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# **Sentinel surveillance of blood borne virus testing in England: data for January to December 2018 (supplementary tables)**

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# Sentinel surveillance of blood borne virus testing in England: data for January to December 2018 (supplementary tables)

The sentinel surveillance of blood borne virus testing began in 2002, with the aim of supplementing the routine surveillance of hepatitis. Information on the testing carried out in participating centres is collected irrespective of test result and can therefore also be used as a basis for estimating prevalence among those tested. These data have enhanced our knowledge and understanding of hepatitis testing, in terms of who is being tested and from which service types individuals are accessing testing, and also in interpreting trends in the number of positive individuals identified over time. In 2018, sentinel surveillance captured front-line testing for hepatitis A, B, C and HIV, covering approximately 40% of the population, and over 80% of the population from all 9 PHECs tested for hepatitis D, E and HTLV.

Changes to data processing means that we are now able to present the number of tests conducted alongside the number of individuals tested within a year, The proportion positive is calculated among individuals tested.

## 1. Hepatitis A IgM testing

**Supplementary Table 1. Number of individuals tested, and testing positive, for anti-HAV IgM in participating centres, January – December 2018\***

PHE centre	Number of individuals tested	Number positive (%)
East of England	6,547	24 (0.4)
London	13,066	83 (0.6)
North East	1,088	5 (0.5)
North West	5,450	37 (0.7)
South East	5,377	21 (0.4)
South West	3,290	34 (1.0)
West Midlands	2,450	22 (0.9)
East Midlands	4,060	13 (0.3)
Yorkshire and Humber	4,155	18 (0.4)
Unknown	48	3 (6.3)

\*Excludes oral fluid testing, 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. An individual can test in more than one PHE centre.

**Supplementary Table 2. Number of individuals tested, and testing positive, for anti-HAV IgM in participating centres, January - December 2018\*†.**

Age group (years)	Female		Male		Unknown		Total	
	Number of individuals tested	Number positive (%)	Number of individuals tested	Number positive (%)	Number of individuals tested	Number positive (%)	Number of individuals tested	Number positive (%)
Under 1	90	0 (0.0)	121	0 (0.0)	0	0 (0.0)	211	0 (0.0)
1-14	465	26 (5.6)	499	19 (3.8)	0	0 (0.0)	964	45 (4.7)
15-24	2,187	19 (0.9)	2,056	12 (0.6)	21	1 (4.8)	4,264	32 (0.8)
25-34	4,458	22 (0.5)	4,321	24 (0.6)	100	0 (0.0)	8,879	46 (0.5)
35-44	3,620	8 (0.2)	4,367	13 (0.3)	91	0 (0.0)	8,078	21 (0.3)
45-54	3,319	4 (0.1)	4,386	12 (0.3)	71	0 (0.0)	7,776	16 (0.2)
55-64	2,972	15 (0.5)	3,484	19 (0.5)	43	0 (0.0)	6,499	34 (0.5)
≥65	4,290	28 (0.7)	4,469	35 (0.8)	26	0 (0.0)	8,785	63 (0.7)
Unknown	12	0 (0.0)	15	0 (0.0)	25	3 (12.0)	52	3 (5.8)

\* 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. Where individuals have tested more than once, age at test was calculated using an individual's most recent test.

## 2. Hepatitis B surface antigen testing

### a. Antenatal HBsAg screening

**Supplementary Table 3. Number of women tested, and testing positive for HBsAg through antenatal screening in participating centres, January – December 2018\***

PHE centre	Number of individuals tested	Number positive (%)
East of England	6,992	15 (0.2)
London	24,820	113 (0.5)
North East	1,766	3 (0.2)
North West	24,671	50 (0.2)
South East	16,744	26 (0.2)
South West	15,773	37 (0.2)
East Midlands	19,044	35 (0.2)
West Midlands	10,275	48 (0.5)
Yorkshire and Humber	13,410	23 (0.2)
Unknown	6	0 (0.0)

\*Excludes oral fluid testing, reference testing and testing from hospitals referring all samples. Only women aged 12-49 years old are included. Data are de-duplicated subject to availability of date of birth, soundex and first initial. All data are provisional. Number of tests includes all test until a person is diagnosed positive, no tests are counted after a positive test, a person can be counted more than once. An individual can test in more than one PHE centre. The proportion positive is calculated using number of individuals.

