Public Health England

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Sexual Health Evidence Summaries launched

Public Health England has published two Evidence Summaries and two accompanying Leaders' Briefings providing the latest evidence on the impact and economics of addressing late HIV diagnosis through screening and testing [1], and opportunistic chlamydia screening of young adults in England [2].

The topics were selected given their priority as key sexual health indicators within the Public Health Outcomes Framework [3], which local areas are now delivering against. The documents, available online, are intended to support local authorities, public health leads, commissioners, providers and other parties with an interest in public health, and inform local sexual health and HIV service planning and provision.

The Evidence Summaries provide a full review of the latest evidence on feasibility, acceptability, effectiveness and cost-effectiveness of these testing strategies; with the hope that they will underpin public health leaders' planning and evaluation of local services.

The Leaders' Briefings address frequently asked questions and considerations for local action, and have been produced to assist public health leaders and commissioning staff when briefing senior accountable staff in local authorities.

Late diagnosis of HIV is the most important predictor of morbidity and one-year mortality. There were 6,360 new HIV diagnoses made in the UK in 2012; 47% (2,990) of which were diagnosed late (a point after treatment should have been initiated). A late HIV diagnosis can have adverse consequences on the individual; as life expectancy is near-normal and clinical outcomes improved if HIV is diagnosed and treated promptly, public health; as diagnosis can reduce onward transmission with treatment and support for behaviour change, and costs of HIV treatment and care; which are lower in individuals diagnosed earlier. The new publications outline the rationale for increased HIV screening and testing to address late HIV diagnosis, and collate the evidence for the feasibility and cost-effectiveness for introducing HIV screening and testing in different healthcare and community settings.

Untreated chlamydia infection can cause a number of complications, including: pelvic inflammatory disease, ectopic pregnancy and infertility in women; epididymitis (swelling of one of the tubes in the testicles) in men and conjunctivitis and pneumonia in babies born to mothers

with chlamydia. By diagnosing and treating asymptomatic chlamydia infections, chlamydia screening can reduce the duration of an infection, therefore reducing the chance of developing complications. The Evidence Summary and Leaders' Briefing provides available evidence on how the identification, diagnosis and treatment of chlamydia infections among young adults is expected to have an impact on the health of the population.

References

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Infection reports

Volume 8 Number 16 Published on: 25 April 2014

Immunisation

Laboratory reports of *Haemophilus influenzae* by age group and serotype: England and Wales, January to March 2014

In the first quarter of 2014 (January to March) there was a total of 206 laboratory reports of invasive *Haemophilus influenzae*. This represents an 8% increase in cases compared to the previous quarter (n=190) and a 7% decrease compared to the first quarter of 2013 (n=221).

Of the samples which underwent serotyping (n=163), 87% were non-capsulated *Haemophilus influenzae* (ncHi), a further 12% were serotype a, e, or f, and 1% were serotype b (Hib). There was a single case of Hib reported this quarter compared to 7 reported in quarter 1 of 2013 when; 82% of serotyped samples were ncHi, 14% were serotype a, e, or f, and 4% were Hib.

Age-group was well reported (Table). Of the laboratory reports during the first quarter of 2014: 80% were aged 15 years and over; 14% were under one year of age; 4% were among 1-4 year olds; and 2% were aged 5-14 years. There was an increase to 29 Hi cases in the under one year of age-group compared to 18 (8%) confirmed in the first quarter of 2013. This increase was largely due to 23 cases of ncHi .in infants <1 year of age compared to 10 in the first quarter of 2013. Cases of ncHi were similar or lower in all other age groups in Quarter 1 of 2014 relative to the first quarter of 2013.

During quarter 1 of 2014 there were no cases of Hib in children under 15 years. In comparison, during the first quarter of 2013 one case of Hib was reported in a child under 15 years.

