



Public Health
England

Protecting and improving the nation's health

Hepatitis C in England 2017 report

Working to eliminate hepatitis C as a major public health threat.

Eliminating hepatitis C as a major public health threat in England

2020 impact targets

Coverage of key services

Reducing HCV mortality (target 10% reduction by 2020)

Figures suggest an 8% fall in deaths from Hep C-related end-stage liver disease and cancer in 2015

Reducing new chronic HCV infections (target 30% reduction by 2020)

Surveys of people who inject drugs (PWID) suggest numbers of new HCV infections have remained stable over recent years; both estimated rates of infection and prevalence of infection in recent initiates to drug use were similar in 2015 and 2014/15 (7/100 person years and 23% respectively) to those observed in 2011 and 2006/7



Number treated
Provisional data suggest around a 40% increase in people receiving Hep C treatment in 2015/16, up from an average of 5,100 in previous years



Proportion of people diagnosed
Only around 1/2 of PWID sampled in surveys were aware of their HCV antibody positive status, and this figure has remained relatively stable over the last decade



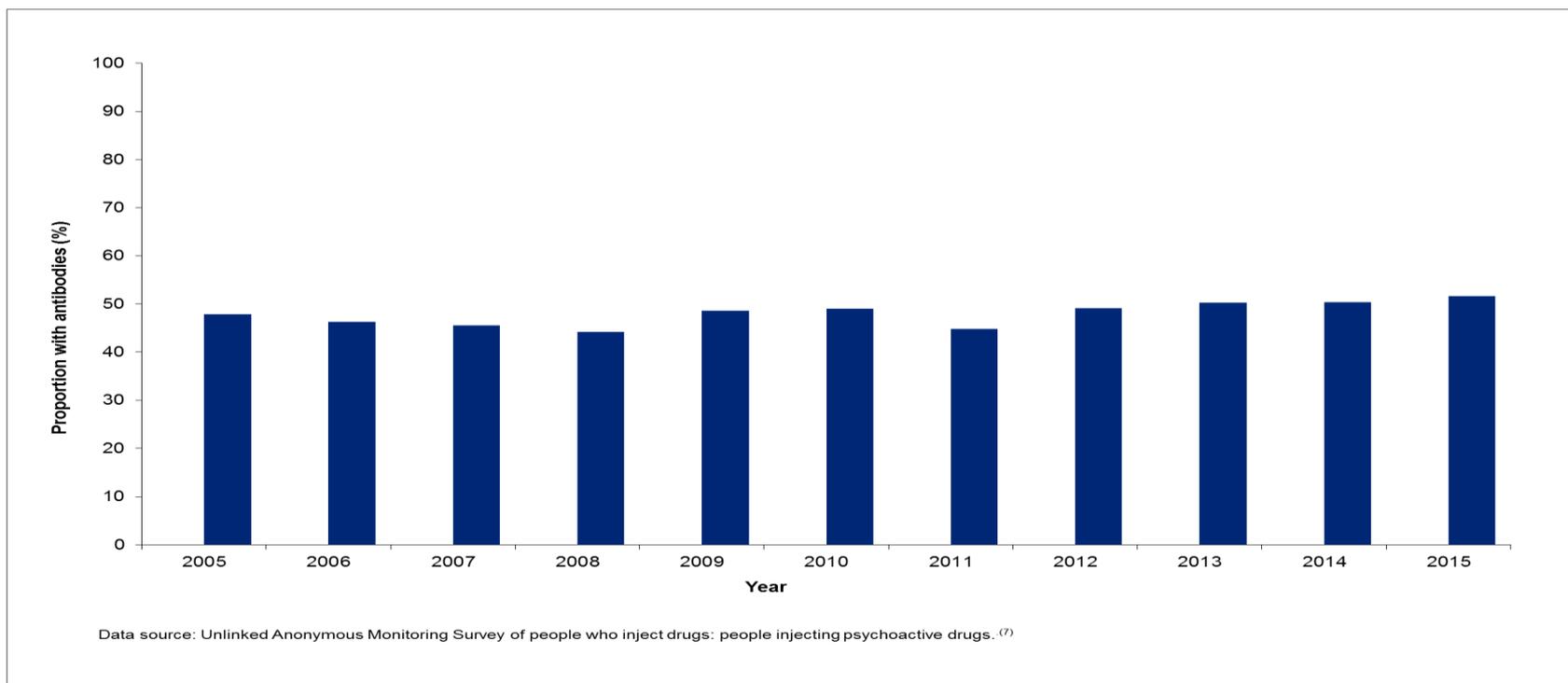
Number of sterile needles / syringes provided
Needle/syringe provision was found to be suboptimal, with just less than one half of those surveyed reporting adequate provision for their needs



160,000 people estimated to be living with chronic Hep C in England



Figure 1. Trend in anti-HCV prevalence* among people injecting psychoactive drugs in England: 2005 to 2015



During 2009 to 2011 there was a phased change in the sample collected in the survey from an oral fluid to dried blood spot (DBS). The sensitivity of the anti-HCV tests on these two sample types is different. The sensitivity of the oral fluid test for anti-HCV is approximately 92%,⁽²⁰⁾ that on DBS samples is close to 100%. Data presented here have been adjusted for the sensitivity of the oral fluid test.

7. Public Health England. People who Inject drugs: HIV and viral hepatitis monitoring. Unlinked Anonymous Monitoring survey. 2017. Available from: www.gov.uk/government/publications/people-who-inject-drugs-hiv-and-viral-hepatitis-monitoring [Accessed 19/01/2017].

20. Judd A, Parry J, Hickman M, McDonald T, Jordan L, Lewis K, et al. Evaluation of a modified commercial assay in detecting antibody to hepatitis C virus in oral fluids and dried blood spots. *Journal of Medical Virology*. 2003;71(1):49-55.

Figure 2. Preliminary estimates of incidence* of HCV-related ESLD**/HCC in England: 2010-2015

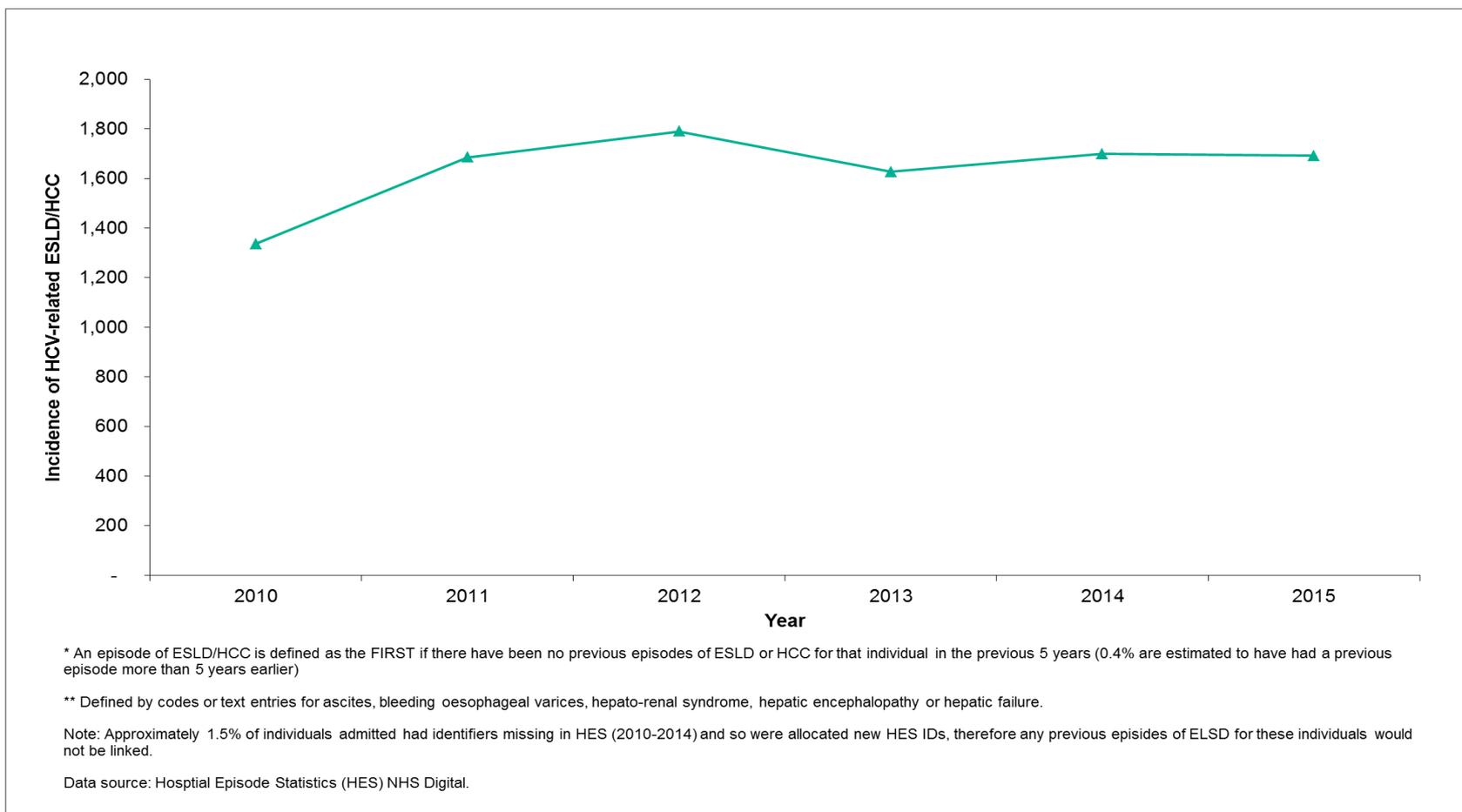


Figure 3. Number of first registrations and liver transplants undertaken in England where post-hepatitis C cirrhosis was given as either the primary, secondary or tertiary indication for transplant: 2008 to 2015

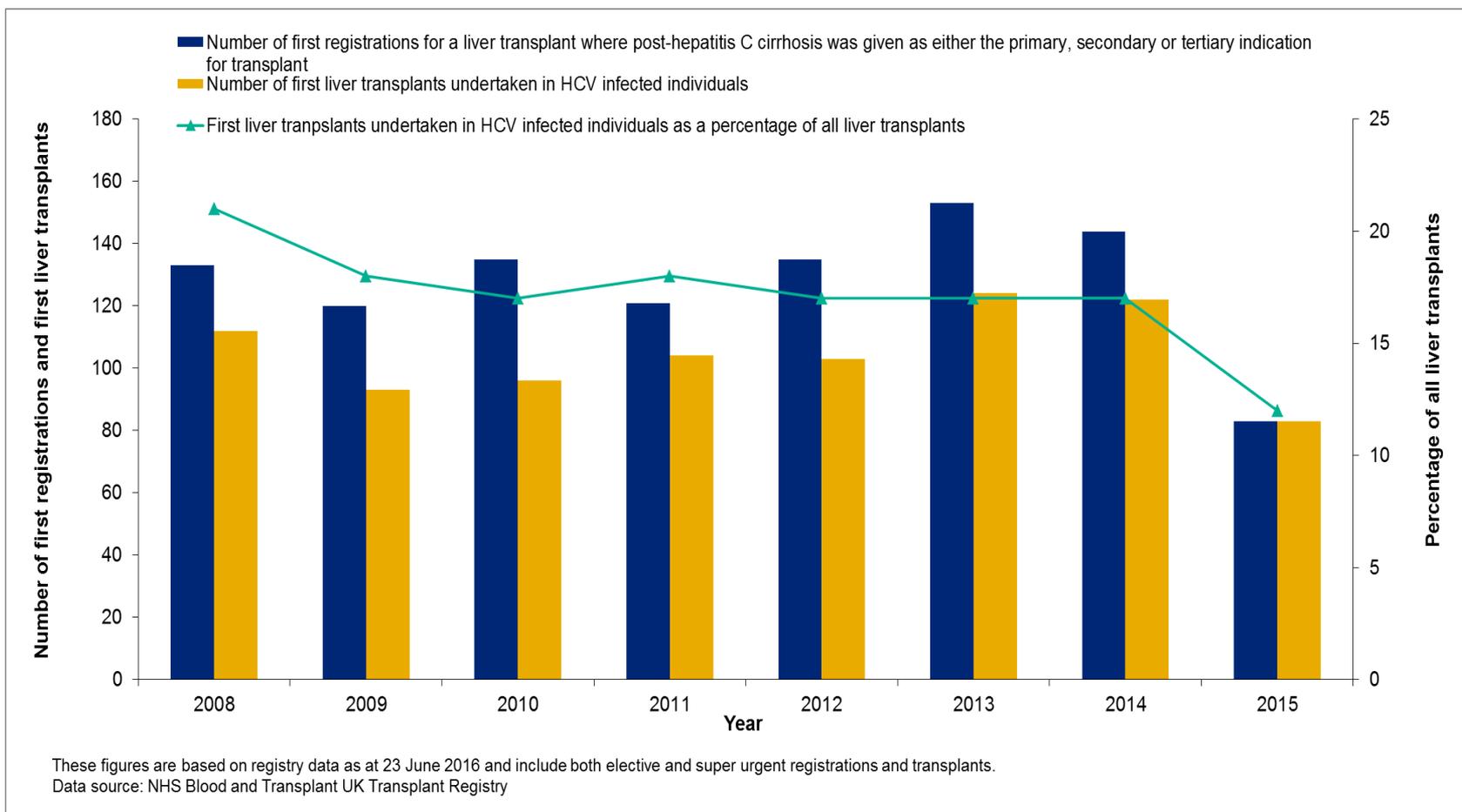


Figure 4. Deaths from ESLD* or HCC in those with HCV mentioned on their death certificate in England: 2005 to 2015