## b. Non-antenatal HBsAg screening

**Supplementary Table 4. Number of tests, individuals tested, and individuals testing positive for HBsAg in participating centres (excluding antenatal testing), January – December 2018\***

PHE centre	Number of tests	Number of individuals tested	Number positive (%)
East of England	37,205	29,759	221 (0.7)
London	184,467	154,165	1,913 (1.2)
North East	23,531	20,301	127 (0.6)
North West	84,094	66,922	509 (0.8)
South East	37,690	30,925	292 (0.9)
South West	38,934	32,995	248 (0.8)
East Midlands	32,651	29,322	155 (0.5)
West Midlands	19,190	15,842	215 (1.4)
Yorkshire and Humber	43,273	38,107	235 (0.6)
Unknown	1,192	1,086	43 (4.0)

\* Excludes antenatal screening, oral fluid testing, 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. Number of tests includes all tests until a person is diagnosed positive, no tests are counted after a positive test, a person can be counted more than once. An individual can test in more than one PHE centre. The proportion positive is calculated using number of individuals.

**Supplementary Table 5. Age and gender of individuals tested for HBsAg in participating centres (excluding antenatal testing), January - December 2018\*.**

Age group (years)	Female			Male			Unknown			Total		
	Number of tests	Number of individuals tested	Number positive (%)	Number of tests	Number of individuals tested	Number positive (%)	Number of tests	Number of individuals tested	Number positive (%)	Number of tests	Number of individuals tested	Number positive (%)
<b>Under 1</b>	320	303	6 (2.0)	426	404	4 (1.0)	2	2	0 (0.0)	748	709	10 (1.4)
<b>1-14</b>	2,587	2,374	15 (0.6)	2,777	2,473	15 (0.6)	13	13	0 (0.0)	5,377	4,860	30 (0.6)
<b>15-24</b>	30,102	28,139	135 (0.5)	30,038	27,474	209 (0.8)	529	460	7 (1.5)	60,669	56,073	351 (0.6)
<b>25-34</b>	61,605	56,498	434 (0.8)	58,993	53,144	728 (1.4)	1,969	1,711	36 (2.1)	122,567	111,353	1198 (1.1)
<b>35-44</b>	45,525	40,506	351 (0.9)	53,225	46,878	724 (1.5)	1,578	1,358	21 (1.5)	100,328	88,742	1096 (1.2)
<b>45-54</b>	29,094	23,918	231 (1.0)	42,462	34,701	449 (1.3)	797	676	10 (1.5)	72,353	59,295	690 (1.2)
<b>55-64</b>	24,576	18,772	130 (0.7)	33,169	24,155	201 (0.8)	484	340	5 (1.5)	58,229	43,267	336 (0.8)
<b>≥65</b>	34,648	24,140	89 (0.4)	46,020	29,285	125 (0.4)	509	357	6 (1.7)	81,177	53,782	220 (0.4)
<b>Unknown</b>	119	115	0 (0.0)	210	201	3 (1.5)	450	448	24 (5.4)	779	764	27 (3.5)

\* Excludes 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. Number of tests includes all tests until a person is diagnosed positive, no tests are counted after a positive test, a person can be counted more than once. Where individuals have tested more than once, age at test was calculated using an individual's most recent test. The number of females tested may include some undergoing routine antenatal screening who could not be identified as such from the information provided. The proportion positive is calculated using number of individuals.

### 3. Hepatitis C antibody testing

**Supplementary Table 6. Number of tests, individuals tested, and individuals testing positive for anti-HCV in participating centres, January – December 2018\***

PHE centre	Number of tests	Number of individuals tested	Number positive (%)
East of England	28,298	21,718	671 (3.1)
London	179,295	157,291	2,382 (1.5)
North East	23,217	19,557	650 (3.3)
North West	81,565	62,651	2,009 (3.2)
South East	40,677	33,645	1,238 (3.7)
South West	35,838	31,457	1,082 (3.4)
East Midlands	30,656	27,355	940 (3.4)
West Midlands	18,121	15,013	596 (4.0)
Yorkshire and Humber	40,648	36,820	906 (2.5)
Unknown	938	852	30 (3.5)

\*Excludes oral fluid testing, 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. Number of tests includes all tests until a person is diagnosed positive, no tests are counted after a positive test, a person can be counted more than once. An individual can test in more than one PHE centre. The proportion positive is calculated using number of individuals.

