



Public Health
England

Protecting and improving the nation's health

Annual report from the sentinel surveillance of blood borne virus testing in England 2019 (supplementary tables)

Health Protection Report
Volume 15 Number 2
19 January 2021

Contents

1. Hepatitis A IgM testing	3
2. Hepatitis B surface antigen testing.....	5
a. Antenatal HBsAg screening.....	5
b. Non-antenatal HBsAg screening	6
3. Hepatitis C antibody testing	8
4. Hepatitis D total antibody testing.....	11
5. Hepatitis E IgM testing	12
6. HIV testing	13
a. Antenatal HIV screening.....	13
b. Non-antenatal HIV testing	14
7. HTLV testing	16

1. Hepatitis A IgM testing

Supplementary Table 1. Number of individuals tested, and testing positive, for anti-HAV IgM in participating centres, January to December 2019*

PHE centre	Number of individuals tested	Number positive (%)
East of England	7,103	24 (0.3)
London	11,973	77 (0.6)
North East	1,204	21 (1.7)
North West	6,441	32 (0.5)
South East	5,935	39 (0.7)
South West	2,794	40 (1.4)
West Midlands	2,755	15 (0.5)
East Midlands	4,175	8 (0.2)
Yorkshire and Humber	4,419	9 (0.2)
Unknown	60	5 (8.3)

*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 to December 2019*†

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	85	0 (0.0)	148	0 (0.0)	0	0 (0.0)	233	0 (0.0)
1 to 14	452	17 (3.8)	501	11 (2.2)	2	0 (0.0)	955	28 (2.9)
15 to 24	2,073	11 (0.5)	2,288	7 (0.3)	4	0 (0.0)	4,365	18 (0.4)
25 to 34	4,321	16 (0.4)	4,494	28 (0.6)	22	1 (4.5)	8,837	45 (0.5)
35 to 44	3,687	11 (0.3)	4,468	16 (0.5)	23	0 (0.0)	8,178	27 (0.3)
45 to 54	3,478	17 (0.5)	4,460	18 (0.4)	32	0 (0.0)	7,970	35 (0.4)
55 to 64	3,181	17 (0.5)	3,547	16 (0.5)	15	0 (0.0)	6,743	33 (0.5)
≥65	4,571	40 (0.9)	4,915	40 (0.8)	18	0 (0.0)	9,504	80 (0.8)
Unknown	6	0 (0.0)	25	0 (0.0)	31	4 (12.9)	62	4 (6.5)

* 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

Supplementary Table 3. Number of individuals tested and testing positive for anti-HAV IgM by ethnic group, January to December 2019*

Ethnic group	Number of individuals tested	Number positive (%)
Asian or Asian British origin	5,036	44 (0.9)
Black or Black British origin	1,195	7 (0.6)
Other and/or mixed origin	1,405	13 (0.9)
White or White British origin	36,366	194 (0.5)
Unknown ethnic origin	2,812	12 (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.

2. Hepatitis B surface antigen testing

a. Antenatal HBsAg screening

Supplementary Table 4. Number of women tested, and testing positive for HBsAg through antenatal screening in participating centres, January to December 2019*

PHE centre	Number of individuals tested	Number positive (%)
East of England	6,470	13 (0.2)
London	22,828	87 (0.4)
North East	1,620	3 (0.2)
North West	24,297	53 (0.2)
South East	16,966	26 (0.2)
South West	15,474	25 (0.2)
East Midlands	13,856	19 (0.1)
West Midlands	9,890	40 (0.4)
Yorks. and Humber	13,931	30 (0.2)
Unknown	14	0 (0.0)

*Excludes oral fluid testing, reference testing and testing from hospitals referring all samples. Only women aged 12 to 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 5. Number of tests, individuals tested, and individuals testing positive for HBsAg in participating centres (excluding antenatal testing), January to December 2019*

PHE centre	Number of tests	Number of individuals tested	Number positive (%)
East of England	40,635	33,728	250 (0.7)
London	178,535	147,602	1,687 (1.1)
North East	27,578	23,531	139 (0.6)
North West	95,828	76,087	682 (0.9)
South East	43,356	34,732	326 (0.9)
South West	40,604	34,527	292 (0.8)
East Midlands	35,274	31,062	187 (0.6)
West Midlands	26,452	22,067	281 (1.3)
Yorks and Humber	67,753	58,734	457 (0.8)
Unknown	1,857	1,671	61 (3.7)

* 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 6. Age and gender of individuals tested for HBsAg in participating centres (excluding antenatal testing), January to December 2019*

