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Trends in late HIV diagnoses and in persons accessing HIV-related care in the UK: data to December 2013

On 6 October 2014, Public Health England (PHE) published national HIV data tables on numbers accessing HIV care in the United Kingdom to the end of 2013 [1]. This information release precedes the launch of the 2014 HIV Surveillance Overview in the week commencing 17 November 2014, in advance of National HIV Testing Week (21-28 November 2014) [2].

There were 6,000 people newly diagnosed with HIV infection in the UK in 2013. Three quarters of them were men (4,477). This is a slight decrease following 6,245 diagnoses reported in 2012, and is consistent with the overall declining trend observed since a peak in 2005 (7,892). The decline is largely due to a reduction in the number of new HIV diagnoses among men and women born abroad. Reports of AIDS and all-cause deaths among persons with diagnosed HIV have remained low since the introduction of effective antiretroviral therapy (ART) in the mid-1990s, with 319 and 527 reports in 2013, respectively. Of note is the changing age distribution among persons newly diagnosed; in 2013 nearly one in six (n=974) adults were 50 years or older, compared to one in fourteen (n=587) in 2004.

There has been a modest reduction in the proportion and the number of HIV diagnoses made at a late stage of infection. Over the past five years, late HIV diagnoses in the UK have fallen from 52% (3,450/6,634) in 2009 to 42% (1,058/6,000) in 2013 (data adjusted for missing information). Defined as having a CD4 count <350 cells/ μ l within three months of HIV diagnosis, late HIV diagnoses represent a key indicator of the public health response to HIV.

Late HIV diagnosis by Local Authority is published each February as one of the Public Health Outcome Indicators [3]. People who are diagnosed with HIV late have a ten-fold increased risk of death within a year of diagnosis compared to those diagnosed promptly. Prompt diagnosis also provides the opportunity for behaviour change and access to anti-retroviral therapy (ART) both of which reduce the risk of onward transmission.

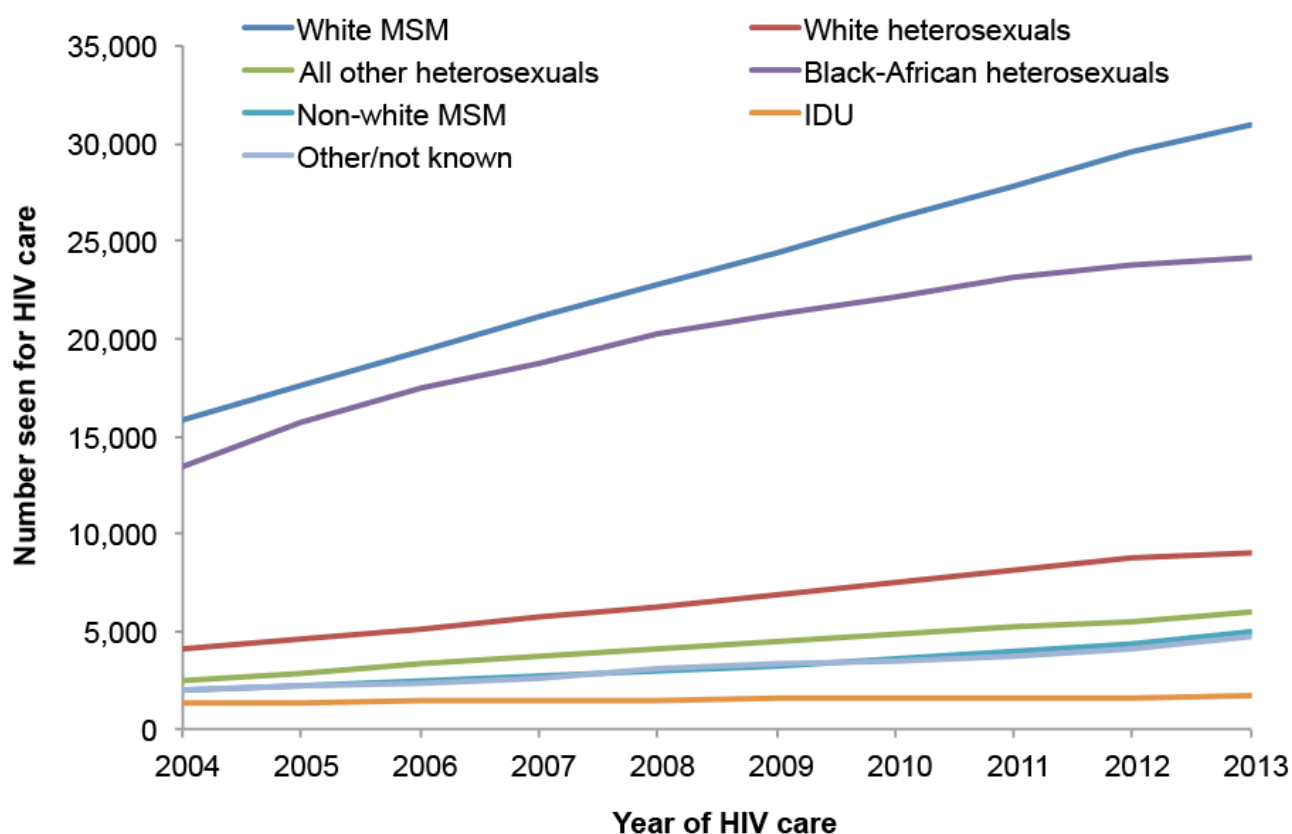
The number of persons accessing HIV-related care has nearly doubled over the last decade, from 41,157 in 2004 to 81,512 in 2013 (see figure). This is due to on-going new diagnoses and an ageing cohort effect as people are living longer with HIV. The number and proportion of persons accessing HIV-related care aged 50 and over continues to rise. In 2013, one in four adults (≥ 15 years) were aged 50 and over, compared with one in five adults in 2009 and one in eight in 2004. It is vital that those living with diagnosed HIV continue to receive appropriate care as they age and have effective and integrated management of their co-morbidities alongside their HIV infection.

