

### **Health Protection Report**

weekly report

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#### **News**

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### Malaria imported into the UK, 2014

Public Health England has published its annual malaria report for the UK for 2014 [1]. In 2014, 1586 cases of imported malaria were reported in the UK, 5.7% higher than reported in 2013 (1501) and just 0.25% below the mean number of 1590 cases reported between 2004 and 2013. The majority of cases (74%) continue to be caused by, the potentially fatal, *Plasmodium falciparum* parasite.

Of those with travel history/country of residence information available (1264/1586, 80%), the majority of malaria cases reported in the UK were UK residents who had travelled abroad (1000/1264, 79%), with most having travelled to visit friends and relatives in West Africa.

Three deaths from malaria were reported in 2014 compared to seven in 2013, all from falciparum malaria acquired in Nigeria.

This latest report shows that malaria remains an important issue for UK travellers, particularly for those of African or Asian ethnicity who are non-UK born and going to visit friends and family in their country of origin. Failure to take chemoprophylaxis is associated with the majority of cases. Those providing advice should engage with these population groups wherever possible, including using potential opportunities to talk about future travel plans outside a specific travel health consultation, such as during new patient checks or childhood immunisation appointments [2].

The PHE Advisory Committee on Malaria Prevention guidelines [3] and resources available from the National Travel Health Network and Centre should also assist clinicians in helping travellers to make rational decisions about protection against malaria.

Useful resources for travellers, including translated advice leaflets, are also available via the PHE Malaria: Guidance, Data and Analysis health protection collection webpage [4].

#### References

- 1. PHE (12 June 2015). Malaria imported into the United Kingdom: 2014: implications for those advising travellers.
- 2. PHE Migrant Health Guide (online).
- 3. Chiodini PL, Field VK, Whitty CJM and Lalloo DG. Guidelines for malaria prevention in travellers from the United Kingdom.
- 4. PHE health protection collection webpage. Malaria: guidance, data and analysis.

#### MERS-CoV in South Korea

The largest outbreak of Middle East respiratory syndrome coronavirus (MERS-CoV) outside the Arabian Peninsula has led PHE to temporarily add South Korea to the list of affected countries in its management algorithms.

The outbreak in South Korea followed the importation of a confirmed case who acquired their infection in the Middle East, with subsequent limited person-to-person transmission in health care settings.

PHE advice for health professionals for the management of suspect cases returning from affected countries includes primary care and public health investigation algorithms. These state that in cases where "a history of travel to, or residence in [the respective countries is indicated] in the 14 days prior to symptom onset" further clinical risk assessment, management and/or microbiological testing may be appropriate [1,2].

The updating of advice for health professionals follows the notification to WHO during the past month of an escalating number of confirmed cases in South Korea (125 as at 12 June [3]).

Despite the change to the testing algorithms, the implications of the South Korean outbreak for UK travellers is minimal. PHE's latest risk assessment [4] notes that: "Although the MERS-CoV cluster in South Korea is the largest that has so far been observed outside of the Arabian Peninsula, the cluster remains limited to patients, visitors to patients and healthcare workers in a few healthcare facilities, and close relatives of the cases. The outbreak does not represent an increased risk of infection for travellers or visitors to South Korea."

Current PHE guidance is therefore that testing is now recommended for suspect cases hospitalised with an acute respiratory illness with a history of travel to the following countries:

- Bahrain
- Iraq
- Iran
- Jordan
- Kingdom of Saudi Arabia
- Kuwait
- Oman
- Qatar
- South Korea
- United Arab Emirates
- Yemen

Further related information is available via the PHE MERS-CoV Clinical Management and Guidance health protection collection webpage [4].

#### References

- 1. PHE (9 June 2015). Primary care initial management and assessment algorithm (MERS-CoV or avian influenza A).
- 2. PHE (9 June 2015). Public health investigation and management algorithm.
- 3. WHO MERS-CoV webpages.
- 4. PHE. Middle East respiratory syndrome coronavirus (MERS-CoV): clinical management and guidance.

## Guidance for cardiothoracic surgery providers on mycobacterial infections

Public Health England in partnership with the Society for Cardiothoracic Surgery and the Association of Cardiothoracic Anaesthetists have issued joint guidance for providers of cardiothoracic surgery in England following a field safety notice (FSN) regarding infection risks potentially associated with heater cooler devices used in cardiopulmonary bypass [1]. The manufacturer's FSN recommends enhanced decontamination procedures and/or removal from service of some contaminated machines, a measure with potential for significant disruption to cardiothoracic surgical services given the widespread use of this brand in the UK.

