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News

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Collaborative tuberculosis strategy for England published

The collaborative tuberculosis strategy for England, jointly launched by NHS England and PHE this month [1,2], follows an extensive consultation exercise in 2014 during which more than one hundred respondents participated. Alongside the 45-page strategy document itself, a report on the consultation exercise has been published describing how responses were analysed, highlighting key comments made and indicating how the draft strategy was amended as a result

Approximately one quarter of responses to the consultation were from local authorities, a quarter from the NHS, a quarter from PHE (including collective responses of local stakeholders made up of PHE, NHS, clinical commissioning groups (CCGs), local government, the third sector and others) and a quarter from other stakeholder groups including the National Institute for Health and Care Excellence, the British Thoracic Society, local government, the Association of Directors of Public Health and third sector organisations.

The collaborative strategy, which will co-ordinate action by local government, the NHS and the voluntary sector, was developed by a PHE-managed National TB Oversight Group on which NHS England, the British Thoracic Society, TB Alert, local government and NICE were represented. It aims to achieve sustained, year-on-year reduction of TB incidence by 2020 and thus reverse the recent trend that has led to England now having the second highest TB rate in Western Europe.

The 10 key intervention areas specified in the draft strategy are carried forward into the final document, ie:

- improving access to services and ensuring early diagnosis
- providing universal access to high-quality diagnostics
- improving treatment and care services
- ensuring comprehensive contact tracing
- improving BCG vaccination uptake
- reducing drug-resistant TB
- tackling TB in under-served populations
- systematically implementing new entrant latent TB (LTBI) screening
- strengthening surveillance and monitoring
- appropriate workforce development to deliver TB control.

Following the consultation exercise, questions about how the proposed local control boards would operate, and how implementation of the strategy would be funded, have been clarified.

Nine TB control boards – coterminous with PHE Centre areas – will be established, responsible for planning, overseeing, supporting and monitoring all aspects of local TB control, including clinical and public health services and workforce planning, with support from the national TB programme. The terms of reference of the control boards, and the roles and responsibilities of individuals involved, are currently being developed. Control boards will be funded through PHE and enable establishment of a dedicated core management team in addition to stakeholder representation. The consultation report also includes reference to an impact assessment which analysed costs and benefits of the strategy.

A formal monitoring framework is being put in place to track implementation progress at control board and national level. The monitoring framework will use existing surveillance systems, including current enhanced tuberculosis surveillance arrangements, but will collect additional data, where necessary. Currently available data cover incidence, treatment outcomes, antimicrobial resistance trends and treatment delays.

It is accepted that socioeconomic deprivation and recent migration from a country where TB is common are important risk factors for TB. A key component of the strategy is to improve early access to detection and treatment of TB, particularly amongst hard to reach populations. To this end, it is planned to expand the successful Find and Treat service, which provides diagnosis and care for persons with social risk factors, including homelessness, imprisonment, drug and alcohol use. The strategy also supports the screening and treatment of recent migrants with dormant (latent) TB, and almost all respondents to the consultation were very supportive of this intervention. The deadline for applications is February 2, 2014 in each case.

References

1. PHE/NHS England policy paper. [Collaborative tuberculosis strategy for England 2015-2020 \[1.23 MB PDF\]](#).
 2. “PHE and NHS England launch joint £11.5m strategy to wipe out TB”, PHE press release, 19 January 2015.
 3. [Consultation on the collaborative tuberculosis strategy for England 2015-2020: summary report \[425 KB PDF\]](#).
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Ebola virus disease: international epidemiological summary (at 18 January 2015)

As of 18 January 2015, WHO reports a total of 21,724 clinically compatible cases (CCC) of Ebola virus disease (EVD), including 8,641 deaths, associated with the west African outbreak (table 1). Provided case totals and particularly deaths are known to still under-represent the true impact of the outbreak in west Africa. While the majority of cases have been reported from Guinea, Liberia and Sierra Leone, cases have also been reported from Mali, Nigeria, Senegal, Spain, the United Kingdom (UK) and the United States of America (USA).

Current reports indicate an overall improving epidemiological situation in Guinea, Liberia and Sierra Leone continues to improve.

In Guinea, reported case incidence showed a decrease again this week to the lowest level nationally since early August 2014, and in the capital Conakry since early November 2014. However, the geographical distribution of cases continues to vary and shift. The resurgence of cases in Boffa in the last week (last cases reported here in June 2014) is characteristic of the variable nature of EVD transmission in Guinea. Incidents of community resistance remain an issue and may impede progress in EVD control.

In Liberia reported case incidence remains at a low level level with eight confirmed cases reported in the last week. Currently only two districts are reporting active transmission: Montserrado county and Grand Cape Mount. As in Guinea, community resistance to EVD control measures, particularly in Grand Cape Mount, may hinder progress.

While Sierra Leone remains the worst affected country (with nearly three times as many new confirmed cases reported in the last 21 days than in Guinea and Liberia combined), a decrease in national case incidence has been reported for the third consecutive week. This week's total is the lowest weekly total of new confirmed cases reported since July 2014. Significant transmission continues in the western districts, particularly in Freetown, Port Loko and the Western Rural Area, where a combined total of 78 confirmed cases were reported in the last week.

The average case fatality rate among hospitalised patients for Guinea, Liberia and Sierra Leone is 58%, with no detectable improvement since the onset of the epidemic.

To date, a total of 24 EVD cases have been cared for outside of Africa. Of these, 18 repatriated cases (hospitalised in USA, Spain, UK, Germany, France, Norway, Switzerland, Italy and the

Netherlands), three imported cases (diagnosed in the USA and the UK) and three incidents of local transmission (in Spain and the USA).

The table below summarises Ebola virus disease international epidemiological information as at 18 January 2015.

Summary of Ebola virus disease international epidemiological information at 18 January

Country	Total CCCs	Total deaths	Current status
Guineau	2871	1875	Ongoing transmission
Liberia	8478	3605	Ongoing transmission
Sierra Leone	10,340	3145	Ongoing transmission
Mali	8	6	Awaiting EVD-free status
Nigeria	20	8	EVD free
Senegal	1	0	EVD free
Spain	1	0	EVD free
UK	1	0	Single imported case
USA	4	1	Awaiting EVD-free status
TOTAL	21,724	8,641	

Further information on the international epidemiological situation can be found in PHE's weekly Ebola Epidemiological Update at:

<https://www.gov.uk/government/publications/ebola-virus-disease-epidemiological-update>.



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Infection Reports

Infection reports: immunisation

- ▶ **Laboratory reports of hepatitis A and C in England and Wales (July-September 2014)**
- ▶ **Quarterly report from the sentinel surveillance study of hepatitis, HIV and HTLV testing in England: data for July to September 2014**
- ▶ **Laboratory confirmed reports of invasive meningococcal infections in England: 2013/2014 annual data by epidemiological year**

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- ▶ **Shingles vaccine coverage report, England, September to November 2014**



Infection reports

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Immunisation

Laboratory reports of hepatitis A and C (England and Wales): July-September 2014

Laboratory reports of hepatitis A in England and Wales (July-September 2014)

There were a total of 74 laboratory reports of hepatitis A reported to Public Health England (PHE) during the third quarter of 2014 (July-September). This was a 25.4% increase on the number of reports during the second quarter of 2014 (n=59) and a 32.1% increase on the same quarter in 2013 (n=56).

