

HIV in the UK

Current statistics and treatments

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Fast facts

- In the UK an estimated 96,000 people are living with HIV¹
- It is estimated that prevalence has nearly trebled in the last ten years¹
- 24% of those infected with HIV are unaware of their infection¹
- Prevalence in the UK is highest amongst black African communities and men who have sex with men¹
- HIV is no longer a death sentence. HIV is now considered a chronic manageable disease due to early diagnosis and recent treatment advances²
- These advances include the introduction of simplified treatment regimens such as one pill, once-a-day treatments³
- Ten to fifteen years ago, treatment response rates (undetectable amounts of HIV in the body) at 48 weeks were about 50 to 60%. Recent treatments have allowed this to reach 90%⁴
- These simplified regimens are recommended by the International Association for the Providers for AIDS care (IAPAC) and the European AIDS Clinical Society^{5,6}

What is HIV?⁷

- Human immunodeficiency virus (HIV) causes CD4 cell counts to drop (a high CD4 cell count means you have a healthy immune system)
- Therefore a person with HIV is at risk of developing serious infections, which a healthy immune system would normally fight off. When a person develops certain illnesses and cancers, they are said to have developed acquired immunodeficiency syndrome (AIDS)
- HIV is present in blood, genital fluids and breast milk. The main routes of transmission are through unprotected sex, by sharing injecting equipment and from mother to baby during pregnancy, birth or through breastfeeding

HIV in the UK – latest Health Protection Agency statistics¹

- An estimated 96,000 people were living with HIV in the UK by the end of 2011
- In 2011, approximately 24% of people living with HIV were unaware of their infection
- The overall prevalence in 2011 was 1.5 per 1,000 population with the highest rates reported among men who have sex with men (MSM) (47 per 1,000) and the black African community (37 per 1,000)
- In 2011, 6,280 people were newly diagnosed with HIV in the UK
- The rate of HIV transmission among MSM remains high and 2011 saw the highest number of new diagnoses in this population
- The proportion of late diagnoses remained high (47%) in 2011 in spite of a slow but significant decline over the last decade
- 73,660 people living with a diagnosed HIV infection in the UK received care in 2011, representing a 58% increase since 2002
- Access to HIV medical care and the quality of care available in the UK is deemed excellent, with 88% of people for whom treatment was indicated receiving ART in 2011

Regional HIV statistics¹

- The most deprived areas in the UK have the highest diagnosed HIV prevalence
- Rates of new HIV diagnoses and HIV prevalence continue to be significantly higher in London than elsewhere in the UK; with 28,351 people living with HIV in London
- Local authorities with the highest prevalence in London are: Lambeth (3,049), Southwark (2,422), Lewisham (1,448), Westminster (1,345) and Newham (1,336)
- Outside of London, local authorities with the highest prevalence are: Manchester (1,889), Birmingham (1,515), Brighton and Hove (1,387) and Leeds (1,008)

Demographics of HIV in the UK¹

- Half of the people accessing HIV care acquired HIV heterosexually, of whom 64% were black African, 4% were black Caribbean and 22% were white
- MSM made up 44% of people accessing HIV care, of whom 87% were white
- More than half of the heterosexual men and women diagnosed in 2011 (52%) acquired their HIV infection in the UK compared to 27% in 2002
- In 2011, 22% of adults with HIV receiving care were aged 50 years or older, compared with 12% in 2002. Improved prognosis with modern HIV treatment means that many people with HIV are living long and healthy lives

How is HIV treated?^{2,6}

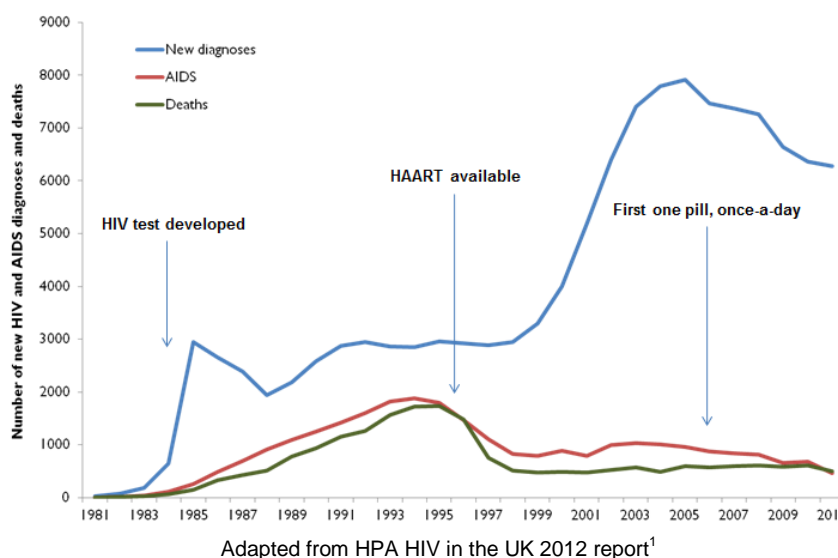
- There is currently no cure for HIV. However, anti-HIV drugs are available and early diagnosis and treatment mean that patients can live a full, healthy and active life. HIV has become a chronic manageable condition and is no longer the death sentence it once was
- The most effective way to manage HIV is to use a combination of at least three antiretroviral treatments attacking HIV at different stages of the replication process – referred to as HAART (highly active antiretroviral therapy)

