



PHE publications gateway number 2014168

30 June 2014

PHE Bulletin, Public Health England's regular update, provides news and information on PHE and the public health landscape for all those concerned with the public's health. For more information see our website: www.gov.uk/phe

Public health news

PHE kickstarts debate on sugar reduction

'[Sugar Reduction: Responding to the Challenge](#)', a PHE paper that aims to kickstart the debate on sugar reduction, was published last Thursday. On the same day, the Scientific Advisory Committee on Nutrition (SACN) published a new [draft report](#) recommending more fibre and less sugar in diet. The SACN report is open for consultation. PHE is particularly interested in SACN's research because it is clear that the nation is consuming more sugar than the UK's current recommendations. Diets high in sugar can contribute to excess calorie intake, which can lead to weight gain and obesity. PHE is calling on charities, non-governmental organisations, academics, businesses, retailers and consumers to work together to reduce the amount of sugar we eat as a nation. PHE already runs successful marketing campaigns designed to promote healthy living. It also wants to look at the way foods are being advertised to children, financial measures that relate to sugar sweetened drinks, food procurement across the public sector and education and training. For more information see PHE's [press release](#).

New Mental Health, Dementia and Neurology Intelligence Networks

PHE has launched a new health intelligence network in partnership with NHS England, supported by the Department of Health and key stakeholders. The Mental Health Dementia and Neurology Intelligence Networks (MHDNIN), consisting of four pilot profiling tools, will support the delivery of improved physical and mental wellbeing services in local areas. The new [network](#) will provide commissioners, local decision makers and other health professionals with authoritative intelligence,

research and evidenced best practice. The MHDNIN is one of five health intelligence networks. For more information see PHE's [news story](#).

PHE knowledge strategy published

PHE's [Knowledge Strategy](#), published earlier this month, provides a framework within which knowledge from data, research and experience can be used to best inform public health decision-making. The strategy addresses the entire knowledge lifecycle and concentrates on openness, transparency and partnership working to deliver the best available knowledge to the right people at the right time. For more information see PHE's [news story](#).

PHE welcomes health ministers backing on action on dementia prevention

PHE has welcomed the backing of health ministers from across the UK for a call for action on reducing the risk of developing dementia. The first Global Dementia Legacy Event in London earlier this month heard that health ministers from England, Wales, Scotland and Northern Ireland have all signed up to the 'Blackfriars Consensus'. The Consensus is a statement on dementia risk reduction published by PHE and the UK Health Forum, and signed by 60 leading figures and organisations from across the dementia and public health community. For more information see PHE's [news story](#).

New reports aim to help reduce accidents to children and young people in the home and on the roads

PHE has launched two new resources for local authorities on preventing accidents to children and young people in the home and on the road. The reports show while the number of children and young people killed or seriously injured continues to fall in England, there are still significant numbers of deaths and emergency admissions from preventable causes. On average each year between 2008 to 2012, 525 children and young people under 25 died and there were more than 53,700 admissions to hospital. The [Reducing unintentional injuries in and around the home among children under 5 Years](#) and the [Reducing unintentional injuries on the roads among children and young people under 25](#) reports include an analysis of data between 2008 to 2012. For more information see PHE's [press release](#).

Review of potential public health impacts from shale gas extraction

PHE has published the final version of its report, [Review of the potential public health impacts of exposures to chemical and radioactive pollutants as a result of shale gas extraction](#). It provides PHE advice on the potential public health impacts

of exposures to chemical and radioactive pollutants as a result of shale gas extraction. It has also published a [cover note](#) to the report. A [draft report](#) was published for comment in October 2012.

PHE approach tech start-up community to improve nation's health

PHE has announced the launch of PHE Health X, an innovation competition that invites early-stage technology businesses to submit their ideas for improving people's health. The package for up to three successful Health X businesses includes support through PHE's Change4Life campaign, presence on NHS Choices and help with product development. Criteria for entry are available on the [PHE Health X website](#). The initiative opened on 20 June 2014 and closes on 1 August 2014. For more information see PHE's [press release](#).