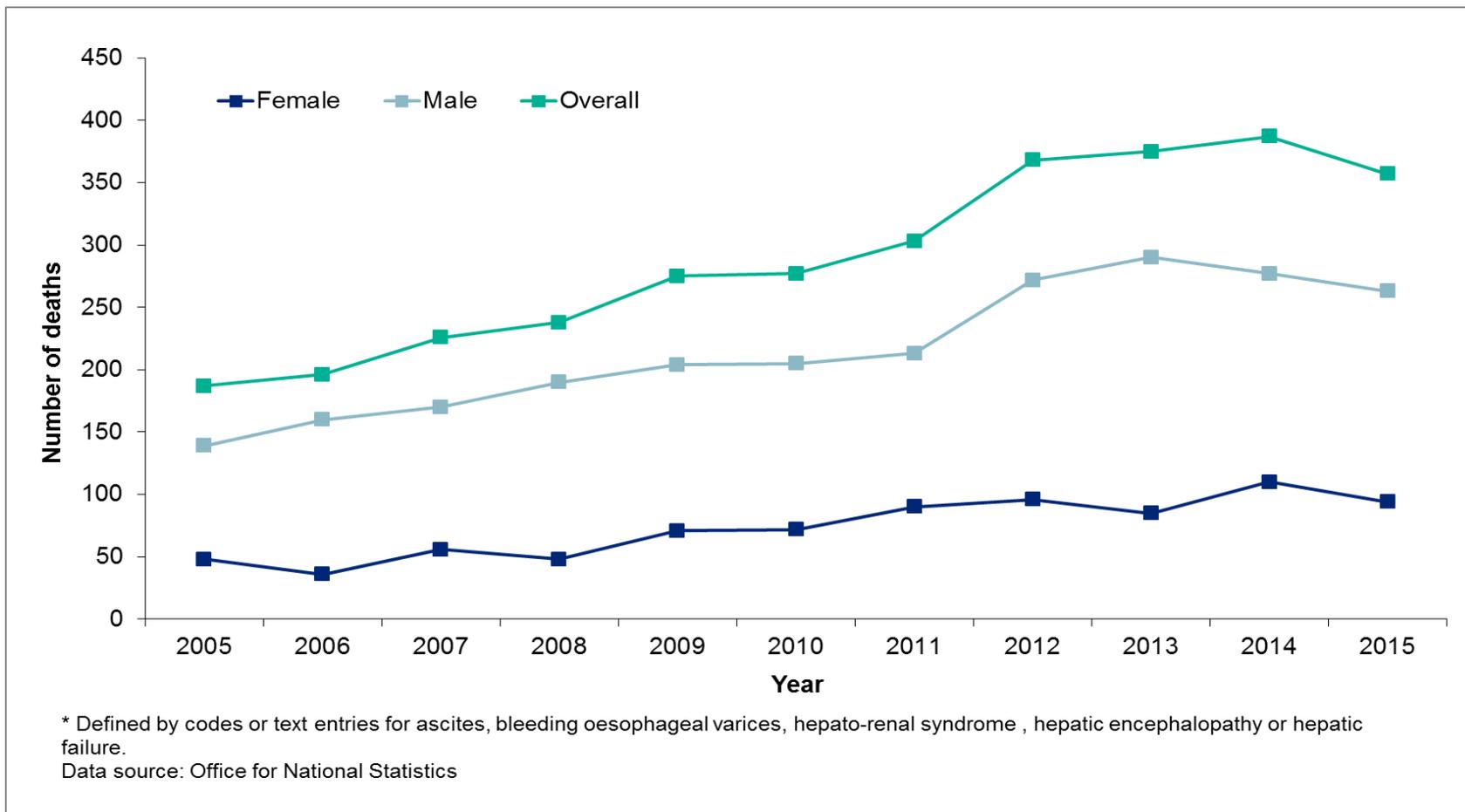
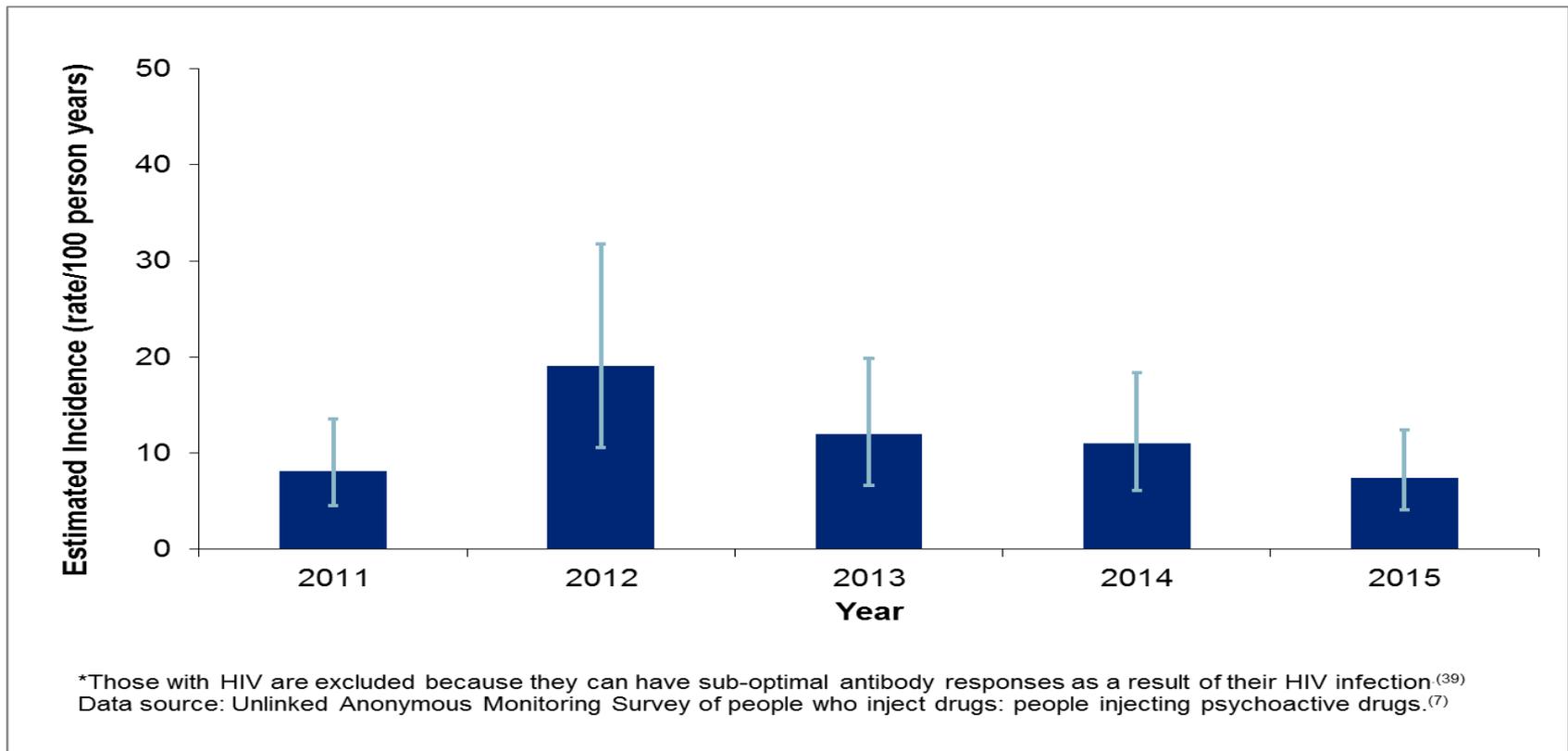


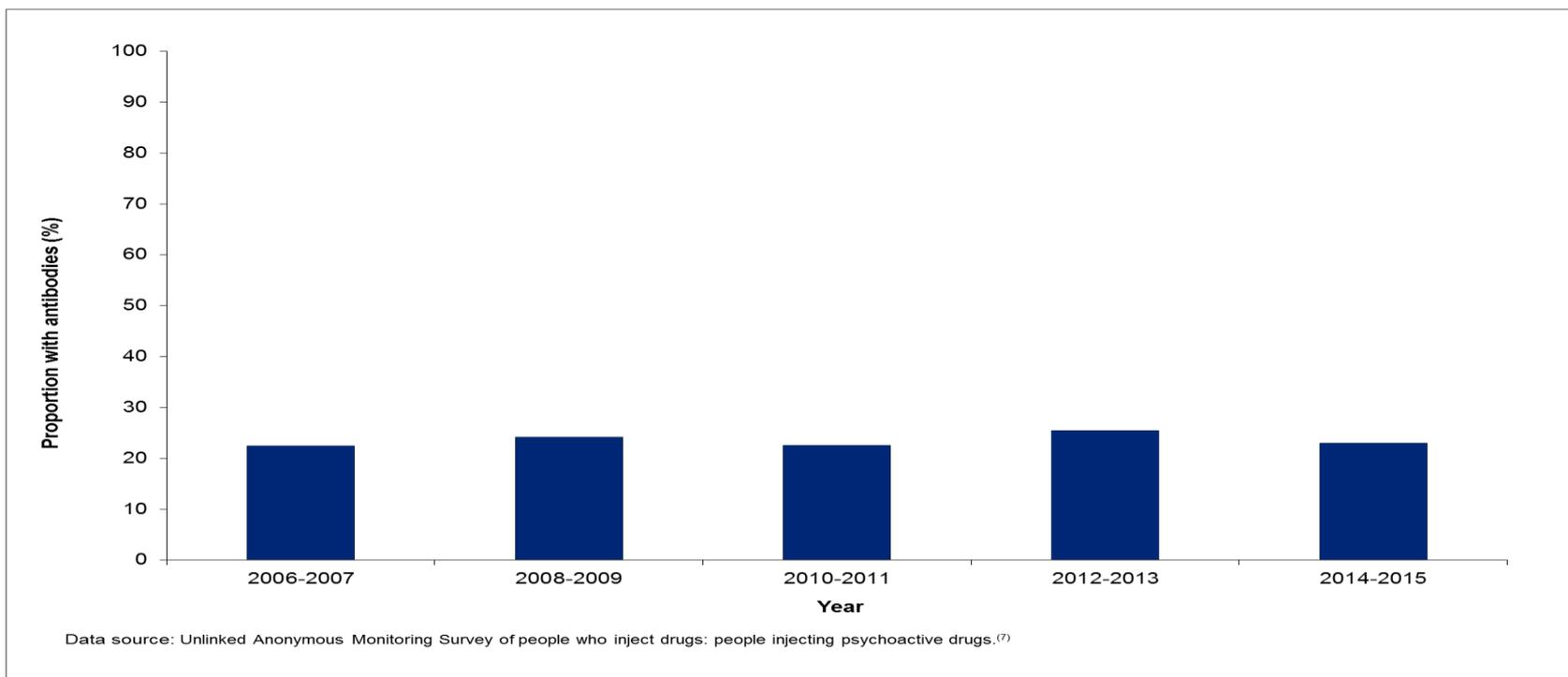
Figure 5. Estimated incidence of HCV among people injecting psychoactive drugs in England who reported injecting in the previous year: 2011- 2015* (95% CI)



7. Public Health England. People who Inject drugs: HIV and viral hepatitis monitoring. Unlinked Anonymous Monitoring survey. 2017. Available from: www.gov.uk/government/publications/people-who-inject-drugs-hiv-and-viral-hepatitis-monitoring [Accessed 19/01/2017].

39. Cullen KJ, Hope VD, Croxford S, Shute J, Ncube F, Parry JV. Factors associated with recently acquired hepatitis C virus infection in people who inject drugs in England, Wales and Northern Ireland: new findings from an unlinked anonymous monitoring survey. *Epidemiol Infect.* 2015;143(7):1398-407.

Figure 6. Prevalence of antibodies to hepatitis C* among people who began injecting psychoactive drugs in the previous three years in England: 2006-2007 to 2014-2015



During 2009 to 2011 there was a phased change in the sample collected in the survey from an oral fluid to dried blood spot (DBS). The sensitivity of the anti-HCV tests on these two sample types is different. The sensitivity of the oral fluid test for anti-HCV is approximately 92%,⁽²⁰⁾ that on DBS samples is close to 100%. Data presented here have been adjusted for the sensitivity of the oral fluid test.

