



Public Health  
England

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# Laboratory reports of hepatitis A and C in England and Wales, April to June 2018

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# Laboratory reports of hepatitis A infections: April to June 2018

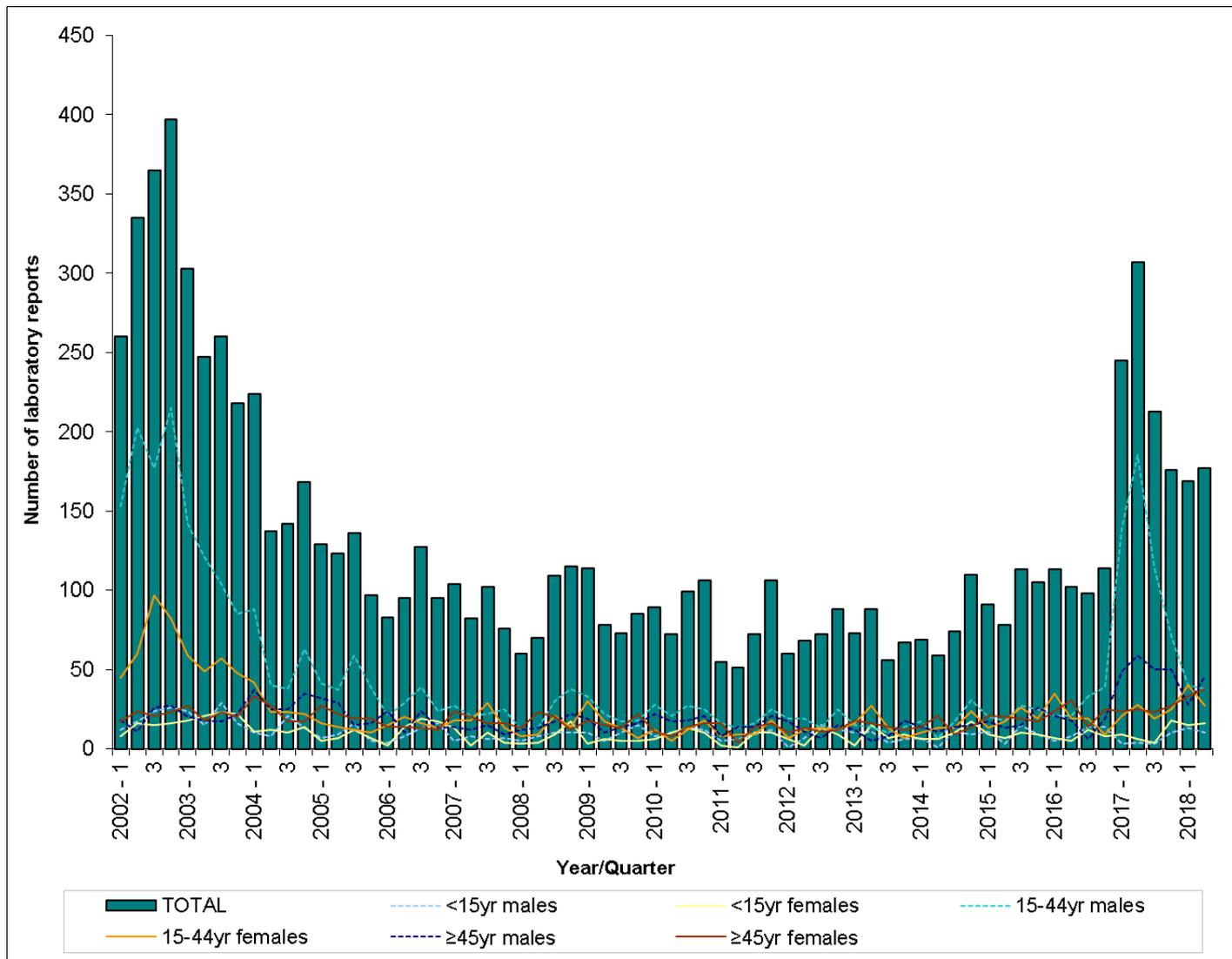
There were a total of 177 laboratory reports of hepatitis A reported to Public Health England (PHE) during the second quarter of 2018 (April - June 2018). This is a 4.7% increase on the reports in the first quarter of 2018 (n=169), (Figure 1). The increase seen in 2017 was due to the outbreak of hepatitis A amongst men who have sex with men (MSM) that was first identified in 2016 (1).

Over 33.9% (n=60) of the reports were reported from London PHE region followed by 11.9% (n=21) from the East of England region. Age-group and sex were well reported (>98% complete) (Table 1). There were 85 (48%) reports among the 45 years and over age group, and 65 (36.7%) reports were among those aged 15-44 years. Where known males accounted for 53.7% (94/175) of all reports. The majority of reports in the 15-44 years age group were in males (58.5%). Males also accounted for the majority of reports (54.8%) in the 45 years and over age group. Whereas females accounted for the majority of reports (61.5%) in the under 15s age group.