**Supplementary Table 7. Number of individuals tested, and testing positive for anti-HCV in participating centres by operational delivery network (ODN), January – December 2018\***

ODN	Number of tests	Number of Individuals tested	Number positive (%)
Barts	15,894	14,696	195 (1.3)
Birmingham	16,927	13,914	574 (4.1)
Bristol And Severn	32,656	28,365	719 (2.5)
Cheshire And Merseyside	30,468	24,592	737 (3.0)
Eastern Hep. Network	19,832	16,235	602 (3.7)
Greater Manchester And Eastern Cheshire	49,338	36,572	1038 (2.8)
Humberside And North Yorkshire	3423	3264	114 (3.5)
Kent Network Via Kings	11,437	9303	287 (3.1)
Lancashire And South Cumbria	1211	1135	149 (13.1)
Leicester	1930	1849	259 (14.0)
North Central London	11,259	8164	242 (3.0)
North East And Cumbria	23,766	20,068	735 (3.7)
Nottingham	29,900	26,596	703 (2.6)
South Thames Hep. Network	97,345	84,600	1192 (1.4)
South West Peninsula	649	642	111 (17.3)
South Yorkshire	377	370	146 (39.5)
Surrey Hep. Services	1447	1375	162 (11.8)
Sussex Hep. Network	15,117	12,599	422 (3.3)
Thames Valley Hep C Network	990	975	116 (11.9)
Wessex Hep C ODN	14,461	12,128	526 (4.3)
West London	63,021	55,861	799 (1.4)
West Yorkshire	36,867	33,222	646 (1.9)
Unknown	938	852	30 (3.5)

\*Excludes oral fluid testing, 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. Number of tests includes all tests until a person is diagnosed positive, no tests are counted after a positive test, a person can be counted more than once. An individual can test in more than one PHE centre. The proportion positive is calculated using number of individuals.

**Supplementary Table 8. Age and gender of individuals tested for anti-HCV in participating centres, January - December 2018\***

Age group (year)	Female			Male			Unknown			Total		
	Number of tests	Number of Individuals tested	Number positive (%)	Number of tests	Number of Individuals tested	Number positive (%)	Number of tests	Number of Individuals tested	Number positive (%)	Number of tests	Number of Individuals tested	Number positive (%)
1-14	2,325	2,112	11 (0.5)	2,463	2,170	14 (0.6)	10	10	2 (20.0)	4,798	4,292	27 (0.6)
15-24	24,302	22,619	115 (0.5)	31,692	28,289	169 (0.6)	454	396	3 (0.8)	56,448	51,304	287 (0.6)
25-34	46,673	42,555	740 (1.7)	66,823	58,289	1,465 (2.5)	1,516	1,355	50 (3.7)	115,012	102,199	2,255 (2.2)
35-44	38,600	34,583	1,003 (2.9)	59,190	51,530	2,654 (5.2)	1,377	1,190	70 (5.9)	99,167	87,303	3,727 (4.3)
45-54	27,707	23,682	569 (2.4)	46,593	38,916	2,083 (5.4)	796	683	59 (8.6)	75,096	63,281	2,711 (4.3)
55-64	22,628	18,323	272 (1.5)	32,918	25,737	679 (2.6)	396	309	18 (5.8)	55,942	44,369	969 (2.2)
≥65	30,892	23,648	180 (0.8)	40,751	29,027	305 (1.1)	418	333	4 (1.2)	72,061	53,008	489 (0.9)
Unknown	107	102	1 (1.0)	206	200	21 (10.5)	416	415	17 (4.1)	729	717	39 (5.4)

\* Excludes oral fluid reference testing and testing from hospitals referring all samples. Individuals aged less than one year are excluded since positive tests in this age group may reflect the presence of passively-acquired 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. Number of tests includes all tests until a person is diagnosed positive, no tests are counted after a positive test, a person can be counted more than once. Where individuals have tested more than once, age at test was calculated using an individual's most recent test. The proportion positive is calculated using number of individuals.



