



# **Audit of perinatally acquired HIV in UK-born infants reported 2014-2017**

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BHIVA, Edinburgh 2018

## Background

Vertical transmission (VT) of HIV in diagnosed women in the UK and Ireland has continued to decline as a result of:

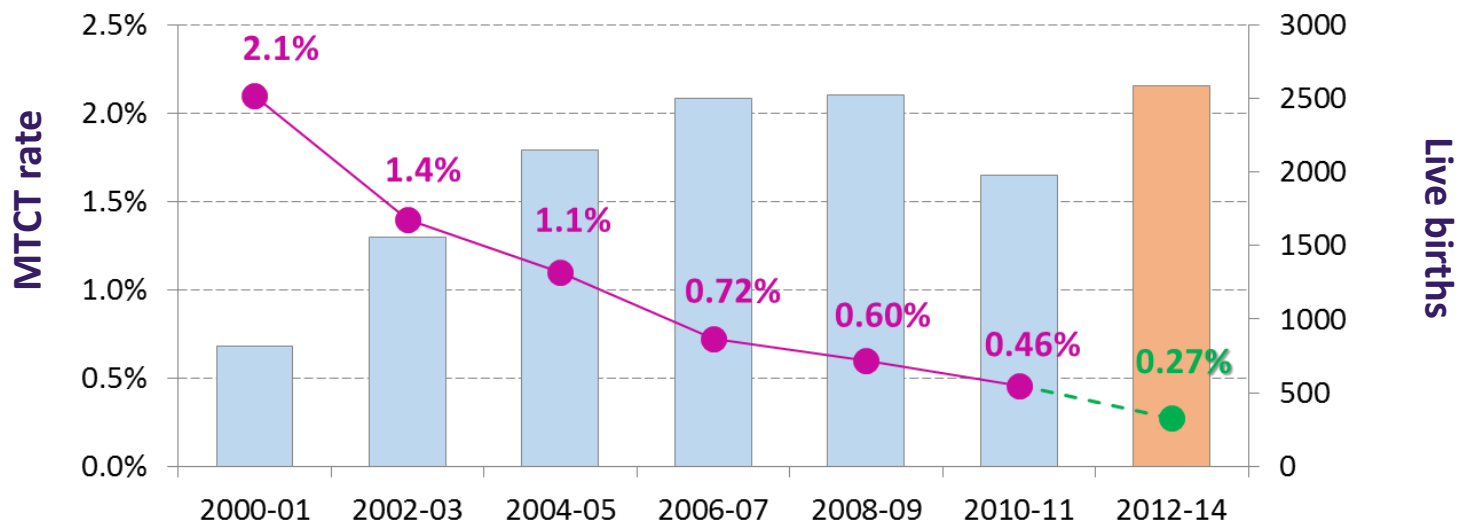
- ❖ high uptake of routine antenatal HIV screening
- ❖ improvements in HIV management in pregnancy
- ❖ increased proportion of women on ART from conception

### However...

a small number of HIV-diagnosed children born in the UK are still reported each year

➔ the National Study of HIV in Pregnancy & Childhood (NSHPC) conducts an ongoing audit of perinatal HIV in the UK

## MTCT rates in diagnosed women, UK & Ireland 2000-2014



- Most recent update of MTCT rate **0.27% for 2012-14**
- Significant decline over time ( $p < 0.001$ )

Data from 2000-11 from: Townsend *et al.* Earlier initiation of ART and further decline in mother-to-child HIV transmission rates, 2000-2011. AIDS 2014; 28:1049–1057 and data from 2012-14 from Peters *et al.* UK MTCT rates continue to decline: 2012-2014, Clinical Infectious Diseases 2016.

## NSHPC Perinatal Audit

- **108 vertically infected children** born in UK 2006-2013 (reported by April 2014)
- Paper published in *HIV Medicine* (covering 108 cases)

National audit of perinatal HIV infections in the UK,  
2006–2013: what lessons can be learnt?

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### Main findings:

- **decline in the number** of perinatal transmissions over the period
- two-thirds born to women undiagnosed by delivery
- main issues: engagement, late booking, declined HIV testing, seroconversion
- over half of mothers experienced **adverse social circumstances**

Results have been fed into national standards and guidelines

## Aims

Investigate antenatal screening and management of women whose infants acquire HIV perinatally to contribute to:

- monitoring and improvement of antenatal HIV screening protocols
- understanding of timing and circumstances of maternal and infant acquisition of infection



