

# Maternity hepatitis B virus (HBV) surveillance data from England



January 2024 update

ISOSS is part of NHS England Infectious Diseases in Pregnancy Screening Programme and is based at UCL Great Ormond Street Institute of Child Health

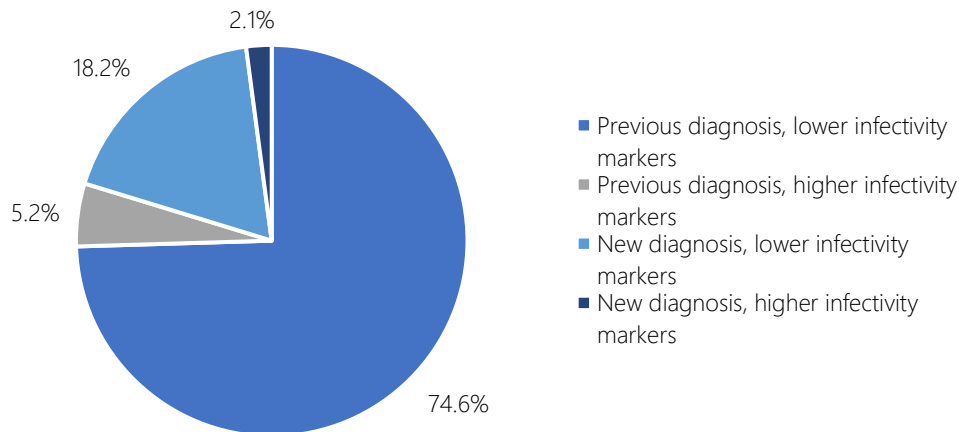


## Integrated Screening Outcomes Surveillance Service – HBV surveillance

- **Comprehensive observational surveillance** of maternal hepatitis B virus (HBV) in England, in place since 2021. Part of NHS England's Infectious Diseases in Pregnancy Screening Programme
- **Maternity reports of all women who screen positive for HBV during pregnancy** through maternity units; demographics, pregnancy management, outcome via the NHS IDPS programme
- **Paediatric HBV follow up:** data linkage with UK Health Security Agency's Immunisation, Hepatitis and Blood Safety team at 12-13months after birth
- **In-depth case studies of vertical transmissions** reviewed by Clinical Expert Review Panel (CERP)

# HBV screen positive pregnancies booked in 2021-2022

Infectivity and timing of diagnosis of HBV screen positive pregnancies booked in 2021-22