Age distribution of laboratory-confirmed cases of *Haemophilus influenzae* by serotype England and Wales, first quarter 2014 (*and 2013*)

Serotype	**Total, all quarters 2014** *(2013)* **by age-group**					**Total, first quarter 2014***(2013)*
	<1y	**1-4y**	**5-14y**	**15+**	**nk**	
b	0 *(1)*	0 *(0)*	0 *(0)*	1*(6)*	0 *(0)*	**1***(7)*
nc	*23(13)*	7 *(6)*	*3(4)*	109*(119)*	0*(1)*	**142***(143)*
a,e,f	3 *(0)*	1*(1)*	0 *(0)*	16*(24)*	0 *(0)*	**20***(25)*
not typed	3*(4)*	1*(0)*	1 *(2)*	38*(40)*	0 *(0)*	**43***(46)*
Total	**29***(18)*	**9***(7)*	**4***(6)*	**164***(189)*	**0***(1)*	**206***(221)*

Laboratory reports of hepatitis A and C (England and Wales): October to December 2013

Laboratory reports of hepatitis A (England and Wales): October to December 2013

There were a total of 67 laboratory reports of hepatitis A reported to PHE during the fourth quarter of 2013 (October-December). This was a 19.6% increase on the number of reports during the third quarter of 2013 (n=56) and a 23.9% decline on the same quarter in 2012 (n=88).

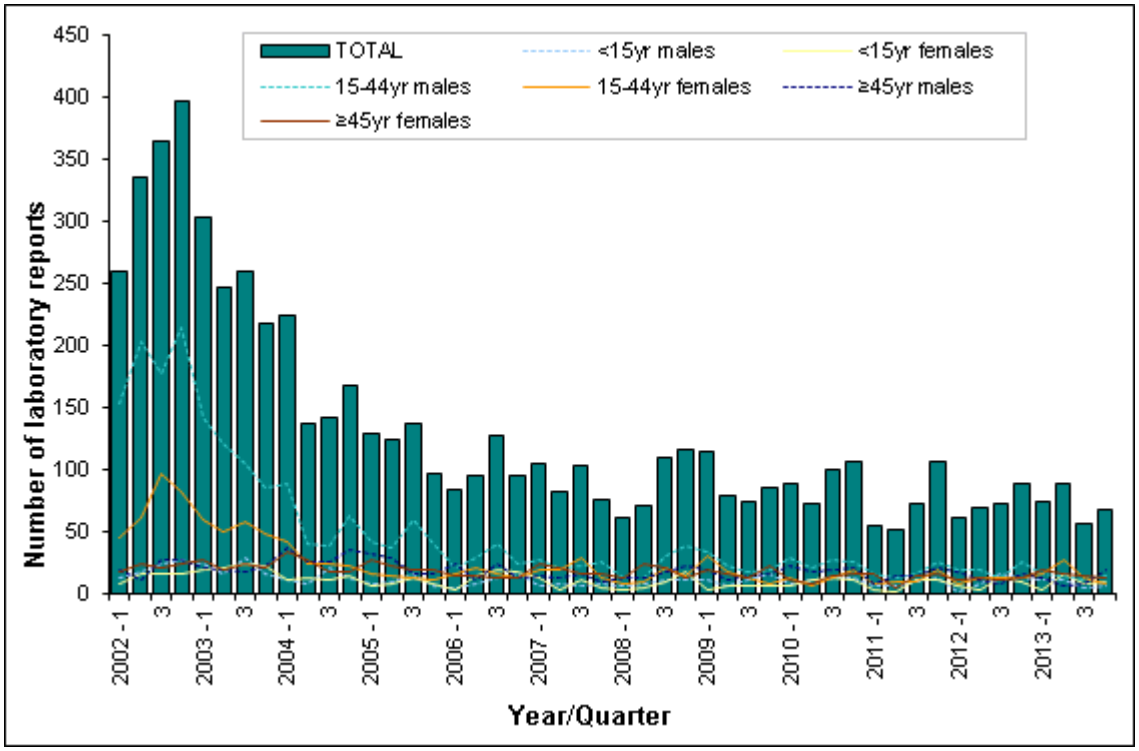
Age-group and sex were well reported (>98% complete). Thirty (45.5%) reports were among those aged over 44 years, a further 21 (31.8%) reports were from those aged 15-44 years and 15 (22.7%) reports were from the under 15 year age-group.