**Table 1: Laboratory reports of hepatitis A in England and Wales, April – June 2018**

Age group	Female	Male	Unknown	Total
<1 years	0	0	1	1
1-4 years	0	2	0	2
5-9 years	9	6	0	15
10-14 years	7	2	0	9
15-24 years	10	9	0	19
25-34 years	12	21	0	33
35-44 years	5	8	0	13
45-54 years	4	11	0	15
55-64 years	12	15	0	27
>65 years	22	20	1	43
<b>Total</b>	<b>81</b>	<b>94</b>	<b>2</b>	<b>177</b>

**Figure 1: Laboratory reports of hepatitis A by age and sex (England and Wales), January 2002 to June 2018**

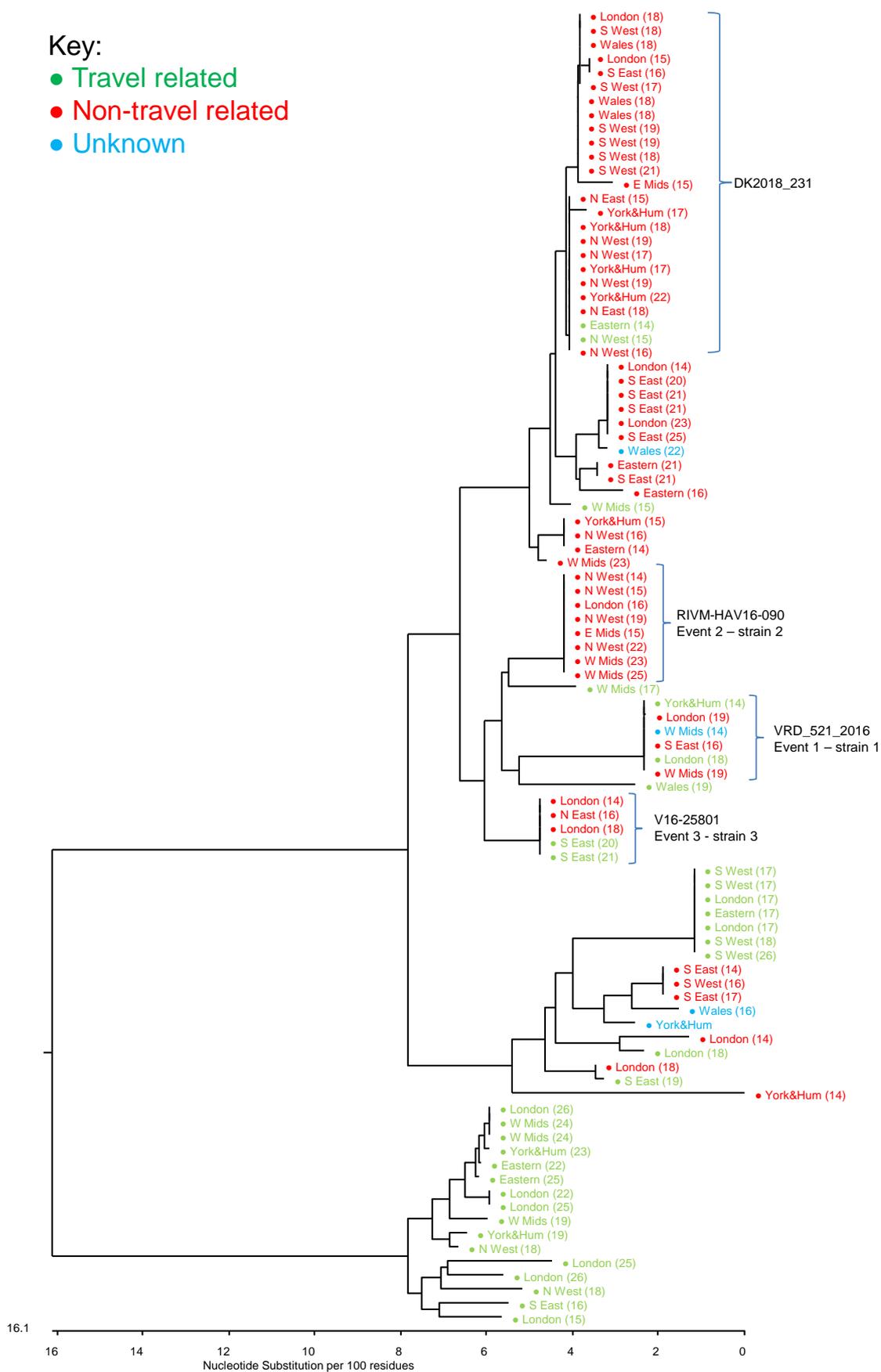


# Reference laboratory confirmation and phylogeny of hepatitis A infection

Of the 177 patients notified as having acute HAV infection during the second quarter of 2018, 126 (71.2%) had samples forwarded to the Virus Reference Department for confirmation. Forty nine of the patients were not confirmed to have acute HAV infection. The remaining 77 patients were confirmed to have acute HAV infection. In addition 17 patients were confirmed to have acute HAV infection that had not been reported through the laboratory reporting system although all the English cases were recorded in HPzone.