7. Public Health England. People who Inject drugs: HIV and viral hepatitis monitoring. Unlinked Anonymous Monitoring survey. 2017. Available from: www.gov.uk/government/publications/people-who-inject-drugs-hiv-and-viral-hepatitis-monitoring [Accessed 19/01/2017].

20. Judd A, Parry J, Hickman M, McDonald T, Jordan L, Lewis K, et al. Evaluation of a modified commercial assay in detecting antibody to hepatitis C virus in oral fluids and dried blood spots. *Journal of Medical Virology*. 2003;71(1):49-55.

Figure 7. Number of anti-HCV tests performed in young adults and proportion positive by year in 23 sentinel laboratories: 2011 to 2015

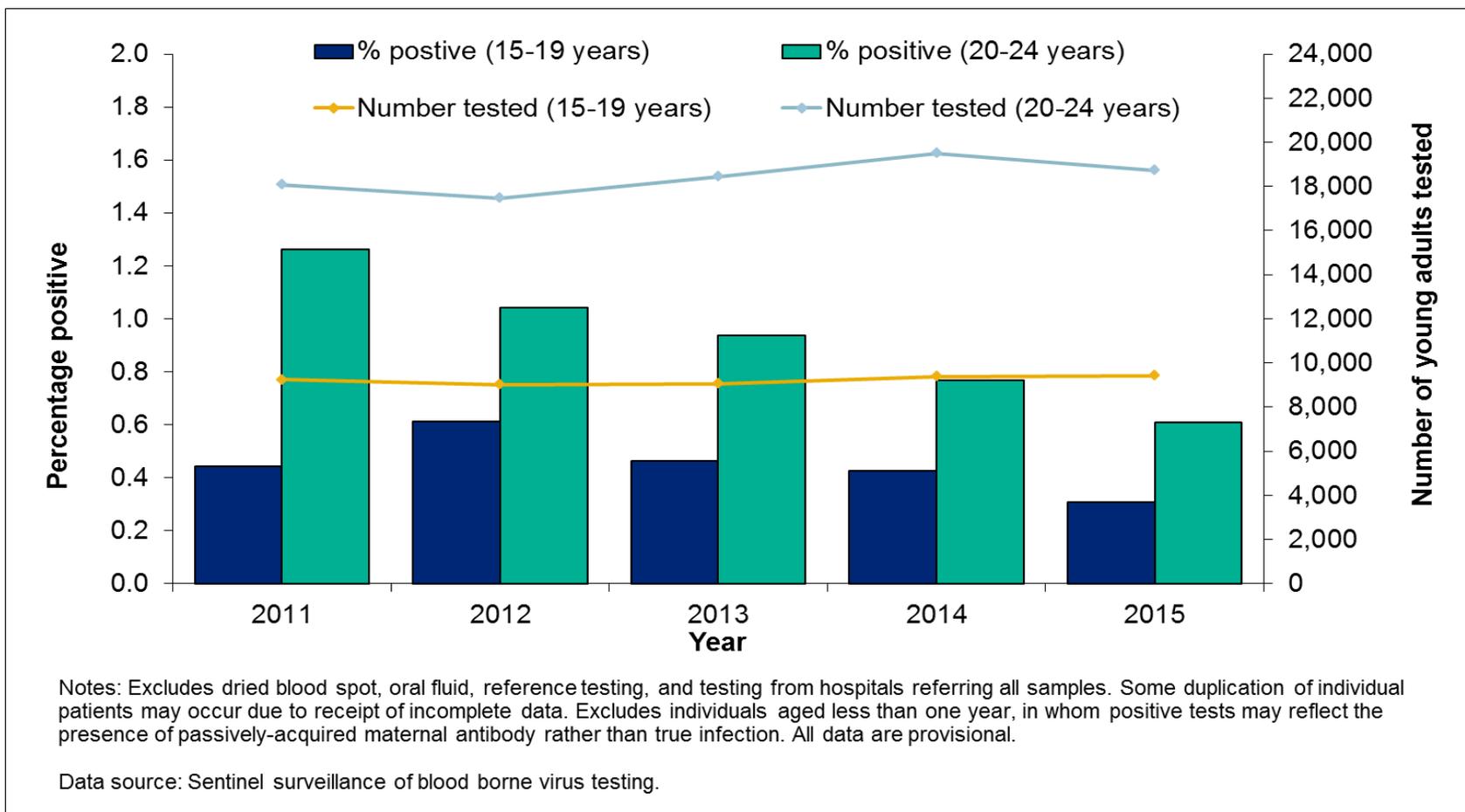
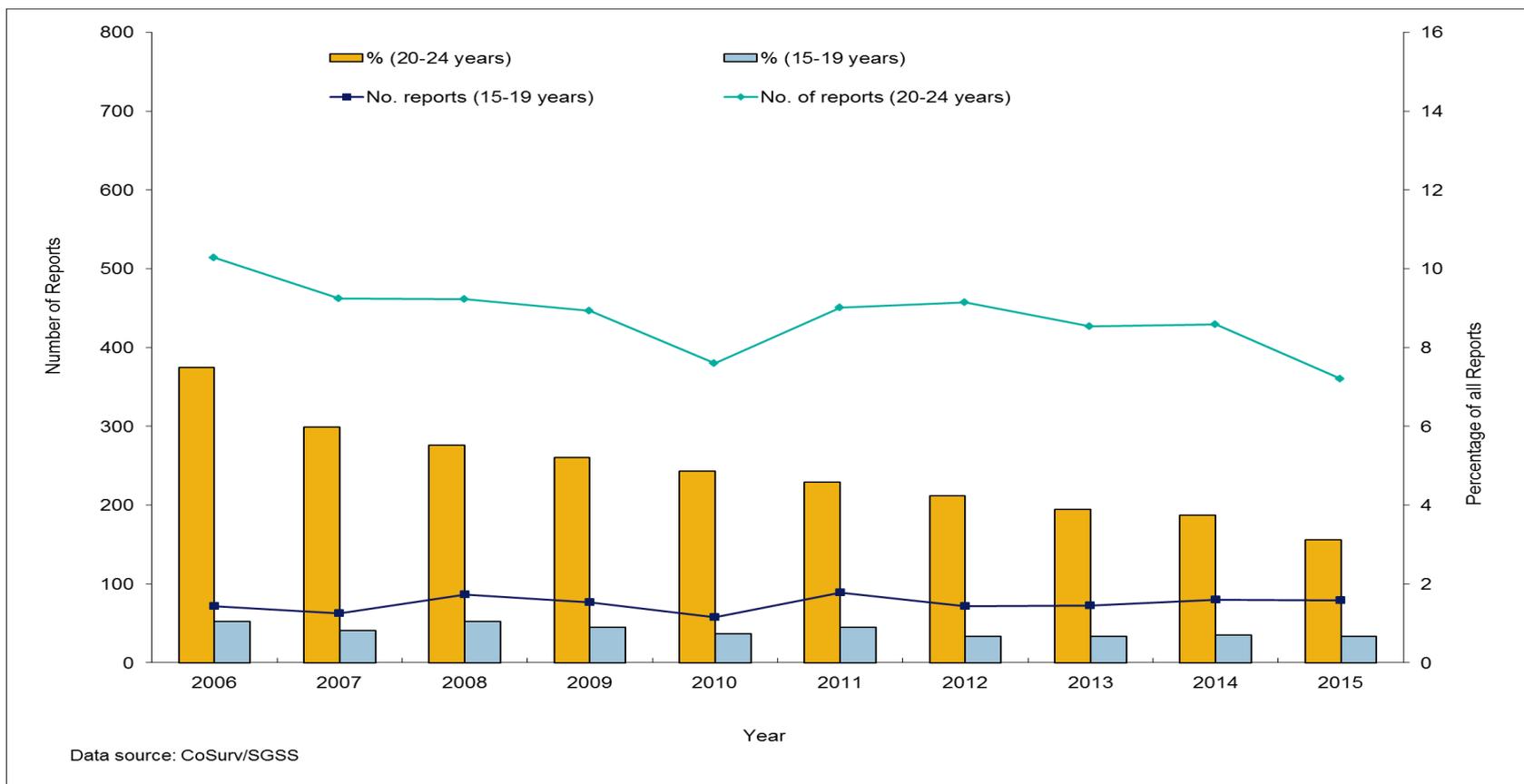


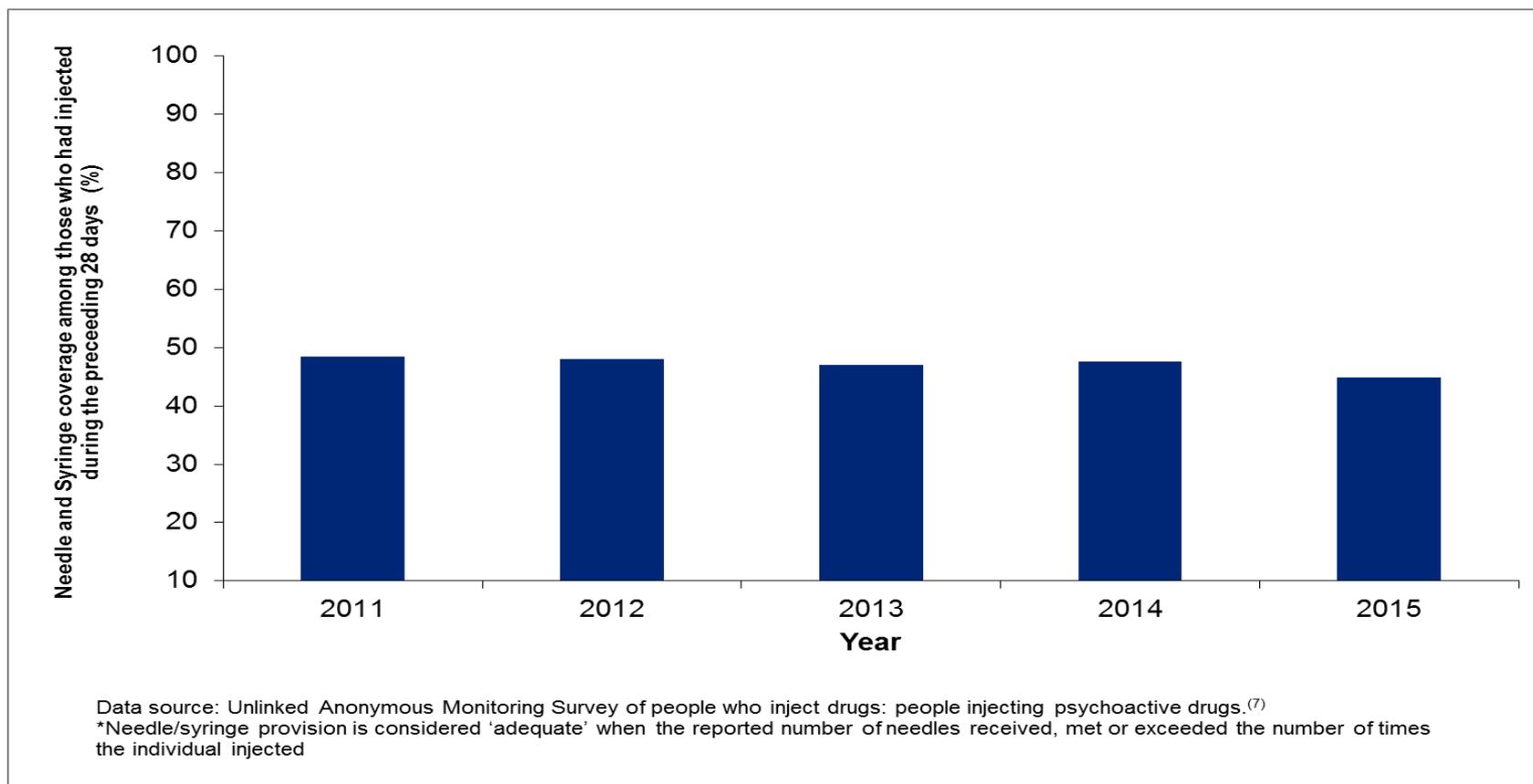
Figure 8. Laboratory reports* of hepatitis C in young adults in England: 2006-2015



Statutory notification by diagnostic laboratories was introduced in October 2010⁽⁴⁰⁾

