CURRENT NOTES

EuSCAPE - European Survey on carbapenemase-producing Enterobacteriaceae

The objective of the European Survey on CPE (EuSCAPE) was to provide the first comparable and quality-controlled data on the occurrence of the most important carbapenemase-producing Enterobacteriaceae (CPE - *Klebsiella pneumoniae* and *Escherichia coli*) as causes of infection (colonisation was not studied) in Europe and neighbouring countries, and to establish a framework for future enhanced sentinel surveillance. The survey also provides the first comparable and laboratory-substantiated data on the incidence of CPE producers across Europe.

The EuSCAPE survey has strengthened the development of diagnostic and national expert laboratory and epidemiological surveillance capability in participating countries via use of standardised (EUCAST) antimicrobial testing methodology, a training course, EQA distribution, and a standardised structured survey of cases.

Two articles have been published recently in relation to the European survey on CPE:


Between November 2013 and April 2014, 455 sentinel hospitals from 36 countries participated in EUSCAPE. Health Protection Scotland, SSSCDRL (as National Expert Laboratory), Glasgow and Edinburgh laboratories and 13 Scottish hospitals participated alongside Public Health England’s AMRHAI Reference Unit and 19 sentinel laboratories across the UK.
Across Europe, on average, 1.3 patients per 10,000 hospital admissions had CPE-positive clinical specimens and 2.51 per 100,000 patient days. The Scottish rate was 0.03 per 10,000 hospital admissions and 0.1 per 100,000 patient days.

Incidence differed greatly, with the highest rates of incidence in Mediterranean and Balkan countries (including Greece, Italy, Montenegro, Spain, and Serbia).

The project also facilitated further detailed studies within the UK (see article 2). The incidence of CPE across the UK was 0.7 per 100,000 patient-days, with north-west England the most affected region at 3.3 per 100,000 patient-days (Scotland: 0.1 per 100,000 patient days).

The UK study showed that recommended IPC measures were not universally followed in participating laboratories and hospitals, including:

- screening high-risk patients on admission (applied by 86%);
- using a CPE ‘flag’ on patients’ records (applied by 70%);
- alerting neighbouring hospitals when transferring affected patients (applied by only 30%);
- having a laboratory protocol for CPE screening (applied by 86%).

The Scottish and UK prevalence and incidence of clinically significant CPE is currently low, but these multi-drug resistant bacteria affect most UK regions. Improved infection prevention and control (IPC) measures, vigilance and monitoring are required. The emergence and spread of antibiotic resistance against last-line antibiotics increasingly erodes the ability to treat patients infected with CPE successfully, especially in countries where CPE prevalence in hospitals is high. At a time when few novel and effective antibiotic compounds have become available, containment of CPE is bound to rely on stricter IPC measures in hospitals.

**Prevention and management of meningococcal disease in higher education institutions**

50/4702 Public Health England and Universities UK - together with the Meningitis Research Foundation, Meningitis Now, Health Protection Scotland, Public Health Wales and the Public Health Agency in Northern Ireland - have revised UK guidance on the prevention and management of meningococcal meningitis and septicaemia in higher education institutions (HEIs).

The new guidance (available at [https://www.gov.uk/government/publications/meningitis-and-septicaemia-prevention-and-management-in-higher-education-institutions](https://www.gov.uk/government/publications/meningitis-and-septicaemia-prevention-and-management-in-higher-education-institutions)) takes account of the current epidemiology of meningococcal disease, in particular the increased incidence, and current outbreak of, a virulent form of MenW disease that underlines the importance of first-year HEI students being vaccinated with MenACWY vaccine. Across the UK, students at HEIs are at increased risk of meningococcal disease compared to their non-student peers, particularly in their first year and in the first few weeks of the autumn term.

The pre-existing guidance has also been updated to take account of modern electronic forms of communication and social media, as well as structural changes in the NHS in England.

The guidance underlines the importance of three key areas of action: raising awareness, promoting immunisation and planning ahead. On awareness-raising, the guidance recommends:

- HEI students and staff should be informed about meningococcal disease and its common signs and symptoms. It is a potentially fatal and life-changing disease that can be difficult to diagnose, particularly in the early stages;
• all students should know to tell someone if they feel unwell and have someone they can contact if they are feeling worse. If a student is ill someone should regularly keep an eye on them and medical advice should be sought immediately if someone has symptoms of concern, or their condition is worsening.

On promoting immunisation, the guidance highlights many ways in which HEIs across the UK can alert new students to the importance of getting immunised with MenACWY vaccine, and describes the resources available to support this. Efforts of HEIs in collaboration with their student health partners have already led to improvements in MenACWY vaccine uptake in their students.

