Public Health England

Health Protection Report
weekly report

This is a PDF consolidation of the news items and infection reports published in HPRs 9(38) and 9(39), on 23 October and 6 November 2015, respectively

Volume 9 Numbers 38-39 Published on: **23 October and 6 November 2015**

Current News

Infection Reports

Immunisation *

Respiratory **

* Published in *HPR* **9**(38) on 23/10/2015.
** Published in *HPR* **9**(39) on 6/11/2015.

News

Volume 9 Number 38/39 Published on: **23 October and 6 November 2015**

HIV: new diagnoses, treatment and care in 2014

The number of people living with diagnosed HIV in the UK continues to rise, with 85,489 people seen for HIV care by the end of 2014. This reflects the longer life expectancy conferred by effective antiretroviral therapy (ART), ongoing HIV transmission and steady numbers of new diagnoses. Consistent with this, the age of people accessing care for HIV continues to increase with almost one in six now aged over 55. The ageing cohort of people living with HIV emphasises the importance of integrated care pathways to manage co-morbidities and other complications. These are among the findings to emerge from the recently-released official statistics on HIV in the UK in 2014 [1].

HIV specialist treatment and care in the UK remains excellent. Of all people attending for care in 2014, 91% were on ART, of whom 95% were virally suppressed and very unlikely to be infectious to others. This puts the UK ahead of time for two of the three ambitious UNAIDS "90/90/90 goals", which set a global target of 90% of people living with HIV being diagnosed, 90% diagnosed on ART and 90% viral suppression for those on ART by 2020.

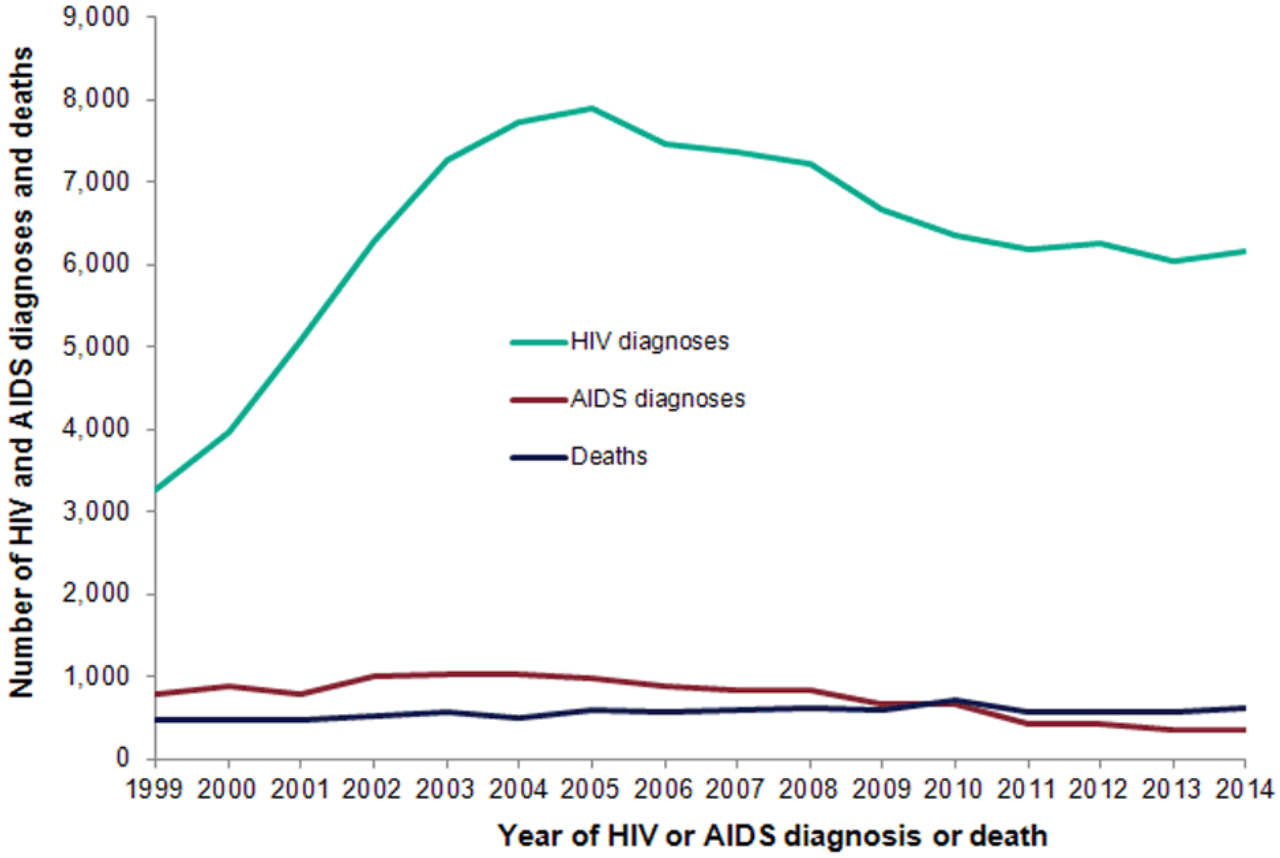
This year new evidence from clinical trials has demonstrated benefits for people with HIV who start ART before their CD4 count drops below 500 cells per cubic millimetre (pcm). These data have been reflected in the 2015 WHO [2] and UK BHIVA [3] treatment guidelines, both of which recommend starting ART as soon as possible after diagnosis. There has already been a trend towards earlier starting of ART in the UK, with 26% of all people initiating in 2013 having a CD4 count >500 pcm when starting treatment, up from 10% in 2009.

Of 85,489 people accessing HIV care in 2014, 41% lived in London. Seventy of 326 (21%) English local authorities had a diagnosed HIV prevalence above two per 1,000 in 2014, the threshold for expanded testing into general practice new registrants and hospital admissions. This included all but one London borough. There is an urgent need to increase HIV testing opportunities and uptake for people living in these areas, in line with national HIV testing guidelines [4,5,6].

Health inequalities, social risk factors and co-infections

A total of 6,151 people were newly diagnosed with HIV in the UK during 2014 (figure 1), according to the new PHE data [1]. Although a slight increase on 2013, this figure is in line with new diagnoses reported in recent years.

