

# Trends in maternal characteristics and pregnancy outcomes among women living with HIV in the UK: 2014-19

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## BACKGROUND

- The HIV vertical transmission rate in the UK has remained at below 0.3% since 2012, reflecting ongoing successes of antenatal screening and clinical management
- We describe recent trends in characteristics and outcomes of pregnancies in women living with HIV (WLWH) in the UK in 2014-2019 using data from the **Integrated Screening Outcomes Surveillance Service (ISOSS)**

## METHODS

- ISOSS is a part of the NHS Infectious Diseases in Pregnancy Screening (IDPS) Programme and conducts comprehensive, UK\* population-based surveillance of pregnancies in WLWH, their infants and any children diagnosed with HIV.
- Analyses included pregnancies in WLWH diagnosed before delivery with estimated date of delivery (EDD) 2014 to 2019, reported to ISOSS by 31/12/2021.

\*as of 2020, ISOSS is an England only service

## CONCLUSIONS

- Changes in the population of WLWH accessing antenatal care in the UK have implications for care across services and require ongoing monitoring to best support guidelines and management
- Clinical outcomes are reassuring** and the IDPS Programme is key to supporting engagement in pregnancy. Current successes reflect the strength of existing clinical pathways and the importance of a multi-disciplinary approach engaging maternity, paediatrics and sexual health across the pregnancy journey.
- ISOSS will continue to monitor **emerging areas of interest including infant feeding, inequalities, and the impact of Covid-19.** *The ISOSS Annual Report 2021 is available on gov.uk*

## RESULTS

- 5,858 pregnancies among 3,353 women; annual numbers decreased from ≈1,100 in 2014-15 to 800-900 in 2018-19, Figure 1.