#### 4. Hepatitis D total antibody testing

**Supplementary Table 9. Number of individuals tested, and testing positive, for HDV-TA and/or HDV IgM in participating centres, January – December 2018\***

PHE centre	Number of individuals tested	Number positive (%)
East of England	673	24 (3.6)
London	953	41 (4.3)
North East	166	9 (5.4)
North West	238	15 (6.3)
South East	857	22 (2.6)
South West	278	11 (4.0)
East Midlands	249	8 (3.2)
West Midlands	293	15 (5.1)
Yorkshire and Humber	524	23 (4.4)
Unknown	1	0 (0.0)

\* Data are de-duplicated subject to availability of date of birth, soundex and first initial. All data are provisional. An individual can test in more than one PHE centre.

#### 5. Hepatitis E IgM testing

**Supplementary Table 10. Number of individuals tested, and testing positive, for anti-HEV IgM in participating centres, January – December 2018\***

PHE centre	Number of individuals tested	Number positive (%)
East of England	3,073	85 (2.8)
London	4,809	120 (2.5)
North East	1,695	47 (2.8)
North West	375	89 (23.7)
South East	2,076	75 (3.6)
South West	1,801	111 (6.2)
East Midlands	1,547	32 (2.1)
West Midlands	4,844	79 (1.6)
Yorkshire and Humber	1,350	41 (3.0)
Unknown	55	5 (9.1)

\* Data are de-duplicated subject to availability of date of birth, soundex and first initial. All data are provisional. An individual can test in more than one PHE centre.

## 6. HIV testing

### a. Antenatal HIV screening

**Supplementary Table 11. Number of women tested (aged 16-49 years), and testing positive for HIV through antenatal screening in participating centres, January – December 2018\***

PHE centre	Number of individuals tested	Number positive (%)
East of England	6,977	0 (0.0)
London	35,672	45 (0.1)
North East	2,022	2 (0.1)
North West	9,825	12 (0.1)
South East	16,600	8 (0.05)
South West	0	0 (0.0)
East Midlands	18,819	9 (0.05)
West Midlands	10,248	27 (0.3)
Yorkshire and Humber	13,507	15 (0.1)
Unknown	2	0 (0.0)

\*Excludes oral fluid testing, reference testing and testing from hospitals referring all samples. Only women aged 16-49 years old are included. Data are de-duplicated subject to availability of date of birth, soundex and first initial. All data are provisional. Number of tests includes all tests until a person is diagnosed positive, no tests are counted after a positive test, a person can be counted more than once. An individual can test in more than one PHE centre. The proportion positive is calculated using number of individuals.

**b. Non-antenatal HIV testing**

**Supplementary Table 12. Number of tests, adults (16+ years old) tested, and, adults (16+ years old) testing positive for HIV in participating centres (excluding antenatal testing), January – December 2018\***

PHE centre	Number of tests	Number of individuals tested	Number positive (%)
East of England	24,959	22,282	5 (0.02)
London	419,585	357,338	2,196 (0.6)
North East	32,914	28,676	99 (0.3)
North West	94,687	73,967	347 (0.5)
South East	60,580	51,334	298 (0.6)
South West	1,545	1,537	1 (0.1)
East Midlands	44,593	39,302	152 (0.4)
West Midlands	17,817	16,425	133 (0.8)
Yorkshire and Humber	52,427	46,749	211 (0.5)
Unknown	1,206	1,160	10 (0.9)

\*Excludes oral fluid testing, 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. Number of tests includes all tests until a person is diagnosed positive, no tests are counted after a positive test, a person can be counted more than once. An individual can test in more than one PHE centre. The proportion positive is calculated using number of individuals.