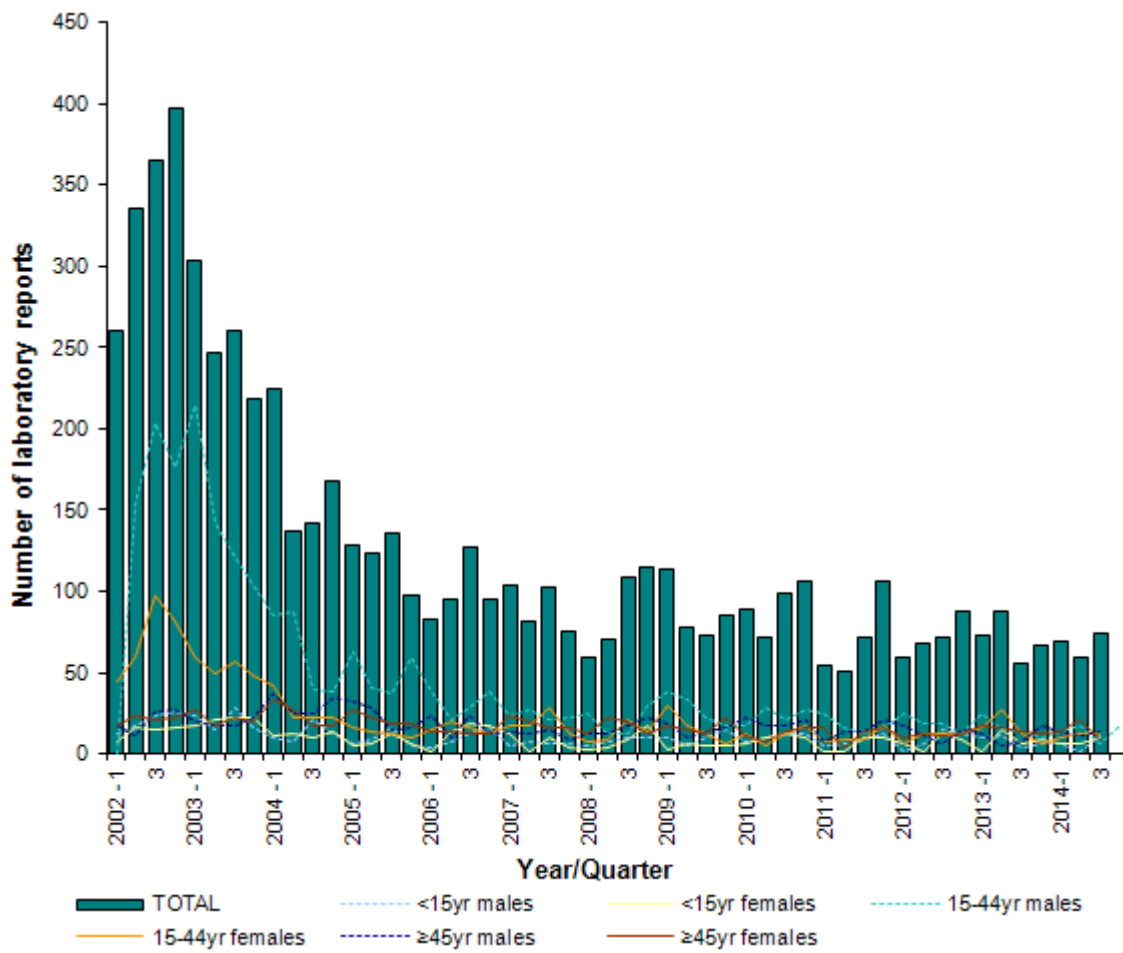
Age-group and sex were well reported (100% complete). Thirty (40.5%) reports were among the 15-44 year old age group, a further 23 (31.1%) reports were among those aged over 44 years and 21 (28.4%) reports were from the under 15 year age group.

Males accounted for 56.8% of all reports. A higher proportion of males were reported among those aged over 44 years old (60.9% males). A similar amount of males and females were reported in the under 15 years age group (52.4% males) and in the over 15 year age group (56.7% males).

Table 1. Laboratory reports of hepatitis A in England and Wales, July to September 2014

Age group	Male	Female	Unknown	Total
<1 year	0	0	0	0
1-4 years	3	3	0	6
5-9 years	6	4	0	10
10-14 years	2	3	0	5
15-24 years	3	7	0	10
25-34 years	8	4	0	12
35-44 years	6	2	0	8
45-54 years	5	2	0	7
55-64 years	3	2	0	5
>65 years	6	5	0	11
Unknown	0	0	0	0
Total	42	32	0	74

Figure 1. Laboratory reports of hepatitis A by age and sex (England and Wales): 2002-2014

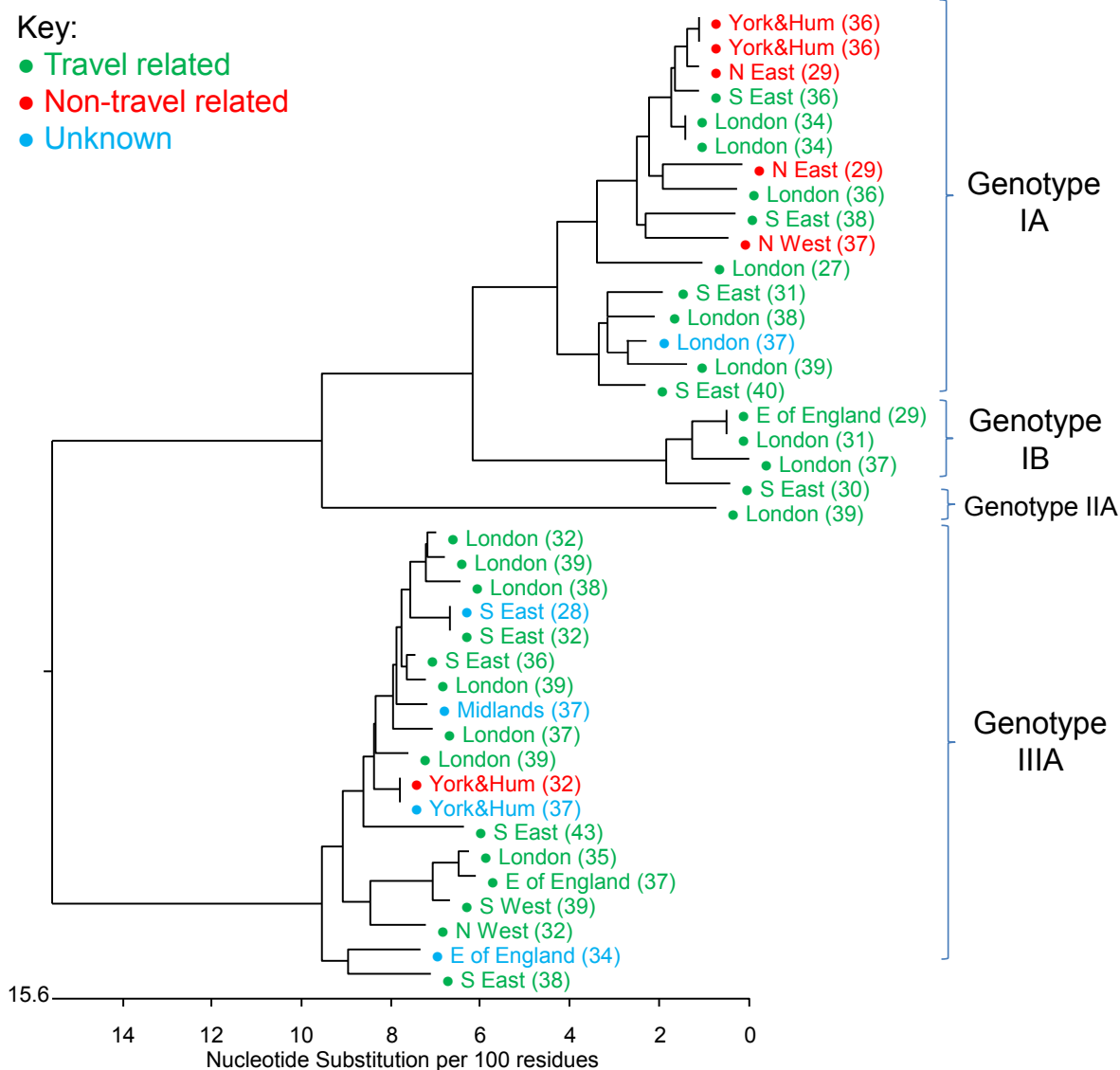


Reference laboratory confirmation and phylogeny of hepatitis A infection

Of the 74 patients notified as having acute HAV infection during the third quarter of 2014, 45 had samples forwarded to the Virus Reference Department for confirmation. Ten of the patients were not confirmed to have acute HAV infection and one sample was insufficient for testing. The remaining 34 patients were confirmed to have acute HAV infection. In addition 7 patients were confirmed to have acute HAV infection that had not been reported through the laboratory reporting system although they were recorded in HPzone.