***Bacillus cereus* infections: 1 July update**

PHE and the Medicines and Healthcare products Regulatory Agency (MHRA) are in the final stages of their investigations into the outbreak of *Bacillus cereus* in the implicated intravenous liquid (Total Parental Nutrition, TPN) linked to a number of cases of sepsis (blood poisoning) in patients at a small number of hospitals in England. Since the last update on 12 June 2014, a further case has been identified and the total number of cases linked to this investigation is 23 (19 confirmed and 4 possible cases). This baby has sadly died. This is the third confirmed case to have died and all 3 cases have been reported to the coroner. The strain of *Bacillus cereus* identified in the 19 cases confirmed as infected, has also since been identified in environmental samples collected from the day of manufacture (27 May 2014), located within the particular sterile area at ITH Pharma where the specific TPN supplies were manufactured. These specific TPN supplies were recalled by the MHRA on 4 June 2014. For more information see PHE's [press release](#).

PHE commits to new priorities for care of the dying

A report published last week by the Leadership Alliance for the Care of Dying People sets out a new approach to care of the dying in England based on the needs and wishes of the person and those close to them. It takes the form of five new Priorities for Care, which replace the Liverpool Care Pathway as the new basis for caring for someone at the end of their life. PHE is one of the 21 organisations that make up the alliance, all of whom have committed to support the Priorities for Care. For more information see the PHE [news story](#).

Travellers to Southern Corsica warned about parasitic infection

PHE and the National Travel Health Network and Centre (NaTHNaC) are aware of reports of *Schistosoma haematobium* infection, a parasitic infection associated with exposure to the Cavu river in Southern Corsica, France. Eleven cases have been confirmed in people from France and Germany, visiting the river between 2011 and 2013. Four of the six confirmed cases in France were children. PHE and NaTHNaC urge anyone who visited, and swam or waded in the Cavu river between June and September in 2011 to 2013, to contact their GP so they can be screened for the infection and receive treatment if required. For more information see the PHE [press release](#).

Protect yourself with online UV updates

Ultraviolet (UV) radiation measurements from a string of monitors right across the UK can now be viewed online. Radiation experts at PHE's Centre for Radiation, Chemical and Environmental Hazards have been measuring UV radiation at a number of sites since 1990. Now it has launched public access to regularly updated data from the monitors, from Camborne in Cornwall to Lerwick in the Shetland Islands. The information can be viewed from the [Defra website](#). For more information see PHE's [press release](#).

Standardised packaging of tobacco consultation announced

PHE has welcomed the Government's [announcement](#) last week of its consultation on standardised packaging of tobacco. The UK wide [consultation](#) will run for six weeks, closing on 7 August. In April this year Sir Cyril Chantler published his independent review into whether the introduction of standardised packaging is likely to have an effect on public health, particularly for children. The review concluded that if standardised packaging were introduced, it would have a positive impact on public health. PHE made a [submission](#) to the Chantler review in January 2014.

NHS Health Check up by 9.5% in 2013 to 2014

More people than ever before are accepting the offer to attend an NHS Health Check, according to figures from PHE. Last year in England over 1.3 million people took up the offer, which aims to identify those at risk of serious but potentially avoidable conditions such as diabetes and heart disease. With the prevalence of diabetes at an all-time high, the potential benefits of the programme, which range from treatment to lifestyle advice, are obvious. Out of the eligible population 2,824,726 people across all 152 local authorities in England were offered, and 1,382,864 people have had, an NHS Health Check between April 2013 and April

2014, a 9.5% increase compared to the previous year. An [interactive map](#) presenting the latest NHS Health Check figures from all 152 upper tier local authorities in England is available. For more information see PHE's [press release](#) and [news story](#).

Dangers of eating undercooked chicken

Data from PHE shows that since the year 2000 there have been 1,595 people affected in outbreaks of food poisoning caused by the bacteria campylobacter. These were all associated with the consumption of poultry products and of these 1,282 (80%) had reported eating chicken liver dishes. For more information see PHE's [press release](#).

PHE business plan published for 2014 to 2015

PHE has published its [Business Plan for 2014 to 2015](#) which sets out the organisation's core functions, outlines the key steps and actions it will be taking over the next year to protect and improve the public's health and reduce inequalities, and highlights some of its achievements in its first year. The business plan comes as PHE welcomes the government's [response to the Health Select Committee](#) and its first [remit letter](#), which confirms the role that the government expects PHE to play in the health and care system, and ministers' expectations of PHE over the next year. The business plan aims to address both these. For more information see the PHE [news story](#).