## Methods

### NSHPC:

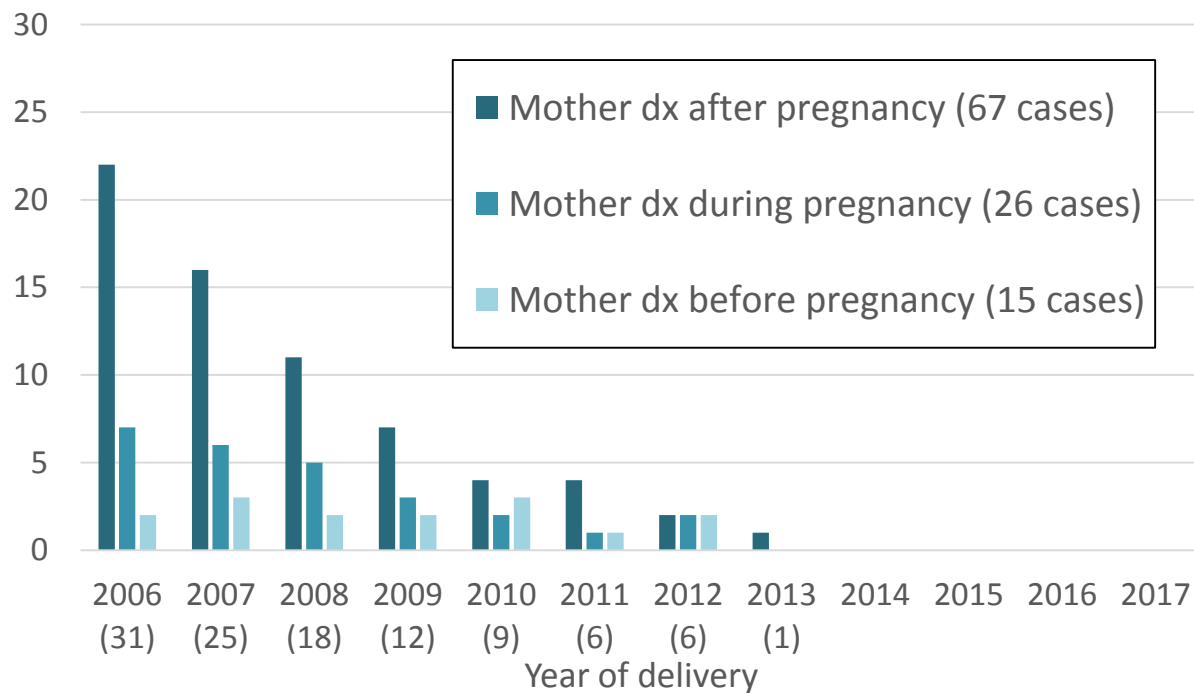
- **All pregnancies** in diagnosed women living with HIV in the UK/Ireland reported
- **Children diagnosed with HIV** and children **born to mothers living with HIV**

### NSHPC Perinatal Audit:

- **Enhanced data collection** performed for each case **born in UK since 2006**
- Structured telephone interviews with reporting clinicians
- **Expert Review Panel:** clinicians from relevant specialties + lay representatives
- Once all cases discussed, review meeting to decide recommendations