Males accounted for 57.6% of all reports. This varied by age-group; males accounted for 66.7% of the 15-44 years old age group and 60% of the over 44 years age-group, conversely females accounted 60.0% of the under 15 years age-group

Table 1. Laboratory reports of hepatitis A in England and Wales, October-December 2014

Age group	Male	Female	Unknown	Total
<1 year	0	0	0	**0**
1-4 years	0	1	0	**1**
5-9 years	3	6	0	**9**
10-14 years	3	2	0	**5**
15-24 years	5	3	0	**8**
25-34 years	6	2	0	**8**
35-44 years	3	2	0	**5**
45-54 years	6	4	0	**10**
55-64 years	4	4	0	**8**
≥ 65 years	8	4	0	**12**
Unknown	0	0	1	**1**
Total	**38**	**28**	**1**	**67**

Laboratory reports of hepatitis A by age group and sex (England and Wales), January 2002 to December 2013



Laboratory reports of hepatitis C (England and Wales), October to December 2013

There were a total of 2,757 laboratory reports of hepatitis C reported to PHE between October and December 2013. This was a 4.7% decline on the previous quarter (n=2,893), and a similar number of reports as the same quarter in 2012 (n=2,696).

Age-group and sex were well reported (>98% complete). Where known males accounted for 69.2% of reports (1,879/2,716), which is consistent with previous quarters. Adults aged 25-44 years accounted for 54.4% of the total number of hepatitis C reports.

Table 2. Laboratory reports of hepatitis C in England and Wales, October-December 2013

Age group	Male	Female	Unknown	Total
<1 year	3	4	0	**7**
1-4 years	1	1	0	**2**
5-9 years	2	1	0	**3**
10-14 years	3	1	0	**4**
15-24 years	59	59	3	**121**
25-34 years	457	247	11	**715**
35-44 years	571	196	12	**779**
45-54 years	501	186	8	**695**
55-64 years	212	89	3	**304**
≥65 years	62	51	1	**114**
Unknown	8	2	3	**13**
Total	**1,879**	**837**	**41**	**2,757**

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Infection report (Travel health)

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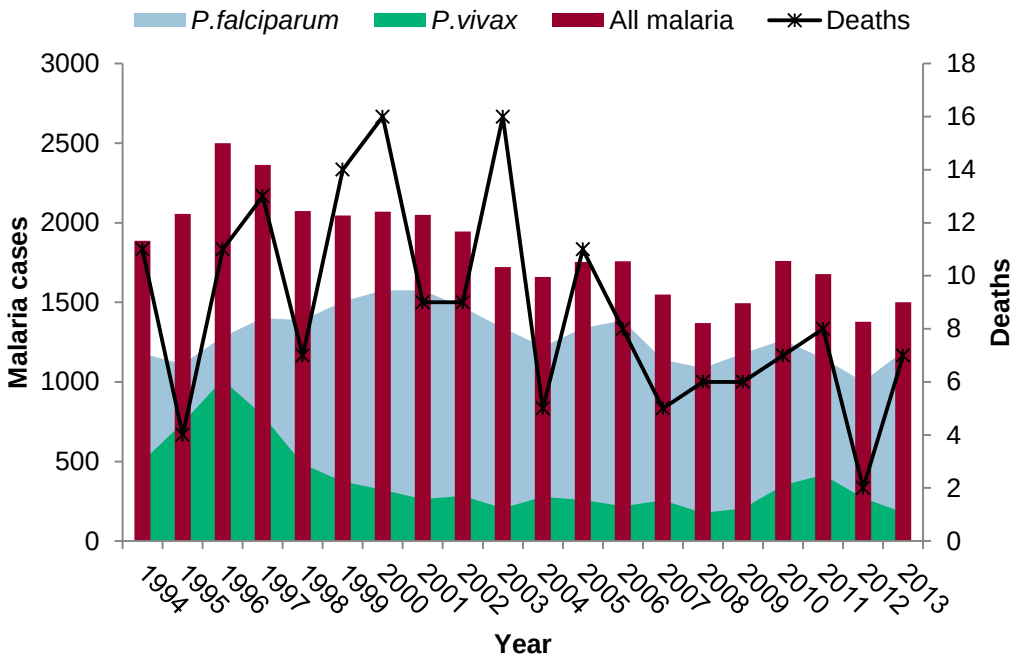
Malaria imported into the United Kingdom in 2013: Implications for those advising travellers