Why are new HIV treatments important in the UK?^{3,8,9}

- Current HIV treatments are effective at reducing viral load (amount of virus in the blood) and increasing CD4 cell count. However, the main goal of newer treatments is to improve quality of life
- Unpleasant side-effects can have a huge impact on a patient's quality of life. These include, but are not limited to: nausea, dizziness, abnormal and vivid dreams/nightmares, difficulties in falling asleep and/or numerous night awakenings, psychiatric adverse events, indigestion, general lack of strength, rash, drowsiness, vertigo, anxiety, major depression and mood swings, as well as changes in the way the body looks, including weight loss or wasting
- These side-effects, alongside complicated dosing regimens (such as many pills taken at different times) can mean that patients do not take all the treatment doses (non-adherence). This reduces the amount of medication in the body needed to control HIV and can lead to drug resistance, where the treatment stops working altogether
- To control the HIV again, a change of treatment may be needed – which is why development of new treatments is important
- Patients find simplified regimens easy to take, which has shown to improve adherence – one of the most important factors for ensuring treatment works

What are the recent innovations in HIV therapy?^{1,4,6}

- In the last 30 years, treatment advances mean that there are now more than 20 licensed antiretroviral drugs available and treatment has evolved from taking numerous pills, several times a day to, in some cases, a combination which requires just a single tablet taken once a day
- Some newer treatments also have fewer unpleasant side-effects
- Ten to fifteen years ago, treatment response rates (undetectable amounts of HIV in the body) at 48 weeks were about 50 to 60%. Recent treatments have allowed this to reach 90%
- A simple dosing regimen is also recommended by the European AIDS Clinical Society for patients starting HIV treatment for the first time
- The graph below shows how HIV tests and these treatment advances have significantly reduced the number of HIV related deaths since the first cases of HIV were identified



Timeline – 32 years of HIV from 1981 – 2013^{4,10-16}

- **1981:** The first case of HIV in the UK was reported in June 1981
- **1984 – 1990:** The development of an HIV test in 1984 led to the first peak in HIV diagnoses in 1985, accompanied by a rapid rise in AIDS cases and deaths in the late 1980s through to the early 1990s
- **1987:** First antiretroviral is used
- **1994 – 1995:** AIDS diagnoses peaked in 1994 and deaths in 1995. Protease inhibitors become available in 1995
- **1996:** The availability of the combination treatment, HAART, in 1996 was responsible for the rapid decline in AIDS diagnoses and deaths since the late 1990s
- **2003:** Fusion inhibitors are introduced
- **2006:** Introduction of the first one pill, once-a-day regimen
- **2007:** CCR5 inhibitor and integrase inhibitor approved for use
- **2013:** First 'functional cure' of HIV. First time HIV treatment response rates (undetectable amounts of HIV in the body) reach 90% at 48 weeks