PHE annual report and accounts for 2013 to 2014

PHE's [annual report and accounts](#) was laid before Parliament last week. The document summarises PHE's activities and accounts, as well as the progress made in our first year of operation, from April 2013 to March 2014. For the first time, health protection and health improvement have been united in one organisation with the potential to exploit the knowledge and expertise to maximum advantage in addressing the health challenges facing the nation.

'Don't just screen, intervene': improved guidance to improve the health of people living with a mental illness

PHE, NHS England, NHS Improving Quality and the National Audit of Schizophrenia have co-produced the [Lester UK adaptation of the positive cardiometabolic health resource guidance](#) for healthcare and public health professionals to help improve the physical health of people with mental illness. The updated Lester Tool is a downloadable resource designed to be used in a range of healthcare settings to

improve screening and to ensure a person's physical and mental health condition are jointly addressed. For more information see the PHE [news story](#).

PHE confirms advice on heated birthing pools after Legionnaires' disease case in baby

PHE has confirmed its advice suspending the use of heated birthing pools filled in advance of labour in home settings. On 17 June 2014 PHE and NHS England temporarily advised against the home use of birthing pools with built-in heaters and recirculation pumps, potentially filled up to two weeks in advance of the birth. This followed a case of Legionnaires' disease identified in a baby born in this specific type of birthing pool at home. Samples taken from the heated birthing pool used confirmed the presence of legionella bacteria, which cause Legionnaires' disease. Further investigations have been carried out and based on an assessment of the available evidence, PHE has now confirmed the provisional advice. This means that PHE recommends that heated birthing pools (incorporating both a re-circulation pump and heater), filled in advance of labour, should no longer be used for labour or birth, in the home setting. The majority of birthing pools used at home are filled from domestic hot water systems at the time of labour; these birthing pools do not pose the same risk and are excluded from this alert. For more information, see PHE's [press release](#).

High activity in a low flu season

Low levels of influenza activity were seen in the community in the UK in 2013 to 2014, according to the PHE [annual flu report](#) published this month. The 2013 to 2014 season was dominated by the flu A H1N1 2009 virus, with flu A H3N2 and very low levels of flu B also circulating. Although influenza activity overall was low, admissions to hospital and intensive care were observed, with peak intensive care unit and high dependency unit numbers higher than seen during 2012 to 2013 and a similar total number reported. [Vaccine uptake reports for 2013 to 2014](#) are also now available. For more information see PHE's [news story](#).

Child flu vaccine pilot has positive impact

Initial results of the uptake and impact of the child flu vaccine pilot programme launched last year by PHE and NHS England are encouraging, according to an article published in [Eurosurveillance](#). As a first step in the extension of the programme, last year all children aged two and three years were offered flu vaccination, while children aged between four and 11 years old were vaccinated in seven pilot areas in England in 2013 to 2014. Despite the low flu activity in 2013 to

2014, early results, although statistically non-significant, suggest a positive impact. For more information see PHE's [press release](#).

Dental health guidance recommends a healthy lifestyle to help protect oral health

PHE has published the third edition of [Delivering better oral health: an evidence-based toolkit](#) for intervention to support dental teams in improving their patient's oral health. The guidance highlights the positive impact a healthy lifestyle has on oral health, in particular the role played by good tooth brushing habits and a healthy diet, along with stopping tobacco use and reducing alcohol consumption to within the lower risk guidelines. For more information see PHE's [press release](#).

Chlamydia screening programme publishes seventh edition of its Standards

PHE has published the seventh edition of the [National Chlamydia Screening Programme Standards](#), an evidence-based and cost-effective approach to delivering chlamydia screening. The document outlines the minimum standards for local implementation and for use by commissioners and providers to form the basis for local screening plans.

Research findings from local conversations on health inequalities published

[Local conversations on health inequalities](#), a summary of research by the TNS BMRB research organisation, has been published. The work forms part of the national conversation on health inequalities programme, a PHE initiative to start a conversation about health inequalities, their cause and possible solutions. PHE commissioned TNS BMRB to undertake research with local communities to understand how the general public identify and describe health inequalities and to identify potential opportunities for innovation in communication and action.