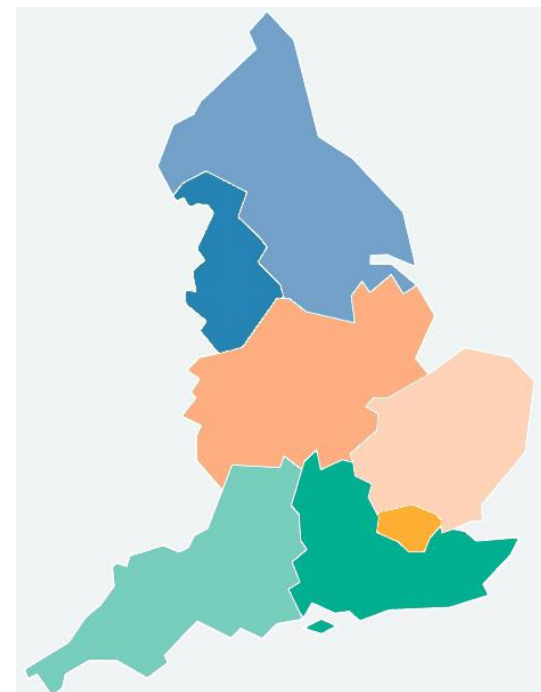
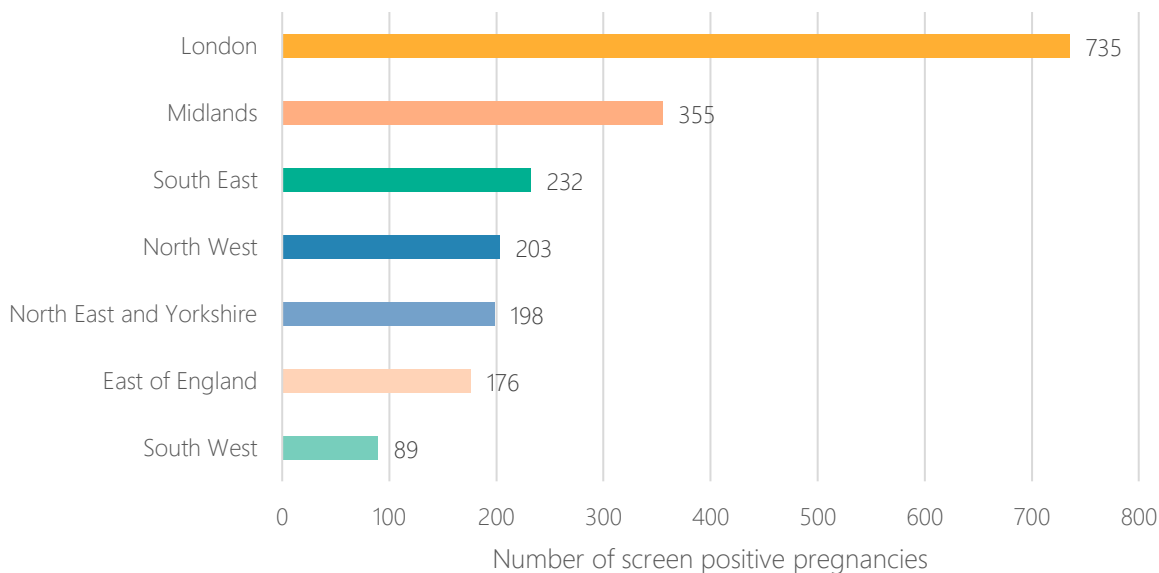


**1988**  
women screened positive for hepatitis B virus (HBV) in pregnancy

**7.3%**  
Higher infectivity

**20.3%**  
Newly diagnosed

## Regional breakdown of screen positive pregnancies booked in 2021-2022



# Maternal demographics of screen positive pregnancies booked in 2021-2022

## Maternal characteristics, N=1988

Ethnicity (n=1978)	Percentage of pregnancies
White British	1.0%
White other	27.4%
Black African	35.6%
Black other	2.2%
Asian	18.5%
Other	12.9%
Mixed	2.5%
Region of birth (n=1927)	
UK	4.7%
Eastern Europe	23.8%
Rest of Europe	7.4%
Africa	37.5%
Asian	25.8%
Other	0.9%
Maternal age at delivery	
<20 years	0.7%
20-24 years	6.0%
25-30 years	19.8%
30-34 years	34.7%
35-39 years	29.5%
≥40 years	9.4%

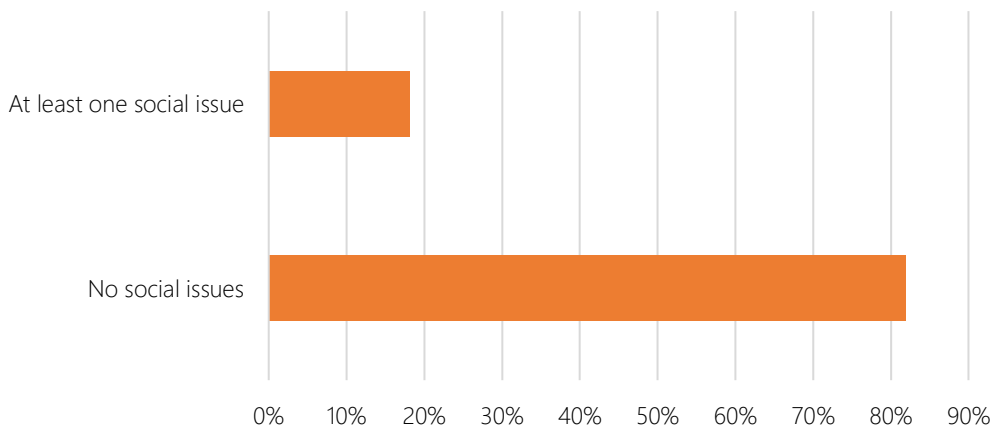
71% of women were from minority ethnic backgrounds