**Supplementary Table 13. Age and gender of adults (16+ years old) tested for HIV in participating centres (excluding antenatal testing), January - December 2018\***

Age group (years)	Female			Male			Unknown			Total		
	Number of tests	Number of individuals tested	Number positive (%)	Number of tests	Number of individuals tested	Number positive (%)	Number of tests	Number of individuals tested	Number positive (%)	Number of tests	Number of individuals tested	Number positive (%)
<b>16-24</b>	89,972	79,608	88 (0.1)	64,410	56,151	246 (0.4)	625	542	3 (0.6)	155,007	136,301	337 (0.2)
<b>25-34</b>	123,659	110,612	188 (0.2)	111,491	93,860	784 (0.8)	2,198	1,847	12 (0.6)	237,348	206,319	984 (0.5)
<b>35-44</b>	67,603	60,100	229 (0.4)	74,319	62,034	652 (1.1)	1,582	1,375	12 (0.9)	143,504	123,509	893 (0.7)
<b>45-54</b>	34,901	30,142	164 (0.5)	50,817	41,354	552 (1.3)	789	667	11 (1.6)	86,507	72,163	727 (1.0)
<b>55-64</b>	23,696	19,682	83 (0.4)	33,918	26,968	253 (0.9)	347	285	4 (1.4)	57,961	46,935	340 (0.7)
<b>≥65</b>	29,230	23,490	37 (0.2)	38,393	29,313	95 (0.3)	265	206	1 (0.5)	67,888	53,009	133 (0.3)
<b>Unknown</b>	450	422	2 (0.5)	1,172	1120	18 (1.6)	476	474	18 (3.8)	2,098	2,016	38 (1.9)

\* Excludes individuals aged under 16, antenatal screening, oral fluid testing, 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. Number of tests includes all tests until a person is diagnosed positive, no tests are counted after a positive test, a person can be counted more than once. Where individuals have tested more than once, age at test was calculated using an individual's most recent test. The number of females tested may include some undergoing routine antenatal screening who could not be identified as such from the information provided. The proportion positive is calculated using number of individuals.

## 7. HTLV testing

**Supplementary Table 14. Number of individuals tested, and testing positive, for HTLV in participating centres, January – December 2018\***

PHE centre	Number of individuals tested	Number positive (%)
East of England	1,207	7 (0.6)
London	3,646	101 (2.8)
North East	767	6 (0.8)
North West	3,588	9 (0.3)
South East	1,134	13 (1.1)
South West	41	1 (2.4)
East Midlands	127	1 (0.8)
West Midlands	406	15 (3.7)
Yorkshire and Humber	1,151	5 (0.4)
Unknown	18	0 (0.0)

\*Data are de-duplicated subject to availability of date of birth, soundex and first initial. All data are provisional. An individual can test in more than one PHE centre.

**Supplementary Table 15. Number of individuals tested, and testing positive, for HTLV in participating centres, January - December 2018\*.**

Age group (years)	Female		Male		Unknown		Total	
	Number of individuals tested	Number positive (%)	Number of individuals tested	Number positive (%)	Number of individuals tested	Number positive (%)	Number of individuals tested	Number positive (%)
Under 1	14	0 (0.0)	24	0 (0.0)	0	0 (0.0)	38	0 (0.0)
1-14	105	4 (3.8)	153	1 (0.7)	0	0 (0.0)	258	5 (1.9)
15-24	325	0 (0.0)	381	3 (0.8)	18	0 (0.0)	724	3 (0.4)
25-34	892	8 (0.9)	845	2 (0.2)	39	0 (0.0)	1,776	10 (0.6)
35-44	803	12 (1.5)	855	7 (0.8)	30	0 (0.0)	1,688	19 (1.1)
45-54	1,009	13 (1.3)	1,257	8 (0.6)	12	0 (0.0)	2,278	21 (0.9)
55-64	1,064	26 (2.4)	1,409	13 (0.9)	21	0 (0.0)	2,494	39 (1.6)
≥65	1,026	21 (2.0)	1,469	13 (0.9)	9	0 (0.0)	2,504	34 (1.4)
Unknown	33	6 (18.2)	26	1 (3.8)	206	20 (9.7)	265	27 (10.2)

\* Data are de-duplicated subject to availability of date of birth, soundex and first initial. All data are provisional. Where individuals have tested more than once, age at test was calculated using an individual's most recent test.

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