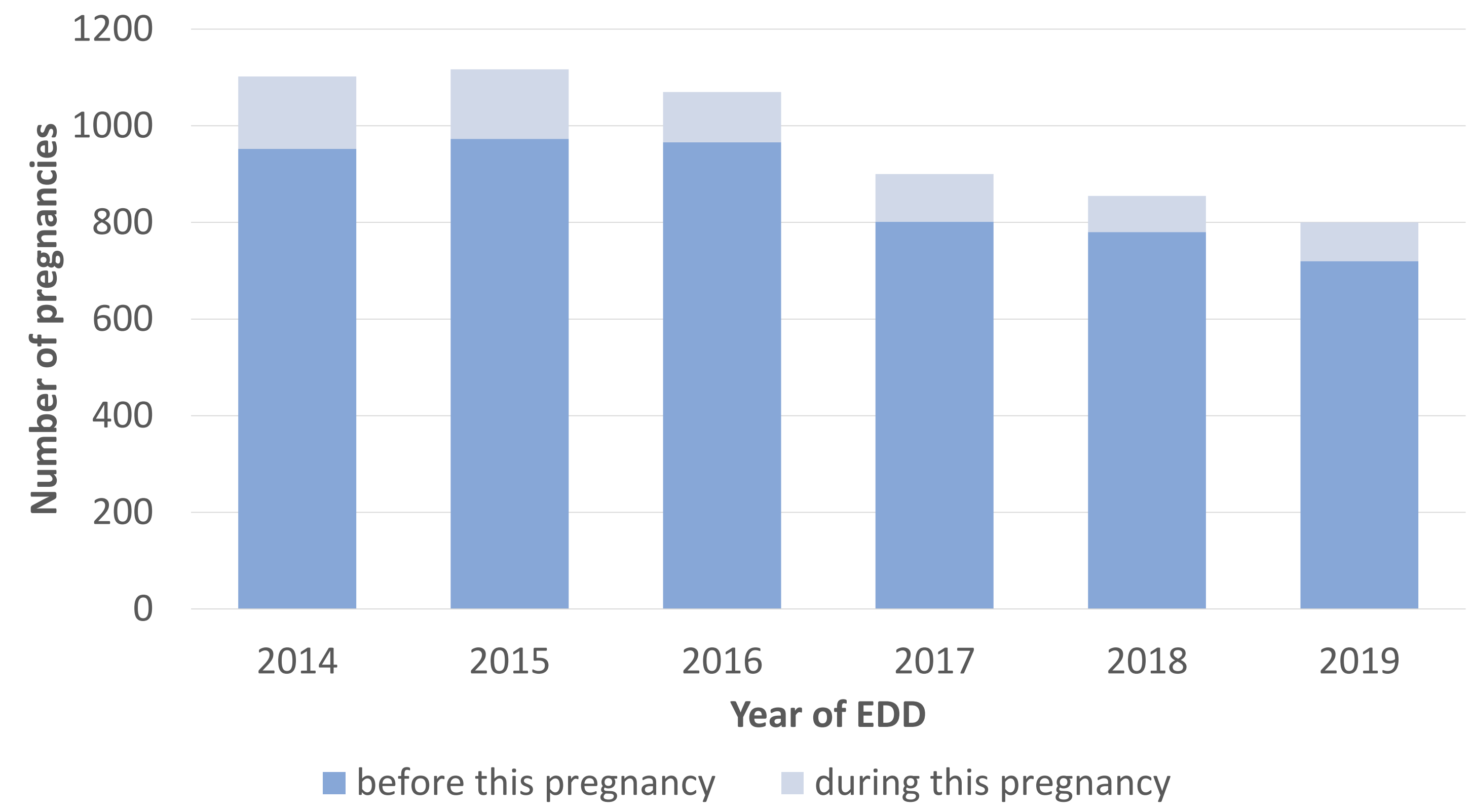


Figure 1: Timing of maternal HIV diagnosis 2014-2019

### Maternal demographics

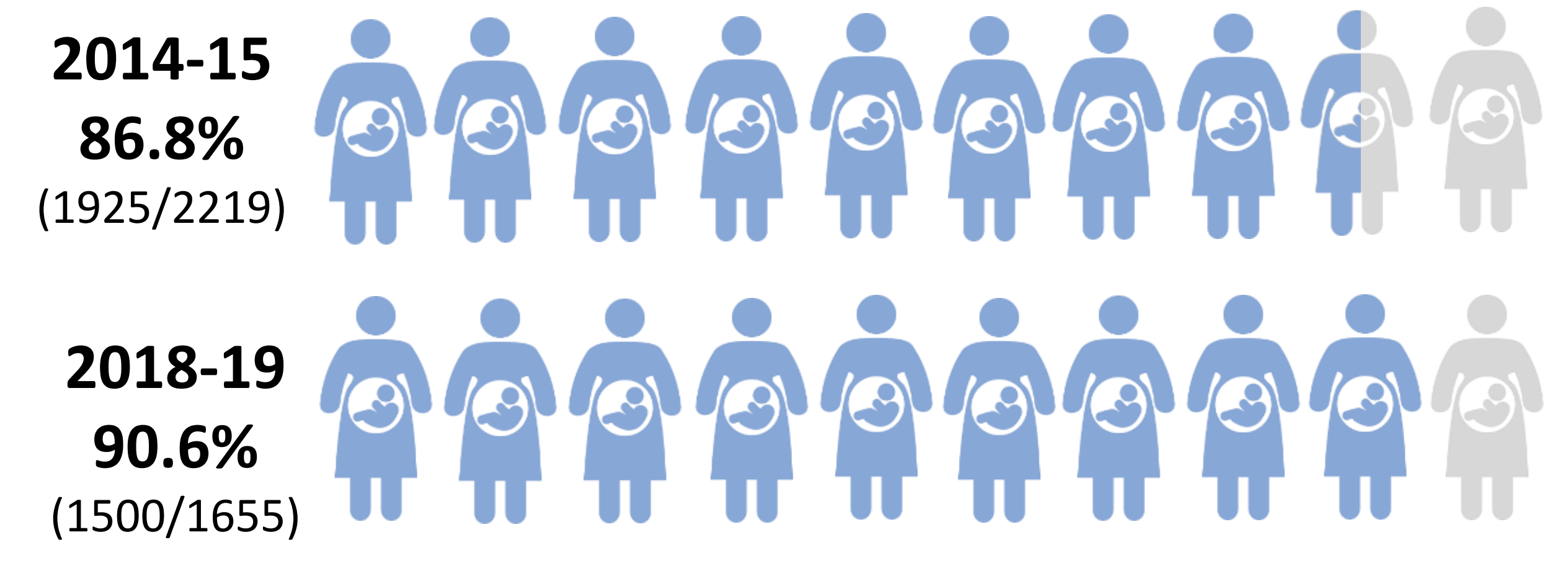
Figure 2 shows shifts in key maternal characteristics. Median age at EDD was 34 years (Q1:30, Q3: 38) increasing over time.

Characteristic	2014-15	2018-19
Maternal age >40 years	12.5%	19.1%
Sub-Saharan Africa-born	72.0%	64.1%
Eastern Europe born	4.3%	6.9%
UK-born	16.2%	18.8%
Vertically-acquired HIV	1.7%	3.7%

Figure 2: Maternal demographics over time

### Clinical characteristics

#### Maternal diagnosis before pregnancy, $p < 0.001$



#### Pregnancies conceived on ART, $p < 0.001$



- In pregnancies to women diagnosed prior to pregnancy, the proportion conceiving on ART increased from 77.8% in 2014-15 to 89.6% in 2018-19 ( $p < 0.001$ )
- Among women with antenatal diagnosis, ART started earlier over time: 19 weeks gestation (Q1:16, Q3:23) in 2014-15 and 16 weeks (Q1:14, Q3:20) in 2018-19
- 51.2% of women had first antenatal CD4 count  $> 500$  cells/mm<sup>3</sup> in 2014-15, increasing to 58.5% in 2018-19 ( $p = 0.001$ )

### Pregnancy outcomes (among live and stillbirth deliveries)

- Overall, **92.1% of deliveries were to women with viral load  $< 50$  copies/ml**, and for deliveries to women on ART from conception this was 95.5%
- Supported breastfeeding** cases, in line with British HIV Association guidelines, increased from 1.5% (24/1595) in 2014-15 to 5.8% (72/1240) in 2018-19 ( $p < 0.001$ )

Characteristic	2014-15	2018-19
Delivery viral load $< 50$ c/ml	91.3%	93.1%
Vaginal delivery	44.3%	47.4% *
Emergency caesarean	26.9%	22.3% *
Preterm delivery	12.6%	12.2%

Figure 3: Pregnancy outcomes over time \* $p < 0.05$