38% of women were born in Africa

Median age at delivery was 30.9 years

# Social circumstances of screen positive pregnancies booked in 2021-2022

Socially complicating issues among screen positive pregnancies



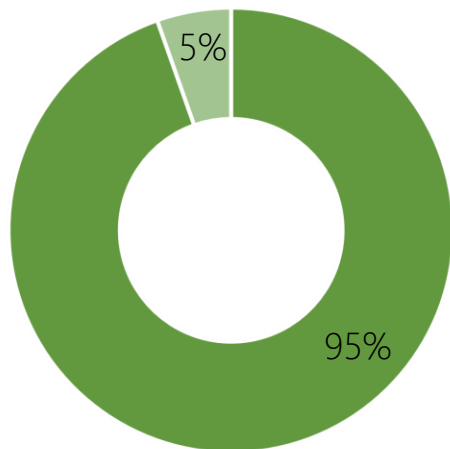
Housing concerns were reported for **5%** of women

Less common social issues included: immigration problems, intimate partner violence, mental health issues, and social services involvement

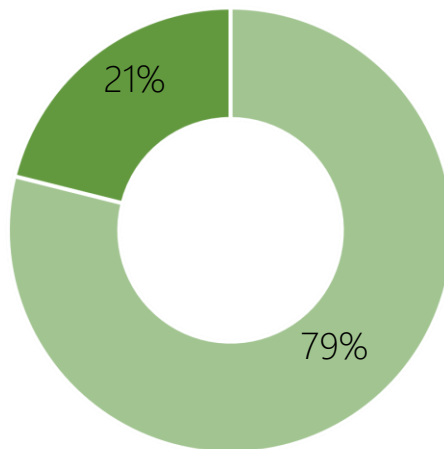
Translation services during maternity care were required for **26%** of women

## Treatment details of pregnancies resulting in births booked in 2021-2022

Pregnancies with lower infectivity markers  
(n=1712)



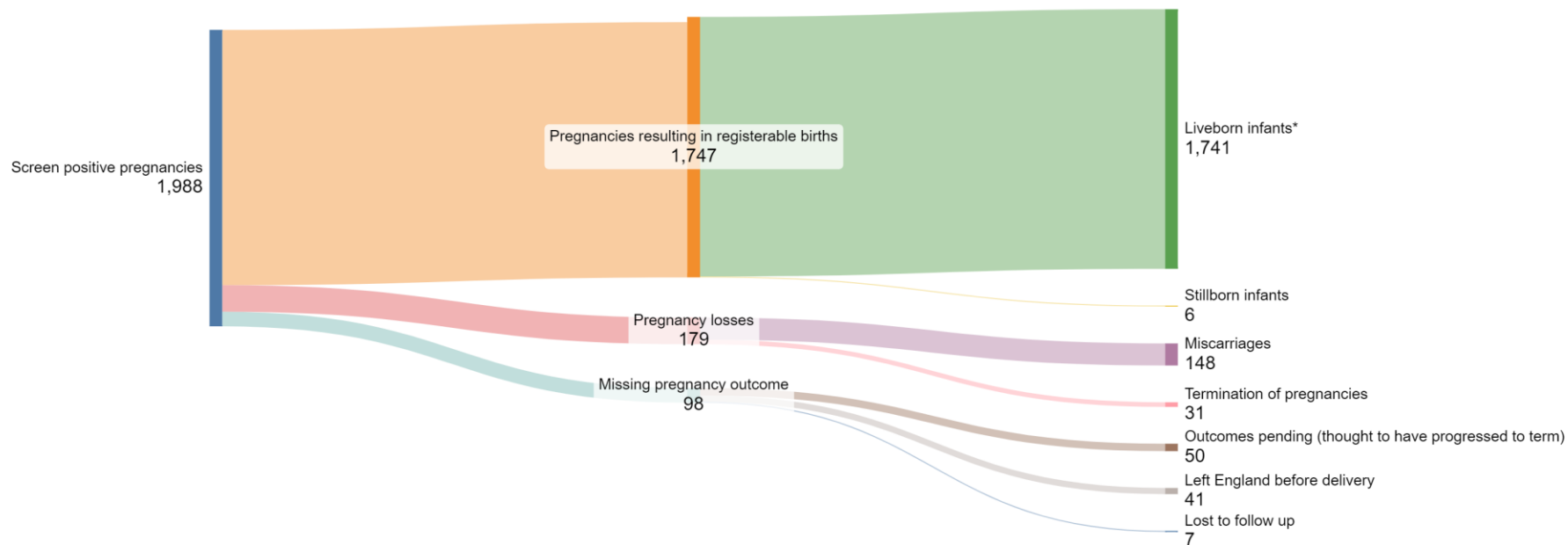
Pregnancies with higher infectivity markers  
(n=128)