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 (%)
Under 1	324	311	3 (1.0)	450	420	9 (2.1)	11	11	0 (0.0)	785	742	12 (1.6)
1 to 14	2,925	2,598	12 (0.6)	2,845	2,517	9 (0.4)	22	22	2 (9.1)	5,792	5,137	23 (0.4)
15 to 24	32,342	29,930	130 (0.4)	36,345	32,370	275 (0.8)	570	535	4 (0.7)	69,257	62,835	409 (0.7)
25 to 34	65,592	59,828	453 (0.8)	70,153	61,877	826 (1.3)	953	860	25 (2.9)	136,698	122,565	1,304 (1.1)
35 to 44	50,076	44,281	372 (0.8)	62,495	54,093	814 (1.5)	837	764	23 (3.0)	113,408	99,138	1,209 (1.2)
45 to 54	32,019	26,500	247 (0.9)	48,560	39,610	523 (1.3)	554	487	12 (2.5)	81,133	66,597	782 (1.2)
55 to 64	27,579	21,221	90 (0.4)	37,302	27,454	232 (0.8)	233	197	3 (1.5)	65,114	48,872	325 (0.7)
≥65	36,265	25,184	105 (0.4)	48,366	30,723	147 (0.5)	192	109	3 (2.8)	84,823	56,016	255 (0.5)
Unknown	116	114	0 (0.0)	244	231	3 (1.3)	502	499	40 (8.0)	862	844	43 (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 7. Number of tests, individuals tested, and individuals testing positive for anti-HCV in participating centres, January to December 2019*

PHE centre	Number of tests	Number of individuals tested	Number positive (%)
East of England	31,682	25,833	1,055 (4.1)
London	163,863	142,078	2,058 (1.4)
North East	27,612	23,011	926 (4.0)
North West	93,395	71,184	2,366 (3.3)
South East	45,720	37,936	1,303 (3.4)
South West	38,029	33,120	1,127 (3.4)
East Midlands	33,730	29,459	914 (3.1)
West Midlands	24,834	21,132	1,225 (5.8)
Yorkshire and Humber	66,952	58,541	1,435 (2.5)
Unknown	1,708	1,617	49 (3.0)

*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. Number of individuals tested, and testing positive for anti-HCV in participating centres by operational delivery network (ODN), January to December 2019*

ODN	Number of tests	Number of Individuals tested	Number positive (%)
Barts	16,254	14,916	210 (1.4)
Birmingham	22,454	19,067	1,120 (5.9)
Bristol And Severn	33,738	29,135	670 (2.3)
Cheshire And Merseyside	31,574	26,324	651 (2.5)
Eastern Hep. Network	22,401	18,175	836 (4.6)
Greater Manchester And Eastern Cheshire	55,996	40,556	1,068 (2.6)
Humber And North Yorkshire	5,298	4,586	548 (11.9)
Kent Network Via Kings	13,481	10,998	310 (2.8)
Lancashire And South Cumbria	5,090	4,460	559 (12.5)
Leicester	1,520	1,222	153 (12.5)
North Central London	10,853	9,410	247 (2.6)
North East And Cumbria	27,977	23,324	973 (4.2)
Nottingham	34,189	30,032	808 (2.7)
South Thames Hep. Network	86,231	73,677	1,050 (1.4)
South West Peninsula	1,084	1,063	200 (18.8)
South Yorkshire	689	684	205 (30.0)
Surrey Hep. Services	1,309	1,254	118 (9.4)
Sussex Hep. Network	15,668	13,069	451 (3.5)
Thames Valley Hep C Network	3,435	3,336	250 (7.5)
Wessex Hep C ODN	15,322	12,649	462 (3.7)
West London	57,190	50,543	577 (1.1)
West Yorkshire	60,964	53,325	699 (1.3)
Unknown	4,808	4,682	296 (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. 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 9. Age and gender of individuals tested for anti-HCV in participating centres, January to December 2019*