This article presents data on malaria imported into the United Kingdom (UK) in 2013, based on figures reported to the Public Health England (PHE) Malaria Reference Laboratory (MRL) on behalf of all UK countries. For details on methods of data collection for malaria see *Imported malaria and high risk groups* [1]. Data analysis was conducted by the PHE Travel and Migrant Health Section.

Figure 1. Cases of malaria in the United Kingdom (including deaths): 1994– 2013



In 2013, 1501 cases of malaria were reported in the UK (1412 in England, 59 in Scotland, 22 in Wales and 8 in Northern Ireland), 9% higher than 2012 but 5.6% below the average number of cases reported each year between 2004 and 2013.

Seventy-nine percent of malaria cases in 2013 (compared with 73% in 2012) were caused by (the potentially fatal) *Plasmodium falciparum* and this high proportion of falciparum malaria reflects the fact that most malaria imported to the UK is acquired in Africa. The proportion due to vivax malaria continued to fall back from a rise in recent years (179 in 2013, compared to 271 reported in 2012 and 416 in 2011) [Figure 1].

Age/sex

Age and sex were known for 1496 cases; of these two-thirds (990) were male, consistent with previous years. Males dominated all age groups except the 0-4 years group [Figure 2]. The median age was 37 years (38 for males, 37 for females). Those aged 16 years and under accounted for 11% of all cases.

Figure 2. Cases of malaria in the United Kingdom by age and sex: 2013

Geographical distribution

Table 1.Cases of malaria in the United Kingdom by geographical distribution: 2013 and 2012

Geographical Area	2013	2012	% change
London PHEC	785	676	16%
London - North East & North Central HPT	258	257	0%
London - North West HPT	122	107	14%
London - South East HPT	298	224	33%
London - South West HPT	105	88	19%
London - unknown HPT	2	-	
West Midlands PHEC	91	104	-13%
Yorkshire and Humber PHEC	88	75	17%
Greater Manchester PHEC	70	74	-5%
South Midlands and Hertfordshire PHEC	53	57	-7%
Sussex, Surrey and Kent PHEC	61	46	33%
Anglia and Essex PHEC	55	42	31%
Thames Valley PHEC	41	38	8%
Avon, Gloucestershire and Wiltshire PHEC	40	34	18%
Wessex PHEC	35	34	3%
Cheshire and Merseyside PHEC	15	45	-67%
East Midlands PHEC	35	23	52%
Cumbria and Lancashire PHEC	24	18	33%
Devon, Cornwall and Somerset PHEC	13	20	-35%
North East PHEC	6	10	-40%
England total	**1412**	**1296**	9%
Scotland	59	53	11%
Wales	22	22	0%
Northern Ireland	8	6	33%
Other UK territory	-	1	
UK Total	**1501**	**1378**	9%

PHEC: Public Health England Centre; HPT: Health Protection Team

London continues to report the largest proportion of cases in England (56%), with cases resident in South East London increasing by a third between 2012 and 2013. Similar increases were seen in Sussex, Surrey and Kent (33%), Anglia and Essex (31%), Cumbria and Lancashire (33%) and the East Midlands (52%) [Table 1].