A total of 40 patients could be genotyped over this period; 16 were genotype IA (40%), 4 were genotype IB (10%), 1 was genotype IIA (2.5%) and 19 were genotype IIIA (47.5%). Of these samples 29 were associated with travel (72.5%), 7 had no travel history (17.5%) and 4 had no information (10%). 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. Phylogenetic tree of genotype IA, IB, and IIIA sequences July to September 2014 (n=XX)



Laboratory reports of hepatitis C in England and Wales (July-September 2014)

There were a total of 2,593 laboratory reports of hepatitis C reported to the PHE between July and September 2014. This was a similar number of reported compared to the second quarter of 2014 (n=2,690), and a 10.4% decrease on the same quarter in 2013 (n=2,893).

Age-group and sex were well reported (>99% complete). Where known males accounted for 67.9% of reports (1,739/2,563), which is consistent with previous quarters. Adults aged 25-44 years accounted for 49.1% of the total number of hepatitis C reports.

Table 1. Laboratory reports of hepatitis C in England and Wales, July-September 2014

Age group	Male	Female	Unknown	Total
<1 year	1	3	0	4
1-4 years	2	2	0	4
5-9 years	1	1	0	2
10-14 years	1	1	0	2
15-24 years	74	45	1	120
25-34 years	368	201	9	578
35-44 years	481	196	10	687
45-54 years	464	189	4	657
55-64 years	249	108	2	359
>65 years	92	73	1	166
Unknown	6	5	3	14
Total	1739	824	30	2593



Infection report

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Immunisation

Quarterly report from the sentinel surveillance study of hepatitis, HIV and HTLV testing in England: data for July to September 2014

The sentinel surveillance study of hepatitis testing in England began in 2002, and provides information on trends in testing, individual risk exposures and clinical symptoms, as a supplement to the routine surveillance of hepatitis A, B and C. The study collects information on hepatitis A, B and C testing carried out in participating sentinel centres regardless of test result and therefore can also be used to estimate prevalence in those individuals tested. Data from 24 centres are detailed in this report. The data presented here are for individuals who were first reported to the sentinel surveillance scheme during the third quarter (July to September) of 2014.

1. Hepatitis A IgM testing

During the third quarter of 2014, 6,973 individuals were tested at least once for anti-HAV IgM. Overall, 0.4% (n=26) of individuals tested positive, which varied by region.

Table 1 shows the age-group and gender of individuals tested, and testing positive, for anti-HAV IgM. Gender and age were reported for the majority of individuals (>99.8%). As in previous quarters, where available, a higher proportion of those tested were males (56.6% vs. 44.4%). The mean age of individuals tested was 47.2 years (range 0.0-101.8 years), whereas the mean age of those testing positive was 31.6 years (range 3.3-88.0 years). The largest age-group tested were aged 65 and over and the highest overall percentage of individuals testing positive was among those aged 1-14 years, although few were tested in this age-group.

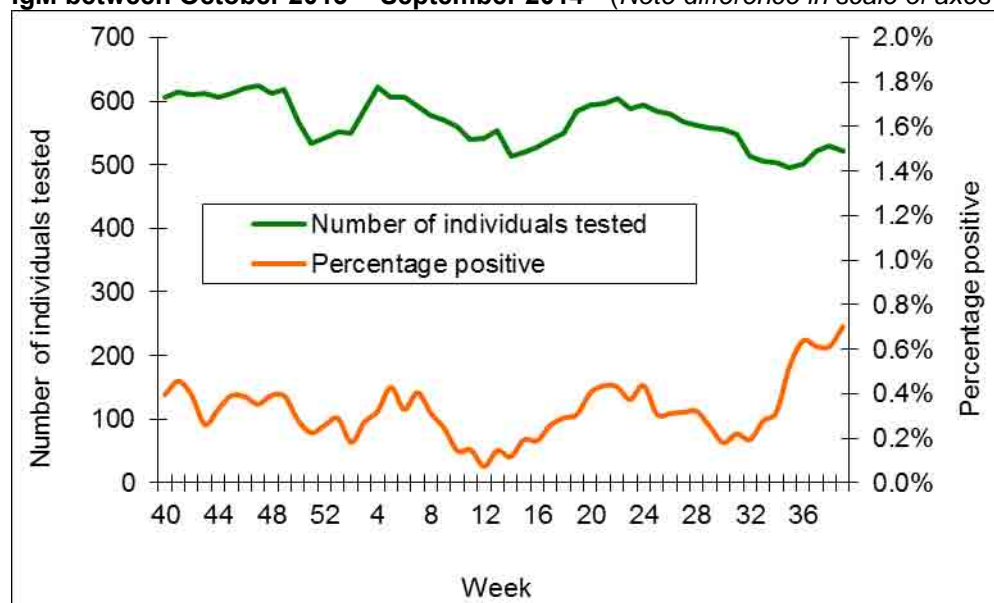
Table 1. Number of individuals tested, and testing positive, for anti-HAV IgM in participating centres, July - September 2014*.

Age group	Female		Male		Unknown		Total	
	Number tested	Number positive (%)	Number tested	Number positive (%)	Number tested	Number positive (%)	Number tested	Number positive (%)
Under 1 year	19	0 (0.0)	39	0 (0.0)	~	~	58	0 (0.0)
1-14 years	75	5 (6.7)	106	4 (3.8)	~	~	181	9 (5.0)
15-24 years	356	4 (1.1)	405	0 (0.0)	1	0 (0.0)	762	4 (0.5)
25-34 years	510	2 (0.4)	699	1 (0.1)	3	0 (0.0)	1,212	3 (0.2)
35-44 years	397	1 (0.3)	666	2 (0.3)	4	0 (0.0)	1,067	3 (0.3)
45-54 years	516	0 (0.0)	691	1 (0.1)	1	0 (0.0)	1,208	1 (0.1)
55-64 years	464	1 (0.2)	505	1 (0.2)	~	~	969	2 (0.2)
≥65 years	747	3 (0.4)	753	1 (0.1)	~	~	1,500	4 (0.3)
Unknown	6	0 (0.0)	10	0 (0.0)	~	~	16	0 (0.0)
Total, all age groups	3,090	16 (0.5)	3,874	10 (0.3)	9	0 (0.0)	6973	26 (0.4)

* Excludes reference testing and testing from hospitals referring all samples. Data are de-duplicated subject to availability of date of birth, soundex and first initial. All data are provisional.

To provide an indication in the trends in testing, and in the number testing positive, figure 1 shows the five-weekly moving average for number of people tested for anti-HAV IgM and percentage positive between October 2013 and September 2014, inclusive, for 24 participating sentinel centres.

Figure 1. Five-weekly moving average of number of people tested, and percentage positive, for anti-HAV IgM between October 2013 – September 2014* (Note difference in scale of axes compared with figures 2 and 3)



* Excludes reference testing and testing from hospitals referring all samples. Data are de-duplicated subject to availability of date of birth, soundex and first initial. All data are provisional.