The FSN follows investigations in Switzerland, the Netherlands, Germany and the UK which have identified a small number of patients with post-surgical infection due to *M. chimaera*, potentially associated with contaminated heater cooler units [2,3].

PHE advice to hospitals includes a preliminary assessment of the potential additional infection risk posed by contamination of heater cooler equipment based on the 13 cases of mycobacterial infection identified to date in patients undergoing cardiothoracic surgery since 2007 [4]. Given the approximately 56,000 surgical procedures involving cardiopulmonary bypass performed on NHS patients in England annually, and the background risk of infection following this type of surgery, the additional risk posed by this threat appears to be very low. The Society for Cardiothoracic Surgery advises that the risk to patients of delaying surgery is likely to be significantly greater than the risk of infection in most cases.

The PHE advice recommends that – where patients develop endocarditis, surgical site infection or systemic illness suggestive of infection after cardiothoracic surgery – diagnostic testing for mycobacterial infection should be considered. The guidance also includes background information about the clinical and microbiological aspects of such investigations. All related documents are available via the 'Mycobacterial infections associated with heater cooler units' health protection collection webpage.

#### References

- PHE, Society for Cardiothoracic Surgery, Association of Cardiothoracic Anaesthetists (9 June). Mycobacterial infections associated with heater cooler units used in cardiothoracic surgery: advice for providers of cardiothoracic surgery.
- 5. Investigation of *M. chimaera* infection associated with cardiopulmonary bypass: an update, *HPR* **9**(18), 21 May 2015.
- 6. ECDC (30 April 2015). Invasive cardiovascular infection by Mycobacterium chimaera potentially associated with heater-cooler units used during cardiac surgery.
- Mycobacterial infections associated with cardiopulmonary bypass surgery, PHE news story, 11 June 2015.

### Infection reports / Enteric

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- Common gastrointestinal infections, England and Wales, laboratory reports: weeks 18-22/15
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- Suspected and laboratory-confirmed reported norovirus outbreaks in hospitals, with regional breakdown: outbreaks occurring in weeks 18-22/15

## General outbreaks of foodborne illness in humans, England and Wales: weeks 18-22/2015

Preliminary information has been received about the following outbreaks.

PHE Centre/ Health Protect'n Team	Organism	Location of food prepared or served	Month of outbreak	Number ill	Cases positive	Suspect vehicle	Evidence
North East	Salmonella Kedougou	Restaurant	May	75	23 Salmonella spp/ 8 Salmonella Kedougou	No food identified	D
West Midlands North	Salmonella spp, non-typhoidal or unspecified	Restaurant	May	14	Not known	Not known	N/k
Greater Manchester	Norovirus	Restaurant	May	26	Not known	Not known	N/k
South East Wales	Campylobacter	Other	May	8	6	Salad suspected	D

D = Descriptive epidemiological evidence: suspicion of a food vehicle in an outbreak based on the identification of common food exposures, from the systematic evaluation of cases and their characteristics and food histories over the likely incubation period by standardised means (such as standard questionnaires) from all, or an appropriate subset of, cases.

# Common gastrointestinal infections, England and Wales, laboratory reports: weeks 18-22/15

Laboratory reports	Number of reports received					Total reports	Cumulative total	
	18/15	19/15	20/15	21/15	22/15	18-22/15	1-22/15	1-22/14
Campylobacter	981	855	1181	1163	975	5155	21302	21082
Escherichia coli O157 *	10	15	14	11	14	64	136	203
Salmonella †	129	83	83	49	6	350	2220	1958
Shigella sonnei	15	11	16	22	20	84	443	436
Rotavirus	231	254	266	297	176	1224	3118	2981
Norovirus	218	150	126	93	75	662	4872	2849
Cryptosporidium	103	94	82	53	31	363	1319	1169
Giardia	82	74	68	59	357	1621	1416	

<sup>\*</sup>Vero cytotoxin–producing isolates: data from PHE's Gastrointestinal Bacteria Reference Unit (GBRU). † Data from GBRU.