Updated advice on MERS-CoV for pilgrims planning to travel to Umrah and Hajj

The Kingdom of Saudi Arabia has published general health advice and requirements for pilgrims planning to undertake the Umrah or Hajj this year. PHE and National Travel Health Network and Centre strongly urge all pilgrims planning to undertake these pilgrimages to refer to this updated advice in light of the on-going cases of Middle East Respiratory Syndrome coronavirus (MERS-CoV). As of 9 June 2014, the Kingdom Of Saudi Arabia has reported 700 cases of MERS, including 287

deaths, occurring mainly among residents. The risk to most travellers is still considered to be very low. For more information see PHE's [news story](#).

New study reveals the costs of low uptake of hepatitis C treatment

A new study from PHE published in the Journal of Hepatology has looked at the cost of increasing hepatitis C treatment uptake in England, and the impact this would have on disease burden. National estimates suggest that around 160,000 individuals are chronically infected with hepatitis C in England but just 28,000 people received treatment between 2006 and 2011. For more information see PHE's [press release](#).

New Commissioning for Value focus packs to help improve cardiovascular disease commissioning

PHE's National Cardiovascular Intelligence Network has published [cardiovascular disease \(CVD\) focus packs](#) as part of Commissioning for Value, a collaborative project between PHE, [NHS Right Care](#) and [NHS England](#). Clinical commissioning groups can use the packs to improve the value of their commissioned CVD services by identifying where to look across the pathway which patients take through the health system and what to change. For more information see PHE's [news story](#).

Uptake of the new shingles vaccine continues to improve

Preliminary data published by PHE shows sustained and improved uptake of the shingles vaccination since its introduction in September last year. The programme offers routine vaccination for those aged 70 years, and a catch-up campaign, which for the first year of the programme was targeted at 79 year olds. In the first eight months since the introduction of this programme, 54.8% of 70 year olds and 53.1% of 79 year olds have been vaccinated. This is an increase of 8.2% for the 70 year olds and 7.6% for the 79 year olds when compared to the previously published preliminary data up to the end of January 2014. For more information see PHE's [news story](#).

Specialist palliative care services lead to more deaths at home

Specialist palliative care services in the community are continuing to lead to more people being able to die at home, according to a new report from PHE and the National Council for Palliative Care. Latest figures from the new report, [National Survey of Patient Activity Data for Specialist Palliative Care Services](#), show that nearly half the people receiving specialist palliative care in the community died in

their own home – the place where most people say they want to die. This compares with just over one in five nationally. For more information see PHE's [news story](#).

PHE publishes new guidance on better oral health.

PHE has published new guidance for local authorities to help improve the oral health of children and young people. The guidance makes recommendations to help local authorities review and develop their oral health improvement strategies. The guidance, [Local Authorities Improving Oral Health: Commissioning Better Oral Health for Children and Young People](#) is based on the best evidence currently available and provides advice on a range of options that local authorities can consider, depending on the needs of their local populations. For more information see PHE's [news story](#).

Children getting burnt on unsupervised sunbeds

Half of all under-18s who have ever used a sunbed have been burned at least once, according to research presented at PHE's annual National Cancer Intelligence Network conference in Birmingham earlier this month. A national survey of more than 3,000 11 to 17 year-olds has shown the [ban on under-18s](#) from using sunbeds has reduced the number of children in Great Britain using them, with less than 5% now saying they have used sunbeds. The research, funded by Cancer Research UK and carried out by PHE and the University of the West of England, has found half of all underage sunbed users say they have been burnt at some point. For more information see Cancer Research UK's [press release](#).

Sexually transmitted infection risk in England is greatest in gay men and young adults

There were 446,253 sexually transmitted infections (STIs) diagnosed in England in 2013 which was close to the number for the previous year according to new PHE data. Chlamydia was the most common STI, making up 47% of all diagnoses, while gonorrhoea diagnoses were up 15% from 2012 to 2013. Among heterosexuals diagnosed in genitourinary medicine clinics in 2013, young people experienced the highest STI rates with 63% of chlamydia cases, 54% of genital warts, 42% of genital herpes and 56% of gonorrhoea. Gay men were also disproportionately affected, accounting for 81% of syphilis and 63% of gonorrhoea cases in male GUM clinic attendees. For more information see PHE's [press release](#).

Recent PHE Blogs

[The serum archive for emerging zoonoses](#) by Hilary Kirkbride (22 May 2014).