2. Hepatitis B surface antigen (HBsAg) testing

All pregnant women in the UK are offered hepatitis B screening as part of their antenatal care. Data from the test request location and freetext clinical details field accompanying the test request were reviewed to distinguish individuals tested for HBsAg as part of routine antenatal screening (section 2a) from those tested in other settings and for other reasons (section 2b). It is possible that some women undergoing antenatal screening may not be identified as such and may therefore be included in section 2b as non-antenatal testing.

a) Antenatal HBsAg screening

During the third quarter of 2014, a total of 22,078 women were identified as undergoing antenatal screening for HBsAg, representing 29.6% (22,078/74,470) of all individuals tested in participating sentinel centres. Overall 0.4% (n=88) of women tested positive. Among the 88 HBsAg positive women identified, 85 (96.6%) had HBeAg results available, and of these, 9.4% were HBeAg positive.

a) Non-antenatal HBsAg testing

During the third quarter of 2014, excluding dried blood-spot and antenatal testing, 52,392 individuals were tested for HBsAg in participating sentinel centres. Overall, 1.3% (n=658) of individuals tested positive. South Midlands and Hertfordshire Public Health England Centre (PHEC) had the highest proportion of individuals testing positive (3.8%), although few individuals were tested in this PHEC.

Table 2 shows the age-group and gender of individuals tested, and testing positive, for HBsAg. Gender and age-group were reported for the majority of individuals (>99.2%), and where available, slightly more males were tested compared to females (52.5% and 47.5% respectively). However, the number of females tested may include some antenatal testing that cannot be identified as such from the information provided. As reported previously the proportion testing positive for HBsAg was higher among males than females (0.9% v 1.5%). The greatest number of tests were performed among those aged 25-34 years whereas the highest percentage of individuals testing positive where age was known, was among those

aged 25-34 and 35-44. The mean age of individuals tested was 39.9 years (range 0.0-104.2 years) and of those testing positive was 38.8 years (range 1.1-91.5 years). The prevalence of HBsAg among tested individuals of unknown gender (2.8%) is higher than both males and females (1.5% and 0.9% respectively). This may reflect a change to the testing of individuals in settings such as prisons, drug services and GUM clinics where few demographic details on patients (such as gender) were available and where service users may be at higher risk of hepatitis B infection.

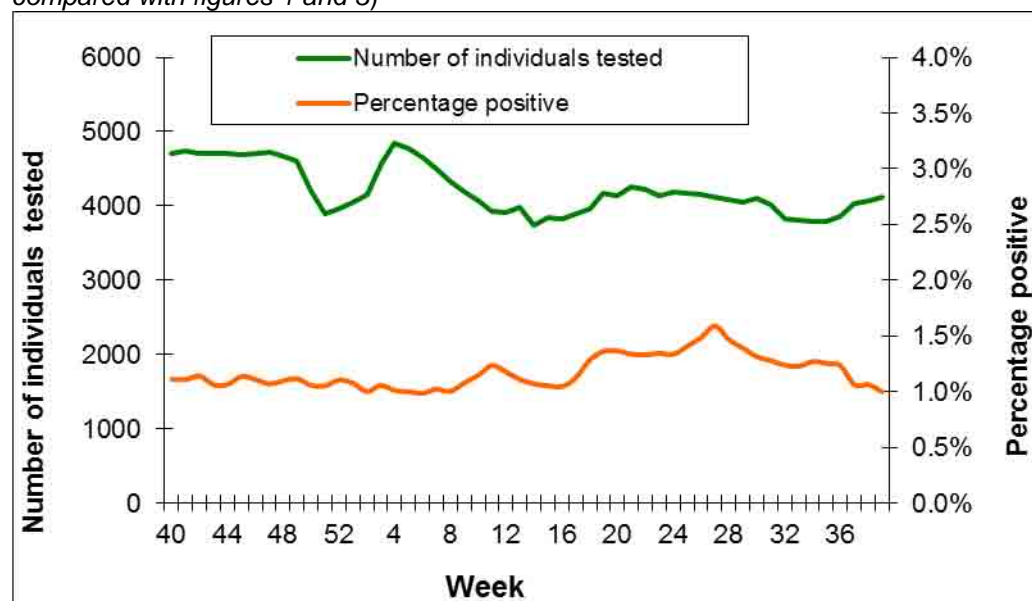
Table 2. Age and gender of individuals tested for HBsAg in participating centres (excluding antenatal testing), July – September 2014*

Age group	Female		Male		Unknown		Total	
	Number tested	Number positive (%)	Number tested	Number positive (%)	Number tested	Number positive (%)	Number tested	Number positive (%)
Under 1 year	61	0 (0.0)	90	0 (0.0)	~	~	151	0 (0.0)
1-14 years	399	4 (1.0)	462	7 (1.5)	5	0 (0.0)	866	11 (1.3)
15-24 years	4,990	36 (0.7)	4,244	41 (1.0)	150	1 (0.7)	9,384	78 (0.8)
25-34 years	7,434	87 (1.2)	7,731	136 (1.8)	105	6 (5.7)	15,270	229 (1.5)
35-44 years	4,062	49 (1.2)	5,327	92 (1.7)	49	2 (4.1)	9,438	143 (1.5)
45-54 years	2,886	20 (0.7)	3,866	82 (2.1)	28	1 (3.6)	6,780	103 (1.5)
55-64 years	2,051	11 (0.5)	2,429	34 (1.4)	5	1 (20.0)	4,485	46 (1.0)
≥65 years	2,757	17 (0.6)	3,099	26 (0.8)	8	0 (0.0)	5,864	43 (0.7)
Unknown	49	2 (4.1)	55	3 (5.5)	50	0 (0.0)	154	5 (3.2)
Total, all age groups	24,689	226 (0.9)	27,303	421 (1.5)	400	11 (2.8)	52,392	658 (1.3)

* Excludes dried blood spot, oral fluid, reference testing and testing from hospitals referring all samples. Data are de-duplicated subject to availability of date of birth, soundex and first initial. All data are provisional.

To provide an indication in the trends in testing, and in the number testing positive Figure 2 shows the five-weekly moving average for number of people tested for HBsAg and percentage positive between October 2013 and September 2014 inclusive, for 24 participating sentinel centres.

Figure 2. Five-weekly moving average of number of individuals tested, and percentage positive, for HBsAg between October 2013 – September 2014* (excluding antenatal testing)* (Note difference in scale of axes compared with figures 1 and 3)



* Excludes reference testing and testing from hospitals referring all samples. Data are de-duplicated subject to availability of date of birth, soundex and first initial. All data are provisional.

3. Hepatitis C testing

During the third quarter of 2014, excluding dried blood spot testing, a total of 45,914 individuals were tested at least once for hepatitis C-specific antibodies (anti-HCV). Overall, 1.7% (n=786) of individuals tested positive, although this varied by region. The highest proportion of positive tests in England were from South Midlands and Hertfordshire PHEC (20.7%), although few individuals were tested in this region. This may reflect changes in testing patterns and/or in the prevalence of hepatitis C in people being tested in these regions. Of the 786 individuals testing positive for anti-HCV during the third quarter of 2014, 495 (63.0%) were also tested for HCV RNA by PCR (qualitative and/or quantitative), of whom, 327 were PCR positive (66.1%).

Table 3 shows the age-group and gender of individuals tested, and testing positive, for anti-HCV. Gender and age were reported for the majority of individuals (>99.1%), and where available, there was a slightly higher proportion males tested (56.1%) compared to females (43.9%). As reported previously the proportion testing positive was also higher among males than among females (2.1% vs. 1.3%). The mean age of individuals tested was 41.4 years (range 1.0-103.9 years) and of those testing positive was 43.3 years (range 12.8-92.5 years). As with the previous quarter the largest group tested were aged 25-34 years. The percentage of individuals testing positive was highest among 45-54 year olds (3.2%). As with HBsAg testing, individuals with unknown gender and age have a higher proportion testing positive (3.3%) when compared to those of known gender and age. This may reflect a change in testing of individuals in settings such as prisons, drug services and GUM clinics where fewer demographic details on patients are routinely available.