- No treatment received
- Treatment received

96% of women had an HBV viral load less than  $2 \times 10^5$

# Pregnancy outcomes of women booked in 2021-2022

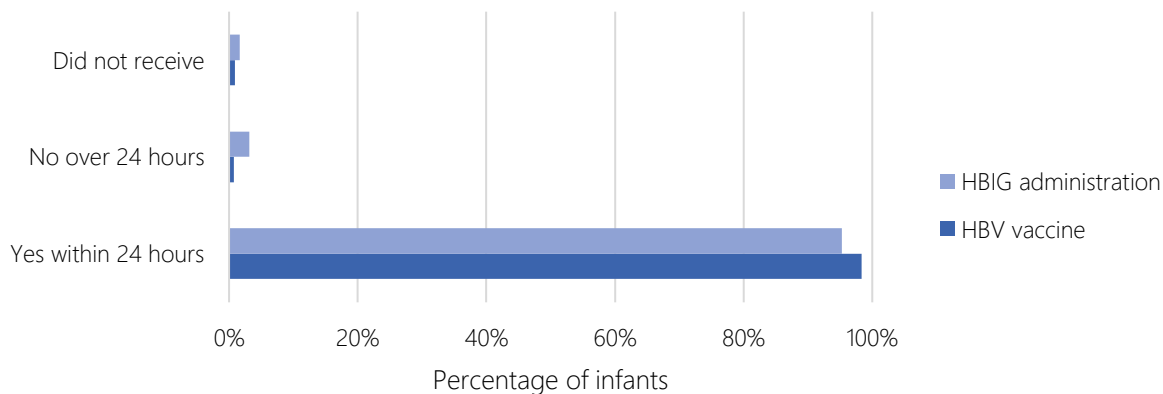


\*number of infants born, includes multiple births



## Newborn vaccination and immunoglobulin administration, 2021-2022

HBV vaccination and HBIG administration among all live births requiring vaccination (n=1742)/HBIG (n=130)\*



\*All infants born to women with HBV infection in pregnancy should receive HBV vaccination, with the first dose being given within 24 hours of birth. All infants born to women with high risk of transmission should also receive HBIG within 24 hours of birth

ISOSS is a part of NHS England's Infectious Diseases in Pregnancy Screening Programme.

Data are collected under legal permissions granted under Regulation 3 of The Health Service (Control of Patient Information) Regulations 2002.

For more information, visit the ISOSS website at [www.ucl.ac.uk/isoss](http://www.ucl.ac.uk/isoss).



## Acknowledgements

All ISOSS respondents

Members of the Clinical Expert Review Panel

## ISOSS Annual Report (Hepatitis B)

The ISOSS hepatitis B report for 2023 can be found at <https://www.gov.uk/government/publications/idps-isoss-hepatitis-b-outcome-report-2023/isoss-hepatitis-b-report-2023>.

## UCL team (2023-2024)

**Surveillance Lead:** Prof Claire Thorne

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