

HIV in Pregnancy

current trends and challenges in the UK

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Prevention of Perinatal HIV Infection: Aiming for zero transmission
BHIVA multidisciplinary event marking World AIDS Day
Friday 27 November 2015, Royal College of Obstetricians and Gynaecologists, London



HIV in pregnancy in the UK

- demographics
- timing of diagnosis
- management and
- pregnancy and infant outcomes

Antenatal screening for HIV

- uptake
- diagnosis and detection
- impact

Paediatric AIDS surveillance established in 1986, extended to included pregnancies in 1989

Comprehensive observational national surveillance study (UK and Ireland)

Complementary obstetric and paediatric active reporting schemes (BPSU, RCOG, PHE)

Reports linked, infant infection status established

Substantial feedback to respondents and HIV networks maximises coverage and case ascertainment (>95%)

Further details at www.ucl.ac.uk/nshpc



- NSHPC data (and data from Collaborative HIV Paediatric Study <http://www.chipscohort.ac.uk/>) contributes to PHE HIV surveillance systems

HIV New Diagnoses, Treatment and Care in the UK
 2015 report

HIV in the UK – Situation Report 2015
 Incidence, prevalence and prevention

- Antenatal HIV Screening Programme – managed by the National Screening Programme's Infectious Diseases in Pregnancy Screening Programme (PHE)



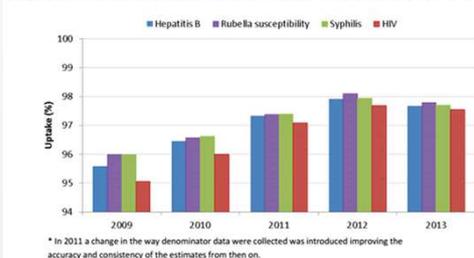
Infectious Diseases in Pregnancy Screening Programme

Antenatal infection screening in the UK

- Longstanding universal offer policy for **syphilis** and **rubella susceptibility**
- Universal offer and recommendation policy for **hepatitis B** and **HIV** from 2000
- Annual UK births currently ~800,000, about 25% to women who were born abroad



Figure 1. National reported uptake of antenatal screening by infection in England: 2009-2013*.



HIV antenatal screening uptake
 ~70% in 2000,
 90% by 2004,
 >97% since 2011

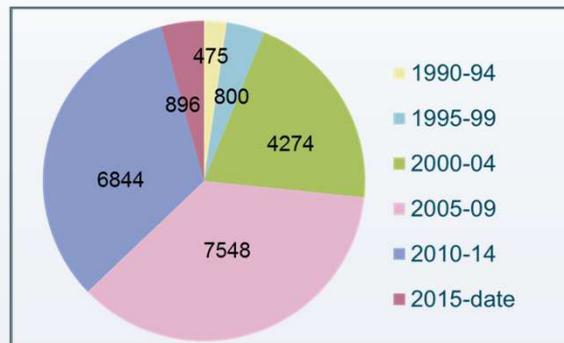
www.gov.uk/topic/population-screening-programmes/infectious-diseases-in-pregnancy



National Study of HIV in
NSHPC
 Pregnancy and Childhood

Over 19,000 pregnancies reported in the UK, currently 1100-1200 each year
 Nearly 2000 from Ireland, about 80-100 annually