# Salmonella infections (faecal specimens) England and Wales, reports to Public Health England (salmonella data set): April 2015

Details of 515 serotypes of salmonella infections recorded in April are given in the table below. In May 2015, 265 salmonella infections were recorded.

Organism	Cases: April 2015			
S. Enteritidis PT4	5			
S. Enteritidis (other PTs)	161			
S. Typhimurium	100			
S. Virchow	7			
Others (typed)	242			
Total salmonella (provisional data)	515			

Note: Following the introduction of a new laboratory reporting system (SGSS) in December 2014, direct comparisons with data generated by the previous system (LabBase2) may not be valid.

# Suspected and laboratory-confirmed reported norovirus outbreaks in hospitals, with regional breakdown: outbreaks occurring in weeks 18-22/15

The hospital norovirus outbreak reporting scheme (HNORS) recorded 72 outbreaks occurring between weeks 18 and 22, 2015, 69 of which (96%) led to ward/bay closures or restriction to admissions. Forty outbreaks (56%) were recorded as laboratory confirmed due to norovirus (see table). For the calendar year 2015 – between week 1 (January) and week 22 (week beginning 25 May) – 487 outbreaks were reported. Ninety-five per cent (461) of reported outbreaks resulted in ward/bay closures or restrictions to admissions and 69% (335) were laboratory confirmed as due to norovirus (see table).

### Seasonal comparison of laboratory reports of norovirus (England and Wales)

In the current season to date† (from week 27, 2014, to week 22, 2015), there were 7755 laboratory reports of norovirus. This is 9% lower than the average number of laboratory reports for the same period in the seasons between 2009/10 and 2013/2014 (8540, see table). The number of laboratory reports in the most recent weeks will increase as further reports are received.

Note: A new laboratory reporting system was commissioned on 1 December 2014; as a result, direct comparisons between the earlier report (based on LabBase2) and the new system (SGSS) may not be valid.

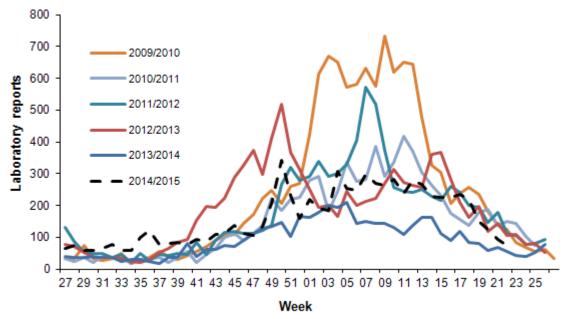
<sup>†</sup> The norovirus season runs from July to June (week 27 in year one to week 26 in year two) in order to capture the winter peak in one season.

Suspected and laboratory-confirmed reported norovirus outbreaks in hospitals, with regional breakdown: outbreaks occurring in weeks 18-22/2015 (and 18-22/2015)

Region/	Outbrea	ıks betweei 18-22/2015	n weeks	Total outbreaks 1-22/2015		
PHE Centre	Outbreaks	Ward/bay closure*	Lab- confirmed	Outbreaks	Ward/bay closure*	Lab- confirmed
Avon, Gloucestershire and Wiltshire	5	5	2	54	53	42
Bedfordshire, Hertfordshire and Northamptonshire	1	1	1	7	7	6
Cheshire and Merseyside	1	1	1	6	6	6
Cumbria and Lancashire	4	3	3	37	36	20
Devon, Cornwall and Somerset	25	25	18	101	101	74
Greater Manchester	1	1	-	15	12	8
Hampshire, Isle of Wight and Dorset	_	_	_	24	23	19
Lincolnshire, Leicestershire, Nottinghamshire and Derbyshire	-	_	-	18	17	14
London	_	_	-	4	4	1
Norfolk, Suffolk, Cambridgeshire and Essex	_	_	_	_	_	_
North east	4	4	2	42	39	26
Sussex, Surrey and Kent	1	1	-	15	15	12
Thames Valley	1		_	3	2	1
West Midlands	18	18	4	101	98	54
Yorkshire and the Humber	11	10	9	60	48	52
Total	72	69	40	487	461	335

<sup>\*</sup> Note: not all outbreaks result in whole wards closures, some closures are restricted to bays only.

## Current season's laboratory reports (to week 22, 2015) compared to previous seasons' weekly average (England and Wales)



## Calendar year 2015 (to week 22) norovirus laboratory reports compared to previous years' weekly mean (2010-2014)