A total of 94 patients could be genotyped over this period; 61 were genotype IA (64.9%), 17 were genotype IB (18.1%) and 16 were genotype IIIA (17%). Of these samples 38 were associated with travel (40.4%), 52 had no travel history (55.3%) and 4 had no information (4.3%). 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. In the second quarter of 2018 the numbers of cases with VRD\_521\_2016 (Event 1 – strain 1), RIVM-HAV16-090 (Event 2 – strain 2) and V16-25801 (Event 3 – strain 3) [1,2,3] continued to decline but there was an increase in non-travel related cases with highly related sequences (DK2018\_231) indicating continued importation of contaminated food products [4].

**Figure 2. Phylogenetic tree of genotype IA, IB, and IIIA sequences April to June 2018 (n=94)**



## References

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# Laboratory reports of hepatitis C: April to June 2018

Between April and June 2018 a total of 2655 laboratory reports of hepatitis C were reported to PHE. There was a 2.1% decrease in the number of reports compared to the first quarter of 2018 (n=2713), and a 3.4% increase on the same quarter in 2017 (n=2565).

Age and sex were well reported (>99.5% complete). Where known males accounted for 69.4% (1832/2640) of reports which is consistent with previous quarters and years [1]. Adults aged 25-44 years accounted for 53.8% of the total number of hepatitis C reports.

Age group	Male	Female	Unknown	Total
1-4 years	1	2	0	3
5-9 years	0	1	0	1
10-14 years	2	1	0	3
15-24 years	39	30	2	71
25-34 years	391	203	5	599
35-44 years	600	225	5	830
45-54 years	444	178	3	625
55-64 years	249	92	0	341
>65 years	106	76	0	182
Unknown	0	0	0	0
<b>Total</b>	<b>1832</b>	<b>808</b>	<b>15</b>	<b>2655</b>

## Notes

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 or exposure to infection.

Laboratory reports are not reliable for differentiating acute and chronic hepatitis C infections. Laboratory reports include individuals with a positive test for hepatitis C antibody, antigen and/or detection of hepatitis C RNA.

A small proportion of these specimens are diagnosed following dried blood spot (DBS) testing however not all DBS testing is reported by laboratories.

For the first time, laboratory reports are presented by Operations Delivery Network (ODN). ODNs were launched in April 2013 following the publication of the NHS England strategy to sustain and develop clinical networks.

ODNs are the networks through which hepatitis C treatment is being delivered across England.

Between April and June 2018, 2504 out of 2655 individuals have been allocated to an ODNs.

Primary ODN	Total
Barts	85
Birmingham	231
Bristol and Severn	130
Cheshire and Merseyside	17
Eastern Hepatitis Network	183
Greater Manchester and Eastern Cheshire	142
Humberside and North Yorkshire	69
Kent Network vis Kings	43
Lancashire and South Cumbria	99
Leicester	67
North Central London	153
North East and Cumbria	169
Nottingham	135
South Thames Hepatitis Network	279
South West Peninsula	12
South Yorkshire	118
Surrey Hepatitis Services	36
Sussex Hepatology Network	84
Thames Valley Hep C ODN	71
Wessex Hep C ODN	63
West London	177
West Yorkshire	141

#### Notes

ODNs are based on NHS England Clinical Commissioning Groups (CCGs) geographic boundaries. NHS England allocates a primary or lead ODN for CCGs which may cross two ODNs. Bristol and Severn, Surrey Hepatitis Services, Sussex Hepatology Network and North East and Cumbria were ODNs which between them had 50 individuals that could also be assigned to a second ODN.

1. Laboratory reports of hepatitis C in England and Wales, 2017, Public Health England  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/730074/hpr2718\\_hcv-nnl.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/730074/hpr2718_hcv-nnl.pdf)

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## About *Health Protection Report*

*Health Protection Report* is a national public health bulletin for England and Wales, published by Public Health England. It is PHE's principal channel for the dissemination of laboratory data relating to pathogens and infections/communicable diseases of public health significance and of reports on outbreaks, incidents and ongoing investigations.

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