UK and Ireland HIV pregnancies by time period



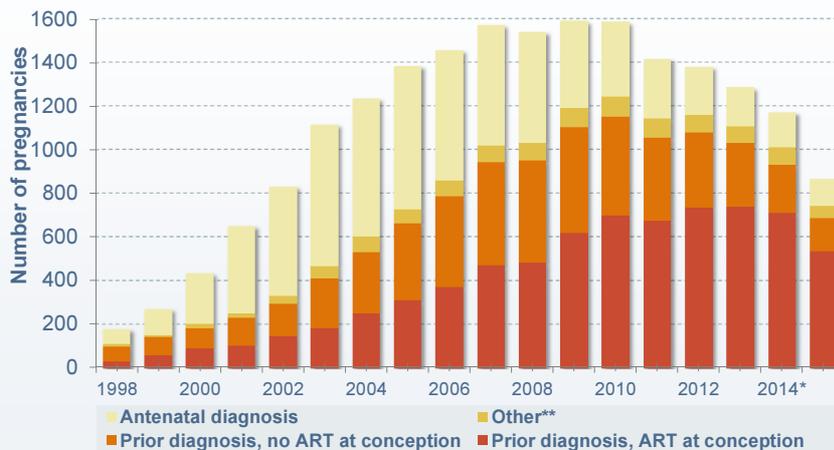
Changing demographics, trends over time



National Study of HIV in
NSHPC
 Pregnancy and Childhood

	1990-94	2010-14
Median maternal age	27 years	33 years
IDU-acquired infection	48%	2%
UK/Irish-born women	48%	15%
African-born women	44%	74%
Pregnancy ended in TOP	27%	2%
MTCT rate (dx women)	20%	0.4%
Pregnancies reported from		
London	55%	38%
rest of England	16%	49%
Scotland Wales NI	20%	5%
Ireland	10%	8%

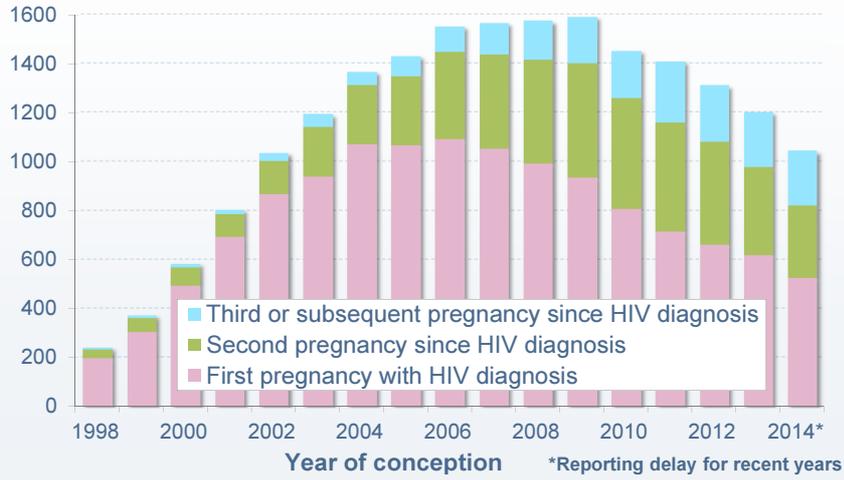
Timing of diagnosis & ART at conception UK & Ireland 1998-2015



* All pregnancies reported by September 2015, regardless of outcome; reporting delay for recent years
 ** Other category is pregnancies lacking information on precise timing of diagnosis and/or ART use

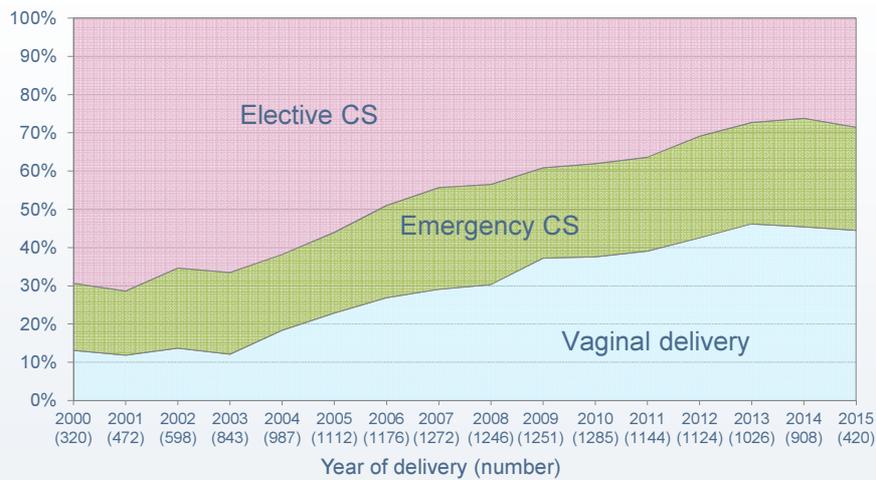
Sequential pregnancies by conception year, 1998-2014