Figure 1. New HIV diagnoses, AIDS and deaths over time: 1999-2014

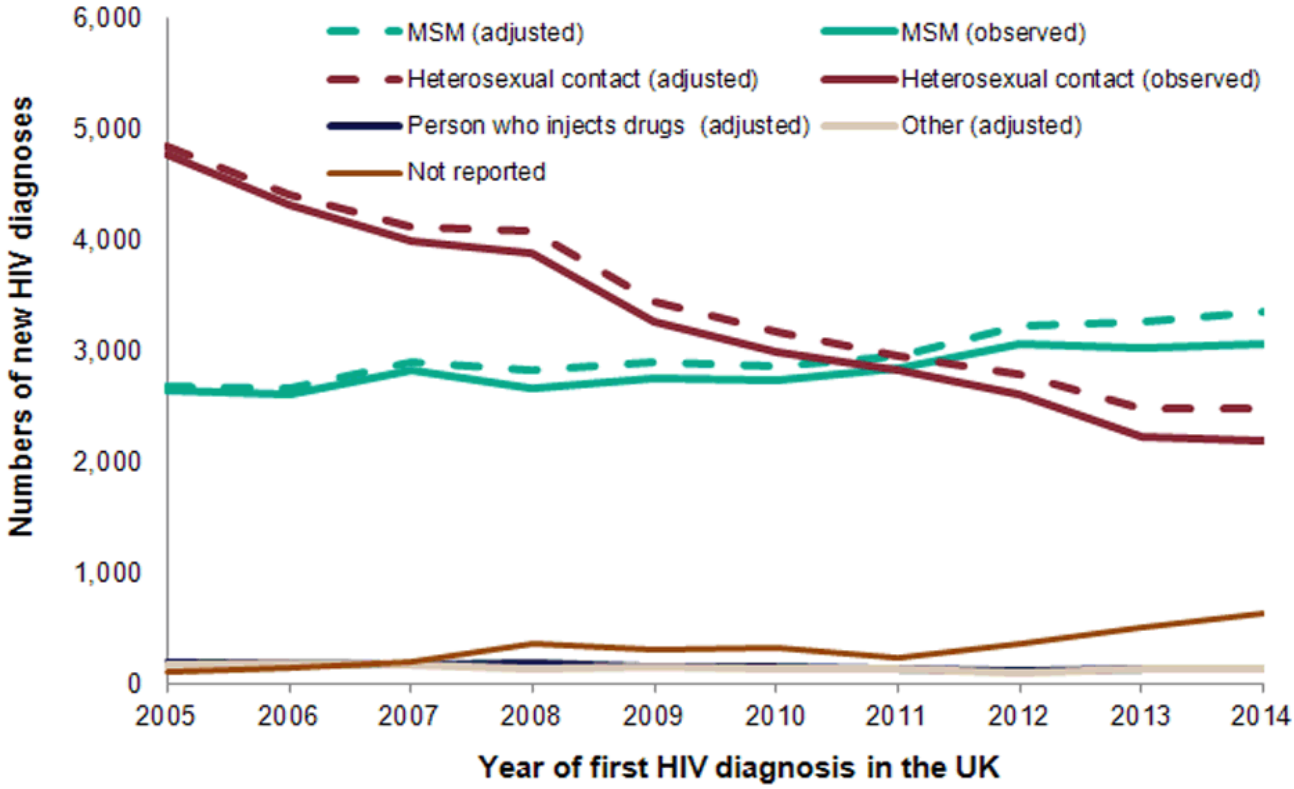


The number of men who have sex with men (MSM) newly diagnosed with HIV continued to rise from 2,860 men in 2010 to 3,360 men diagnosed HIV positive in 2014 (figure 2). New diagnoses acquired through heterosexual sex have declined over the same time period (3,440 to 2,490), largely due to a reduction in diagnoses among black African men and women (1,801 in 2010 to 1,044 in 2014).

Of all new HIV diagnoses acquired through heterosexual sex, the estimated proportion of those acquired in the UK has risen from 52% (1,646/3,183) in 2010 to 59% (1,460/2,490) in 2014, with the proportion of HIV diagnoses acquired in the UK among MSM stable over time at 76% (2,550/3,360).

A major challenge for the UK remains the timely diagnosis of HIV infection in order to start lifesaving ART and prevent onwards transmission of infection. Two out of five people newly diagnosed with HIV in 2014 had “late stage” HIV, evidenced by a CD4 count below 350. Whilst declining, this remains stubbornly and unacceptably high (56% in 2005). Being diagnosed late is associated with a ten-fold increased risk of death within one year of diagnosis. In 2014, 613 people with HIV died, most of who were diagnosed late, whilst 346 people were diagnosed with AIDS for the first time.

Figure 2. New HIV diagnoses by exposure group over time: 2005-2014



The number of children newly diagnosed with HIV annually in the UK has declined substantially in recent years from 131 in 2005 to 29 in 2014. About two-thirds of newly diagnosed children were born abroad and arrived in the UK at older ages. The UK continues to have a very low rate of mother-to-child transmission (MTCT). The overall vertical transmission rate from women diagnosed with HIV before delivery in the UK declined to below 0.5% by 2010/11, and current reports provide convincing evidence that these very low rates are being maintained.

A low and stable number of people (131/6,151 (2%)) acquired HIV through shared use of injecting drug equipment in 2014.

References

1. PHE (20 October 2015). HIV new diagnoses, treatment and care in the UK: 2015 report. (HIV in the United Kingdom official statistics webpage.)
2. WHO (September 2015). Guideline on when to start antiretroviral therapy and on pre-exposure prophylaxis for HIV.
3. BHIVA (2015). British HIV Association guidelines for the treatment of HIV-1-positive adults with antiretroviral therapy 2015.
4. PHE (2014). Addressing late HIV diagnosis through screening and testing: an evidence summary.
5. NICE (2014). HIV testing: guideline LGB21.
6. BHIVA, BASHH and BIS (2008). UK National Guidelines for HIV Testing 2008.

Eleventh annual review of infections among UK blood, tissue and organ donors and transfusion recipients

The NHSBT/PHE Epidemiology Unit's annual review, Safe Supplies: Uncovering Donor Behaviour, describes infections among blood, tissue, and organ donors and transfusion recipients during 2014 [1]. New to 2014's report are initial findings from the PHE UK blood donor survey [2] and, for the first time, platelet screening data for all UK blood services.

During 2014, almost 2.2 million blood donations were tested in the UK. There were 212 confirmed markers: syphilis (82), HBV (68), HCV (38), HIV (13), and HTLV (11). This is a rate of 9.7 confirmed positive donations per 100,000, a 4% decrease compared with 2013. New donors accounted for 8% of the donor population but 84% of the positives. Four acute and two occult HBV infections were reported. Occult HBV is not usually reported in the general population but is identified in blood donations as both serology and nucleic acid testing are used in screening. HBV and HCV infections are notified to local health protection teams (HPTs).

The donor survey showed that donor adherence to selection criteria is very high (99.3%) but each year a small number of non-compliant donors with markers of infection are observed. In 2014, there were eight of these donors: five of whom reported sex between men. This is the third full reporting year since the change in blood donor selection policy for men who have sex with men (MSM): from a permanent to a 12-month deferral. Although the data should be interpreted with caution, there is no evidence that this change has resulted in increased risk of a transfusion transmissible infection entering the blood supply.