Travel history

The breakdown of malaria cases reported by region of acquisition and parasite species is shown in Table 2. The majority of cases (where travel history is known) continue to be acquired in West Africa (65%), followed by East Africa (11%) and South Asia (10%). While it is important not to over-interpret changes in individual countries because numbers are low, cases acquired in Pakistan halved (70) compared with 2012 (141), possibly returning to baseline levels after a previous increase associated with flooding in 2010 and 2011. There has, however, been an 18% increase in cases acquired in Sierra Leone (185), following the 51% increase between 2011 (104) and 2012 (157). Similarly after seeing a fall in cases acquired in Nigeria since 2009, 460 cases were reported in 2013 representing a 23% increase compared to 2012 (373).There were two cryptic cases where there was no explanatory travel history or other source of infection identified.

Table 2.Cases of malaria in the United Kingdom by species and region of acquisition: 2013

Region of acquisition* [2]	*P. falciparum*	*P. vivax*	*P. ovale*	*P. malariae*	Mixed	**2013 Total**	2012 total
Western Africa	826	1	49	21	9	**906**	722
Eastern Africa	120	6	15	9	-	**150**	142
Southern Asia	6	134	-	-	-	**140**	221
Middle Africa	106	-	4	5	2	**117**	66
Northern Africa	28	-	-	2	-	**30**	32
Africa unspecified	24	-	4	1	-	**29**	21
South America	1	7	-	-	-	**8**	3
South-Eastern Asia	1	4	-	-	-	**5**	3
Oceania	1	2	-	-	-	**3**	4
Western Asia	-	1	-	-	-	**1**	1
Southern Africa	1	-	-	-	-	**1**	7
Cryptic	2					**2**	-
Not stated	78	24	6	1	2	**109**	147
Total	**1192**	**179**	**78**	**39**	**13**	**1501**	1378

P = Plasmodium

* Note that the region of acquisition in this table is based on the current United Nations World Region classification [2], which is a slightly different classification than used in previous HPR reports. Caution should therefore be exercised when comparing these data with data before 2012. Contact tmhs@phe.gov.uk for further information.

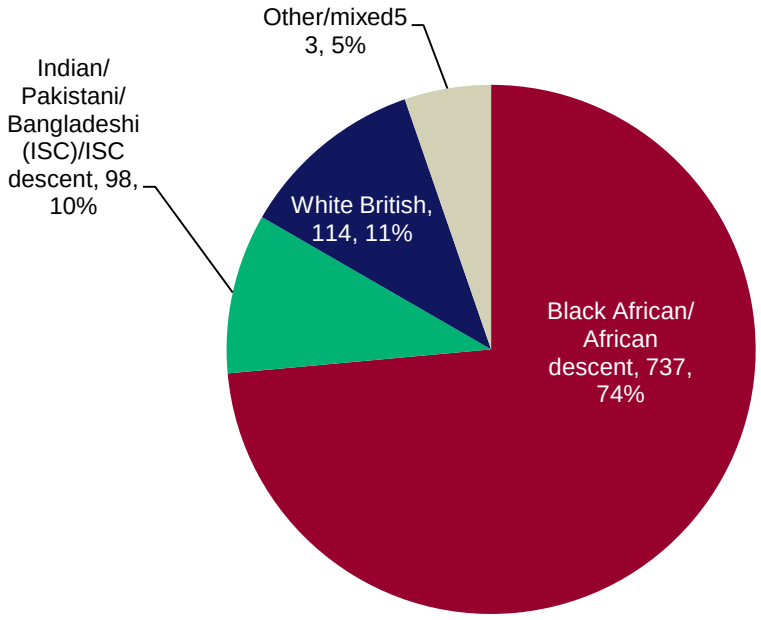
Seven deaths from malaria were reported in 2013, all from falciparum malaria acquired in western or eastern Africa. There is a small variation in the number of deaths from malaria in the UK every year but the total for 2013 is consistent with the annual average of 6.5 over the last 10 years.

Of those with travel history/country of residence information available (1257, 84%), the majority of malaria cases and deaths reported in the UK were UK residents who had travelled abroad (1045, 83%); 123 (10%) cases (no deaths) were new entrants (including UK expats and foreign students) and 89 (7%) cases (including one death) were foreign visitors to the UK.