Pregnancies reported by end September 2015, UK and Ireland



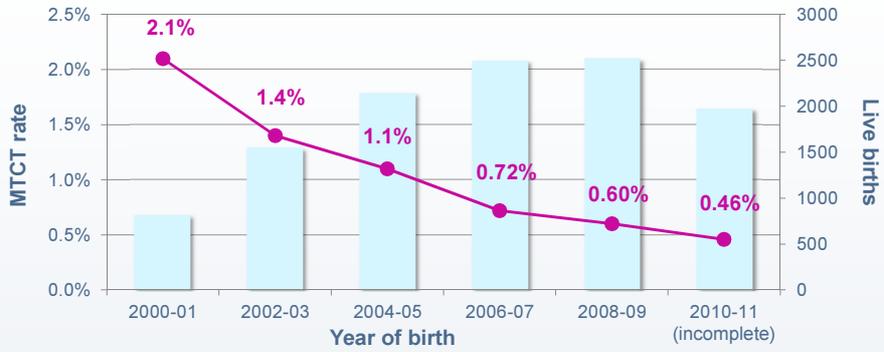
Changing mode of delivery among all diagnosed women

Deliveries 2000-2015 reported by end September 2015, UK births only



- Data for deliveries since 2013 incomplete due to reporting delay
- BHIVA Guidelines and evolution of recommendations on mode of delivery

MTCT rates in diagnosed women, UK & Ireland 2000-2011



~12,500 singleton births; significant decline in MTCT over time ($p < 0.001$)

Graph derived from data in Townsend *et al.* Earlier initiation of ART and further decline in mother-to-child HIV transmission rates, 2000-2011. AIDS 2014; 28:1049-57

MTCT rates in diagnosed women, UK & Ireland 2000-2011



**VERY LOW MTCT RATE MAINTAINED SINCE 2011;
<1 PER 1000 IN TERM DELIVERIES WITH VL <50**

Health implications for HIV & ARV exposed uninfected infants

Despite great progress MTCT rate remains higher for some groups

Recent analysis to explore timing of key elements of care to understand more about factors likely to be contributing to higher MTCT rates in specific groups

5700 pregnancies delivered 2009-2014

- 51% diagnosed, on ART at conception
- 28% ~~diagnosed, no ART~~ at conception
- 21% AN HIV diagnosis
- Late AN booking (≥ 13 weeks) in 42% of women
- 6% booked after 23 weeks

Preliminary data presented at 2015 conference

French *et al*, submitted Presentation for care and antenatal management of HIV in the United Kingdom: temporal trends and demographic variations, 2009-2014

Overall continuing improvement in *time to antenatal booking, laboratory assessment and ART initiation in pregnancy*

But still sub-optimal in women diagnosed antenatally

Migrants, parous women, and diagnosed women not already on treatment at conception, at higher risk of late booking

Women started ART significantly earlier in more recent period

But 13% of women not on ART at conception started ART after 26 weeks; with longer time to ART initiation for

- women diagnosed pre-pregnancy with parity > 2 , and
- newly diagnosed SSA migrants



Perinatal transmissions

Most perinatally infected infants born to women not aware of their infection until after delivery, eg when screened in a subsequent pregnancy, or child presents with symptoms

Evidence suggests number of perinatal transmissions from undiagnosed women reducing – suggesting fewer women remain undiagnosed

Laura Byrne's presentation on Perinatal Transmissions later



Challenges

Maintaining high uptake of antenatal screening when 85% of women already know their status at conception

Enabling timely screening for excluded and vulnerable groups

Ensuring second offer to those who decline

Optimising care for all positive women including outside, during and after pregnancy

Ensuring access to appropriate peer and professional support, not just for healthcare, but to help deal with immigration, housing, disclosure issues and stigma

Antenatal screening and seroconversions

- Low numbers, some likely postnatal
- Evidence does not support routine re-offer of screening later in pregnancy in UK currently



Move towards normalising management of pregnancy & delivery

British HIV Association guidelines for the management of HIV infection in pregnant women 2012. HIV Med. 2012 Aug;13:87–157, with 2014 update available at <http://www.bhiva.org/pregnancy-guidelines.aspx>

Multidisciplinary team approach recommended

Emerging and vulnerable groups include

Perinatally infected women (<100 so far, but highly treatment experienced, often with sub-optimal regimens)

Migrants (75% of women from Sub-Saharan Africa; slowly increasing number from Eastern Europe, Asian SC)

Women with co-infections and/or challenging social circumstances



Assessing effectiveness of screening and management

Consider other issues besides MTCT

% delivering with suppressed virus

% having normal delivery

% remaining engaged in care

% exposed infants receiving appropriate care, prophylaxis and testing

Ensuring high quality timely care, appropriate support, and equity of access for all women

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Ethics

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NSHPC is currently under review with the Health Research Authority's Confidentiality Advisory Group

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