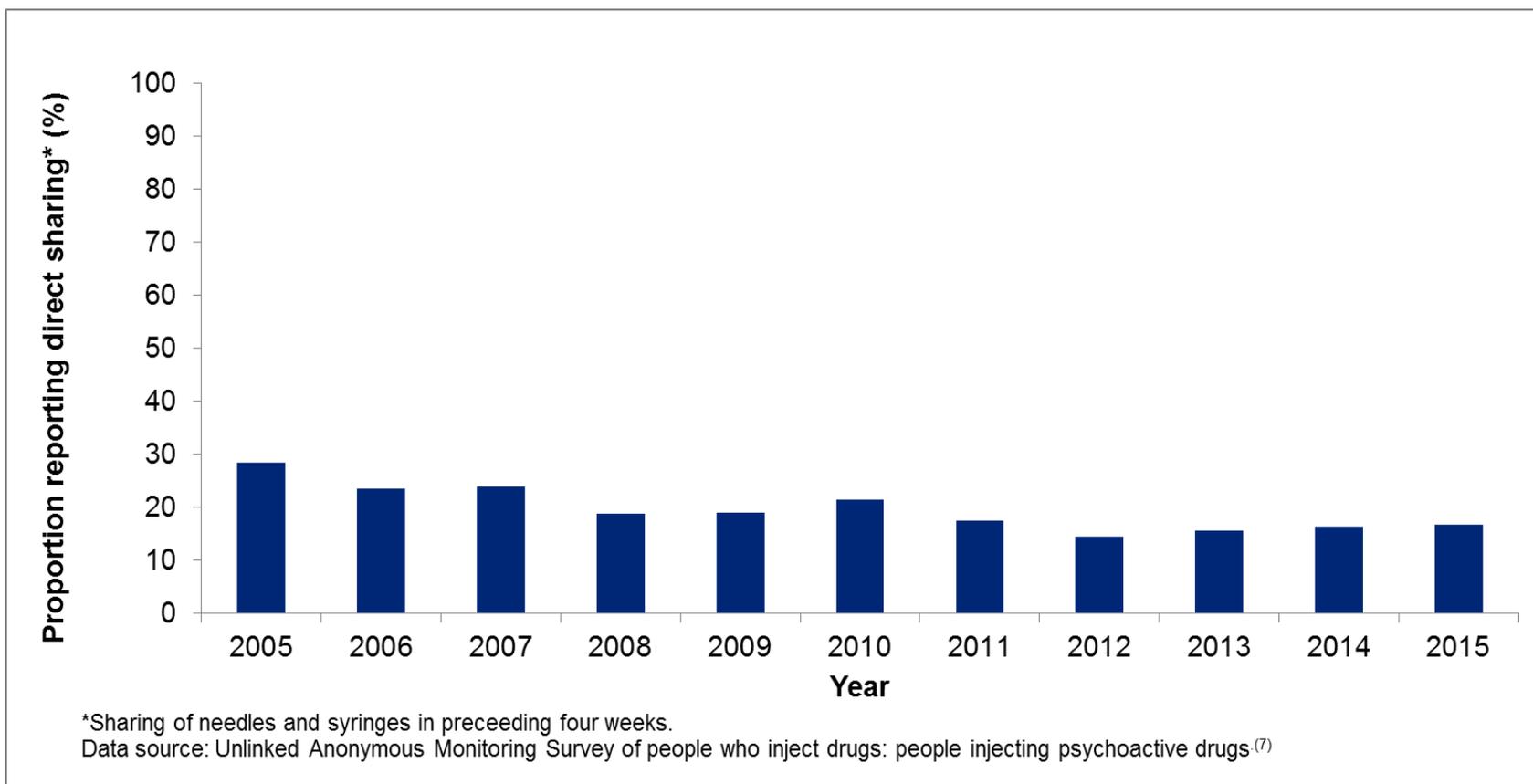
40. Health Protection Agency, Department of Health, Chartered Institute of Environmental Health. Health Protection Legislation (England) - Guidance 2010. Available from: www.gov.uk/government/organisations/public-health-england/about/our-governance [Accessed 18/01/2017]. 2010.

Figure 9. Estimated proportion of people injecting psychoactive drugs reporting adequate* needle and syringe provision in England, 2011-2015



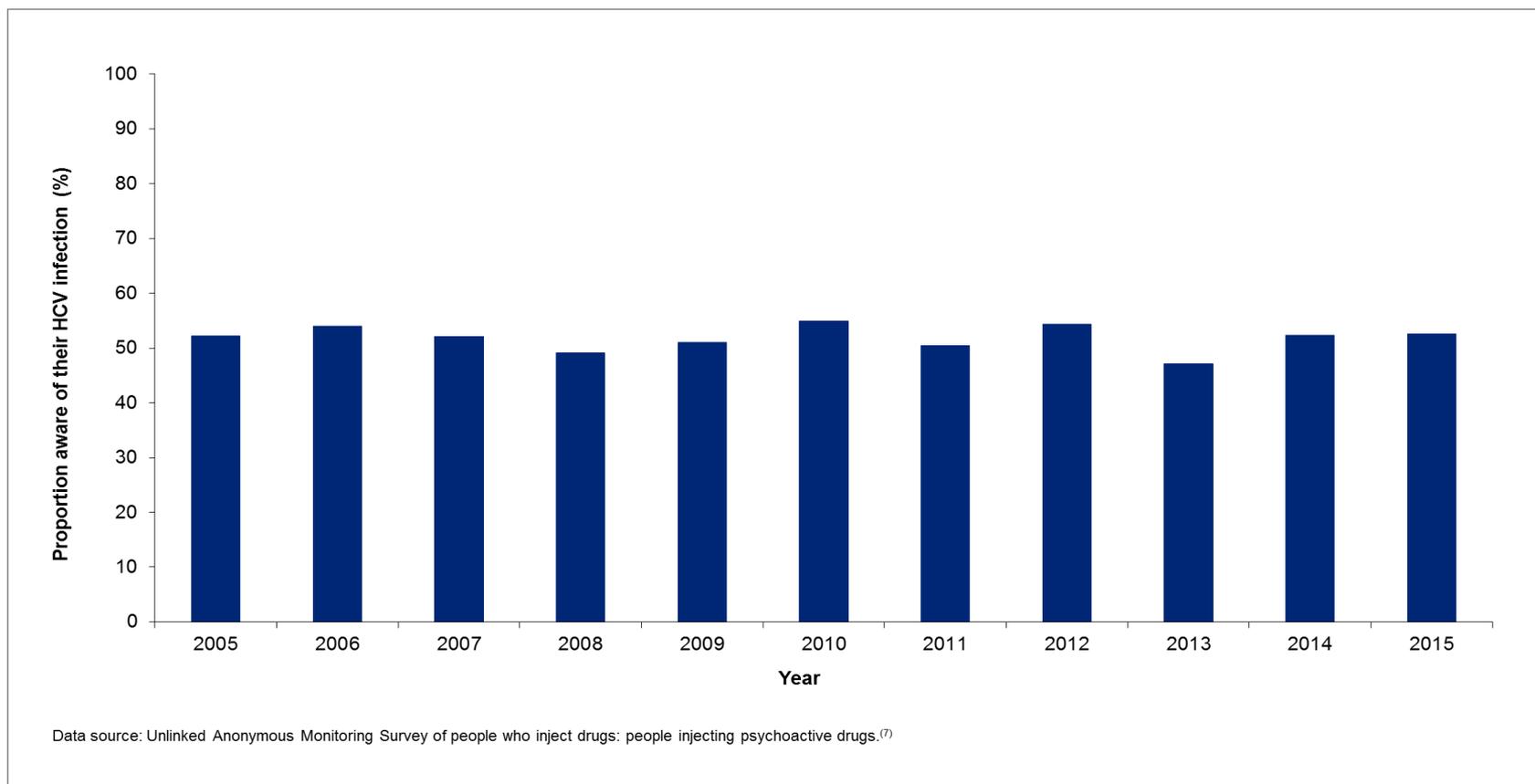
7. Public Health England. People who Inject drugs: HIV and viral hepatitis monitoring. Unlinked Anonymous Monitoring survey. 2017 Available from: www.gov.uk/government/publications/people-who-inject-drugs-hiv-and-viral-hepatitis-monitoring [Accessed 19/01/2017].

Figure 10. Trends in the sharing of needles and syringes in the preceding four weeks among people injecting psychoactive drugs in England 2005 to 2015



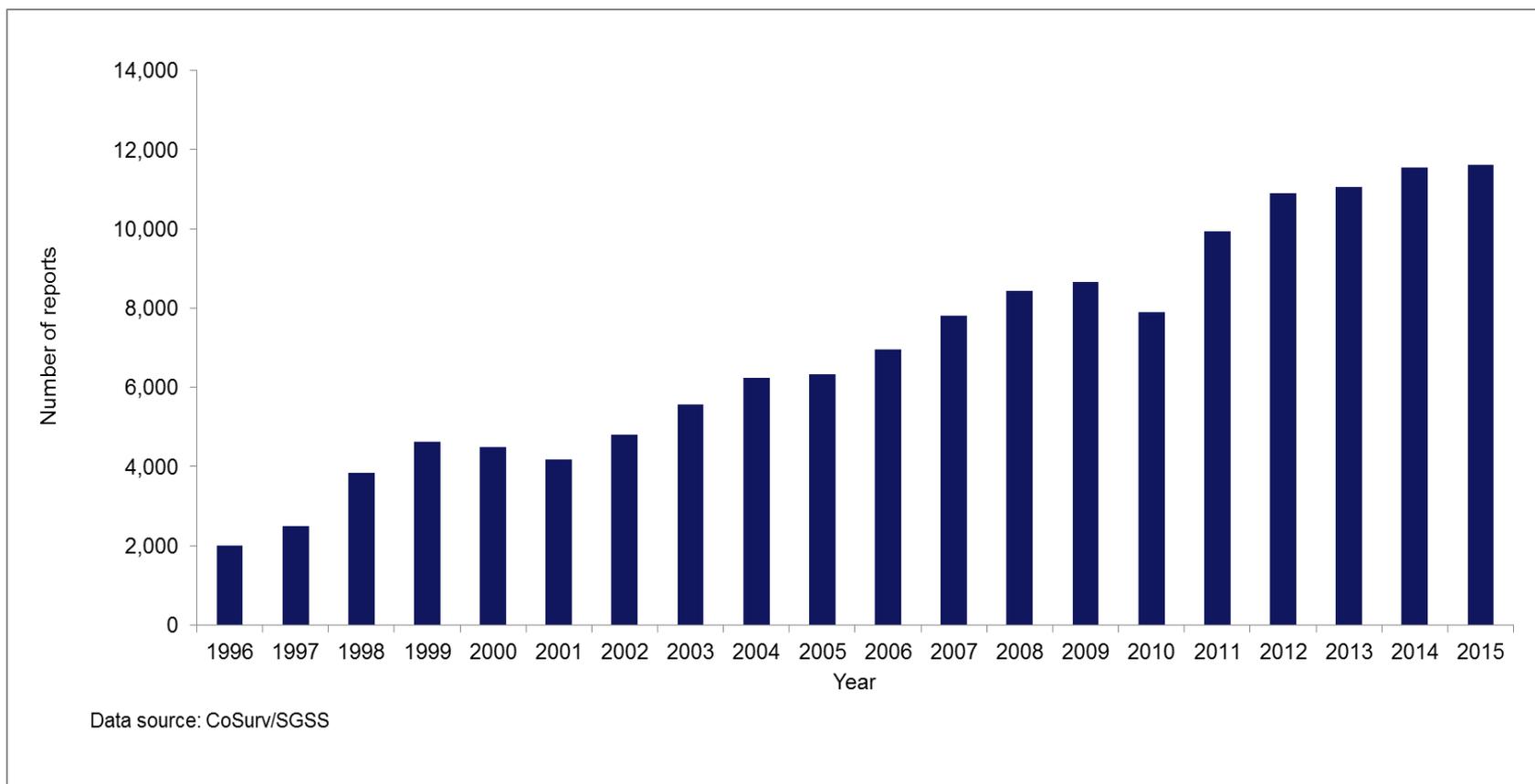
7. Public Health England. People who Inject drugs: HIV and viral hepatitis monitoring. Unlinked Anonymous Monitoring survey. 2017. Available from: www.gov.uk/government/publications/people-who-inject-drugs-hiv-and-viral-hepatitis-monitoring [Accessed 19/01/2017].

Figure 11. Estimated proportion of people injecting psychoactive drugs testing positive for HCV antibodies in England, who are aware of their infection, 2005-2015



7. Public Health England. People who Inject drugs: HIV and viral hepatitis monitoring. Unlinked Anonymous Monitoring survey. 2017. Available from: www.gov.uk/government/publications/people-who-inject-drugs-hiv-and-viral-hepatitis-monitoring [Accessed 19/01/2017].