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 (%)
1 to 14	2,648	2,336	9 (0.4)	2,489	2,200	6 (0.3)	13	13	0 (0.0)	5,150	4,549	15 (0.3)
15 to 24	26,244	24,193	131 (0.5)	37,457	32,498	184 (0.6)	665	604	4 (0.7)	64,366	57,295	319 (0.6))
25 to 34	48,663	44,059	809 (1.8)	75,995	64,644	1,654 (2.6)	1,748	1,523	68 (4.5)	126,406	110,226	2,531 (2)
35 to 44	42,089	37,503	1,262 (3.4)	66,369	56,790	3,273 (5.8)	1,598	1,410	137 (9.7)	110,056	95,703	4,672 (5.8))
45 to 54	30,309	26,023	722 (2.8)	51,113	42,344	2,412 (5.7)	909	809	93 (11.5)	82,331	69,176	3,227 (5)
55 to 64	25,490	20,794	300 (1.4)	36,986	28,890	849 (2.9)	442	362	33 (9.1)	62,918	50,046	1,182 (2.9))
≥65	32,113	24,637	172 (0.7)	43,014	30,588	265 (0.9)	312	204	8 (3.9)	75,439	55,429	445 (0.9))
Unknown	109	107	8 (7.5)	252	241	27 (11.2)	498	495	35 (7.1)	859	843	70 (11)

* 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 10. Number of individuals tested, and testing positive, for HDV-TA and/or HDV IgM in participating centres, January to December 2019*

PHE centre	Number of individuals tested	Number positive (%)
East of England	218	7 (3.2)
London	297	10 (3.4)
North East	32	0 (0.0)
North West	70	3 (4.3)
South East	195	6 (3.1)
South West	64	1 (1.6)
East Midlands	76	0 (0.0)
West Midlands	61	1 (1.6)
Yorkshire and Humber	109	5 (4.6)
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.

Supplementary Table 11. Number of individuals tested, and testing positive, for HDV-TA and/or HDV IgM in participating centres by ethnic group, January to December 2019*

Ethnic group	Number of individuals tested	Number positive (%)
Asian or Asian British origin	172	7 (4.1)
Black or black British origin	155	7 (4.5)
Other and/or mixed origin	206	3 (1.5)
White or white British origin	505	15 (3.0)
Unknown ethnic origin	81	1 (1.2)

* Data are de-duplicated subject to availability of date of birth, soundex and first initial. All data are provisional.

5. Hepatitis E IgM testing

Supplementary Table 12. Number of individuals tested, and testing positive, for anti-HEV IgM in participating centres, January to December 2019*

PHE centre	Number of individuals tested	Number positive (%)
East of England	3,715	114 (3.1)
London	4,370	119 (2.7)
North East	2,072	37 (1.8)
North West	467	94 (20.1)
South East	2,319	82 (3.5)
South West	1,175	64 (5.4)
East Midlands	2,378	52 (2.2)
West Midlands	4,759	73 (1.5)
Yorkshire and Humber	2,078	60 (2.9)
Unknown	66	6 (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.

Supplementary Table 13. Number of individuals tested, and testing positive, HEV IgM in participating centres by ethnic group, January to December 2019*

Ethnic group	Number of individuals tested	Number positive (%)
Asian or Asian British origin	3,020	114 (3.8)
Black or black British origin	390	4 (1.0)
Other and/or mixed origin	527	9 (1.7)
White or white British origin	18,795	548 (2.9)
Unknown ethnic origin	642	26 (4.0)

*Data are de-duplicated subject to availability of date of birth, soundex and first initial. All data are provisional.

6. HIV testing

a. Antenatal HIV screening

Supplementary Table 14. Number of women tested (aged 16 to 49 years), and testing positive for HIV through antenatal screening in participating centres, January to December 2019*

PHE centre	Number of individuals tested	Number positive (%)
East of England	6,455	0 (0.0)
London	32,699	33 (0.1)
North East	1,887	0 (0.0)
North West	9,210	23 (0.2)
South East	16,805	13 (0.1)
South West	0	0 (0.0)
East Midlands	13,560	7 (0.1)
West Midlands	9,896	34 (0.3)
Yorkshire and Humber	13,941	5 (0.0)
Unknown	6	0 (0.0)

*Excludes oral fluid testing, reference testing and testing from hospitals referring all samples. Only women aged 16 to 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 15. Number of tests, adults (16+ years old) tested, and, adults (16+ years old) testing positive for HIV in participating centres (excluding antenatal testing), January to December 2018*

PHE centre	Number of tests	Number of individuals tested	Number positive (%)
East of England	26,986	24,023	5 (0.02)
London	426,501	358,286	2,286 (0.6)
North East	36,864	31,352	102 (0.3)
North West	94,340	72,919	280 (0.4)
South East	66,295	55,792	461 (0.8)
South West	832	822	0 (0.0)
East Midlands	45,842	39,550	124 (0.3)
West Midlands	25,649	23,296	214 (0.9)
Yorkshire and Humber	82,221	70,679	225 (0.3)
Unknown	1,966	1,881	47 (2.5)