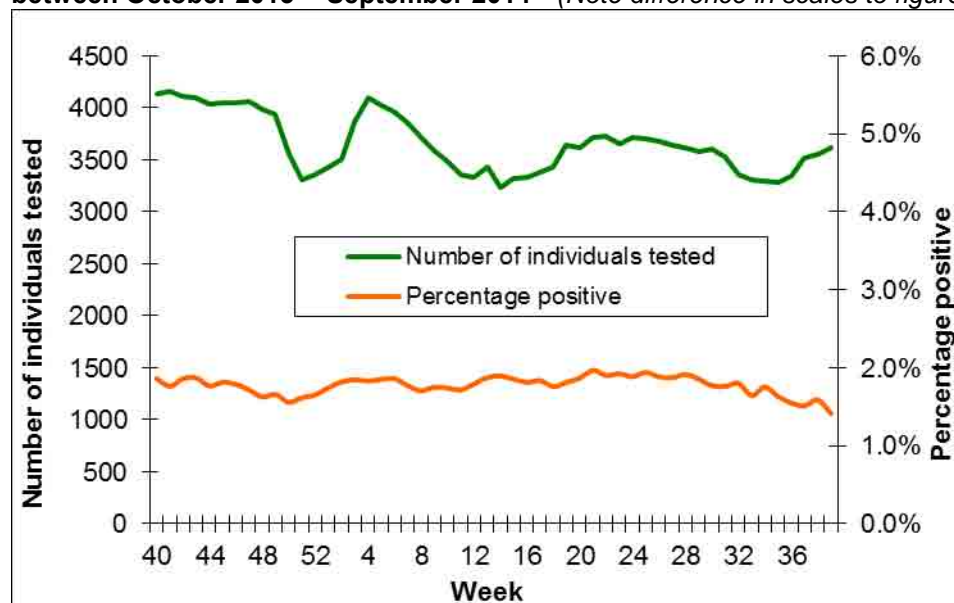
Table 3. Age and gender of individuals tested for anti-HCV in participating centres, July - September 2014*

Age group	Female		Male		Unknown		Total	
	Number tested	Number positive (%)	Number tested	Number positive (%)	Number tested	Number positive (%)	Number tested	Number positive (%)
1-14	303	0 (0.0)	339	2 (0.6)	1	0 (0.0)	643	2 (0.3)
15-24	3,567	17 (0.5)	3,672	32 (0.9)	154	0 (0.0)	7,393	49 (0.7)
25-34	5,346	61 (1.1)	7,066	111 (1.6)	93	2 (2.2)	12,505	174 (1.4)
35-44	3,408	67 (2.0)	5,253	149 (2.8)	51	0 (0.0)	8,712	216 (2.5)
45-54	2,647	56 (2.1)	3,808	146 (3.8)	22	3 (13.6)	6,477	205 (3.2)
55-64	1,971	38 (1.9)	2,309	54 (2.3)	3	0 (0.0)	4,283	92 (2.1)
≥65	2,718	17 (0.6)	3,023	26 (0.9)	8	0 (0.0)	5,749	43 (0.7)
Unknown	47	1 (2.1)	55	4 (7.3)	50	0 (0.0)	152	5 (3.3)
Total, all age groups	20,007	257 (1.3)	25,525	524 (2.1)	382	5 (1.3)	45,914	786 (1.7)

* Excludes dried blood spot, oral fluid, reference testing and testing, hospitals referring all samples and individuals aged less than one year (as positive tests may reflect maternal antibody rather than true infection). Data are de-duplicated subject to availability of date of birth, soundex and first initial. All data are provisional.

To provide an indication in the trends in testing, and in the number testing positive, figure 3 shows the five-weekly moving average for number of people tested for anti-HCV and percentage positive between October 2013 and September 2014 inclusive, for 24 participating sentinel centres. Overall a slight decline in the proportion positive overtime is apparent.

Figure 3. Five-weekly moving average of number of people tested, and percentage positive, for anti-HCV between October 2013 – September 2014* (Note difference in scales to figures 1 and 2)



* Excludes dried blood spot, oral fluid, reference testing and testing, hospitals referring all samples and individuals aged less than one year (as positive tests may reflect maternal antibody rather than true infection). Data are de-duplicated subject to availability of date of birth, soundex and first initial. All data are provisional.

4. Hepatitis D testing

The sentinel surveillance study collects data on testing for hepatitis D-specific total antibody (HDV TA). A positive HDV results does not necessarily represent an incident infection and these data should be interpreted accordingly.

During the third quarter of 2014, a total of 517 individuals were tested at least once for HDV TA. Overall 3.9% (n=20) of individuals tested positive, although this varied by region. Where gender was available (>99.2%), a higher proportion of males were tested (59.4%) than females. The mean age of individuals tested was 38.8 years (range 6.9-95.6 years), whereas the mean age of those testing positive was 35.2 years (range 17.4-68.7 years).

5. Hepatitis E IgM testing

The sentinel surveillance study collects data on testing for hepatitis E-specific IgM antibody (anti-HEV IgM), a marker of acute hepatitis E infection. Thirteen sentinel laboratories provide anti-HEV IgM testing facilities.

During the third quarter of 2014, a total of 2,812 individuals were tested at least once for anti-HEV IgM. Overall, 7.7% (n=216) of individuals tested positive, although this varied by region. Where gender was available (>99.8%), a higher proportion of males (54.9%) were tested than females. The mean age of individuals tested was 51.0 years (range 0.1-101.0 years), whereas the mean age of those testing positive was 58.3 years (range 15.3-94.0 years).

6. HIV testing

All pregnant women in the UK are offered HIV screening as part of their antenatal care. Data from the test request location and freetext clinical details field accompanying the test request were reviewed to distinguish individuals tested for HIV as part of routine antenatal screening (section 6a) from those tested in other settings and for other reasons (section 6b). It is possible that some women undergoing antenatal screening may not be identified as such and may therefore be included in section 6b as non-antenatal testing. Data are presented throughout for adults aged ≥ 16 years old at the time of test.

a) Antenatal HIV screening

During the third quarter of 2014, a total of 13,521 women were identified as undergoing antenatal screening for HIV, representing 15.5% (13,521/87,057) of all individuals tested in participating sentinel centres. Overall 0.1% (n=17) of women tested positive.

b) Non-antenatal HIV testing

The sentinel surveillance study collects data on testing for HIV excluding dried blood-spot and antenatal testing, 22 sentinel laboratories provide HIV testing facilities. During the third quarter of 2014, a total of 73,536 individuals were tested at least once for HIV. Overall, 0.8% (n=623) of individuals tested positive, although this varied by region. South Midlands and Hertfordshire PHEC had the highest proportion of individuals testing positive (28.6%), although few individuals were tested in this region and Greater Manchester also had a high proportion of individuals testing positive (1.1%). This may reflect more targeted testing of risk groups and/or genuinely higher prevalence in people being tested in these regions.

Table 4 shows the age-group and gender of individuals tested, and testing positive, for HIV. Gender and age were reported for the majority of individuals (>99.1%), and a slightly higher proportion of females (51.0%) were tested than males, although the proportion testing positive was higher among males than among females (1.4% vs.0.4%). The mean age of individuals tested was 34.2 years (range 16.0-103.9 years), whereas the mean age of those testing positive was 37.8 years (range 16.3-87.1 years). The largest group tested were aged 25-34 years. The percentage of individuals testing positive was highest among 45-54 year olds (1.9%).