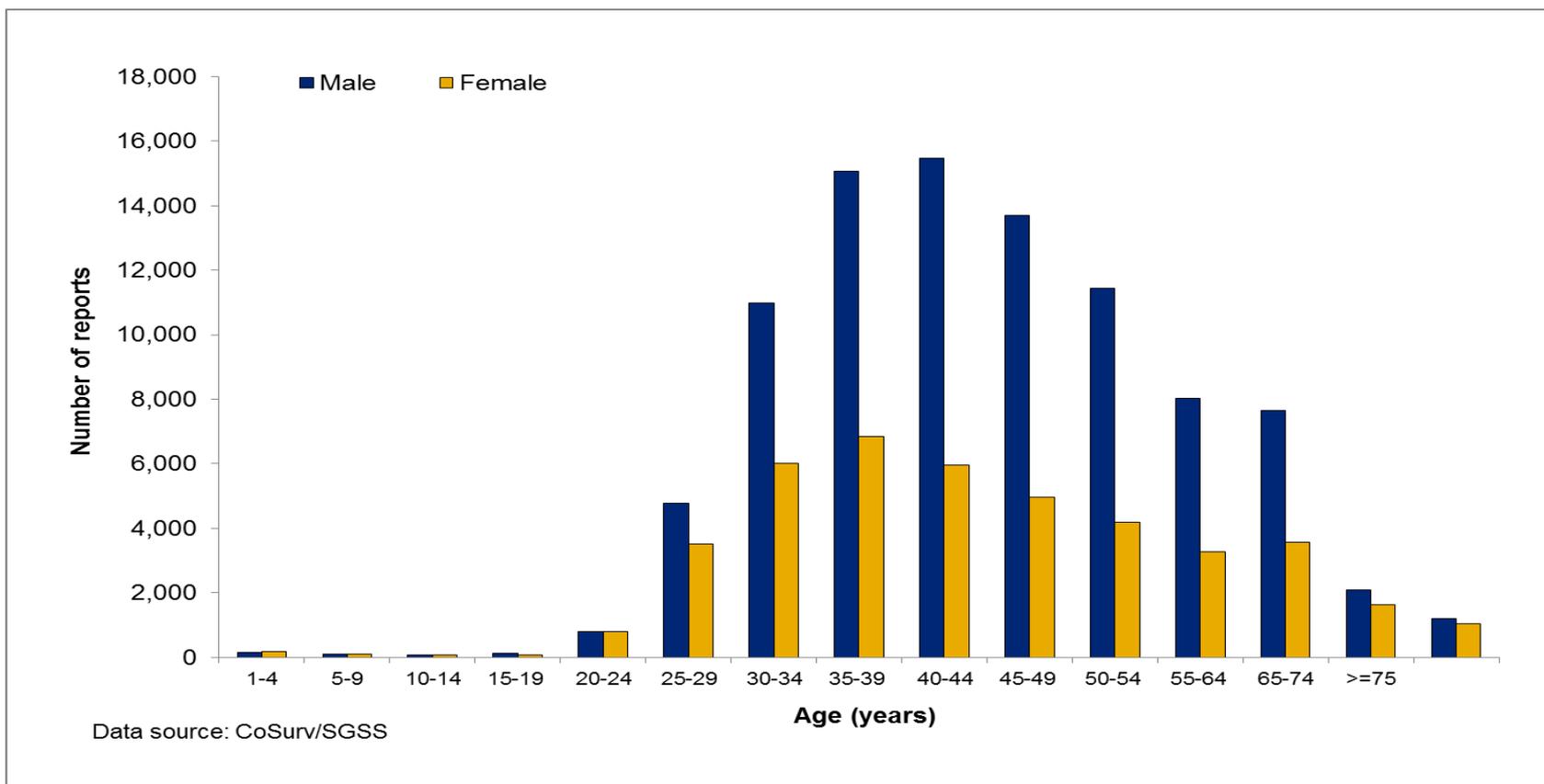
Figure 12. Number of laboratory reports* of hepatitis C from England: 1996 to 2015



Statutory notification by diagnostic laboratories was introduced in October 2010⁽⁴⁰⁾

40. Health Protection Agency, Department of Health, Chartered Institute of Environmental Health. Health Protection Legislation (England) - Guidance 2010. Available from: www.gov.uk/government/organisations/public-health-england/about/our-governance [Accessed 18/01/2017].

Figure 13. Age and sex distribution of laboratory reports* of hepatitis C from England: 1996 to 2015



Statutory notification by diagnostic laboratories was introduced in October 2010⁽⁴⁰⁾

40. Health Protection Agency, Department of Health, Chartered Institute of Environmental Health. Health Protection Legislation (England) - Guidance 2010. Available from: www.gov.uk/government/organisations/public-health-england/about/our-governance [Accessed 18/01/2017].

Map1. Geographic distribution of centres who have participated in the Sentinel Surveillance of Hepatitis Testing Study by Public Health England Centre.

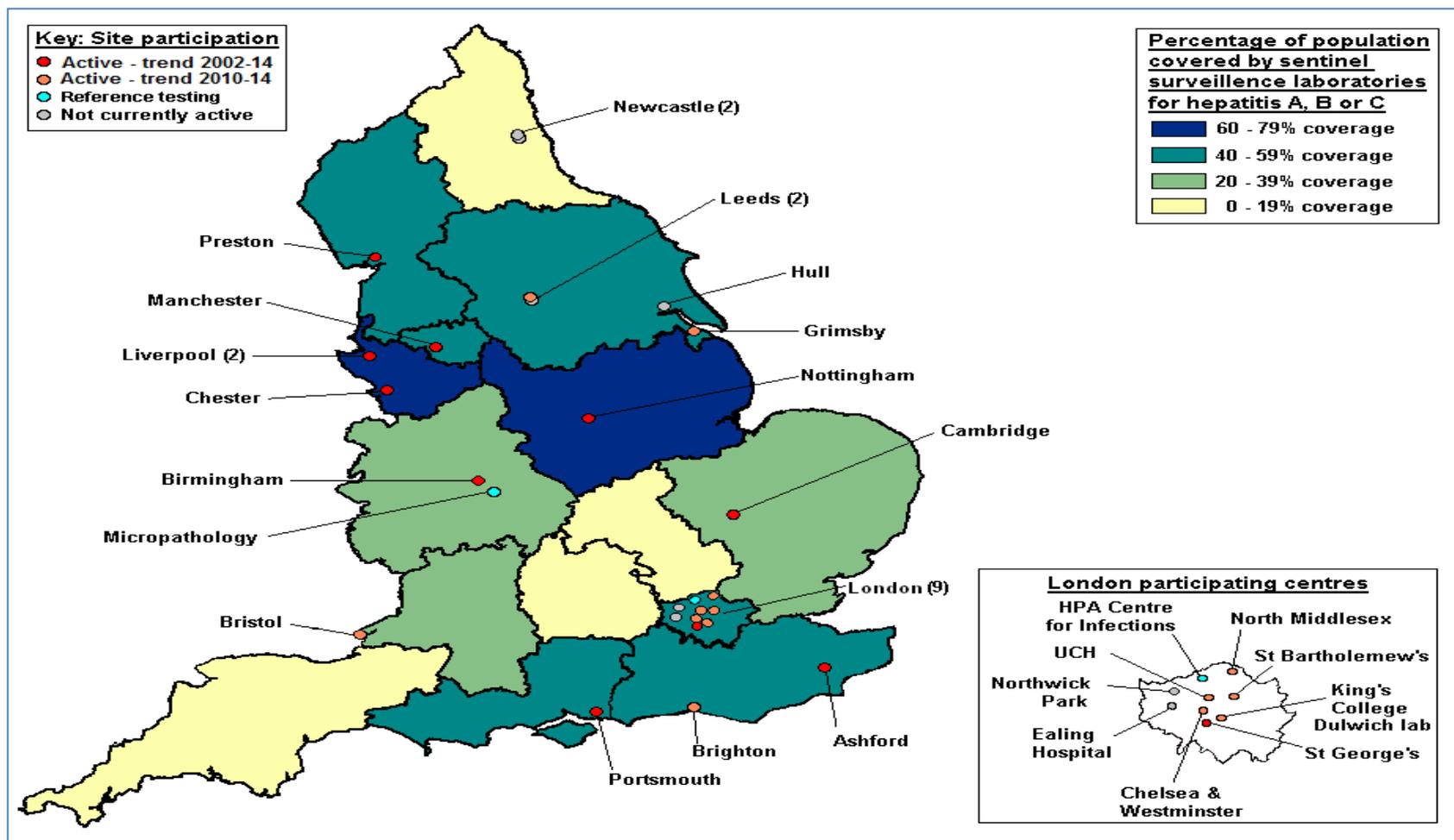


Figure 14. Number of people tested for anti-HCV by year, and proportion positive, in 23 sentinel laboratories: 2011 to 2015

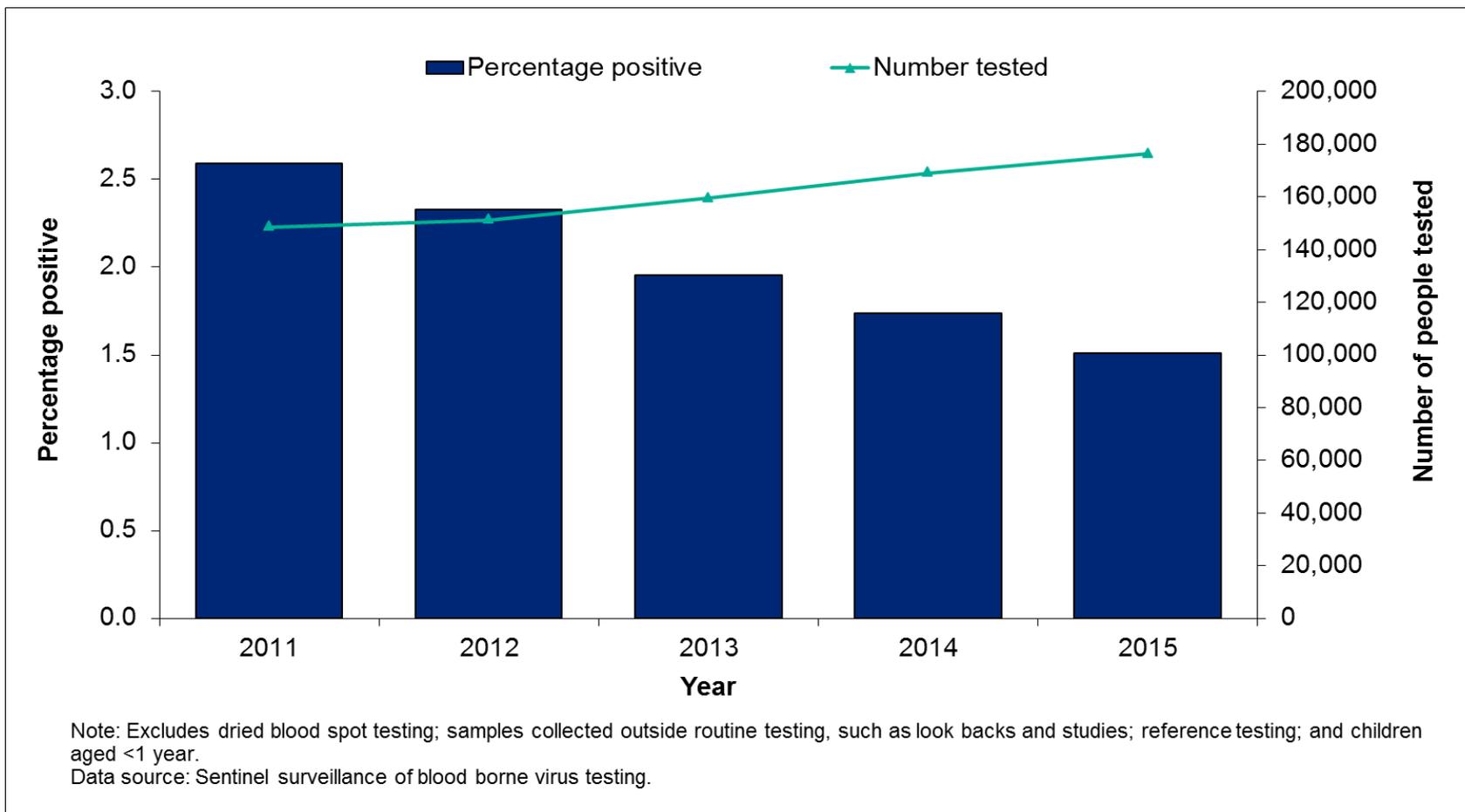


Figure 15. Number of people tested for anti-HCV by year, and proportion positive, through GP surgeries in 23 sentinel laboratories: 2011 to 2015