Contact information

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References

1. Health Protection Agency. HIV in the United Kingdom: 2012 Report. Available at <http://www.hpa.org.uk/Publications/InfectiousDiseases/HIVAndSTIs/1211HIVintheUK2012/> [accessed: 16 May 2013].
2. May M, Gompels M, Delpech V, et al. Impact of late diagnosis and treatment on life expectancy in people with HIV-1: UK Collaborative HIV Cohort (UK CHIC) Study. *BMJ* 2011;343:d6016.
3. Airoidi M, Zaccarelli LB, Bisi L, et al. One-pill once-a-day HAART: a simplification strategy that improves adherence and quality of life of HIV-infected subjects. *Patient Preference and Adherence*. 2010;4:115–25.
4. Sax E, DeJesus E, Mills A, et al. Co-formulated elvitegravir, cobicistat, emtricitabine, and tenofovir versus co-formulated efavirenz, emtricitabine, and tenofovir for initial treatment of HIV-1 infection: a randomised, double-blind, phase 3 trial, analysis of results after 48 weeks. *The Lancet* 2012;379:2439-2448.
5. IAPAC. Guidelines for improving entry into and retention in care and ART adherence for persons with HIV. Available at: http://www.iapac.org/ias/ias_2012.html [accessed 16 May].
6. EACS. Guidelines Version 6.1 – November 2012. Available at: http://www.europeanaidsclinicalsociety.org/index.php?option=com_content&view=article&id=59&Itemid=41 [accessed 16 May].
7. NAM aidsmap. Key tests to monitor HIV. Available at: <http://www.aidsmap.com/> [accessed 16 May 2013].
8. Gallego PB, del Rio Rafael, Gonzalez R, et al. Analyzing Sleep Abnormalities in HIV-Infected Patients Treated with Efavirenz. HIV/AIDS Brief Report. *Clinical Infectious Diseases*. 2004;38:430-32.
9. Cohen C, Andrade-Villanueva J, Bonaventura C, et al. Rilpivirine versus efavirenz with two background nucleoside or nucleotide reverse transcriptase inhibitors in treatment-naïve adults infected with HIV-1 (THRIVE): a phase 3, randomised, non-inferiority trial. *The Lancet* 2011;378:229-37.
10. Health Protection Agency. Health Protection Report. 30 years on: People living with HIV in the UK about to reach 100,000. 2011;5(22). Available at: <http://www.hpa.org.uk/hpr/archives/2011/news2211.htm> [accessed: 16 May 2013].
11. About.com. HIV/AIDS – an HIV timeline, the history of HIV. Available at: <http://aids.about.com/od/newlydiagnosed/a/hivtimeline.htm> [accessed: 20 May 2013].
12. US Department of Health and Human Services (HHS). FDA Approves First Protease Inhibitor Drug for Treatment of HIV. Available at <http://archive.hhs.gov/news/press/1995pres/951207.html> [accessed: 16 May 2013].
13. National AIDS treatment advocacy project (NATAP). FUZEON (T-20) Approved by the FDA. Available at http://www.natap.org/2003/march/031703_2.htm [accessed: 20 May 2013].
14. The Body. Approval of Atripla. Available at <http://www.thebody.com/content/art13833.html> [accessed: 20 May 2013].
15. The Body. A Look Ahead at This Year's Drug Approvals - Maraviroc: The First CCR5 Inhibitor Drug and Raltegravir: The First Integrase Inhibitor. Available at <http://www.thebody.com/content/art43065.html> [accessed: 20 May 2013].
16. NHS Choices. Early treatment may hold key to HIV functional cure. Available at: <http://www.nhs.uk/news/2013/03March/Pages/Early-treatment-may-hold-key-to-HIV-functional-cure.aspx> [accessed 16 May 2013].

APPENDIX 1: Prevalence of diagnosed HIV infection across England, 2011 (taken from HIV in the United Kingdom: 2012 report, HPA)¹

Local Authority	Number living with diagnosed HIV Infection	Estimated resident population	Diagnosed HIV prevalence per 1,000 population
London			
Lambeth	3,049	220.2	13.85
Southwark	2,422	206.7	11.72
City of London	57	5.3	10.75
Kensington and Chelsea	950	107.6	8.83
Westminster	1,345	154.6	8.7
Camden	1,296	153.1	8.47
Islington	1,266	149.9	8.45
Lewisham	1,448	186.7	7.76
Hackney	1,291	174	7.42
Hammersmith and Fulham	967	131.1	7.38
Haringey	1,136	174.8	6.5
Newham	1,336	215	6.21
Tower Hamlets	1,112	186.8	5.95
Greenwich	928	166.5	5.57
Barking and Dagenham	629	114.9	5.47
Croydon	1,094	228.7	4.78
Wandsworth	1,055	221.1	4.77
Waltham Forest	764	171.9	4.44
Enfield	776	195.2	3.98
Merton	504	131.6	3.83
Brent	793	207.7	3.82
Hounslow	577	168.3	3.43
Ealing	719	223.4	3.22
Barnet	633	222.7	2.84
Redbridge	481	175.5	2.74
Hillingdon	439	173.3	2.53
Bexley	325	138.3	2.35
Bromley	428	182.8	2.34
Sutton	270	117.8	2.29
Richmond upon Thames	261	116.8	2.23
Outside London			
Brighton and Hove	1,387	182.7	7.59
Manchester	1,889	344.7	5.48
Salford	635	146.5	4.33
Luton	534	127.1	4.2
Blackpool	297	81.7	3.64
Slough	313	90.6	3.45
Leicester	706	212.7	3.32
Reading	295	102.5	2.88
Coventry	558	196.2	2.84
Watford	162	57.8	2.8
Northampton	368	131.6	2.8
Bournemouth	319	114.1	2.8
Southend-on-Sea	281	101.7	2.76

Crawley	185	67.5	2.74
Nottingham	533	203.2	2.62
Harlow	127	49.9	2.55
Milton Keynes	385	156.2	2.46
Lewes	126	52.2	2.41
Wolverhampton	347	149.6	2.32
Birmingham	1,515	658.9	2.3
Oxford	228	103.9	2.19
Worthing	129	59	2.19
Leeds	1,008	471.5	2.14
Stevenage	109	52.1	2.09
Woking	126	60.3	2.09
Corby	78	37.8	2.06
Bedford	193	94.2	2.05
Eastbourne	111	54.8	2.03