

Speaker Name	Statement
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Concurrent infections in pregnancies to women living with HIV in the UK and Ireland

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Background

- Sexually-acquired and blood-borne coinfections are frequent among people living with HIV
- In pregnancy such coinfections may place women and their infants at increased risk for adverse outcomes including vertical/congenital infection
- These have implications for management during pregnancy and beyond

Background- screening guidelines

In the UK recommended that all pregnant women are screened for hepatitis B virus (HBV), and syphilis

BHIVA guidelines:

- All HIV-positive women (newly diagnosed or previously engaged in care) are additionally screened for HCV and genital infections
- Comprehensive guidelines: management of any coinfections found in HIV-positive women (amendments to treatment regimen, increased testing in other depts, MDT approach)

Aim

- To describe infant exposure to coinfections in pregnancy in HIV-diagnosed women in the UK and Ireland, together with infant outcomes



National Study of HIV in Pregnancy and Childhood

Comprehensive observational surveillance in UK and Ireland since 1990

Complementary reporting schemes

- Paediatric reports, clinics and **BPSU orange card**
- Obstetric reports, **RCOG approved scheme**

No interventions, no enrolment, surveillance only

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

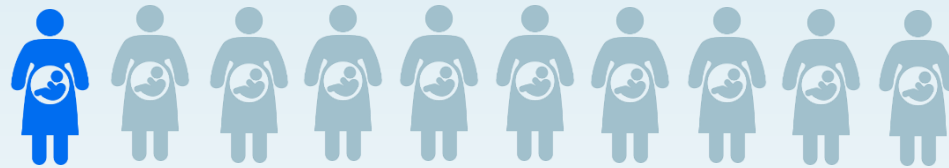
Methods

- Since 2008 the NSHPC has actively collected data on infections routinely screened for in HIV-positive pregnancies (HBV, HCV and syphilis) as well as other co-infections
- Additionally collects details on infant exposure to and/or confirmed congenital infection

Analysis: describe exposure to co-infections and outcomes in 7758 livebirths to HIV-diagnosed women 2010-16, reported by the end of 2016

Results

- Among infants born 2010-16, 10% (764/7758) were reported to be exposed to a maternal co-infection



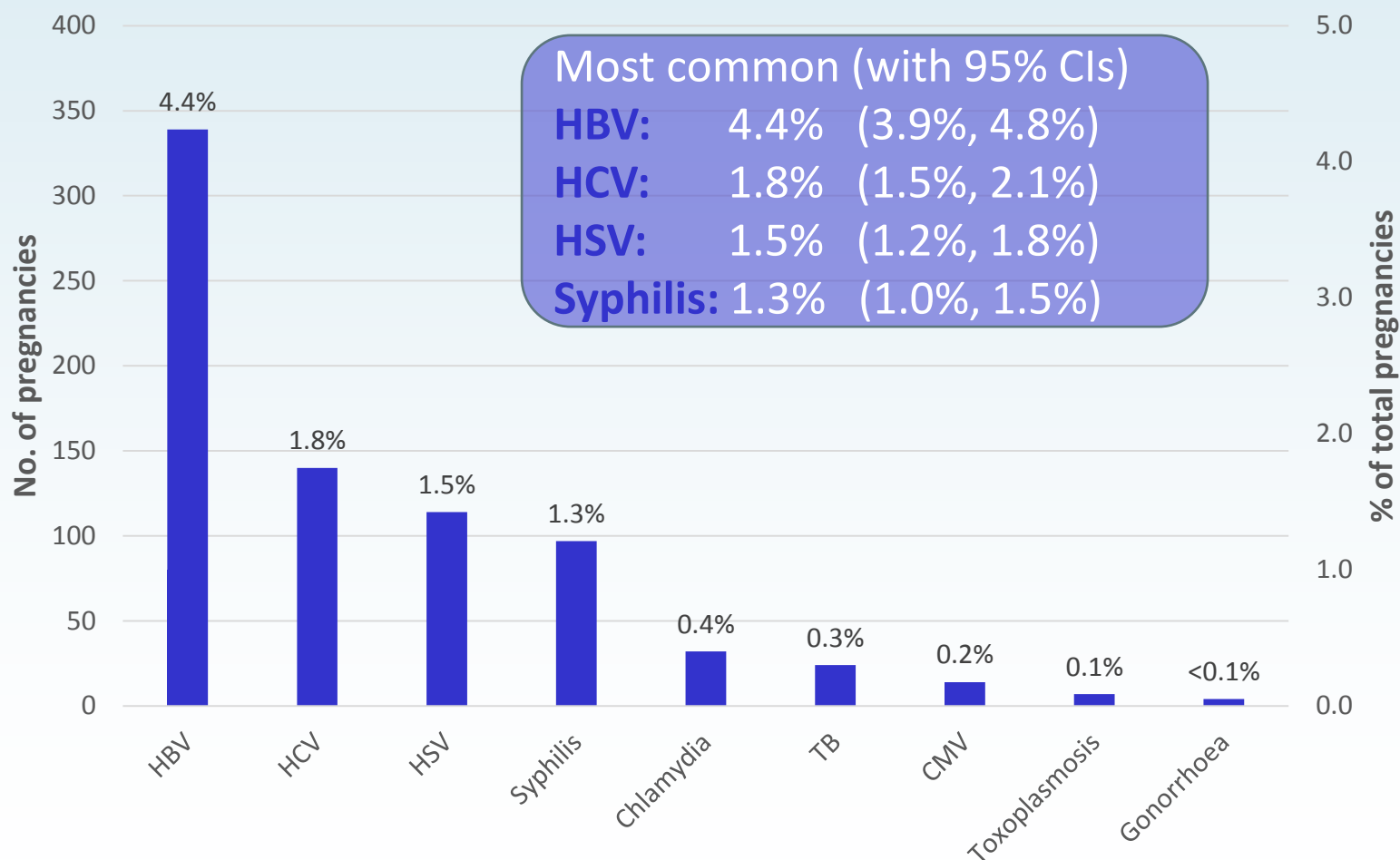
- Of these, 5% (38/764) were exposed to >1 concurrent infections