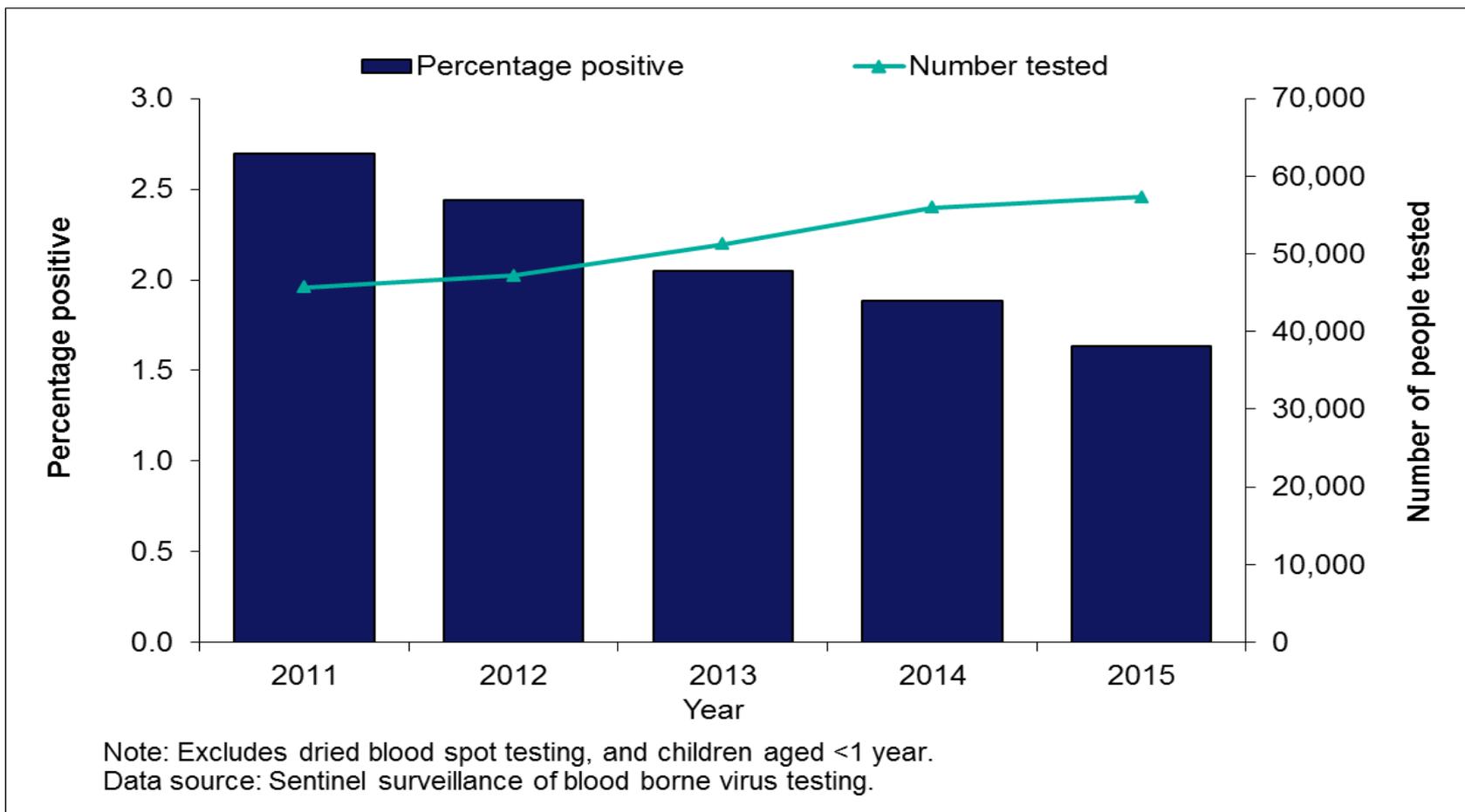
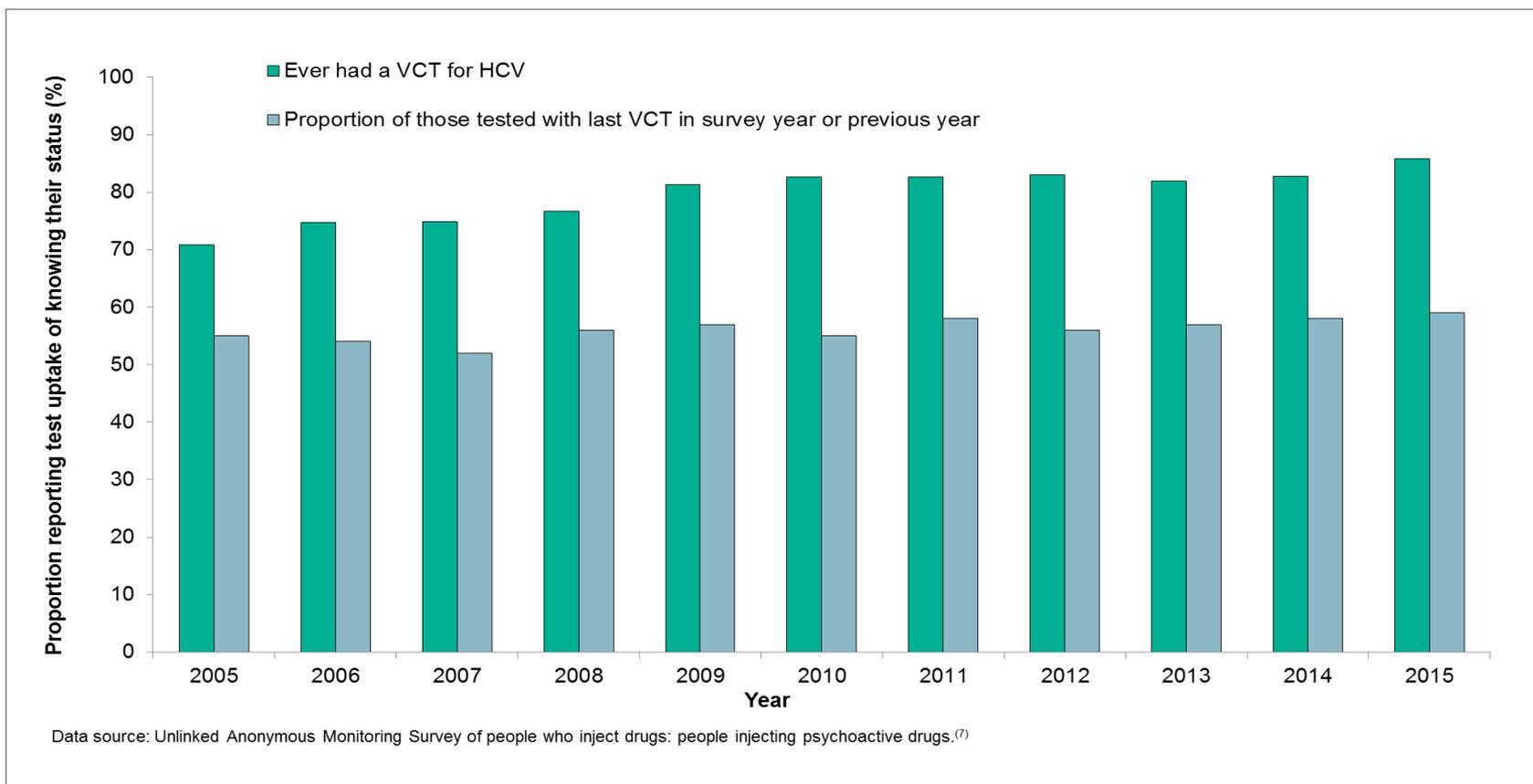


Figure 16. Trends in reported uptake of voluntary confidential testing (VCT) for HCV infection among people injecting psychoactive drugs in England: 2005 to 2015



7. Public Health England. People who Inject drugs: HIV and viral hepatitis monitoring. Unlinked Anonymous Monitoring survey. Available from: www.gov.uk/government/publications/people-who-inject-drugs-hiv-and-viral-hepatitis-monitoring [Accessed 19/01/2017]. 2017.

Figure 17. Proportion of new receptions to English prisons tested for hepatitis C: financial years 2010/11 to 2015/16

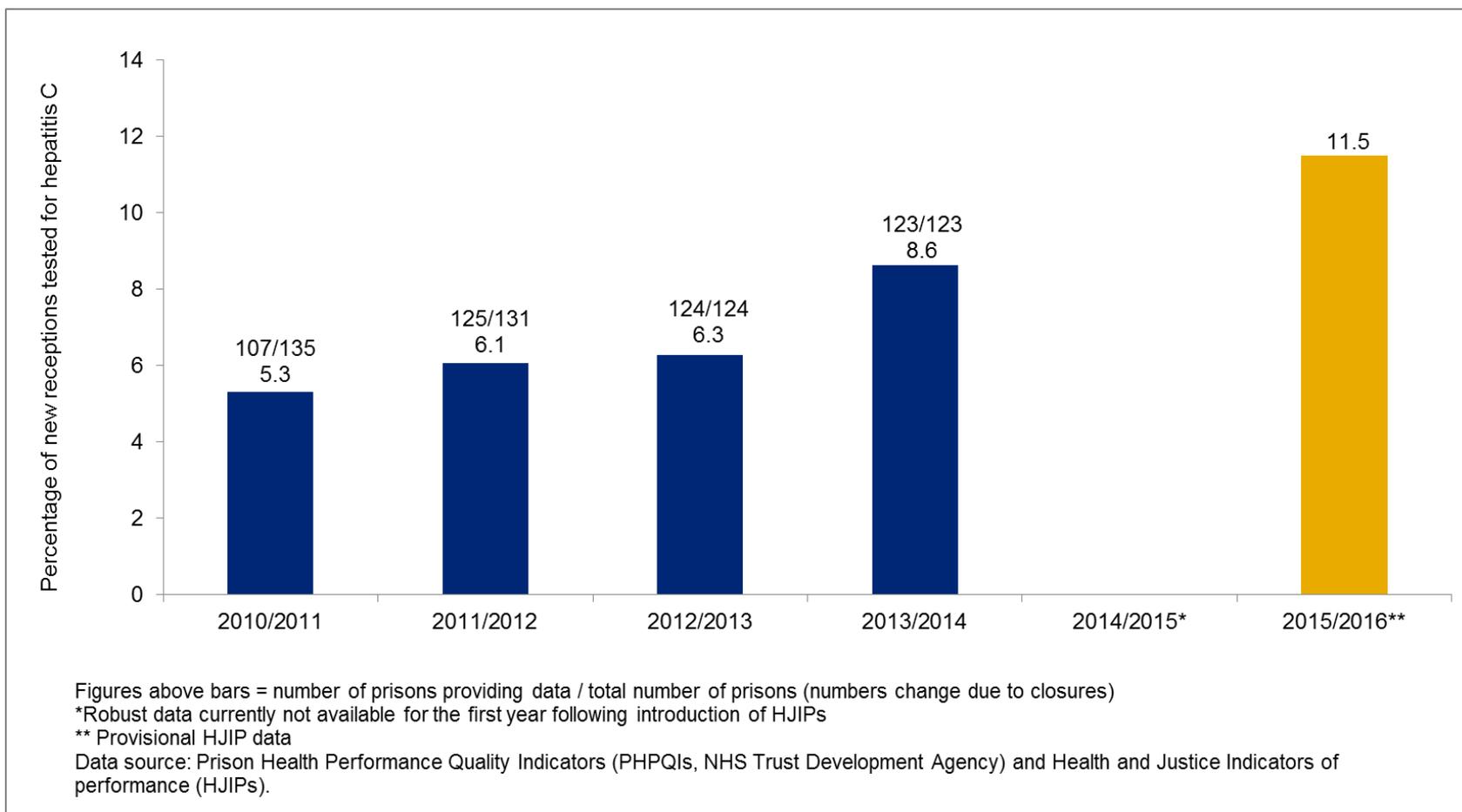


Figure 18. Health and Justice Indicators of performance relating to hepatitis C testing

Hepatitis C testing	Percentage of patients offered hepatitis C testing, within 72hrs of reception
Hepatitis C antibody testing	Percentage of eligible patients who have undertaken an HCV antibody test
Hepatitis C PCR testing	Percentage of HCV antibody positive patients who underwent HCV PCR testing

Figure 19. Number of Asian or Asian British people tested, and proportion positive, in 23 sentinel laboratories: 2011 to 2015