New risk estimates for infectious but undetected infections suggest that testing will miss approximately one HBV infection every year, one HCV infection every 12 years and one HIV infection every three years.

HEV screening

During 2014, a local HPT initiated a blood service investigation following a report of a hospital patient with acute hepatitis E following transfusion which led to confirmation of a hepatitis E transfusion transmission. HEV screening will be implemented by the UK blood services in 2016 [3]. There were two near-miss cases of *Staphyloccus aureus* in platelet packs – vigilance of hospital staff before transfusion led to the discovery of clumps which allowed preventative action to be taken with associated packs.

During 2014, 3,825 organs from 1,241 deceased solid organ donors were transplanted in the UK. Testing of these donors for markers of infection revealed that Epstein-Barr virus (EBV) and cytomegalovirus (CMV) were detected in 93% and 52%, respectively, of donors for whom a test

result was available. Initial screening results were also obtained for: HBV core antibodies (33 donors); HBV surface antigen (3); HCV antibodies (12); *Toxoplasma gondii* (212); and treponemal antibodies (4). The Unit is currently working to quantify the risk of a transmission occurring through transplantation.

NHSBT also tested a total of 2,375 cord blood donors: two were reactive for markers of HCV infection and two for HTLV. Positive donors are referred for specialist advice, particularly on the risk of maternal HTLV transmission through breast feeding.

References

1. NHSBT/PHE Epidemiology Unit (November 2015). Safe supplies: uncovering donor behaviour: annual review.
2. Davison KL, Reynolds CA, Andrews N, Brailsford SR and on behalf of the UK Blood Donor Survey Steering Group (2015). Getting personal with blood donors – the rationale for, methodology of and an overview of participants in the UK blood donor survey. *Transfusion Medicine*, 25: 265–275.
3. Advisory Committee on the Safety of Blood, Tissues and Organs (SaBTO). Extraordinary meeting: Tuesday 7 July 2015.

Ebola virus disease: international epidemiology summary (at 1 November 2015)

As of 4 November 2015, a total of 28,622 clinically compatible cases of Ebola virus disease (EVD) (15,246 confirmed) have been reported associated the West African outbreak, 11,314 of which have died.

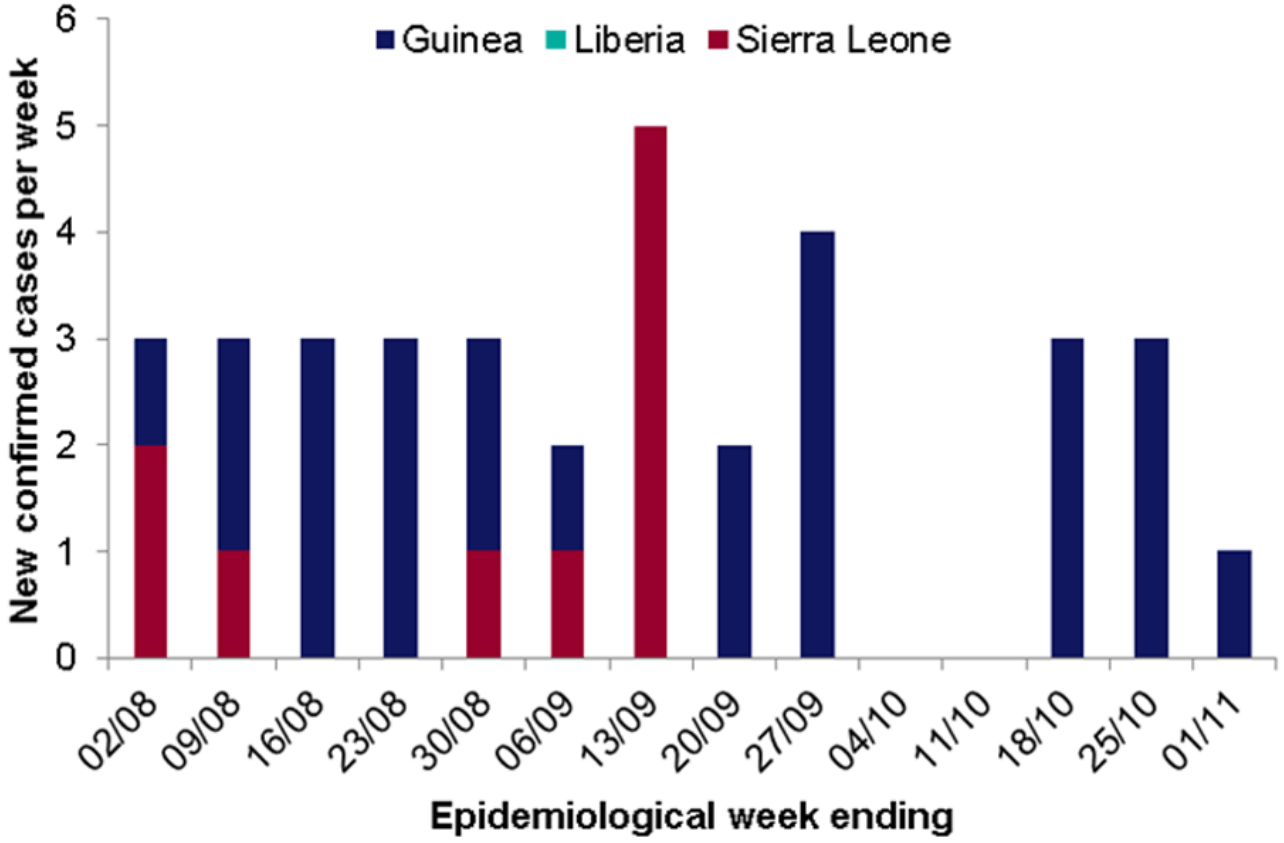
A total of seven confirmed cases were reported in October, all in Guinea, compared to 13 in the previous month (seven in Guinea, six in Sierra Leone). Case incidence in West Africa has now remained at five or fewer confirmed cases for 14 consecutive weeks.

Of the seven cases reported in Guinea in October, five were registered contacts and six were associated with the Forécariah branch of the recent Ratoma, Conakry chain of transmission. Although the remaining case was from the Ratoma area of the city, genomic analyses suggest he was not infected with the strain of Ebola virus responsible for the most recent cases in Conakry and Forécariah. Over 350 contacts remain under follow up in Guinea across Conakry and Forécariah, of which 141 are considered high-risk. In the past 42 days, one contact in Forécariah has been lost to follow up.

There have been no confirmed cases reported in Sierra Leone for seven consecutive weeks: so the country is set to be declared free of EVD transmission on 7 November [1].

A UK survivor of EVD was re-hospitalised on 6 October due to late EVD-related complications. She is being treated for viral meningitis caused by the persistence of the virus and is said to be in a serious but stable condition in hospital.

