



## Overview

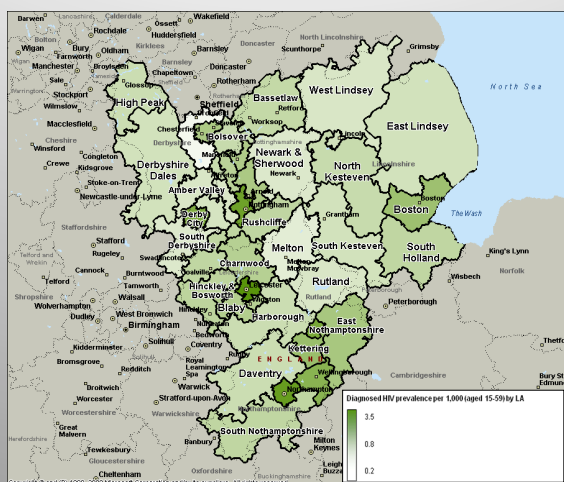
- Epidemiology
- Mother to child Transmission in Nottingham
- Audit – Background & Methods
- Discussion
- Results so far
- Service Development
- HIV Testing in Children & Young people
- Questions

## HPA Report, 2010

- An estimated 86,500 people live with HIV in the UK
- A quarter of these people were unaware of their infection
- 6,630 people were newly diagnosed as HIV-infected
- 37 English PCTs had a prevalence of diagnosed HIV greater than 2 per 1,000 population

### Diagnosed HIV prevalence per 1,000 population (aged 15-59 years) by Local Authority in the East Midlands, 2010

Data Sources: SOPHID - Survey of prevalent HIV infections diagnosed 2010, Health Protection Agency.  
Office for National Statistics mid-2010 population estimate.



Health Protection Agency New HIV Diagnoses National tables: Table 6  
25/08/2011

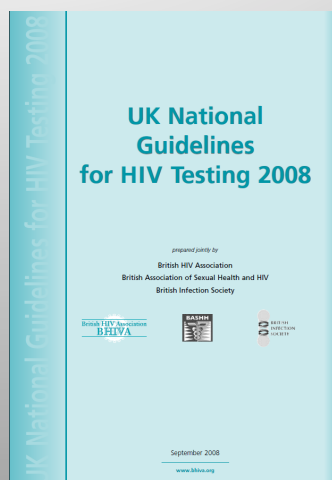
**New HIV diagnoses in the United Kingdom**  
**By year of diagnosis and age group**  
 Data to the end of June 2011

Age at diagnosis	1995 or earlier	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Cumulative total
<15	684	68	85	95	87	105	113	126	147	154	122	117	94	82	77	61	15	2,232
15-19	817	35	36	41	38	66	92	109	137	181	153	160	147	145	131	160	53	2,501
20-24	4,086	245	244	222	278	339	451	587	690	710	775	646	660	609	562	532	218	11,854
25-29	6,989	633	586	595	619	754	1,026	1,268	1,391	1,419	1,427	1,345	1,256	1,208	984	1,029	447	22,976
30-34	6,279	752	698	726	806	987	1,277	1,457	1,780	1,739	1,697	1,631	1,413	1,374	1,202	1,143	489	25,450
35-39	4,295	483	525	567	684	748	966	1,337	1,402	1,446	1,466	1,390	1,435	1,316	1,154	1,111	477	20,802
40-44	2,850	289	272	276	314	398	538	642	878	962	948	1,000	1,012	1,016	979	1,047	394	13,815
45-49	1,687	173	164	153	177	244	288	364	418	499	579	538	610	692	694	690	251	8,221
50-54	945	94	120	107	98	134	198	224	217	303	315	280	331	355	374	408	179	4,682
55-59	534	65	55	69	73	92	99	114	139	144	177	170	173	223	217	220	87	2,651
60+	444	56	66	55	85	87	94	104	132	139	185	183	200	218	251	257	112	2,668
Not reported	386	7	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	399
<b>Total</b>	<b>29,996</b>	<b>2,900</b>	<b>2,852</b>	<b>2,908</b>	<b>3,262</b>	<b>3,954</b>	<b>5,142</b>	<b>6,332</b>	<b>7,331</b>	<b>7,696</b>	<b>7,844</b>	<b>7,460</b>	<b>7,331</b>	<b>7,238</b>	<b>6,625</b>	<b>6,658</b>	<b>2,722</b>	<b>118,251</b>

Will include some records of the same individuals which are unmatchable because of differences in the information supplied.  
 Numbers will rise as further reports are received, particularly for recent years.