Coverage of ART continues to rise with 87% (70,570/81,512) of persons seen for care in 2013 receiving ART compared to 68% (27,799/41,157) in 2004. Coverage of ART among people with a CD4 count <350 cells/ μ l has increased from 83% (12,519/15,113) in 2009 to 90% (11,351/12,631) in 2013.

London had the largest number of residents living with diagnosed infection accounting for 42% (33,863/81,512) of diagnosed persons. The PHE centres that saw the largest proportional increases over the past 10 years were the West Midlands and Yorkshire and The Humber, which each saw a tripling in the number accessing care from 2,720 in 2004 to 5,552 in 2013 and from 1,706 to 4,298, respectively.

National testing guidelines recommend that, where the prevalence of diagnosed HIV infections is two or more per 1,000 among persons aged 15-59, an HIV test should be offered to persons newly registering in general practice and being admitted to a general medical ward. In 2013, 66 Local Authorities (LAs) had a diagnosed prevalence above the two per 1,000 threshold, nearly half of which were in London (32/66). All but one of the 33 London LAs had prevalence above this threshold. Outside London, the five LAs with the highest prevalence above the two per 1,000 threshold were: Brighton and Hove, Salford, Manchester, Slough and Luton.

Persons seen for HIV care by prevention group and ethnicity: United Kingdom, 2004–2013



References

1. HIV data tables are available at: <https://www.gov.uk/government/statistics/hiv-data-tables>.
 2. The 2014 HIV Surveillance Overview will include estimates of undiagnosed HIV infection, HIV incidence trends, the impact of treatment as prevention and the monitoring of HIV care quality.
 3. See: <http://www.phoutcomes.info/public-health-outcomes-framework#gid/1000043/pat/6/ati/102/page/0/par/E12000004/are/E06000015>.
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English Surveillance Programme for Antimicrobial Utilisation and Resistance first report

PHE has been charged with delivering on four of the seven key areas of the UK antimicrobial resistance strategy for 2013-2018 [1]. The English Surveillance Programme for Antimicrobial Utilization and Resistance (ESPAUR) was established by PHE in response to the strategy. ESPAUR, which works towards aspects of the four key areas, has produced its first annual report, presenting “baseline” data on useage of key antibiotics and an assessment of the extent of proliferation of resistant strains associated with those drugs.