Number of new confirmed cases reported per week (25 October to 1 November 2015) in affected countries in West Africa



Data source: WHO Ebola Situation Report 4 November 2015.

Note [11/11/15]**:** *This report was based on the PHE Ebola Epidemiological Update (no. 60) of 6 November 2015, from which date the frequency of updates from PHE is reduced to monthly, in view of the stabilising epidemiological situation in West Africa.*

More frequent updates continue to be available from the WHO's Ebola Virus Disease Outbreak webpages.

Public Health England

Health Protection Report
weekly report

Infection Reports

Immmunisation *

- **Laboratory reports of hepatitis A and C (England and Wales): April-June 2015**
- **Laboratory reports of *Haemophilus influenzae* by age group and serotype, England and Wales, July-September 2015**
- **Invasive meningococcal disease (laboratory reports in England): 2014/2015 annual data by epidemiological year**

Respiratory **

- **Laboratory reports of respiratory infections made to CIDSC from PHE and NHS laboratories in England and Wales: weeks 40 to 44, 2015**

* Published in *HPR* **9**(38) on 23/10/2015.
** Published in *HPR* **9**(39) on 6/11/2015.

Infection reports / Vaccine-preventable infections

Volume 9 Number 38 Published on: 23 October 2015

Laboratory reports of hepatitis A and C (England and Wales): April-June 2015

Laboratory reports of hepatitis A in England and Wales (April-June 2015)

There were a total of 79 laboratory reports of hepatitis A reported to Public Health England (PHE) during the second quarter of 2015 (April-June 2015). This was a 14.1% decrease on the number of reports during the first quarter of 2015 (n=92) and a 33.9% increase on the same quarter in 2014 (n=59).

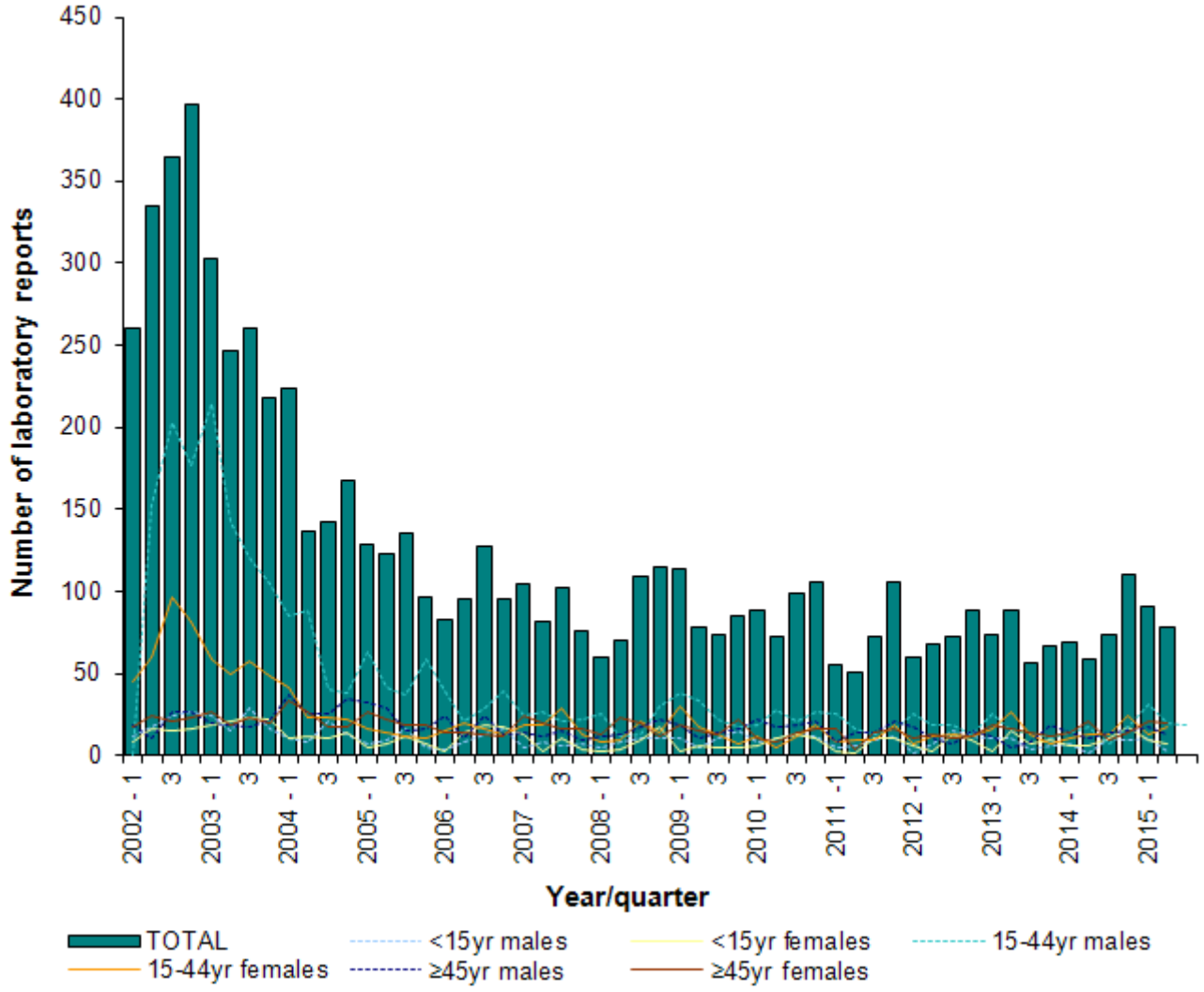
Age-group and sex were well reported (>98% complete). Thirty five (44.9%) reports were among those aged 15-44, a further 33 (42.3%) reports were among the over 44 years old-age group, and 10 (12.8%) reports were from the under 15 year age-group.

Males accounted for 43.6% of all reports. A similar proportion of males and females were reported in the 15-44 years age-group (44.3% males) and in the over 45 years old group (41.8% males). A considerably lower proportion of males (12.7% males) were reported in the less than 15 years age-group.