## Results

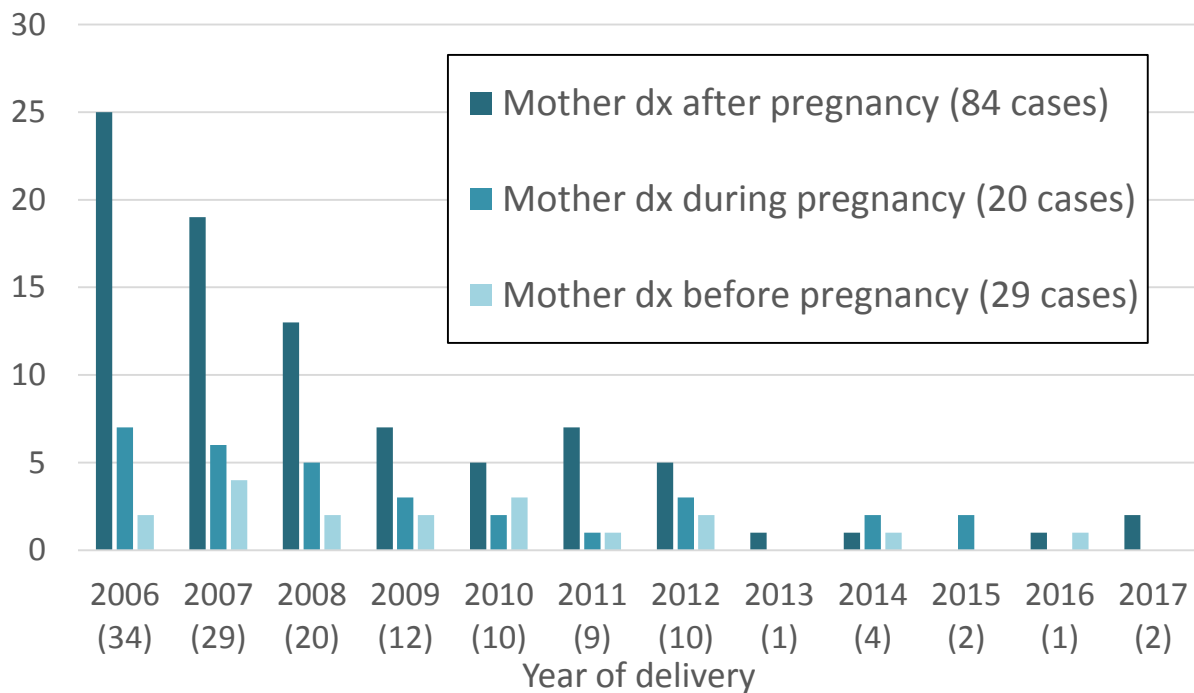
108 cases reported by April 2014



## Results

**25 new cases reported since April 2014:** 17 born to mothers dx after pregnancy

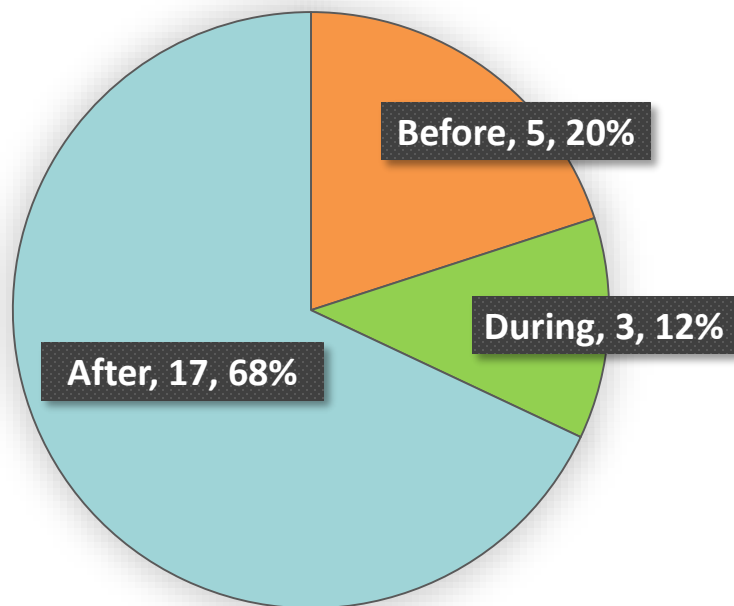
- 53 interviews conducted with clinicians (paed/obst/GUM) 2-3 interviews per case





## Results

Of 25 cases reported since 2014...



Timing of maternal diagnosis in relation to pregnancy

Majority born to undiagnosed women

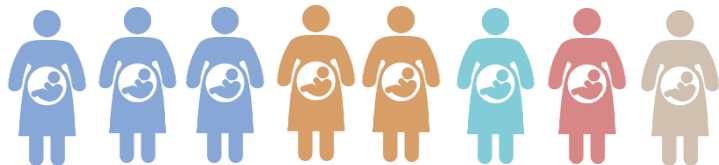
Child's age at diagnosis ranged from birth to 8 years

Over half of cases had adverse social circumstances reported

## Women diagnosed before or during pregnancy (8/25)

### Contributing factors

- 3 postnatal/likely breastfeeding
- 2 booked late
- 1 with problems taking ART
- 1 seroconverted
- 1 not known

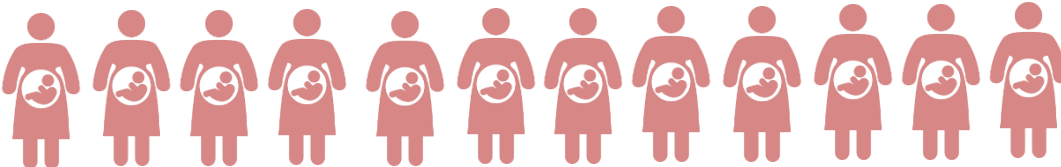
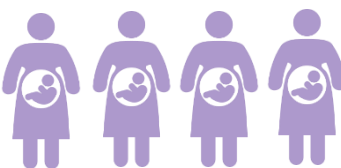



### Timing of transmission

- 3/8 transmissions in utero
- 3/8 were postnatal
- 1/8 intrapartum
- 1/8 timing unknown

## Women diagnosed after pregnancy (17/25)

### Contributing factors

- **12 seroconversions**  

- **4 declined HIV test(s)**  

- **1 booked late**  


## Women diagnosed after pregnancy (17/25)

### Seroconversions (12/17)

- 7/12 had partners diagnosed after pregnancy
- 1/12 had an HIV+ partner who did not disclose
- 2/12 had new partners in pregnancy

2/7 partners died  
from HIV

### Declined tests (4/17)

- All prior to 2010 (i.e. before current IDPS standards)
- 2/4 were by the same woman in subsequent pregnancies

### Late Booking (1/17)

- Booked at >30 weeks, delivered preterm and dx following delivery

## Conclusions

- Among 25 recent cases of vertical transmissions in the UK, **two-thirds involved undiagnosed women**
- Issues identified are similar to those previously reported; **seroconversion was a common factor**, highlighting the importance of partner testing/PrEP use in pregnancy
- No recent cases where HIV test was declined
- This ongoing audit provides valuable insights into the circumstances of the small number of transmissions still occurring in the UK, and helps to strengthen future PMTCT strategies

## Acknowledgements

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