The key aims of ESPAUR are to develop surveillance systems to measure both utilisation and resistance, to measure the impact of the former on the latter, and assess the implications for patient/public safety.

It is a given that consumption of antibiotics is a major driver for the development of resistance in bacteria and ESPAUR data outputs are seen as essential to the reduction of unnecessary prescribing. The data in the new report provide, for the first time, information on national and regional antibiotic resistance and use trends from 2010 to 2013, and provide a baseline against which changes in prescribing practices and resistance can be compared [2]. The focus is on susceptibility data for bacteria/drug combinations chosen because they encompass particularly hard-to-treat infections.

On consumption, the ESPAUR report states that, in 2013, 66 different antibiotics were prescribed in both general practice and hospital settings, of which the top 15 accounted for 98% and 88% of consumption respectively. From 2010 to 2013, total antibiotic consumption increased by 6%: general practice consumption increased 4%, prescribing to hospital inpatients increased by 12% and other community prescriptions (eg dentists) increased by 32%. The predominant antibiotics consumed in England were penicillins, tetracyclines and macrolides. The report dedicates sections on trends in consumption to these other key drug categories

On antibiotic resistance, the report dedicates sections to trends in resistance for the following key pathogen categories: *Escherichia coli*, *Klebsiella pneumoniae*, *Pseudomonas* spp. and *Streptococcus pneumoniae*. It notes, for example, that (according to voluntary reporting data) there was an increase of 12% in bloodstream infections caused by E.coli between 2012 and 2013, with varying levels of resistance to key antibiotics for this infection of between 10 and 19%.

Data from the first year of ESPAUR provides a baseline measure of antimicrobial resistance and use. This will allow PHE to determine the impact of future behaviour and educational strategies developed with both the public and healthcare professionals. As part of this, PHE has established the Antibiotic Guardian pledge campaign where everyone in the UK, the public and the medical community can choose one simple pledge about how they make better use of antibiotics and help save these vital medicines from becoming obsolete [3].

References

1. “UK five-year antimicrobial resistance strategy 2013 to 2018”, DH website, 10 September 2013.
 2. English surveillance programme antimicrobial utilisation and resistance (ESPAUR) 2014 report, 10 October 2014. See also: “New report reveals increase in use of antibiotics linked to rising levels of antibiotic resistance”
 3. The Antibiotic Guardian website, where pledges can be made is at: <http://antibioticguardian.com/>
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Infection reports

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 - ▶ Common gastrointestinal infections, England and Wales: laboratory reports: weeks 36-39/2014
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General outbreaks of foodborne illness in humans, England and Wales: weeks 36-39/2014

Preliminary information has been received about the following outbreaks.

PHE Centre/ Health Protection Team	Organism	Location of food prepared or served	Month of outbreak	Cases positive	Number ill	Suspect vehicle	Evidence
South Midlands and Hertfordshire	Clostridium perfringens	Restaurant	August	22	9	Beef	D
North East	Salmonella Typhimurium	Nursery	September	3	3	N/k	N/k
North East	Salmonella Enteritidis	Restaurant	September	13	10	Chinese food	D
National	E coli PT1 VT2	National	September	13	13	N/k	N/k

D = Descriptive epidemiological evidence: suspicion of a food vehicle in an outbreak based on the identification of common food exposures, from the systematic evaluation of cases and their characteristics and food histories over the likely incubation period by standardised means (such as standard questionnaires) from all, or an appropriate subset of, cases.

Salmonella infections (faecal specimens) England and Wales, reports to Public Health England (salmonella data set): August 2014

Details of 775 serotypes of salmonella infections recorded in August are given below.

In September 2014, 550 salmonella infections were recorded.