Table 1. Laboratory reports of hepatitis A in England and Wales, April to June 2015

Age group	Male	Female	Unknown	Total
<1 year	0	0	0	0
1-4 years	2	2	0	4
5-9 years	1	4	0	5
10-14 years	0	1	0	1
15-24 years	5	6	0	11
25-34 years	9	5	0	14
35-44 years	4	6	0	10
45-54 years	0	5	0	5
55-64 years	6	5	0	11
>65 years	7	10	0	17
Unknown	0	0	1	1
Total	**34**	**44**	**1**	79

Figure 1. Laboratory reports of hepatitis A by age and sex (England and Wales): 2002-2015

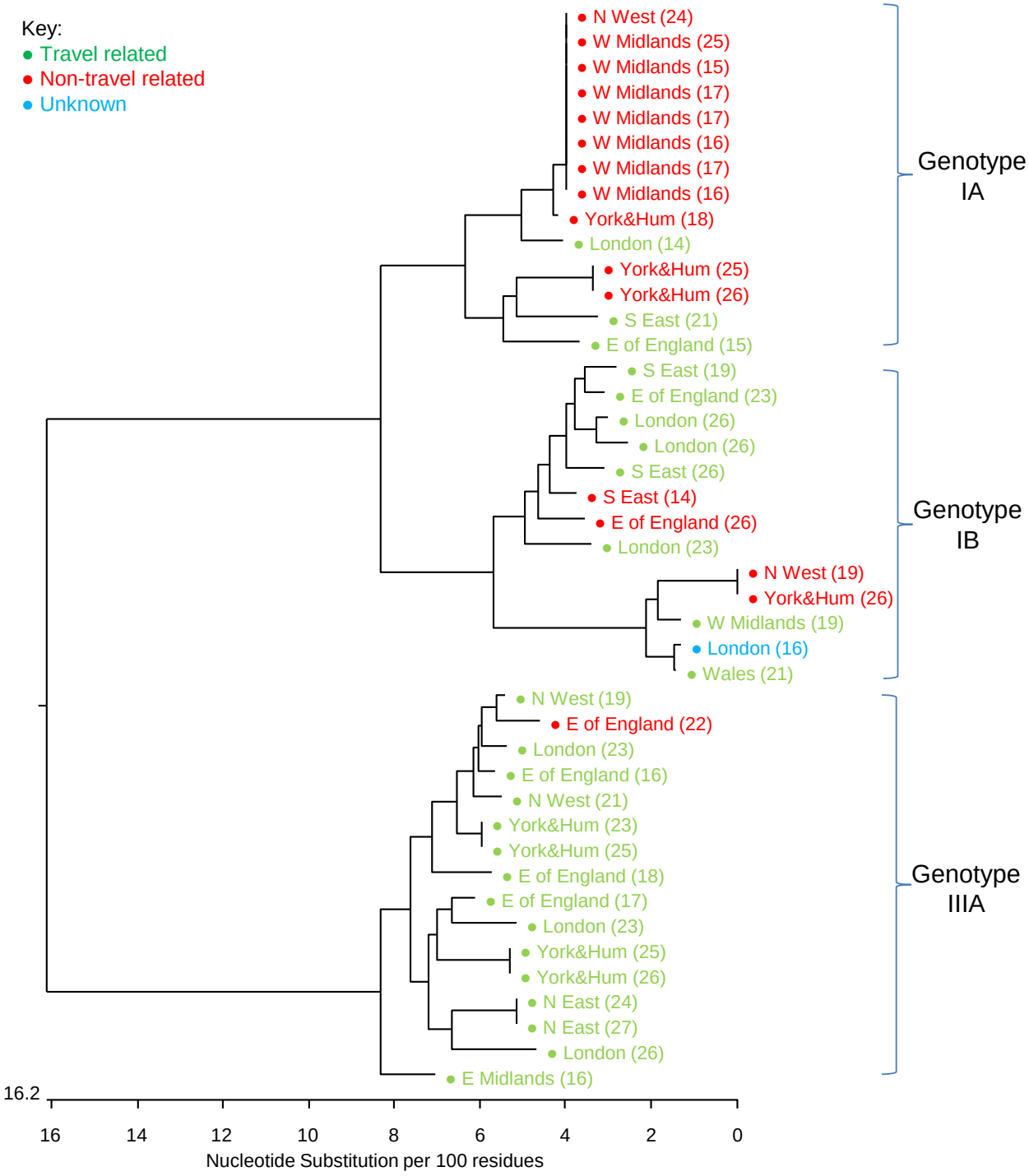


Reference laboratory confirmation and phylogeny of hepatitis A infection

Of the 79 patients notified as having acute HAV infection during the second quarter of 2015, 47 had samples forwarded to the Virus Reference Department for confirmation. Nineteen of the patients were not confirmed to have acute HAV infection. The remaining 28 patients were confirmed to have acute HAV infection. In addition 16 patients were confirmed to have acute HAV infection that had not been reported through the laboratory reporting system, with the exception of two they were all recorded on HPzone.

A total of 43 patients could be genotyped over this period; 14 were genotype IA (32.6%), 13 were genotype IB (30.2%) and16 were genotype IIIA (37.2%). Of these samples 26 were associated with travel (60.5%), 16 had no travel history (37.2%) and 1 had no information (2.3%). This information is presented as a phylogenetic tree. Each sequence is represented by a dot with the patient region and the week of sampling in brackets.

Figure 2. Phylogentic tree of genotype IA, IB, and IIIA sequences April to June 2015



Laboratory reports of hepatitis C in England and Wales (April-June 2015)

There were a total of 2,758 laboratory reports of hepatitis C reported to the PHE between April and June 2015. There was an 2.6% increase in the number of reported cases compared to the first quarter of 2015 (n=2,689), and a 2.5% increase on the same quarter in 2014 (n=2,690).

Age-group and sex were well reported (>98% complete). Where known males accounted for 68.7% of reports (1,876/2,732), which is consistent with previous quarters. Adults aged 25-44 years accounted for 49.9% of the total number of hepatitis C reports.

Table 1. Laboratory reports of hepatitis C in England and Wales, April-June 2015

Age group	Male	Female	Unknown	Total
<1 year	5	5	0	**10**
1-4 years	0	0	0	**0**
5-9 years	3	2	0	**5**
10-14 years	1	1	0	**2**
15-24 years	62	44	1	**107**
25-34 years	404	182	6	**592**
35-44 years	557	219	4	**780**
45-54 years	500	209	5	**714**
55-64 years	253	125	3	**381**
>65 years	86	69	1	**156**
Unknown	5	0	6	**11**
Total	**1876**	**856**	**26**	**2758**

Volume 9 Number 38 Published on: 23 October 2015

Laboratory reports of *Haemophilus influenzae* by age group and serotype (England and Wales): July to September 2015

In the third quarter of 2015 (July to September) there was a total of 113 laboratory confirmed cases of invasive *Haemophilus influenza* (Hi). This represents a 14% increase in the number of cases compared to the third quarter of 2014 (n=99). There were 191 cases in the second quarter of 2015.

Of the samples which underwent serotyping 82%, (n=93), 92% (n=86) were non-capsulated *Haemophilus influenzae* (ncHi), a further 6% (n=6) were serotype a, e or f, and 1% (n=1) were serotype b (Hib). The number of Hib cases has remained relatively stable with three cases in Q3 2014 and one case in Q3 2015. Total ncHi cases increased by 13% from 64 in 2014 to 86 in Q3 2014 accounting for 82% and 92% of cases in each period respectively. Cases of a, e, or f Hi fell from 11 in Q3 2014 to six in Q3 2015 accounting for 14% and 6% of typed cases respectively.