*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 16. Age and gender of adults (16+ years old) tested for HIV in participating centres (excluding antenatal testing), January to December 2019*

Age group (years)	Male			Female			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 (%)
16 to 24	95,434	83,773	76 (0.1)	70,240	60,079	247 (0.4)	529	495	1 (0.2)	166,203	144,347	324 (0.2)
25 to 34	128,936	114,581	180 (0.2)	119,739	98,256	837 (0.9)	775	693	5 (0.7)	249,450	213,530	1,022 (0.5)
35 to 44	73,400	64,890	214 (0.3)	80,722	65,804	703 (1.1)	629	563	8 (1.4)	154,751	131,257	925 (0.7)
45 to 54	38,763	33,354	194 (0.6)	55,356	44,439	614 (1.4)	425	364	8 (2.2)	94,544	78,157	816 (1.0)
55 to 64	27,587	22,853	76 (0.3)	38,739	30,374	341 (1.1)	195	159	1 (0.6)	66,521	53,386	418 (0.8)
≥65	32,117	25,698	64 (0.2)	41,578	31,503	122 (0.4)	115	90	1 (1.1)	73,810	57,291	187 (0.3)
Unknown	413	401	1 (0.2)	1,248	1,194	13 (1.1)	556	549	38 (6.9)	2,217	2,144	52 (2.4)

* 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. Inscope.

7. HTLV testing

Supplementary Table 17. Number of individuals tested, and testing positive, for HTLV in participating centres, January to December 2019*

PHE centre	Number of individuals tested	Number positive (%)
East of England	1,306	5 (0.4)
London	3,827	38 (1.0)
North East	914	5 (0.5)
North West	3,683	9 (0.2)
South East	1,348	14 (1.0)
South West	77	2 (2.6)
East Midlands	89	1 (1.1)
West Midlands	371	2 (0.5)
Yorkshire and Humber	1,047	3 (0.3)
Unknown	17	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 18. Number of individuals tested, and testing positive, for HTLV in participating centres, January to December 2019*

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	22	0 (0.0)	35	0 (0.0)	1	0 (0.0)	58	0 (0.0)
1 to 14	117	2 (1.7)	150	2 (1.3)	1	0 (0.0)	268	4 (1.5)
15 to 24	332	2 (0.6)	432	1 (0.2)	2	0 (0.0)	766	3 (0.4)
25 to 34	858	4 (0.5)	833	5 (0.6)	13	0 (0.0)	1,704	9 (0.5)
35 to 44	819	1 (0.1)	925	3 (0.3)	13	0 (0.0)	1,757	4 (0.2)
45 to 54	1,021	5 (0.5)	1,279	9 (0.7)	12	0 (0.0)	2,312	14 (0.6)
55 to 64	1,081	11 (1.0)	1,559	7 (0.4)	4	0 (0.0)	2,644	18 (0.7)
≥65	1,103	13 (1.2)	1,674	5 (0.3)	9	0 (0.0)	2,786	18 (0.6)
Unknown	43	8 (18.6)	35	0 (0.0)	220	1 (0.5)	298	9 (3.0)

* 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.

Supplementary Table 19. Number of individuals tested, and testing positive for HTLV in participating centres by ethnic group, January to December 2019*

Ethnic group	Number of individuals tested	Number positive (%)
Asian or Asian British origin	1,005	5 (0.5)
Black or black British origin	361	6 (1.7)
Other and/or mixed origin	215	2 (0.9)
White or white British origin	10,330	55 (0.5)
Unknown ethnic origin	632	11 (1.7)

* Data are de-duplicated subject to availability of date of birth, soundex and first initial. All data are provisional.

About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. We do this through world-leading science, research, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health and Social Care, and a distinct delivery organisation with operational autonomy. We provide government, local government, the NHS, Parliament, industry and the public with evidence-based professional, scientific and delivery expertise and support.

Public Health England
Wellington House
133-155 Waterloo Road
London SE1 8UG
Tel: 020 7654 8000

Website: www.gov.uk/phe
Twitter: [@PHE_uk](https://twitter.com/PHE_uk)
Facebook: www.facebook.com/PublicHealthEngland

© Crown copyright 2021

Queries relating to this document should be directed to:

Immunisation
Hepatitis and Blood Safety Department
National Infection Service
PHE Colindale
61 Colindale Avenue
London NW9 5EQ

OGL

You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v3.0. To view this licence, visit [OGL](http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3). Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

Published: January 2021
PHE gateway number: GW-1881



PHE supports the UN Sustainable
Development Goals