On forward planning, the guidance states that HEIs have arrangements in place for responding to any case, or cases, of meningococcal disease among students. That includes having allocated staff responsibilities for responding to cases (or an outbreak) and managing communications, and providing support for students and staff affected. [Text adapted with thanks from Health Protection Report, 11 November 2016. https://www.gov.uk/government/publications/health-protection-report-volume-10-2016/hpr-volume-10-issue-39-news-11-november]

European HIV-Hepatitis testing week...

50/4703 From 18 to 25 November 2016, almost 500 organisations all across Europe are hosting activities to increase awareness of the benefits of HIV and hepatitis testing. These diseases can be asymptomatic for a long time and without getting tested, many people will live with their infection without knowing it. ECDC backs the efforts of European HIV-Hepatitis Testing Week with an updated version of the European Test Finder which now allows locating testing sites for HIV, sexually transmitted infections and viral hepatitis.

Viral hepatitis is preventable and curable. While there is currently no cure for HIV, early diagnosis allows access to lifesaving treatment and also reduces the long term cost to the healthcare system. But almost every second person diagnosed with HIV in Europe still presents at a late stage or with indication of advanced infection.

A quick and simple blood test will tell if one is infected or not - knowledge that can help protect own health and that of others.


...and HIV Testing Week Scotland

50/4704 HIV Testing Week Scotland, which runs from 18-25 November, is about increasing awareness of HIV testing, highlighting the range of options available and encouraging people to test regularly. During HIV Testing Week, sexual health clinics, GPs and community testing venues across Scotland will be offering additional testing to help people find the test that’s right for them.

The campaign is highlighting how testing can put people in control of their HIV status. Where a test is positive, effective treatments mean people can live a long, healthy life and are highly unlikely to pass on the virus. Regardless of test result, testing also helps make people HIV aware, giving them the facts and confidence to prevent new infections, and ultimately putting an end to HIV.

You can find out more about the campaign, and what’s going on locally, by visiting http://www.HIVTestWeek.scot. You can also add your support to the campaign by adding the HIV Testing

Shooting Up - Infections among people who inject drugs in the UK 2015

50/4705 The new Shooting Up report was published by Public Health England (PHE) on 15 November. This annual national report describes trends in the extent of infections and associated risks and behaviours among people who inject drugs in the UK to the end of 2015.

Its summary findings were that:

- In the UK, around one in 100 people who inject drugs is living with HIV. Most have been diagnosed and will be accessing HIV care. However, HIV is often diagnosed at a late stage among people who inject drugs. HIV transmission continues among people who inject drugs, and both injecting and sexual risks remain common. The emergence of injecting drug use around or during sex among some groups of HIV positive men who have sex with men is a concern, as is the recent HIV outbreak among people injecting heroin in Glasgow.

- Hepatitis C remains the most common infection among people who inject drugs, and there are significant levels of transmission among this group in the UK. Two in every five people who inject psychoactive drugs are living with hepatitis C and around half of these infections remain undiagnosed. Around one in 20 of those who inject image and performance-enhancing drugs have hepatitis C.

- In the UK, around one in every 200 people who injected psychoactive drugs is living with hepatitis B infection. About three-quarters of people who inject psychoactive drugs report taking up the vaccine against hepatitis B, but this level is no longer increasing. Uptake of the hepatitis B vaccine is much lower among people who inject image and performance-enhancing drugs.

- One-third of people who inject psychoactive drugs report having a recent symptom of a bacterial infection. Outbreaks of infections due to bacteria are continuing to occur in this group. Some of these infections are severe and can place substantial demands on the healthcare system.

- The increased injection of a range of stimulants, particularly the recently emerged psychoactive drugs such as mephedrone, is a concern. People injecting stimulants often report higher levels of injecting and sexual risk behaviours.

- The provision of effective interventions, which act to reduce risk and prevent infections, needs to be maintained. These interventions include needle and syringe programmes, opioid substitution therapy and other treatments for drug use. Local areas need to be responsive to changes in drug use and risk and offer these interventions in appropriate settings. Vaccinations and diagnostic tests for infections need to be accessible and routinely and regularly offered to people who inject or have previously injected drugs in line with guidance. Care pathways and treatments should be available to those testing positive.

Outbreaks of avian influenza across Europe

On 16 November, the European Food Safety Authority (EFSA) reported on the outbreaks of avian influenza which had been reported among wild birds and poultry across Europe since the end of October 2016. The highly pathogenic avian influenza (HPAI) H5N8 virus had been identified in Hungary, Poland, Croatia, Germany, Austria, Switzerland, Denmark, and the Netherlands.