Age-group was well reported (see table). Of the 113 laboratory confirmed cases during the third quarter of 2015: 89% were aged 15 years and over; 5% were under one year of age, 4% were 1-4 years old, and 1% were among 5-14 year olds. Similarly, in the third quarter of 2014: 85% were aged 15 years and over; 4% were under one year of age, 7% were 1-4 year olds and 4% were among 5-14 year olds. There were nine ncHi cases among children aged under 15 years old during this period compared to 10 in the third quarter of 2014. Among those aged 15 years and over there was a 45% increase in ncHi case from 53 in Q3 2014 to 77 in Q3 2015.

During the third quarter of 2015, 90% of Hi cases in children under 15 years were ncHi (n=9/10). There were no cases of Hib in this age-group during this quarter. There were two cases of Hib during the third quarter of 2014; an infant who presented with tonsillitis and a five year old who presented with pneumonia; both children were unimmunised and made a full recovery. The most recent death in a child aged under 15 years attributed to invasive Hib disease was in 2011.

Age distribution of laboratory-confirmed cases of *Haemophilus influenzae* by serotype: England and Wales, third quarter 2015 (*and 2014*)

Serotype	Age-group					Total, third quarter 2015 *(2014)*
	<1y	1-4y	5-14y	15+	nk	
b	– *(–)*	– *(1)*	– *(1)*	1 *(1)*	– *(–)*	**1** *(3)*
nc	5 *(2)*	3 *(5)*	1 *(3)*	77 *(53)*	– *(1)*	**86** *(64)*
a,e,f	– *(1)*	1 *(1)*	– *(–)*	5 *(9)*	– *(–)*	**6** *(11)*
not typed	1 *(1)*	1 *(4)*	– *(–)*	18 *(20)*	– *(–)*	**20** *(21)*
Total	***6 (4)***	**5** *(7)*	**1** *(4)*	**101** *(83)*	**0** *(1)*	**113** *(99)*

Infection reports / Vaccine-preventable infections

Volume 9 Number 38 Published on: 23 October 2015

Invasive meningococcal disease (laboratory reports in England): 2014/2015 annual data by epidemiological year

This report presents data on laboratory-confirmed invasive meningococcal disease (IMD) for the last complete epidemiological year, 2014/2015 [1]. Epidemiological years run from week 27 in one year (beginning of July) to week 26 the following year (end of June). When most cases of a disease arise in the winter months, as for IMD, epidemiological year is the most consistent way to present the data when comparing years as the peak incidence may be reached before or after the year end. Using epidemiological year avoids the situations where a calendar year does not include the seasonal peak or where two seasonal peaks could be captured in a single calendar year.

In England, the national Public Health England (PHE) Meningococcal Reference Unit (MRU) confirmed 724 cases of IMD during 2014/2015. This was a 14% increase from the 636 cases reported in 2013/2014 (figure 1). In England, there has been an overall decline in confirmed IMD cases from 2,595 cases in 1999/2000 to 1,226 cases reported in 2005/2006. A large decline in incidence occurred in England following the introduction of immunisation against group C (MenC) disease in 1999 which reduced MenC cases by approximately 96% (to around 30 cases each year). The overall incidence of total IMD has continued to decrease over the past decade from two per 100,000 in 2005/2006 to one per 100,000 since 2011/2012 [2]; this latter decline was mainly due to secular changes in MenB cases.

Compared to 2013/2014, overall IMD incidence in 2014/2015 has remained stable at one per 100,000, however, small increases have been seen in toddlers (1-4 year-olds) and adolescents (15-24 year-olds) while the number of cases in infants (aged <1 year) has continued to decrease (figure 2). In 2014/2015, infants accounted for 18% of all IMD cases with an incidence of 19 per 100,000, followed by toddlers (22%; 6/100,000) and adolescents (15%; 2/100,000). Over a third (39%; 279/724) of all cases in 2014/2015 were reported between January and March 2015 (Q1).

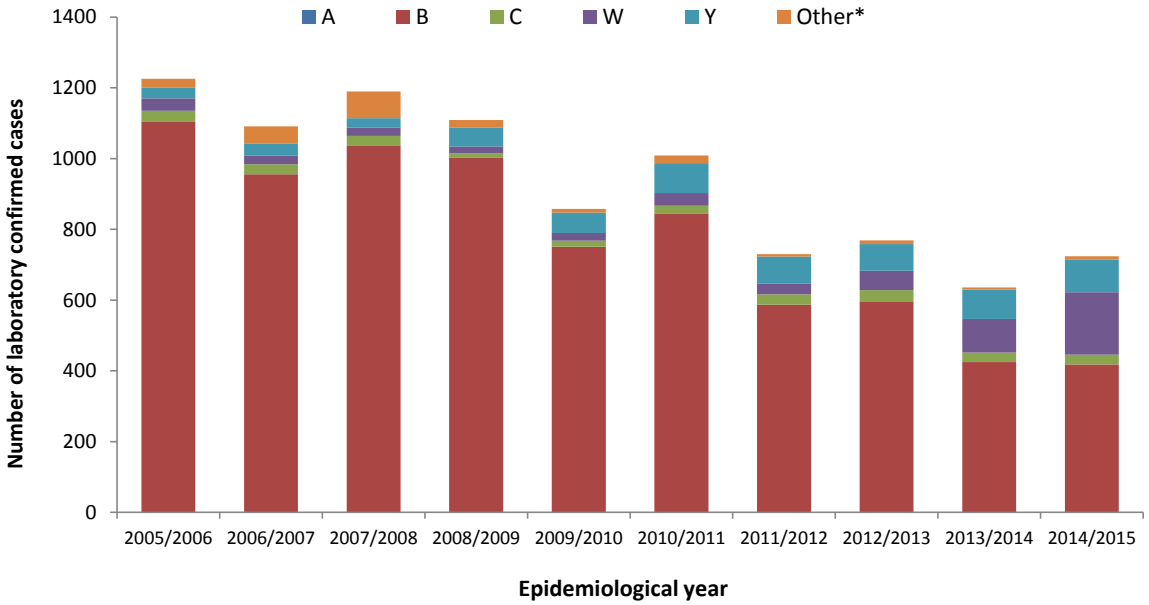
The distribution of capsular groups causing IMD by age group is summarised in table 1, with MenB accounting for 58% (418/724) of all cases, followed by MenW (n=176, 24%), MenY (n=93, 13%) and MenC (n=28, 4%). This compares with 67% (424/636), 15% (95/636), 13% (83/636) and 4% (27/636), respectively in 2013/14. The increase in 2014/15 relative to 2013/14 has been largely due to the rise in MenW cases and numbers of both MenW and MenY cases reported in 2014/2015 were the highest since the start of IMD surveillance in England in the late 1990's. MenW increased by 85% from 95 in 2013/2014 to 176 cases (previous highest was 125 cases in 2000/2001 due to an outbreak linked to pilgrims returning from the Hajj) and MenY increased by 12% (from 83 to 93 cases; while the previous highest was 84 cases reported in 2010/2011).