Organism	Cases: August 2014
S. Enteritidis PT4	18
S. Enteritidis (other PTs)	243
S. Typhimurium	162
S. Virchow	17
Others (typed)	335
Total salmonella (provisional data)	775

Common gastrointestinal infections, England and Wales, laboratory reports: weeks 36-39/2014

Laboratory reports	Number of reports received				Total reports	Cumulative total	
	36/14	37/14	38/14	39/14	36-39/14	1-39/14	1-39/13
Campylobacter	1249	1201	1133	1012	4595	46873	44484
<i>Escherichia coli</i> O157 *	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Salmonella †	208	170	117	55	550	4770	5513
<i>Shigella sonnei</i>	31	24	30	26	111	803	737
Rotavirus	47	32	40	13	132	3991	14358
Norovirus	104	62	66	56	288	3687	5696
Cryptosporidium	115	134	119	88	456	2553	2510
Giardia	101	109	95	83	388	2750	2584

*Vero cytotoxin-producing isolates: data from PHE's Gastrointestinal Bacteria Reference Unit (GBRU).

† Data from GBRU.

Less common gastrointestinal infections, England and Wales, laboratory reports: weeks 27-39/2014

Laboratory reports	Total reports 27-39/2014	Cumulative total to 39/2014	Cumulative total to 39/2013
Astrovirus	19	171	223
Sapovirus	30	103	119
<i>Shigella boydii</i>	15	43	70
<i>Shigella dysenteriae</i>	4	21	28
<i>Shigella flexneri</i>	174	525	521
<i>Plesiomonas</i>	5	27	33
<i>Vibrio</i> spp.	21	48	41
<i>Yersinia</i> spp	4	33	28
<i>Entamoeba histolytica</i>	10	37	38
<i>Blastocystis hominis</i>	36	137	157
<i>Dientamoeba fragilis</i>	9	32	43

Suspected and laboratory-confirmed reported norovirus outbreaks in hospitals, with regional breakdown: outbreaks occurring in weeks 32-39/14

The hospital norovirus outbreak reporting scheme (HNORS) recorded 18 outbreaks occurring between weeks 36 and 39, 2014, 16 (89%) of which led to ward/bay closures or restriction to admissions. Twelve (65%) were recorded as laboratory confirmed due to norovirus.

From week 1 (January 2014) to week 39 (week beginning 22 September 2014) 443 outbreaks have been reported. Ninety-four per cent (414) of reported outbreaks resulted in ward/bay closures or restrictions to admissions and 65% (288) were laboratory confirmed as due to norovirus (see table below).

Seasonal comparison of laboratory reports of norovirus (England and Wales)

In the current season † (from week 27, 2014, to week 39, 2015) to date, there were 785 laboratory reports of norovirus. This is 50% higher than the average number of laboratory reports for the same period in the seasons between 2009/10 and 2013/2014 (523)* (see graphs below). The number of laboratory reports in the most recent weeks will increase as further reports are received.

† The norovirus season runs from July to June (week 27 in year one to week 26 in year two) in order to capture the winter peak in one season.