## HIV Testing

- Universal Testing recommended in Antenatal screening services, GUM
- Termination of pregnancy services
- Drug dependency programmes
- Those diagnosed with TB, Hepatitis B & C, Lymphoma



# HIV Testing Guidelines

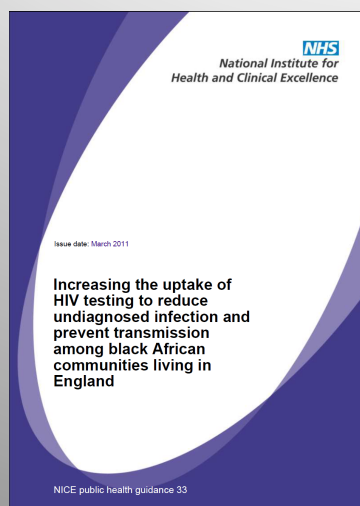
## *Appendix 5: Testing infants, children and young people*

Any infant/child/young person thought to be at significant risk of HIV infection, including all those with parents or siblings who are HIV-infected, should be tested. It is in the best interest of the infant/child/young person to be tested in these circumstances although this only needs to be undertaken urgently in infants who are at risk of rapid disease progression.

### *Who to consider for HIV testing*

- infants and children whatever their age where the mother has HIV, or may have died of an HIV-associated condition
- infants born to mothers known to have HIV in pregnancy
- infants born to mothers who have refused an HIV test in pregnancy
- infants and children who are presented for fostering/adoption where there is any risk of blood-borne infections [33]
- infants and children newly arrived in the UK from high-prevalence areas (they may be unaccompanied minors)
- infants and children with signs and symptoms consistent with an HIV diagnosis
- infants and children being screened for a congenital immunodeficiency
- infants and children in circumstances of post-exposure prophylaxis [34]
- infants and children in cases where there has been sexual abuse (see below).

## NICE Guidance

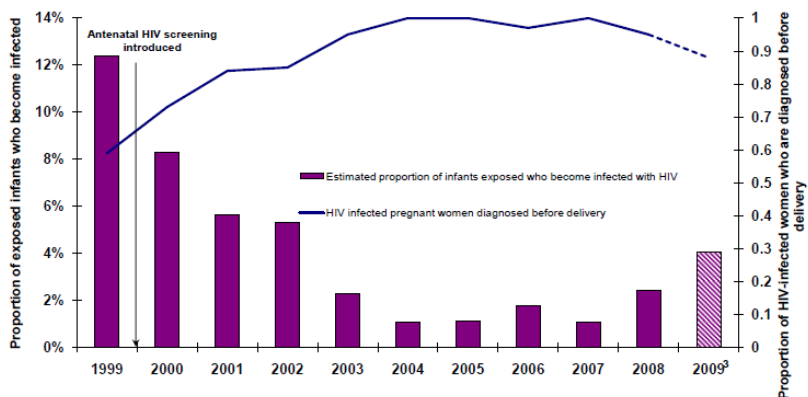


# Mother-to-child Transmission of HIV in the United Kingdom

Unlinked Anonymous HIV Prevalence Monitoring Programme

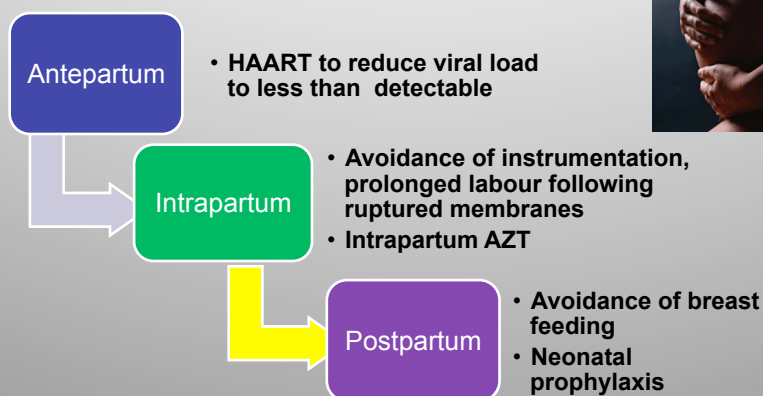
Health Protection Agency 2010

**Figure 2. Estimated proportion of HIV-infected pregnant women diagnosed before delivery<sup>1</sup>, and of exposed infants becoming infected with HIV<sup>2</sup>: England**