In 2014/2015, MenB was responsible for the majority of IMD cases in infants (80%) and toddlers (86%) but contributed to a lower proportion of cases in older age groups, where other capsular groups were more prevalent. The introduction of a routine national MenB immunisation programme for infants was announced in June 2015 [3] with immunisation of infants starting from 1 September 2015.

Of the 28 MenC cases in 2014/2015, 68% (19/28) were aged 25 years or older; 18% (n=5) were aged between 5-9 years, three cases (11%) in adolescents and one infant case. MenW cases were more common in adults aged 25 years or older (58%; 102/176), although a substantial proportion were diagnosed in children younger than 5 years (22%) and in adolescents (18%). MenY cases were also more prevalent in adults aged 25 years and older (67%; 62/93) and in adolescents (17%).

The previously reported increase in MenW cases [4,5] has continued and has led to the introduction of MenACWY conjugate vaccine to the national immunisation programme in England [6,7]. MenACWY vaccine replaced the existing time-limited 'freshers' programme from August 2015 and will directly substitute for MenC vaccine in the routine adolescent schools programme (school year 9 or 10) from the 2015/16 academic year. In addition a catch-up campaign is being implemented offering MenACWY vaccine to all adolescents aged 14 to 18 years (to school year 13); 2015 school leavers (aged 18 before 1 September 2015) have been prioritised for the first phase of the catch-up.

Figure 1. Invasive meningococcal disease in England by capsular group: 2005/2006 to 2014/2015



* Other includes capsular groups: X, Z, E, ungouped and ungroupable. Ungroupable refers to invasive clinical meningococcal isolates that were non-groupable, while ungrouped cases refers to culture-negative but PCR screen (*ctrA*) positive and negative for the four genogroups [B, C, W and Y] routinely tested for.

Figure 2. Incidence of invasive meningococcal disease in England: 2005/2006 to 2014/2015

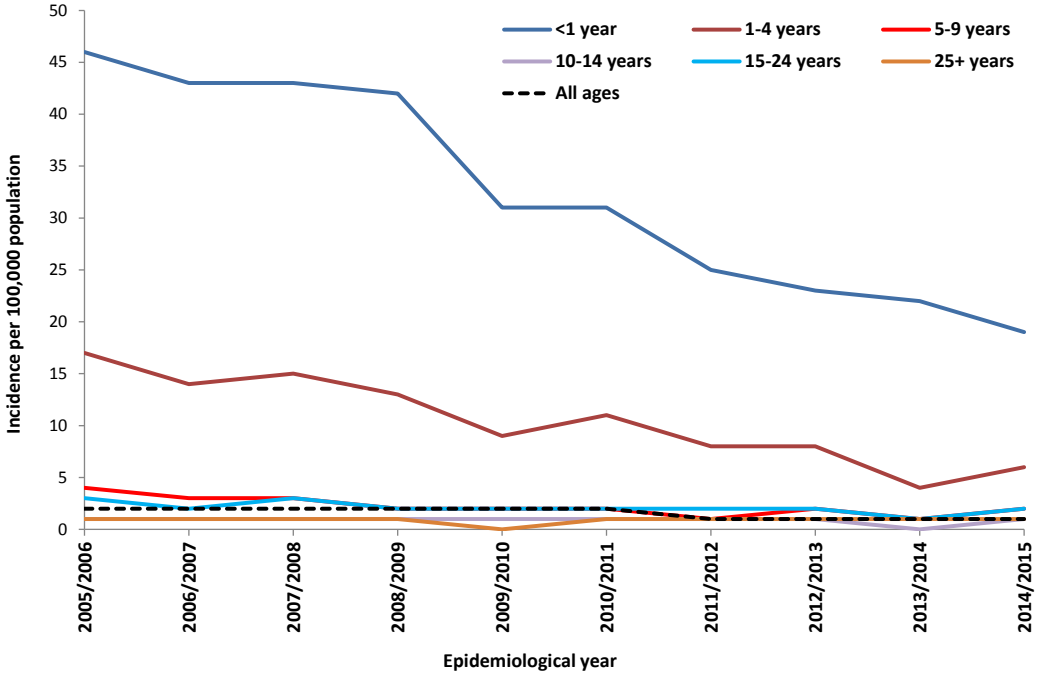


Table 1. Invasive meningococcal disease in England by capsular group and age group at diagnosis: 2014/2015

Age groups	Capsular Group										Annual total	
	B		C		W		Y		Other*			
	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
<1 year	101	(24)	1	(4)	21	(12)	4	(4)	0	-	127	(18)
1-4 years	139	(33)	0	-	18	(10	5	(5)	0	-	162	(22)
5-9 years	36	(9)	5	(18)	2	(1)	3	(3)	1	(11)	47	(6)
10-14 years	13	(3)	0	-	2	(1)	3	(3)	0	-	18	(2)
15-19 years	36	(9)	3	(11)	25	(14)	14	(15)	1	(11)	79	(11)
20-24 years	17	(4)	0	-	6	(3)	2	(2)	2	(22)	27	(4)
25+ years	76	(18)	19	(68)	102	(58)	62	(67)	5	(56)	264	(36)
Total	418		28		176		93		9		724	

* Other includes ungrouped and ungroupable.

Table 2. Invasive meningococcal disease in England by capsular group and laboratory testing method: 2013/2014 and 2014/2015

Capsular groups*	CULTURE AND PCR		CULTURE ONLY		PCR ONLY		Annual total	
	2013/2014	2014/2015	2013/2014	2014/2015	2013/2014	2014/2015	2013/2014	2014/2015
A	0	0	0	0	1	0	1	0
B	86	113	106	113	232	192	424	418
C	7	5	13	13	7	10	27	28
W	14	19	70	125	11	32	95	176
Y	13	11	57	70	13	12	83	93
Ungrouped	0	0	0	0	6	4	6	4
Ungroupable**	0	0	0	5	0	0	0	5
Total	120	148	246	326	270	250	636	724

* No cases of X or Z/E were reported in the time period shown.

** Ungroupable refers to invasive clinical meningococcal isolates that were non-groupable, while ungrouped cases refers to culture-negative but PCR screen (*ctrA*) positive and negative for the four genogroups [B, C, W and Y] routinely tested for.