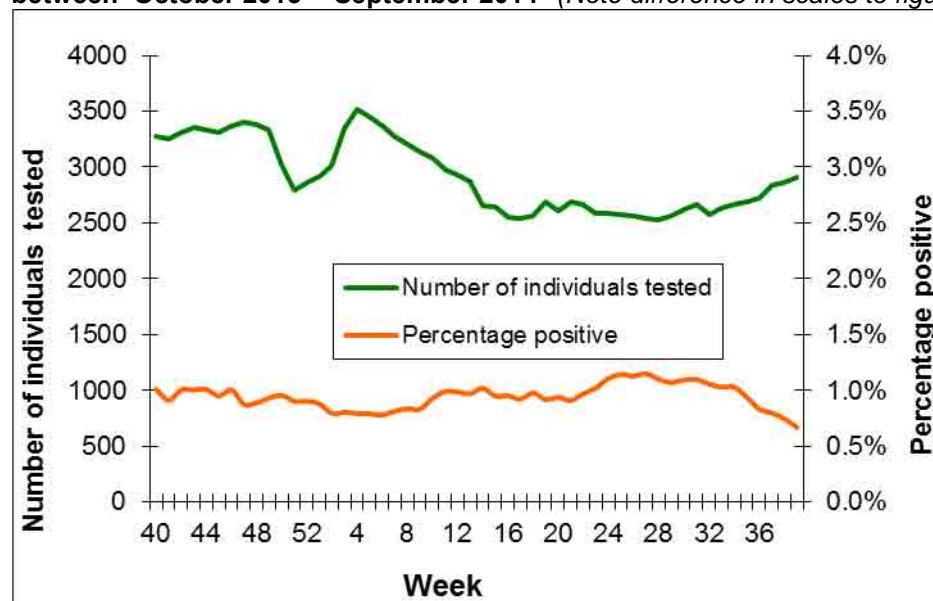
Table 4. Age and gender of individuals tested for HIV in participating centres (excluding antenatal testing), July – September 2014*

Age group	Female		Male		Unknown		Total	
	Number tested	Number positive (%)	Number tested	Number positive (%)	Number tested	Number positive (%)	Number tested	Number positive (%)
16-24 years	12,440	17 (0.1)	8,840	52 (0.6)	289	2 (0.7)	21,569	71 (0.3)
25-34 years	13,408	33 (0.2)	12,522	181 (1.4)	198	2 (1.0)	26,128	216 (0.8)
35-44 years	5,655	46 (0.8)	6,401	123 (1.9)	92	1 (1.1)	12,148	170 (1.4)
45-54 years	2,771	28 (1.0)	3,775	94 (2.5)	40	0 (0.0)	6,586	122 (1.9)
55-64 years	1,369	6 (0.4)	1,960	24 (1.2)	8	1 (12.5)	3,337	31 (0.9)
≥ 65 years	1,490	2 (0.1)	2,114	11 (0.5)	9	0 (0.0)	3,613	13 (0.4)
Unknown	50	0 (0.0)	54	0 (0.0)	51	0 (0.0)	155	0 (0.0)
Total, all age groups	37,183	132 (0.4)	35,666	485 (1.4)	687	6 (0.9)	73,536	623 (0.8)

* Excludes dried blood spot, oral fluid, reference testing and testing from hospitals referring all samples. Data are de-duplicated subject to availability of date of birth, soundex and first initial. All data are provisional.

Data are presented throughout for adults aged ≥ 16 years old at the time of test. Figure 4 shows the five-weekly moving average for number of people tested for HIV and percentage positive between October 2013 and September 2014 inclusive, for 22 participating sentinel centres.

Figure 4. Five-weekly moving average of number of people tested, and percentage positive, for HIV between October 2013 – September 2014* (Note difference in scales to figures 1 and 2)



* Excludes dried blood spot, oral fluid, reference testing and testing, hospitals referring all samples. Data are de-duplicated subject to availability of date of birth, soundex and first initial. All data are provisional.

7. HTLV testing

The sentinel surveillance study collects data on testing for HTLV. Twelve sentinel laboratories provide HTLV testing facilities. During the third quarter of 2014, a total of 1,570 individuals were tested at least once for HTLV. Overall, 1.5% (n=24) of individuals tested positive, although this varied by region. Where gender was available (>95.3%), a slightly higher proportion of females (51.5%) were tested than males. The mean age of individuals tested was 45.5 years (range 0.4-92.0 years), whereas the mean age of those testing positive was 57.0 years (range 18.1-82.9 years).

8. Dried blood spot testing

Three sentinel laboratories provide dried blood spot testing facilities. During the third quarter of 2014, a total of 1,600 individuals were tested at least once for HBsAg by dried blood spot testing. Overall, 0.4% (n=6) of individuals tested positive, although this varied by region. During the same quarter of 2014, 1,737 individuals were tested for hepatitis C-specific antibodies (anti-HCV) by dried blood spot testing by sentinel laboratories, of whom 9.2% (n=159) tested positive. The comparatively lower proportion of positive test results among individuals who were tested by sentinel laboratories may reflect differences in testing; for example dried blood spot testing has been trialled in pharmacies and other primary care settings as well as by specialist drug services.

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Infection report

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Invasive meningococcal disease (laboratory reports in England): 2013/2014 annual data by epidemiological year

This report presents data on laboratory-confirmed invasive meningococcal disease (IMD) for the last complete epidemiological year, 2013/2014 [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 point will definitely be captured in an epidemiological year whereas it may fall across two calendar years or two seasonal peaks could be captured in a single calendar year.

In England, the national Public Health England (PHE) Meningococcal Reference Unit (MRU) confirmed 636 cases of IMD during 2013/2014. This was a 17% decrease from the 769 cases reported in 2012/2013 (figure 1). Twenty-nine cases of IMD were additionally reported in Wales. In England, there has been a year-on-year decline in confirmed IMD cases from 2,343 cases in 2000/01 to 1,384 cases reported in 2004/2005. The incidence of total IMD in England has decreased from 3 per 100,000 in 2004/2005 to 1 per 100,000 in 2013/2014 [2]. IMD cases have declined across all age groups, but the decline is most marked in infants (aged <1 year), toddlers (1-4 year-olds) and adolescents (15-24 year-olds) (figure 2).

In 2013/2014, infants accounted for 24% of all IMD cases with an incidence of 22 per 100,000, followed by toddlers (19%; 4/100,000) and adolescents (15%; 1/100,000). A third (33%; 211/636) of all cases in 2013/2014 were reported between January and March 2014 (Q1).

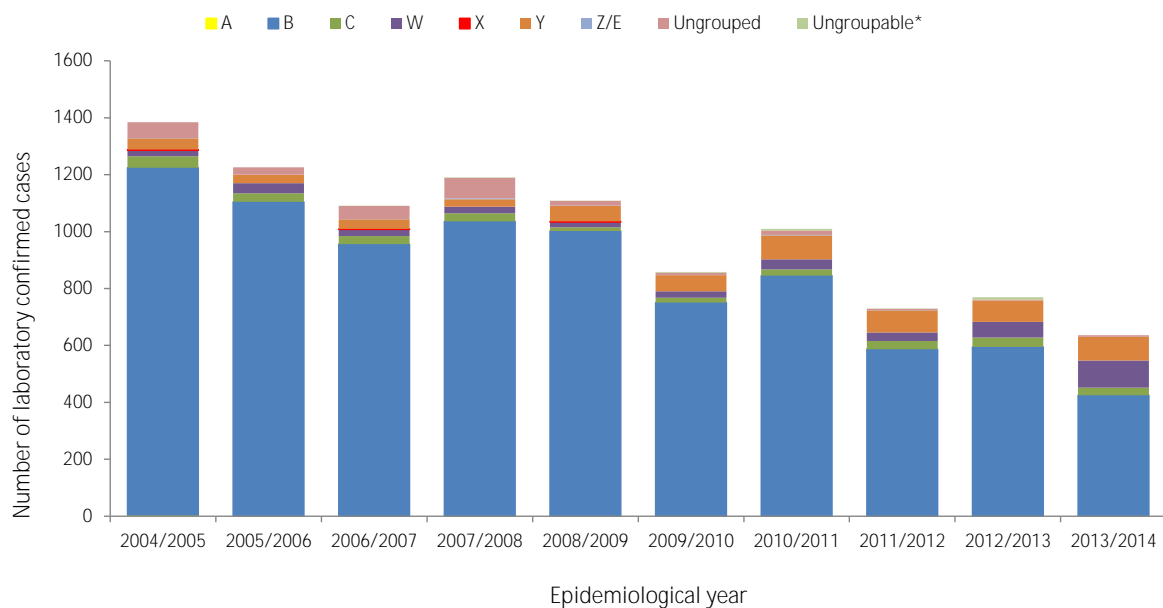
The distribution of capsular groups causing IMD by age group is summarised in table 1, with capsular group B (MenB) accounting for 67% (424/636) of all cases, followed by MenW (n=95, 15%), MenY (n=83, 13%), MenC (n=27, 4%) and one MenA case.