Zoonoses – diseases passed from animals to humans – have made up 75% of the new diseases discovered in the past 25 years. Dr Hilary Kirkbride, PHE consultant epidemiologist in zoonoses, talks about one of the new tools PHE is working on to track the emergence of these infections.

[Getting better all the time](#) by Don Sinclair, Helen Shaw and Dave Jephson (27 May 2014). PHE's Health Profiles tool gives those planning for the health of local people a rich dataset to draw from, but what goes into producing the annual update? The team behind the tool explains.

[Work is what you do, not where you do it](#) by Michael Brodie and Jenny Harries (28 May 2014). Work is what you do, not where you do it, but how can we use technology to facilitate that? PHE's finance and commercial director Michael Brodie and regional director for the south of England Dr Jenny Harries discuss how PHE is approaching this question.

[Towards a national model of workplace wellbeing](#) by Tony Vickers-Byrne (2 June 2014). On Wednesday 4 June PHE launched the new Workplace Wellbeing Charter standards for England. PHE's director of HR Tony Vickers-Byrne explains the background and rationale for the charter.

[Keeping fans healthy at the 2014 World Cup](#) by Geraldine Oliver (5 June 2014). Thousands of England fans jetted off to Brazil for the World Cup, but this huge country with variable climates presents a range of health risks. Geraldine Oliver from the National Travel Health Network and Centre discusses the advice offered to travellers.

[Beyond big data: Bringing people together to improve cancer outcomes](#) by Chris Carrigan (9 June 2014). The new National Cancer Registration Service has been referred to as "the largest single cancer database in the world." Chris Carrigan, PHE's director of the National Cancer Intelligence Network and information services, explains how partner organisations and patients are taking ownership of the project.

[Life expectancy continues to rise, but inequalities remain](#) by Charlotte Fellows, Allan Baker and Justine Fitzpatrick (11 June 2014). The relationship between social and economic inequalities, health and life expectancy is just one of the things the Public Health Outcomes Framework measures. Charlotte Fellows, Allan Baker and Justine Fitzpatrick from the PHOF team explain what the data is telling us.

[Saving lives with primary care data](#) by Julian Flowers and Claire Currie (12 June 2014). Primary care data potentially gives us a rich, complex and vast resource to improve public health, and sharing it should be a matter of urgency. That's the argument of PHE's Dr Julian Flowers and Claire Currie.

[The genomics of tuberculosis](#) by Christine McCartney (16 June 2014). How are new advancements in genomics changing the way the UK fights tuberculosis? PHE's director of microbiology services Christine McCartney explains.

[Creating an effective 'Platform' for partnership working](#) by Meng Khaw (23 June 2014). No one organisation can improve the public's health alone. PHE's director for the East Midlands Dr Fu-Meng Khaw discusses Platform, a unique health and wellbeing partnership operating in his region.

[Keeping music fans safe at Glastonbury](#) by Mark Salter (24 June 2014). If everything goes well you might never know that PHE had a presence at Glastonbury, but we were there. PHE's Mark Salter blogs about the work we do protecting health at festivals.

[Continuing the conversation about health inequalities](#) by Ann Marie Connolly (25 June 2014). Earlier this year PHE launched a National Conversation on Health Inequalities, the first stage of which culminated in the release of a toolkit to support frontline and local authority health workers to engage their communities on the topic. PHE's director for health inequalities Ann Marie Connolly reflects on the process that led us to this point.

[At the heart of it all: personalised care and population health](#) by Viv Bennett (26 June 2014). During the #PHPWeek week of action for healthcare professionals and in the lead-up to the annual public health nursing conference, director of nursing Viv Bennett discusses the past, present and future of public health and the role every type of healthcare professional can play in taking us forward.

People news

Knighthood for PHE Board member

Derek Myers, a member of PHE's Board since June last year, was knighted in the Queen's Birthday Honours list for his services to local government in London. Recently retired as joint chief executive at the Royal Borough of Kensington and Chelsea and London Borough of Hammersmith and Fulham, Sir Derek has played a leading role in the improvement and efficiency of public services at local, regional and national levels over the last 30 years.

PHE director to be chief scientist at the European Centre for Disease Prevention and Control

Professor Mike Catchpole, director of the Centre for Infectious Disease Surveillance and Control at PHE, will be taking up the role of chief scientist at the European Centre for Disease Prevention and Control in the autumn. He has worked in infectious disease epidemiology and response at national and international level since 1991.