For cases that travelled abroad from the UK, reason for travel was known for 832/1045 (80%). Of these, 681 (82%) had visited family in their country of origin, 102 (12%) travelled for business (including armed forces and civilian air crew) and 49 (6%) travelled for a holiday.

Ethnicity and country of birth for cases that travelled abroad from the UK

Figure 3. Ethnicity of malaria cases that travelled abroad from the UK: 2013 (N=1002)



The majority of malaria cases that travelled abroad from the UK were of Black African ethnicity or African descent (African descent is determined from other information about the patient if ethnicity is not given). Of cases of non-White British ethnicities with information about country of birth (527), 361 (90%) were non-UK born.

Chemoprophylaxis

Among patients with malaria who had travelled abroad from the UK, where the history of prophylaxis was obtained, 596/737(81%) had not taken prophylaxis. Of those that had taken some form of prophylaxis (141), 109 (84%) had taken a drug that is currently recommended by the PHE Advisory Committee for Malaria Prevention in UK Travellers (ACMP) for their destination [3]; however, this only represented 15% of the total cases with prophylaxis information. (Note that whether the cases had taken the drug regularly was poorly completed and should also be taken into consideration when interpreting these data.) Although these proportions are similar to the last 5-6 years, in the early 2000s the proportion of those who had not taken prophylaxis was much lower (48% in 2000, 41% in 2001). The proportion of the total cases with prophylaxis information that took a drug recommended by the ACMP has however remained between 12% and 16% since 2000.

These data imply that health messages about the importance of antimalarial prophylaxis are still not reaching groups who are at particular risk of acquiring malaria, e.g. those who are visiting family in their country of origin, particularly those of Black African ethnicity.

It seems likely that these groups are either not seeking or not able to access medical advice on malaria prevention before they travel, or they are not being given good advice, or they are not adhering to it; they may not perceive themselves to be at risk because the destination is familiar to them. Probably all these factors contribute. The burden of falciparum malaria in particular falls heavily on those of Black African ethnicity, and this group is important to target for pre-travel advice [4]. The PHE MRL is working with African Diaspora Action Against Malaria (ADAAM) to address this.

A recent analysis of malaria deaths over 20 years in the UK [5] has shown that, while African born travellers visiting family in their country of origin are at particular risk of acquiring malaria, once acquired the risk for mortality is significantly higher in those born outside Africa and travelling for other reasons

(e.g. holiday travellers). There is also a strong association between increasing age and mortality, so elderly travellers should also be considered a particular risk group.

Malaria reporting

There is some under-reporting of malaria cases in the UK. The most complete source of information about malaria in the UK comes from the PHE MRL surveillance data, which are used to inform the UK malaria prevention strategy [3]. Malaria is a notifiable disease and clinical and laboratory staff are also obligated under law to notify cases to their Proper Officer [6]; however, in 2013, only 12% of malaria cases reported to MRL were officially notified. A capture-recapture study estimated that the MRL surveillance system captured 56% of cases (66% for *P. falciparum* and 62% for London cases) [7]. Clinical and laboratory staff are therefore reminded of the need to notify cases they diagnose to the Proper Officer and to report all cases to PHE Malaria Reference Laboratory; a form for this purpose is available at www.malaria-reference.co.uk.

Prevention advice

Malaria, an almost completely preventable but potentially fatal disease, remains an important issue for UK travellers. Failure to take prophylaxis is associated with the majority of cases of malaria in UK residents travelling to malarial areas. The number of cases in those going on holidays is small but there is continuing evidence that those of African or Asian ethnicity who are non-UK born and going to visit family are at increased risk of malaria, as well as a number of other infections [8]. 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 [9].

The ACMP guidelines [3] and resources available from the National Travel Health Network and Centre (http://www.nathnac.org/) should assist clinicians in helping travellers to make rational decisions about protection against malaria.

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