This compares with 77% (595/769), 7% (55/769), 10% (75/769) and 4% (33/769), respectively in 2012/13. The increase in MenW cases (from 55 to 95 cases) is the highest reported in the decade, while the increase in MenY from 75 to 83 cases is the second highest (84 cases were reported in 2010/2011).

In 2013/4, MenB was responsible for the majority of IMD cases in infants (85%) and toddlers (92%) but contributed to a lower proportion of cases in older age groups, where other capsular groups were more prevalent. Of the 27 MenC cases in 2013/14, 59% (16/27) were aged 25 years or older; there were only 3 MenC cases (11%) in infants and toddlers and one case in adolescents. MenW cases were more common in adults aged 25 years or older (57%; 54/95), although a substantial proportion were diagnosed in children younger than 5 years (18%) and in adolescents (23%). MenY cases were also more prevalent in adults aged 25 years and older (80%; 66/83)

The overall IMD case fatality ratio (CFR) in England was 6% (38/636) during 2013/2014 [3]. MenB was responsible for 45% (n=17) of all deaths (CFR, 4%). MenC had the highest CFR (15%, 4/27), followed by MenW (13%, 12/95) and MenY (6%, 5/83). More than half the deaths were in adults aged 25 years and over (61%; 23/38); there were only 5 deaths (13%) in children younger than 5 years. Five deaths were reported in Wales, four were due to MenB in children younger than 5 years and one death was caused by MenY in an adult.

Figure 1. Invasive meningococcal disease in England by capsular group: 2004/2005 to 2013/2014



* 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: 2004/2005 to 2013/2014

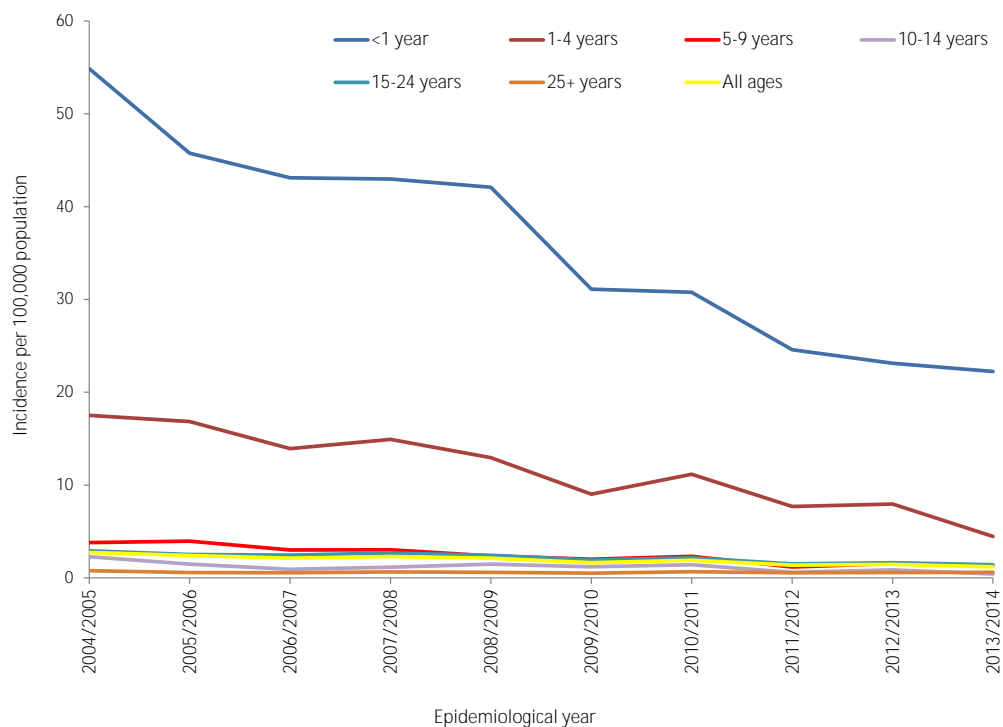


Table 1. Invasive meningococcal disease in England by capsular group and age group at diagnosis: 2013/2014

Age groups	Capsular Group						Annual total					
	B		C		W		Y		Other*			
	Total	%	Total	%	Total	%	Total	%	Total	%		
<1 year	129	(30)	1	(4)	12	(13)	6	(7)	3	(43)	151	(24)
1-4 years	109	(26)	2	(7)	5	(5)	0	-	2	(29)	118	(19)
5-9 years	29	(7)	5	(19)	1	(1)	2	(2)	1	(14)	38	(6)
10-14 years	10	(2)	2	(7)	1	(1)	0	-	0	-	13	(2)
15-19 years	40	(9)	0	-	13	(14)	4	(5)	0	-	57	(9)
20-24 years	25	(6)	1	(4)	9	(9)	5	(6)	1	(14)	41	(6)
25+ years	82	(19)	16	(59)	54	(57)	66	(80)	0	-	218	(34)
Total	424		27		95		83		7		636	

*Other includes capsular group A and Ungrouped.

Table 2. Invasive meningococcal disease in England by capsular group and laboratory testing method: 2012/2013 and 2013/2014

Capsular groups	CULTURE AND PCR		CULTURE ONLY		PCR ONLY		Annual total	
	2012/2013	2013/2014	2012/2013	2013/2014	2012/2013	2013/2014	2012/2013	2013/2014
	A	0	0	0	0	0	1	0
B	144	86	120	106	331	232	595	424
C	15	7	12	13	6	7	33	27
W	6	14	41	70	8	11	55	95
X	0	0	0	0	0	0	0	0
Y	13	13	54	57	8	13	75	83
Z/E	0	0	0	0	0	0	0	0
Ungrouped	0	0	0	0	3	6	3	6
Ungroupable*	3	0	5	0	0	0	8	0
Total	181	120	232	246	356	270	769	636

* 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. 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 report

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Immunisation

Shingles vaccine coverage report, England, September to November 2014

Coverage of the shingles vaccine in routine and catch-up cohorts for the first quarter of the 2014/15 programme is marginally higher than that recorded for the same time period last year.

Introduction

A report evaluating the first year (September 2013 to August 2014) of the herpes zoster (shingles) vaccination programme in England was published in December 2014 [1]. Here we present data for the first three months of the second year of this national immunisation programme which started on the 1 September 2014.

This year (1 September 2014 to 31 August 2015) the shingles vaccine should be offered to patients aged 70 years for the routine programme (born between 2 September 1943 and 1 September 1944) and patients aged 78 and 79 years (born between 2 September 1934 and 1 September 1936) for the catch-up programme. Eligibility is determined by the patient's age on 1 September 2014. From 1 September 2014 GPs may continue to offer immunisation to all those who became eligible as 70 year-olds from 1 September 2013 but have not yet been immunised [2]. The programme aims to reduce the incidence and severity of shingles by boosting individuals' pre-existing varicella zoster virus immunity.

As a live viral vaccine, the shingles vaccine is contraindicated for individuals with severe immunosuppression either as a result of combination immunosuppressive therapies or due to a known primary or acquired immunodeficiency state such as leukaemia or lymphoma. It is also contraindicated for pregnant women. It is important to assess the eligibility of individuals prior to offering the shingles vaccine. Whilst a number of individuals in the eligible cohort are likely to have underlying medical conditions, many are likely to benefit and therefore prior assessment is essential to ensure individuals who can benefit from the vaccine are not excluded [3,4].

Methods

Aggregated GP practice level shingles vaccine coverage data are automatically uploaded via participating GP IT suppliers to the ImmForm* website on a monthly and annual basis. The ImmForm website provides a secure platform for vaccine coverage collections and these data collections are monitored, validated and analysed by PHE.

* ImmForm is the system used by Public Health England to record vaccine coverage data for some immunisation programmes and to provide vaccine ordering facilities for the NHS.