References

1. Data source: PHE Meningococcal Reference Unit, Manchester
2. Office of National Statistics 2011 population estimates:
   http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Population+Estimates
3. Public Health England and NHS England:
   https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/436525/2015_06_10_MenB_bipartite_letter_v_24_final_final_track_change_MD1_TRACK....pdf
4. Public Health England. Health Protection News Report 2015; Volume 9 Number 7
   https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/407865/hpr0715_men-w.pdf
5. Public Health England press release: 27 November 2014
   https://www.gov.uk/government/news/freshers-told-its-not-too-late-for-meningitis-c-vaccine
6. Public Health England and NHS England:
7. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/436535/15-06-10_ACWY_single_bipartite_letter_draft14_final_final_track_changeMD....pdf
8. Public Health England:
   https://www.gov.uk/government/collections/meningococcal-acwy-menacwy-vaccination-programme
9. Death data from the Office of National Statistics includes all deaths coded to meningitis or meningococcal infection as a cause of death and linked to a laboratory-confirmed case.

Infection reports / Respiratory

Volume 9 Number 39 Published on: 6 November 2015

Laboratory reports of respiratory infections made to PHE from PHE and NHS laboratories in England and Wales: weeks 40 to 44, 2015

Data are recorded by week of report, but include only specimens taken in the last eight weeks (i.e. recent specimens)

Table 1. Reports of influenza infection made to CIDSC, by week of report

Week	Week 40	Week 41	Week 42	Week 43	Week 44	Total
Week ending	**4/10/15**	**11/10/15**	**18/10/15**	**25/10/15**	**1/11/15**	
Influenza A	**12**	**31**	**8**	**15**	**17**	**83**
Isolation	3	1	1	1	2	8
DIF *	1	8	1	0	0	10
PCR	7	14	6	6	11	44
Other †	1	8	0	8	4	21
Influenza B	**1**	**9**	**6**	**9**	**10**	**35**
Isolation	–	1	–	–	–	1
DIF *	–	1	–	–	1	2
PCR	1	–	5	6	7	19
Other †	–	7	1	3	2	13

* DIF = Direct Immunofluorescence. † Other = "Antibody detection - single high titre" or "Method not specified".

Table 2. Respiratory viral detections by any method (culture, direct immunofluorescence, PCR, four-fold rise in paired sera, single high serology titre, genomic, electron microscopy, other method, other method unknown), by week of report

Week	Week 40	Week 41	Week 42	Week 43	Week 44	Total
Week ending	**4/10/15**	**11/10/15**	**18/10/15**	**25/10/15**	**1/11/15**	
Adenovirus *	29	45	66	59	59	258
Coronavirus	5	1	5	10	8	29
Parainfluenza†	70	68	68	104	124	434
Rhinovirus	366	312	260	331	276	1545
RSV	58	70	82	145	203	558

* Respiratory samples only. † Includes parainfluenza types 1, 2, 3, 4 and untyped.

Table 3. Respiratory viral detections by age group: weeks 40-44/2015

Age group (years)	<1 year	1-4 years	5-14 years	15-44 years	45-64 years	≥65 years	Un-known	Total
Adenovirus *	46	57	21	75	40	18	1	258
Coronavirus	3	4	1	4	11	6	–	29
Influenza A	5	12	6	31	33	26	–	113
Influenza B	3	5	3	15	7	2	–	35
Parainfluenza †	112	116	52	52	45	56	1	434
Respiratory syncytial virus	323	95	33	40	39	25	3	558
Rhinovirus	419	259	122	268	247	228	2	1545

* Respiratory samples only.
† Includes parainfluenza types 1, 2, 3, 4 and untyped.

Table 4 Laboratory reports of infections associated with atypical pneumonia, by week of report

Week	Week 40	Week 41	Week 42	Week 43	Week 44	Total
Week ending	**4/10/15**	**11/10/15**	**18/10/15**	**25/10/15**	**1/11/15**	
Coxiella burnettii	–	–	–	–	–	0
Respiratory *Chlamydia* sp. *	1	–	–	1	–	2
Mycoplasma pneumoniae	9	9	14	18	5	55
Legionella sp.	3	3	1	2	–	9

* Includes *Chlamydia psittaci*, *Chlamydia pneumoniae*, and *Chlamydia* sp detected from blood, serum, and respiratory specimens.

Table 5 Reports of Legionnaires Disease cases in England and Wales, by week of report

Week	Week 40	Week 41	Week 42	Week 43	Week 44	Total
Week ending	**4/10/15**	**11/10/15**	**18/10/15**	**25/10/15**	**1/11/15**	
Nosocomial	–	2	–	–	–	2
Community	2	2	4	4	3	15
Travel Abroad	7	11	1	6	5	30
Travel UK	2	–	1	1	–	4
Total	**11**	**15**	**6**	**11**	**8**	**51**
Male	5	12	4	10	7	38
Female	6	3	2	1	1	13

Fifty-one cases were reported with pneumonia. Thirty-eight males aged 30 - 91 years and 13 females aged 50 - 80 years. Fifteen cases had community-acquired infection and two cases were reported to be associated with a hospital/healthcare facility. Two deaths were reported in males aged 63 - 67 years.

Thirty-four cases were reported with travel association: Croatia (1), Cuba (1), France (1), France/Germany (1), France/Italy (1), Greece (6), Italy (3), Portugal (3), Spain (3), Spain/United Kingdom (1), Sri Lanka (1), Switzerland (1), Thailand (1), Turkey (3), United Arab Emirates (1), United Kingdom (4) and United States of America (2).

Table 6. Reports of Legionnaires Disease cases in England and Wales, by PHE Centre: weeks 40-44/2015

Region/Country	Nosocomial	Community	Travel Abroad	Travel UK	Total
North of England					
North East	–	–	3	1	4
Cheshire & Merseyside	–	–	2	–	2
Greater Manchester	–	–	3	–	3
Cumbria & Lancashire	–	–	–	–	0
Yorkshire & the Humber	–	2	5	–	7
South of England					
Devon, Cornwall & Somerset	–	–	1	–	1
Avon, Gloucestershire & Wiltshire	–	1	–	1	2
Wessex	–	1	3	–	4
Thames Valley	–	–	1	–	1
Sussex, Surrey & Kent	–	3	4	2	9
Midlands & East of England					
East Midlands	1	1	–	–	2
South Midlands & Hertfordshire	–	1	1	–	2
Anglia & Essex	–	1	–	–	1
West Midlands	–	3	2	–	5
London Integrated Region					
London	1	1	2	–	4
Public Health Wales					
Mid & West Wales	–	–	1	–	1
North Wales	–	–	1	–	1
South East Wales	–	–	1	–	1
Miscellaneous					
Other	–	1–	–	–	1
Not known	–	–	–	–	0
Total	**2**	**15**	**30**	**4**	**51**