Most common were:

- HBV/HCV (14/38)
- HBV/syphilis (8/38)

Results

Prevalence of reported coinfections among pregnancies to women with HIV



Results – maternal demographics

	Co-infected (n=764)	None (n=6994)	p-value
Median age at EDD (95% CI)	33.4y (29.7, 36.9)	33.4y (29.6, 37.1)	>0.5
* HIV dx during pregnancy	154 (20%)	1126 (16%)	0.005
* Region of birth			
UK/Ireland	111 (15%)	1013 (15%)	<0.001
Other Europe	100 (14%)	338 (5%)	
Sub Saharan Africa	496 (67%)	4932 (74%)	
Other	30 (4%)	428 (6%)	
* Ethnic origin			
Black African	499 (68%)	4923 (75%)	<0.001
White	198 (27%)	1074 (16%)	
Other	40 (5%)	585 (9%)	
* Mode of HIV acquisition			
Heterosexual	593 (87%)	6034 (97%)	<0.001
IDU	68 (10%)	42 (<1%)	
Other	17 (3%)	155 (3%)	
Previous livebirths	584 (76%)	5448 (78%)	0.36

Results – Hepatitis B

Factors associated with HBV coinfection:

- Older median age: 34yr vs 33yr ($p<0.03$)
- Born abroad: SSA 83% vs 72% ($p<0.001$)
- Non-white ethnicity: 88% vs 82% ($p<0.005$)

No difference in timing of diagnosis, mode of HIV acquisition and parity

Results – Hepatitis C

Factors associated with HCV coinfection :

- Younger median age: 32yr vs 33yr ($p=0.032$)
- Region of birth: Eastern Europe ($p<0.001$). EE accounted for 30% (44/148) of those with an HCV coinfection
- White ethnicity: 85% vs 16% ($p<0.001$)
- IDU: 47% vs 0.7% ($p<0.001$). 57% of IDU had HCV
- First pregnancy ($p=0.07$)

No difference in timing of diagnosis

Results – Syphilis

Factors associated with syphilis coinfection :

- Older median age: 35yr vs 33yr ($p=0.09$)
- Diagnosis in current pregnancy: 26% vs 16% ($p<0.02$)
- Born abroad: SSA 89% vs 71% ($p<0.001$)
- Black African ethnicity: 91% vs 74% ($p<0.001$)

No difference in parity or mode of HIV acquisition

Results – Regional differences

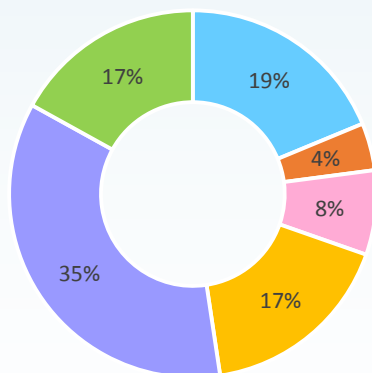
London: Nearly two-fifths of HIV reports vs quarter of HCV and HBV coinfections

Ireland: only 8% of HIV reports vs 29% of HCV coinfections and 17% of syphilis and HCV coinfections

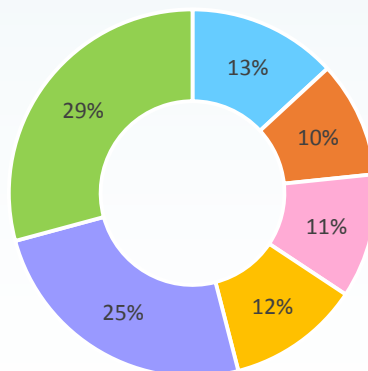
Overall HIV reports

London	37%
Midlands	23%
North England	15%
South England	12%
Ireland	8%
NI, Scotland, Wales	5%

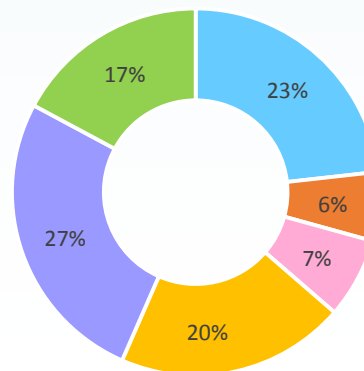
Syphilis



HCV



HBV



Results – Infant outcomes

- Of the infants exposed to co-infections **15% were born preterm** (<37wks) vs 10% in unexposed ($p<0.001$)
- A **confirmed congenital infection** was reported in **4%** of infants: CMV (12), syphilis (4), HBV (4), HCV (3), HSV (3), other (3) with one child having >1 congenital infection
- Of infants where HIV infection status was known, **0.8%** (5/624) were **found to have HIV** (1/5 had a congenital infection) vs 0.4% overall

Conclusions

- One in ten infants born to women living with HIV in the UK/Ireland are exposed to coinfections
- Findings underscore the need to:
 - follow recommendations for screening for sexually transmitted and blood-borne infections in pregnant women with HIV
 - allow for appropriate management of mother and infant and to prevent congenital infection and/or other adverse pregnancy outcomes

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Any views expressed are those of the speaker and not necessarily those of the funders