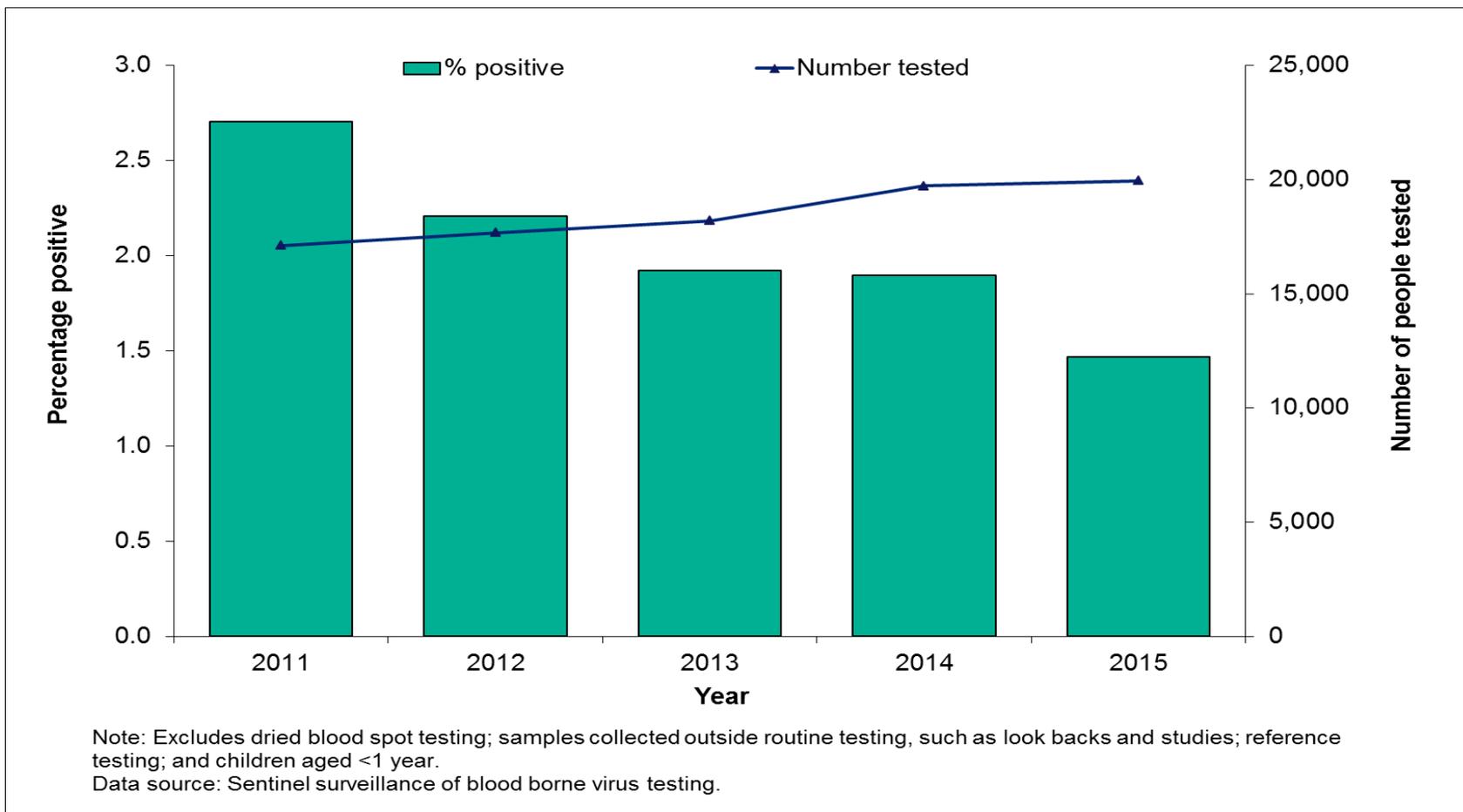


Figure 20. Number of Eastern European people tested, and proportion positive, in 23 sentinel laboratories: 2011 to 2015

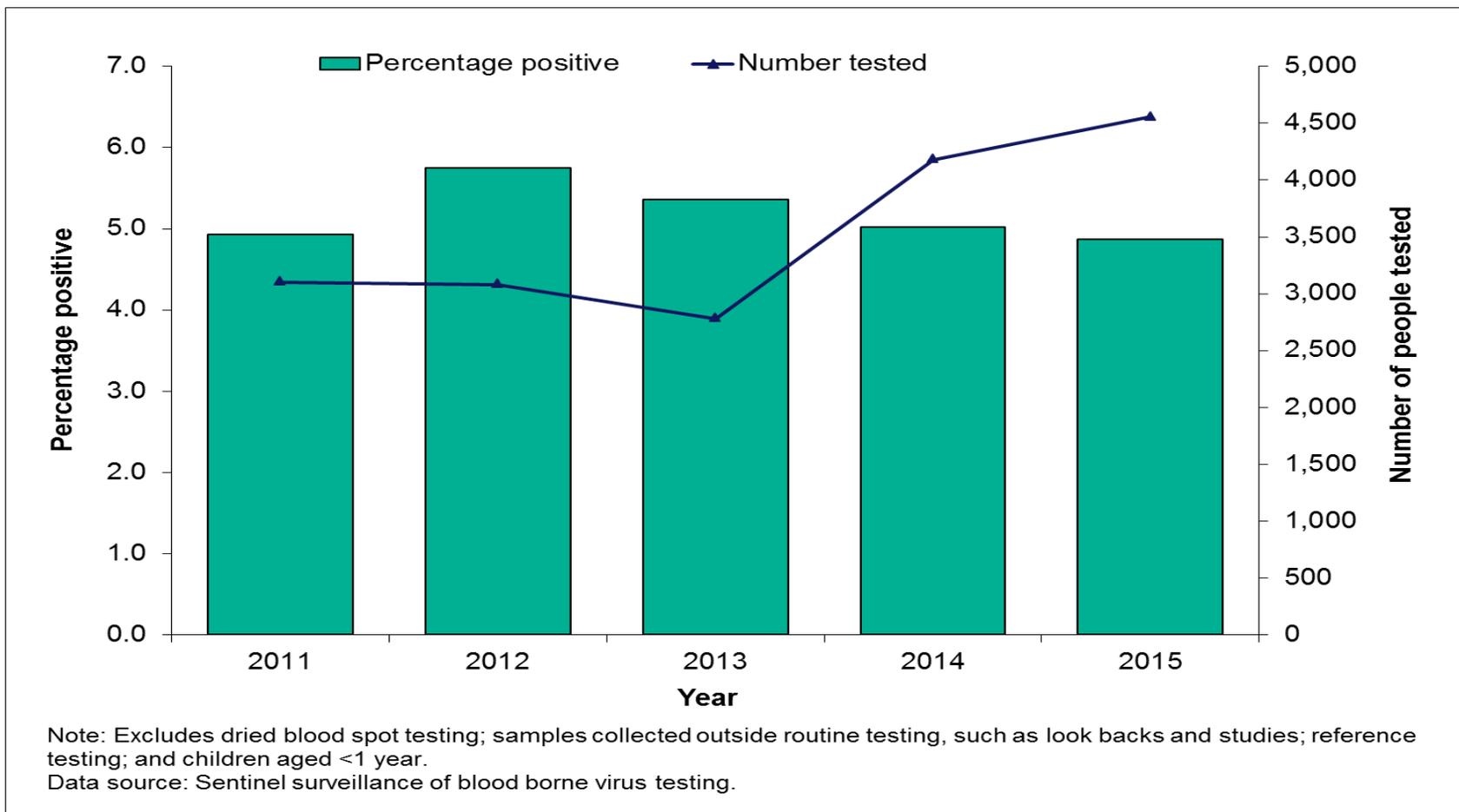


Figure 21. Rate of hepatitis C among donations from new and repeat blood donors in England (and North Wales): 1991* to 2015

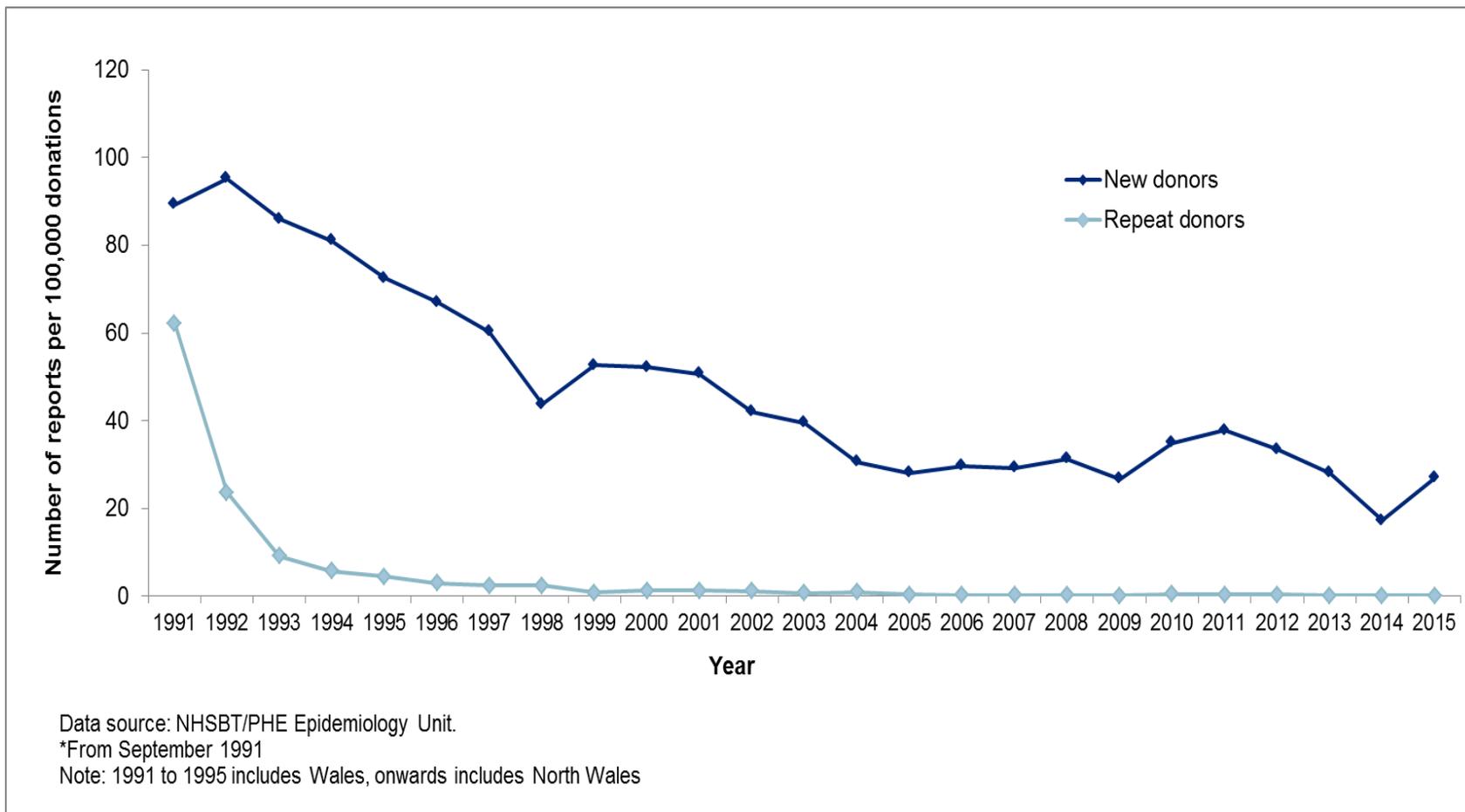


Figure 22. Provisional estimates of numbers initiating HCV treatment in England, 2007-2015

