent years, both estimated rates of infection, and prevalence of infection, in recent initiates to drug use being similar in 2015 (8/100 person years and 26% respectively) to those observed in 2011 (7/100 person years) and 2008 (24%).

If improved access to treatments continues and contributes to reduction in mortality, the World Health Assembly’s recently adopted Global Health Sector Strategy (GHSS) on viral hepatitis for the period 2016 to 2021, calling for a 10% reduction in hepatitis C deaths by 2020, should be achievable in the UK. However, the WHO GHSS call to reduce new cases of chronic HCV by 30% by 2020, and 90% by 2030, represents a significant challenge for UK health services. [Source: Health Protection Report, 5 August 2016. https://www.gov.uk/government/publications/health-protection-report-volume-10-2016/hpr-volume-10-issue-25-news-5-august]

Hepatitis A circulation - Europe 1975 - 2014

50/3204 A recent report released by the European Centre for Disease Prevention and Control (ECDC) seeks to provide a comprehensive picture of hepatitis A virus (HAV) infection epidemiology in the EU/EEA between 1975 and 2014. It demonstrates a steady decline in HAV circulation over the last four decades reaching a stable trend by 2010. Both seroprevalence and reported incidence data show this decline, although with notable differences at national and sub-regional level. This decreasing trend could be due to several factors such as improved hygiene, sanitation, socio-economic conditions and increased availability of vaccines for at-risk groups.

The report indicates that a progressively growing part of EU/EEA population has become susceptible to HAV infection, since there is a decline in seroprevalence, and shows that population susceptibility, particularly in adults, serves as a good indicator for assessing optimal prevention options for this disease. Important knowledge gaps about e.g. strengthening laboratory-based surveillance through molecular typing and data available on coverage of HAV vaccination are also outlined in the report. These gaps should be addressed when designing specific prevention and control measures, such as vaccination strategies, to further decrease HAV circulation in the EU/EEA.


Yellow fever outbreaks (Angola and DRC) - WHO update

50/3205 On 6 August, the World Health Organization (WHO) noted that the yellow fever epidemic in Angola, first reported in late January 2016, appeared to be declining, with no new cases confirmed in the preceding six weeks. However, WHO and its partners would continue to provide support to Angola as well as to the Democratic Republic of the Congo (DRC) to control the outbreak there.

WHO expected that more than 17 million additional people would be vaccinated in massive campaigns scheduled to take place in both countries before the rainy season begins in this part of Africa in September.

The outbreaks of yellow fever in Angola and the DRC have posed special challenges for ministries of health, and responding partners, including WHO. This was the first time partners had had to manage such a large outbreak of yellow fever in a dense, urban setting.

As both the DRC and Angola are endemic for yellow fever, sporadic cases have simultaneously occurred in remote, rural areas, adding to the existing logistical challenges. These included
ensuring that people in hard-to-reach areas had access to vaccination as well as creating infrastructure to keep vaccines at the right temperature until they are administered.

More than 42 countries in the world are endemic for yellow fever and regularly experience outbreaks. However, transmission in 2016 has been explosive and rapidly exhausted the usual global emergency stockpile of six million vaccine doses managed by the International Coordinating Group (ICG) on Vaccine Provision (WHO, UNICEF, MSF and IFRC). This rise in yellow fever cases was thought probably due to the unusual severity of El Niño, which has led to a higher than usual density of the mosquitoes that transmit the disease.

However, the collaboration of partners including Gavi the Vaccine Alliance, the ICG partnership, and manufacturers, has enabled countries affected by the current outbreak to access almost 19 million doses of the yellow fever vaccine since January. This was three times the volume normally planned for outbreak use in a 12-month period.


Prestwick Beach – asbestos removal

50/3206 Further to Current note 50/3107 (at http://www.hps.scot.nhs.uk/ewr/redirect.aspx?id=68979), South Ayrshire Council announced on Friday 5 August the reopening to the public of the main northern stretch of Prestwick Beach following the completion of on-site asbestos removal works and confirmation that the risk to public health was negligible. Work to inspect and remove any asbestos material on the southern stretch of the beach continued over the weekend.

South Ayrshire Council closed the beach as a precautionary measure on Friday 29 July after preliminary analysis identified asbestos fibres on small pieces of material found on the beach.

Work to remove any additional material was then undertaken while the beach remained off-limits, and more detailed analysis was carried out. This confirmed that the material found on the beach prior to the closure - as well as the additional material retrieved by the specialist contractor - contained chrysotile ‘white’ asbestos. This is more commonly known as asbestos cement, the type of material often still found in sheets used for roofing and wall cladding.

Independent experts from Asbestos Analytical Services confirmed that the potential for any asbestos fibres to be released from this material was ‘very low’.

Public health experts from NHS Ayrshire & Arran and Health Protection Scotland - who carried out a full risk assessment - also confirmed that, even if such fibres were to be released on the beach, the risk to beach users is negligible.

Hazel Henderson, Consultant in Public Health for NHS Ayrshire & Arran, added that the risk assessment concluded that it was highly unlikely that users of the beach had been put at risk of serious long-term health effects from this material. [Source: South Ayrshire Council News Release, 5 August. http://www.south-ayrshire.gov.uk/news/council-reopens-main-stretch-of-prestwick-beach-to-the-public.aspx]