Results

In total 7,404/ 7,867 (94.1%) GP practices reported shingles vaccine coverage data in November 2014 (compared to 84.4% of GP practices in November 2013). This ranged from 85.5% of practices in Cumbria Northumberland, Tyne and Wear Area Team, to 99.4% of practices in West Yorkshire Area Team (table 1).

Table 1. Shingles vaccine coverage in England by age cohort and Area Team - 1st September 2014 to 30th November 2014

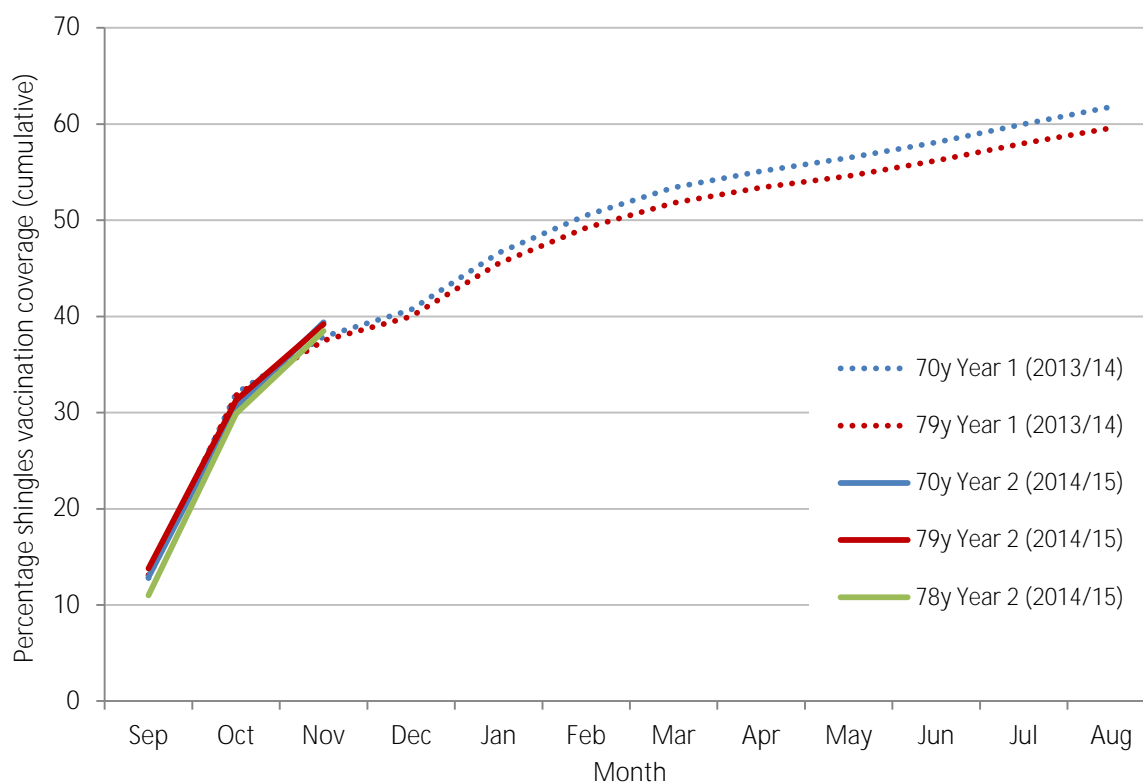
Area Team (code)	Per cent of practices reporting data in Nov. 2014	Percentage of age cohort vaccinated to end November 2014		
		Routine 70 years	Catch-up 79 years	Catch-up 78 years
Cheshire, Warrington and Wirral (Q44)	96.4	42.8	44.5	43.3
Durham, Darlington and Tees (Q45)	92.4	43.8	42.9	42.0
Greater Manchester (Q46)	85.7	37.3	36.5	36.4
Lancashire (Q47)	98.7	39.8	38.7	39.9
Merseyside (Q48)	91.0	36.6	36.1	36.9
Cumbria, Northumberland, Tyne and Wear (Q49)	85.5	43.3	43.0	42.9
N Yorkshire and Humber (Q50)	95.3	41.7	41.8	39.7
S Yorkshire and Bassetlaw (Q51)	97.7	41.0	39.9	39.6
W Yorkshire (Q52)	99.4	44.8	42.6	39.9
Arden, Herefordshire and Worcestershire (Q53)	96.1	39.5	41.0	41.3
Birmingham and Black Country (Q54)	89.6	36.3	35.5	35.5
Derbyshire and Notts. (Q55)	96.6	44.5	42.1	40.6
East Anglia (Q56)	93.4	44.3	42.3	40.3
Essex (Q57)	96.3	36.2	37.1	34.5
Hertfordshire and the S Midlands (Q58)	94.9	44.1	42.5	42.2
Leicestershire and Lincolnshire (Q59)	98.0	43.3	42.9	40.2
Shropshire and Staffordshire (Q60)	89.3	40.3	40.4	39.7
Bath, Gloucestershire, Swindon and Wiltshire (Q64)	96.9	40.8	42.6	40.0
Bristol, N Somerset, Somerset and S Gloucestershire (Q65)	93.9	35.9	36.9	37.5
Devon, Cornwall and Scilly Isles (Q66)	92.5	41.4	42.4	40.1
Kent and Medway (Q67)	91.8	36.9	38.2	39.6
Surrey and Sussex (Q68)	94.9	36.1	37.6	36.4
Thames Valley (Q69)	96.2	40.0	39.5	41.9
Wessex (Q70)	95.0	39.8	40.0	39.0
London (Q71)	96.6	30.0	30.3	30.8
ENGLAND	94.1	39.4	39.2	38.5

Overall coverage of the shingles vaccination programme in England in November 2014 was 39.4% for the routine 70 year old cohort (compared to 37.9% at the same point in 2013), 39.2% in the 79 year old catch-up cohort (compared to 37.5% at the same point in 2013), and 38.5% in the 78 year old catch-up cohort (Figure 1). Slightly higher coverage was observed for males (39.2%) and females (39.6%) for those aged 70 years, this was more pronounced for males compared to females in the catch-up cohorts (79 years: 41.0 vs. 37.6%, 78 years: 40.1 vs. 37.2%).

Coverage by Area Team ranged from 30.0% (London) to 44.8% (West Yorkshire) for the routine 70 year old cohort, 30.3% (London) to 44.5% (Cheshire, Warrington and Wirral) for the 79 year old catch-up cohort and 30.8% (London) to 43.3% (Cheshire, Warrington and Wirral) for the 78 year old catch-up cohort. Nine (out of 25) Area Teams achieved $\geq 40\%$ coverage for all three cohorts. Coverage estimates for Clinical Commissioning Group (CCG) by age cohort are available in the appendix [5].

A small proportion (3.5%) of individuals in cohorts who will become eligible for vaccination in future years (67-69 year olds and 71-77 year olds) across England were recorded as vaccinated. As only one dose of shingles vaccine is recommended, these patients will not require vaccination in future years. Area Team level data for the proportion vaccinated in future cohorts has not been published this quarter due to an outstanding query on data from one GP IT supplier, but will be provided in a future report.

Figure 1. Cumulative shingles vaccine coverage in England by age cohort, September to November 2014 (Year 2), and September 2013 to August 2014 (Year 1)



Discussion

Vaccine coverage data for the first quarter of the 2014/15 shingles vaccination programme in England has reached almost 40% which is marginally higher than the coverage achieved at the same time last year. Annual coverage for the 2013/14 programme reached 62% for the routine cohort and almost 60% for the catch-up cohort [1] and so, given current performance, it is hoped that similar or higher coverage will be achieved in the second year of the shingles programme by the end of August 2015.

Various surveillance systems have been put in place by PHE in collaboration with a range of partners to effectively monitor the impact and effectiveness of the shingles vaccine programme in England, and results will be reported in due course [1]. GP practices are urged to continue to offer shingles vaccine to the eligible cohorts in the coming months, beyond the current flu campaign in order to prevent the significant burden of disease associated with shingles among older adults in England.

References/appendix

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