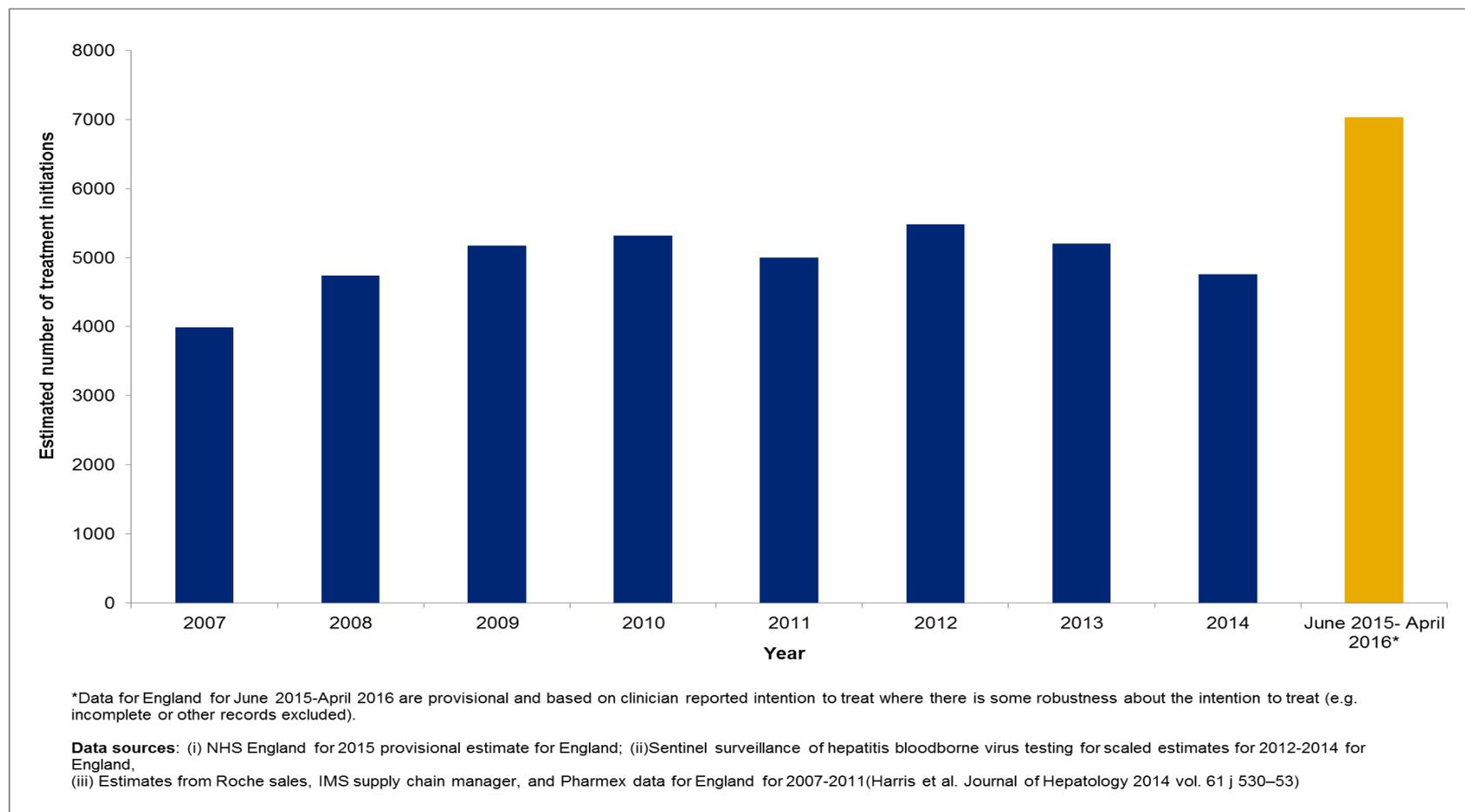
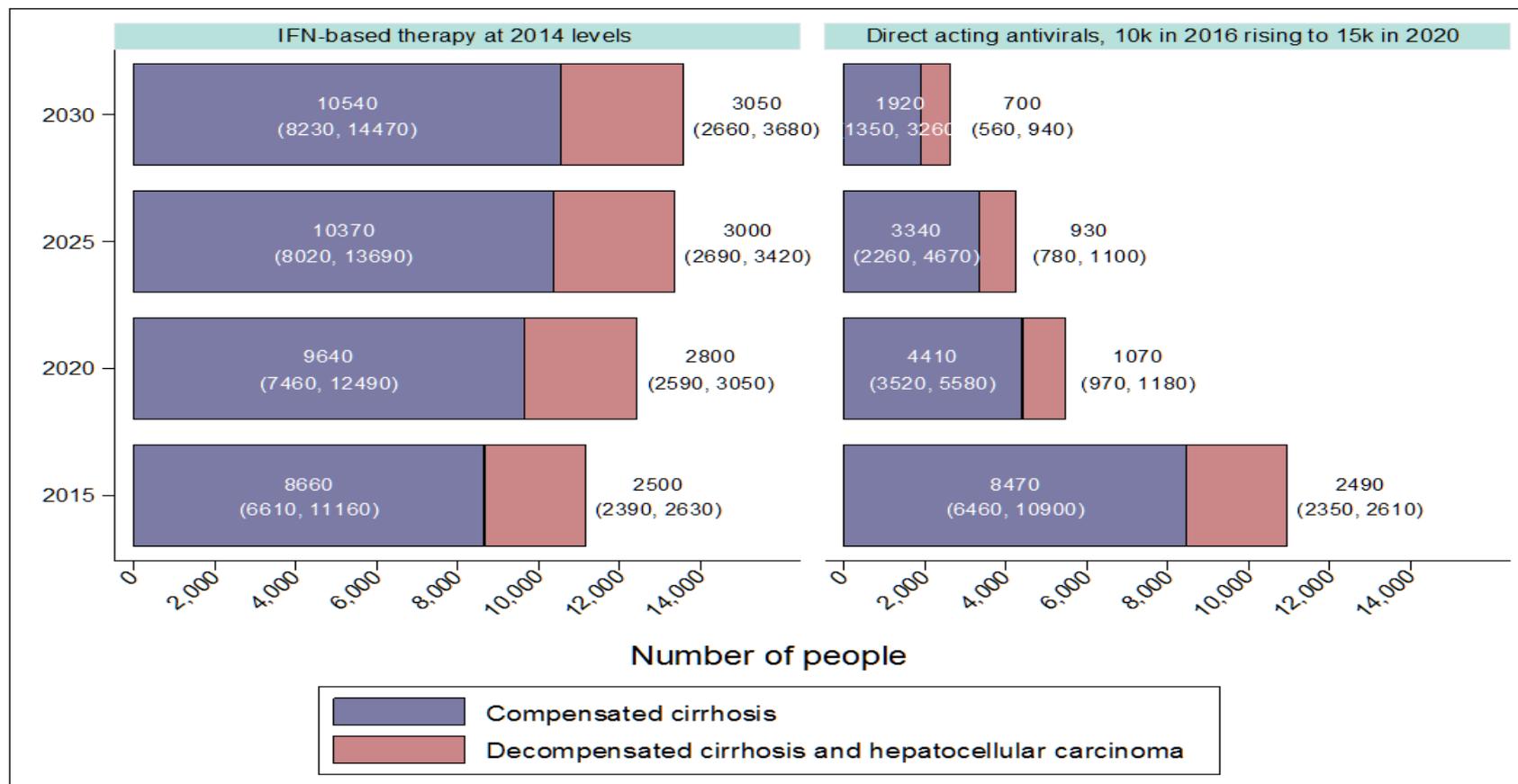


Figure 23. Predicted number of people living with HCV-related cirrhosis or decompensated cirrhosis/HCC in England under new DAAs compared to previous IFN-based therapy (95% credible intervals are given in parentheses)⁽³¹⁾



31. Harris RJ, Martin NK, Rand E, Mandal S, Mutimer D, Vickerman P, et al. New treatments for hepatitis C virus (HCV): scope for preventing liver disease and HCV transmission in England. J Viral Hepat. 2016;(8):631-43.

Appendix 1.* WHO GHSS targets⁽¹⁾ for viral hepatitis, relevant to HCV in the UK context, with 2020 targets updated to reflect the draft action plan for the health sector response to viral hepatitis in the WHO European Region.⁽³⁾

TARGET AREA	2020 TARGETS ⁽³⁾	2030 TARGETS ⁽¹⁾
Impact targets		
Incidence: New cases of chronic viral hepatitis C infection	30% reduction	80% reduction
Mortality: Viral hepatitis C deaths	10% reduction	65% reduction
Service coverage targets		
Blood safety:**Proportion of donations screened in a quality-assured manner	100%	100%
Safe injections:*** Percentage of injections administered with safety engineered devices in and out of health facilities	50%	90%
Harm reduction: A comprehensive package of harm reduction services to all PWID ⁽⁶¹⁾ including:	At least 200 sterile needles and syringes provided per person who injects drugs per year At least 40% of opioid dependent PWID receive OST 90% of PWID receiving targeted HCV information, education and communication	At least 300 sterile needles and syringes provided per person who injects drugs per year
Proportion of people with chronic HCV diagnosed and aware of their infection	50% [75% of estimated number of patients at late stage of viral hepatitis-related liver disease (cirrhosis or HCC) diagnosed]	90%
Treatment coverage of people diagnosed with chronic HCV who are eligible for treatment	75% (>90% cured) [90% of diagnosed patients with chronic HCV are linked to care and adequately monitored]	80%

- Abstracted from the WHO Global Health Sector Strategy for Viral Hepatitis⁽¹⁾ and modified to reflect the draft action plan for the health sector response to viral hepatitis in the WHO European Region⁽³⁾

** In England, 2020 and 2030 targets are already met.⁽⁶²⁾

***In England, 2020 and 2030 targets are already met in the health care setting as the UK follows the EU Directive for the prevention of sharps injuries in the health care setting,⁽⁶³⁾ by using safety engineered devices.

1. World Health Organization. Global health sector strategy on viral hepatitis, 2016-2021. Towards Ending Viral hepatitis. 2016. Available from: <http://apps.who.int/iris/bitstream/10665/246177/1/WHO-HIV-2016.06-eng.pdf?ua=1>. [Accessed 19/01/2017].

3. World Health Organization. Action plan for the health sector response to viral hepatitis in the WHO European Region. 2016. Available from: <http://www.euro.who.int/en/about-us/governance/regional-committee-for-europe/66th-session/documentation/working-documents/eurrc6610-action-plan-for-the-health-sector-response-to-viral-hepatitis-in-the-who-european-region> [Accessed 24/01/2017].

61. World Health Organization. WHO, UNODC, UNAIDS technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users – 2012 revision. WHO; 2013. Available from: http://www.who.int/hiv/pub/idu/targets_universal_access/en/. [Accessed: 18/01/2017].

62. Joint United Kingdom (UK) Blood Transfusion and Tissue Transplantation Services Professional Advisory Committee. Guidelines for the Blood Transfusion Services in the UK. Available from: <http://www.transfusionguidelines.org/> [Accessed 20/01/2017].

63. European Agency for Safety and Health at Work. Directive 2010/32/EU - prevention from sharp injuries in the hospital and healthcare sector. 2010. Available from: <https://osha.europa.eu/en/legislation/directives/council-directive-2010-32-eu-prevention-from-sharp-injuries-in-the-hospital-and-healthcare-sector>. [Accessed 20/01/2017].

Appendix 2. Preliminary indicators to monitor the impact of key interventions to tackle hepatitis C virus in England

Burden, Impact and Service Coverage Monitoring Areas		Data source
<ul style="list-style-type: none"> • Preliminary 2016 Indicator (UK indicators in red; Placeholders* in italics) 		
Burden	Reducing the burden of infection in England <ul style="list-style-type: none"> • Placeholder: Estimated prevalence of HCV infection in England • Risk factors for infection from laboratory reports • Trend in anti-HCV prevalence among PWID 	TBC CoSurv/SGSS UAM survey
Impact	1. Reducing HCV-related morbidity and mortality <ul style="list-style-type: none"> • Estimated incidence of HCV-related ESLD/HCC • Registrations for liver transplants in patients with HCV • First liver transplants undertaken in patients with HCV (% of all liver transplants) • First liver transplants undertaken in patients with HCV HCC (% of all liver transplants in patients with HCV) • Deaths from HCV-related ESLD/HCC 	HES NHS BT NHS BT NHS BT ONS
	2. Reducing the number of new (incident) infections <ul style="list-style-type: none"> • Estimated incidence of HCV among people injecting psychoactive drugs • Estimated prevalence of anti-HCV among recent initiates to drug use • Number of HCV tests performed in young adults (and proportion testing positive) in sentinel laboratories • Number of HCV laboratory reports in young adults (and proportion of all reports they represent) • Placeholder: Estimated number of new infections originating injecting drug use and net migration 	UAM survey UAM survey Sentinel surveillance CoSurv/SGSS TBC
	1. Adequate harm reduction <ul style="list-style-type: none"> • Estimated proportion of PWID reporting adequate needle/syringe provision • Sharing of needles and syringes among PWID • Number of current and past PWID in drug treatment • Proportion of opioid dependent PWID receiving OST • Placeholder: Proportion of PWID receiving targeted HCV information 	UAM survey UAM survey NDTMS NDTMS; Hay et al. ⁽³⁸⁾ TBC
Service coverage	1. Adequate harm reduction <ul style="list-style-type: none"> • Estimated proportion of PWID reporting adequate needle/syringe provision • Sharing of needles and syringes among PWID • Number of current and past PWID in drug treatment • Proportion of opioid dependent PWID receiving OST • Placeholder: Proportion of PWID receiving targeted HCV information 	UAM survey UAM survey NDTMS NDTMS; Hay et al. ⁽³⁸⁾ TBC

2. Increasing awareness and the numbers and proportion diagnosed <ul style="list-style-type: none"> • Estimated proportion of PWID testing positive for anti-HCV, aware of their infection • Placeholder: Proportion of chronic HCV infections in England diagnosed • Placeholder: Proportion of population with late stage HCV-related liver disease (cirrhosis/HCC) diagnosed • Numbers completing RCGP HCV e-learning • Laboratory reports of HCV infection • Number of HCV tests (and proportion testing positive) in sentinel laboratories • Number of HCV tests via GP surgeries (and proportion testing positive) in sentinel laboratories • Reported uptake in voluntary confidential HCV testing among PWID • Offer and uptake of HCV testing in adults - both newly presenting to, and all in, drug treatment • Offer and uptake of HCV testing in adults currently or previously injecting - both newly presenting to, and all in, drug treatment • Placeholder (awaiting DBS data): Number of HCV tests via drug services (and proportion testing positive) in sentinel laboratories • Proportion of new receptions to prisons tested for HCV • Placeholder (awaiting DBS data): Number of HCV tests via prisons (and proportion testing positive) in sentinel laboratories • Number of HCV tests in Asian or Asian British people (and proportion testing positive) in sentinel laboratories • Number of HCV tests in Eastern European people (and proportion testing positive) in sentinel laboratories • Rate of hepatitis C infection among new and repeat blood donors 	UAM survey TBC TBC RCGP CoSurv/SGSS Sentinel surveillance Sentinel surveillance NDTMS NDTMS NDTMS Sentinel surveillance PHPQI/HJIP Sentinel surveillance Sentinel surveillance Sentinel surveillance NHS BT	
	3. Increasing numbers accessing treatment <ul style="list-style-type: none"> • Estimated number initiating HCV treatment • Placeholder: Proportion of diagnosed population linked into care and monitored • Placeholder: Proportion of diagnosed population eligible for HCV treatment who have accessed treatment, and proportion cured • Placeholder: Future additional metrics on treatment access 	NHS E TBC TBC TBC; via agreed National Treatment Monitoring Dataset

* Placeholders are for indicators that are not currently available/in development or are absent because key data were not available at the time of publication.

38. Hay G, Rael dos Santos A, Worsley J. Estimates of the Prevalence of Opiate Use and/or Crack Cocaine Use, 2011/12: Sweep 8 report. Liverpool John Moores University, 2014. Available from: <http://www.nta.nhs.uk/facts-prevalence.aspx>. [Accessed 18/01/2017].