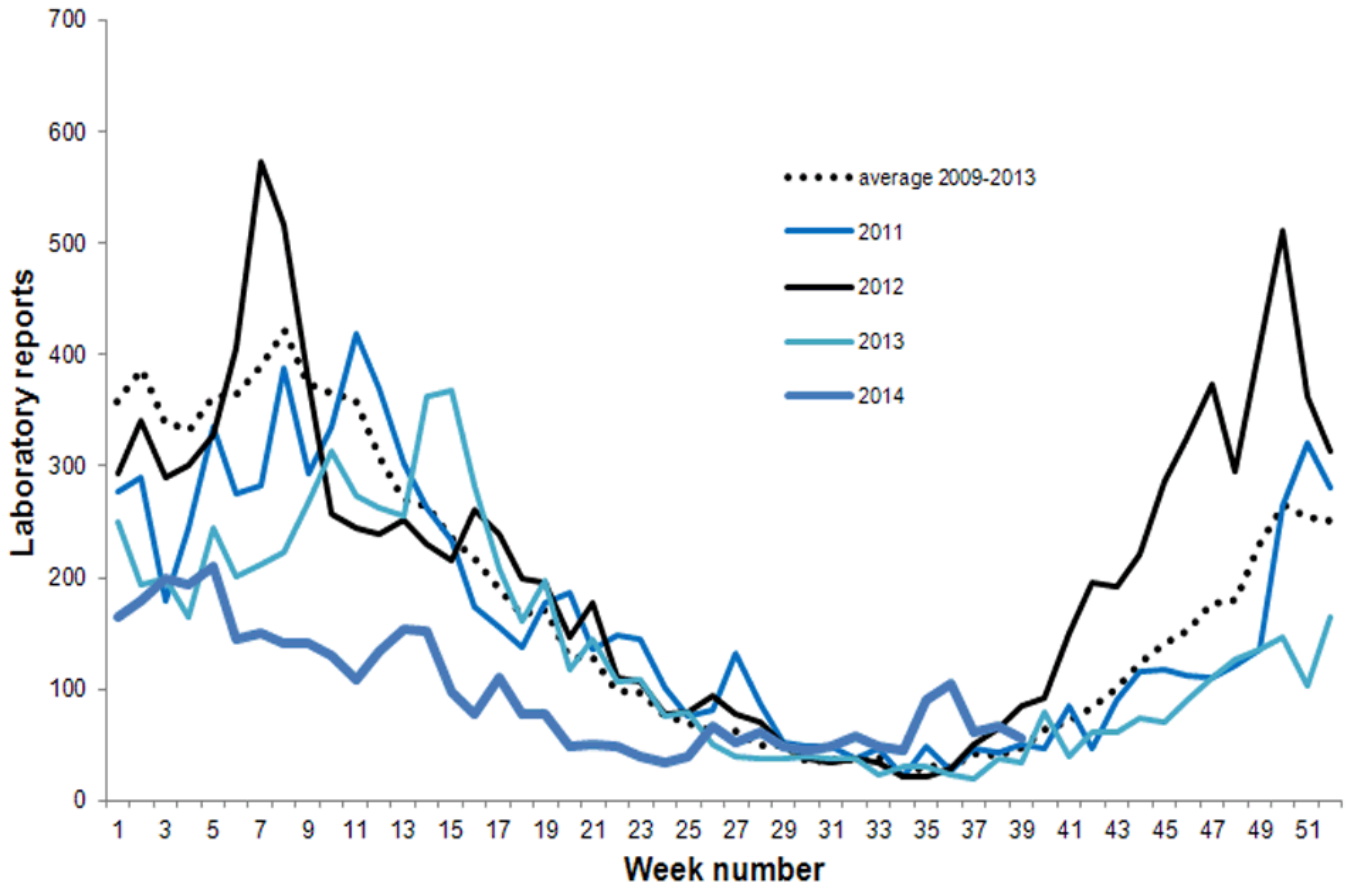
* The 2012/2013 season began earlier than normal so comparisons with that year would not be valid.

Suspected and laboratory-confirmed reported norovirus outbreaks in hospitals, with regional breakdown: outbreaks occurring in weeks 36-39/2014 (and 1-39/2013)

Region/ PHE Centre	Outbreaks between weeks 36-39/2014			Total outbreaks 1-39/2013		
	Outbreaks	Ward/bay closure*	Lab- confirmed	Outbreaks	Ward/bay closure*	Lab- confirmed
Avon, Gloucestershire and Wiltshire	3	3	2	54	54	34
Bedfordshire, Hertfordshire and Northamptonshire	–	–	–	1	1	1
Cheshire and Merseyside	–	–	–	1	1	1
Cumbria and Lancashire	1	1	1	20	20	11
Devon, Cornwall and Somerset	1	1	1	46	45	23
Greater Manchester	–	–	–	15	14	4
Hampshire, Isle of Wight and Dorset	–	–	–	22	22	13
Lincolnshire, Leicestershire, Nottinghamshire and Derbyshire	4	4	4	40	39	31
London	–	–	–	7	7	5
Norfolk, Suffolk, Cambridgeshire and Essex	–	–	–	–	–	–
North east	3	3	2	47	41	33
Sussex, Surrey and Kent	1	1	–	24	24	17
Thames Valley	3	1	1	15	13	5
West Midlands	1	1	–	51	50	26
Yorkshire and the Humber	2	2	1	101	84	85
Total	18	16	12	443	414	288

* Note: not all outbreaks result in whole wards closures, some closures are restricted to bays only.

Current weekly norovirus laboratory reports compared to weekly average 2006-2010



Seasonal comparison of laboratory reports of norovirus (England and Wales)