EFSA experts are supporting member states in their data collection activities aimed at identifying how the virus enters poultry farms and the risks posed by wild birds. This information will help EFSA to re-assess the risk of introduction of avian influenza into the EU based on new scientific knowledge. The updated scientific advice will be published in 2017.

The European Commission has called on member states to be vigilant and to reduce the risk of further outbreaks, by taking measures such as increasing biosecurity levels in poultry holdings and backyard flocks.

EFSA has worked on this topic extensively in recent years. Its work has included a scientific opinion (available at http://www.efsa.europa.eu/en/efsajournal/pub/357) on migratory wild birds and their possible role in the spread of highly pathogenic avian influenza viruses.


Highland clamp down on illegal shellfish operations

A multi-agency enforcement operation took place in the Lochaber area of the Highlands of Scotland on Wednesday 16 November 2016. The operation, led by Highland Council’s Environmental Health Service, also included participation by a number of partner agencies, including HMRC, Gangmasters Licensing Authority, Police Scotland, Borders Agency and Marine Scotland Compliance.

The purpose of the operation was focussed on the illegality arising from and associated with the gathering, holding, transportation and placing on the market of shellfish, in particular winkles and cockles. While investigations arising from the operations were continuing, in the course of the operation the Environmental Health Service had taken enforcement action to stop one food business placing shellfish onto the market. This action also involved a significant quantity of shellfish being removed from the food chain.

The Council stressed the importance of blocking illegal harvesting of shellfish and its onward movement into the food chain as shellfish placed on the market outwith legitimate routes could have significant effects on consumers’ health.

The Gangmasters Licensing Authority Head of Operations added that partnership initiatives such as this were key to protecting not only the health of the public but also the safety of the workers involved in gathering the shellfish. [Source: Highland Council News Release, 17 November 2016. http://www.highland.gov.uk/news/article/9841/partners_clamp_down_on_illegal_shellfish_operations_in_highland]

Carbon monoxide - 2016 Awareness Week

On 17 November, the Scottish Chief Medical, Nursing and Pharmaceutical Officers issued a letter in support of Carbon Monoxide Awareness Week (21-27 November) underlining the importance of staff across the NHS in Scotland being alert to the symptoms and signs of this preventable cause of death.
Carbon monoxide is a poisonous gas which is difficult to detect as it has no smell or taste. The gas can be released from poorly maintained, poorly ventilated or incorrectly fitted fossil fuel burning cookers, boilers or fires. Carbon monoxide poisoning is likewise difficult to diagnose. Early symptoms are often mistaken for mild ‘flu like’ illnesses or food poisoning. Given this, there may be many patients affected by exposure to carbon monoxide who have not sought medical help which is why awareness raising is so important.

In 2015, a total of four deaths were attributed to unintentional carbon monoxide poisoning in Scotland. This was an increase on the number of deaths seen in the previous five years, with an average of only one death per year reported between 2010 and 2014. A total of 24 patients had an episode of ‘Toxic Effect of Carbon Monoxide’ recorded for a hospital episode in 2015, compared to an average of 18 patients in the previous five years.

The Chief Officers’ letter (available at http://www.sehd.scot.nhs.uk/cmo/CMO(2016)19.pdf) incorporates a range of supplementary materials and relevant links to support staff in their response to this continuing concern.

Environmental incidents - SEISS reports (Garage fire - Oban)

50/4509 The Scottish Environmental Incident Surveillance System (SEISS) recorded the following incident in the past week:

- A major fire damaged a maintenance depot in Oban which services Argyll and Bute Council’s fleet of vehicles on Friday 11 November. About 30 firefighters and eight appliances were called to tackle the blaze on Soroba Road at about 01:30. The operation was complicated by the presence of highly-flammable acetylene cylinders. A council spokesman said there were no reports of injuries. Two fire engines from Oban initially attended but this was increased to eight, with crews from as far afield as Milngavie in East Dunbartonshire called in due to the scale of the blaze. [Source: SFRS News Release, 11 November 2016. http://www.firescotland.gov.uk/news-campaigns/news/2016/11/sfrs-remain-at-the-scene-of-major-blaze-in-oban.aspx]

For more detailed information on SEISS, go to http://www.hps.scot.nhs.uk/enviro/ssdetail.aspx?id=107 or contact either Ian Henton or Colin Ramsay at HPS on 0141 300 1100.

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