New award for excellence in public health

The Royal Society for Public Health is launching a new [Public Health Minister's Award](#) to recognise excellence in public health. The award is established by Jane Ellison MP, to recognise excellence in public health, and will recognise teams or organisations who have demonstrated excellence and innovation in improving the health of their workforce. The deadline for nominations is 18 July 2014.

Campaigns news

Change4Life and Disney announce national partnership

Change4Life and Disney are to join forces on a major new campaign to encourage children to meet the minimum of 60 minutes of moderate to vigorous exercise they need every day. They aim to get the country moving for an additional 100 million minutes over the summer. As part of this campaign, Disney is providing its characters to feature alongside recognisable Change4Life animations to create exclusive content for schools, TV, print and online media and for face-to-face events with the aim of inspiring children to do a number of extra 10 minutes of activity per day. For more information, see PHE's [press release](#).

South West skin cancer pilot campaign as figures reveal that one in four do not survive melanoma beyond five years

A skin cancer pilot is running in the PHE Devon, Cornwall and Somerset area focusing on encouraging earlier detection of skin cancer and will continue until late July 2014. The main message of the campaign is “a change to a mole isn't the only sign of skin cancer – if you notice any unusual or persistent changes to your skin, go to your doctor”. The campaign targets men and women aged 50 and over, as latest published national figures by the Office for National Statistics show that around three quarters of new cases of malignant melanoma are in this group. Men are a particular focus as male mortality rates are higher. The number of new cases of skin cancer diagnosed in the area, given the size of the population, is double the England average and latest figures reveal that of those in the area diagnosed with melanoma one in four do not survive beyond five years. For more information see PHE's [press release](#).

Marketing team award success

PHE's marketing team have received two gold, one silver and two bronze national awards from the [Institute of Promotional Marketing](#) for Stoptober and Be Food Smart campaigns, and a gold award in the [Public Sector Communications Excellence Awards](#) for the Be Clear on Cancer campaign.

A further phase for 'Blood in Pee' campaign

PHE, in partnership with the Department of Health and NHS England, has announced that the next national Be Clear on Cancer campaign will be a further phase of “Blood in Pee”, to take place in the autumn. A [joint letter](#) outlines campaign plans and provides links to Be Clear on Cancer campaign impact evaluations.

News from other organisations

Mapping Health and Wellbeing Boards' priorities

An [interactive map](#) highlighting the priorities of all health and wellbeing boards across England is now available. By selecting a theme, for example smoking or healthy living, the map will highlight all areas citing it as one of their health and wellbeing priorities. By signposting similar priorities adopted by health and wellbeing boards, opportunities for learning and sharing experience can be identified. Selecting a single area on the map allows viewing a summary of the local priorities to be viewed. A link to the latest Health Profile from PHE for the area is also provided.

Improving eye health and reducing sight loss – a call to action

NHS England is inviting patients, professionals and the public to have their say on the [provision of eye health services](#) by reviewing the current system to inform and develop a long-term sustainable plan. The consultation will run until 12 September 2014.

NICE briefing on HIV testing for local government

A new [briefing](#) from the National Institute for Health and Care Excellence (NICE) for local authorities and partner organisations – who are responsible for providing and funding sexual health services – will help to make sure that HIV testing and prevention is tailored to local need. The aim is to promote testing to treat more people with the virus, benefiting patients and people at risk, and saving local authorities money.

NICE has produced new online tools to tackle [alcohol misuse](#) and [physical inactivity](#). The return on investment tools aim to help local authorities to judge the health and economic gains that can be created by placing greater focus on prevention rather than cure. NICE has also published [public health guidance](#) for commissioners and other health professionals on the provision of effective multi-component lifestyle weight management services for adults who are overweight or obese.

Events news

PHE annual conference 2014

PHE's second annual conference will be held on 16-17 September 2014 at Warwick University and will include a keynote address by Jeremy Hunt, Secretary of State for

Health and another by Simon Stevens, chief executive of NHS England. Booking details and the full programme can be found on the [conference website](#).

PHE Board's next open meeting

The eighth open meeting of PHE's Board will take place on 24 September 2014, from 11.00am to 3.00pm, in London. The meeting will include a panel discussion on antimicrobial resistance with external experts. Meeting [details](#), including board papers for earlier meetings and information on future board meetings, are available online.