Data Sources: Unlinked anonymous seroprevalence of newborn infant dried blood spots. National Study of HIV in Pregnancy & Childhood. ICH, UCL.  
 1 Includes previously diagnosed and those diagnosed through antenatal testing.  
 2 Assumes vertical transmission rate of 26.5% in undiagnosed women and 2.2%, 1.6% and 1.0% in diagnosed women in 1999, 2000-2002 and 2003-2009 respectively.  
 3 These data contain reports received by the end of June 2010, 2009 estimates will improve significantly when further reports are received.

## Prevention of mother-to-child Transmission



Mother to child transmission rate <1% in UK

## Neonatal Follow-up



- Detection of Proviral DNA at birth with paired maternal sample
- Test infants at day1, 6 weeks and 12 weeks of age
- Parents can be informed that the child is negative at 3 months if all the tests are negative (if the mother is not breast feeding)
- Loss of maternal antibodies subsequently confirmed at 18 months of age

## Perinatal transmissions in the UK

- With the introduction of HAART, the mother to child transmission rate in the UK is less than 1%
- It is 0.1% if Viral load is undetectable at delivery

*Townsend et al. Low rates of Mother-to-Child Transmission of HIV following effective intervention in the UK and Ireland 2000-2006. AIDS 2008; 22(8): 973-981.*

## Review of Mother-child Transmission rate in Nottingham

- All pregnancies in HIV positive women since January 2005 till December 2010 were reviewed
- MTCT rate 1 out of 105 pregnancies (0.95%)
- MTCT rate in women with undetectable viral load at 36 weeks - 0%
- MTCT rate in women with detectable viral load at 36 weeks - 5%

One case of vertical transmission, positive foetal proviral DNA on day1, indicating intra-uterine infection

## Prevention of mother-to-child transmission

- With effective management post-partum and intra-partum HIV transmission is largely preventable
- In-utero transmission is likely to account for increasing proportion of MTCT
- Early testing and timely initiation of HAART ensures good viral control close to delivery

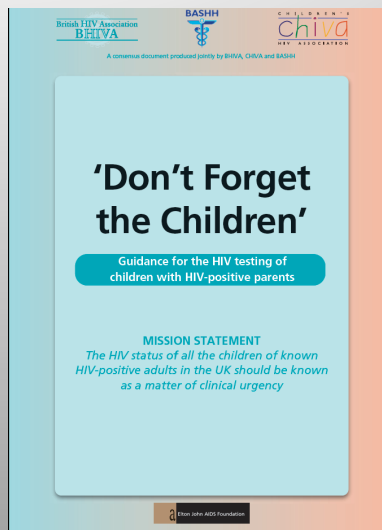
## Don't forget the children

Audit on HIV testing in children of HIV Positive parents

## Background

‘The most dangerous HIV is undiagnosed HIV’

- All adult HIV services should have pathways and procedures in place to ensure ALL children of HIV positive parents are tested
- In Nottingham, children had been referred on an individual basis



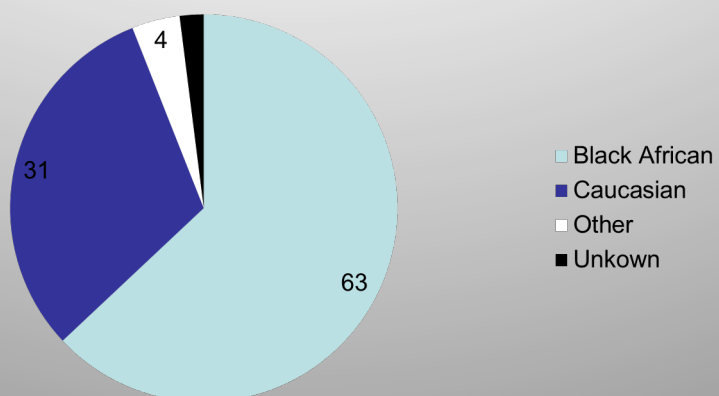
## Methodology

- A “look back” exercise was performed to audit the existing testing rates in children within our unit
- Prospective information was gathered during routine consultation on all patients using a standardised proforma for a period of 2 months

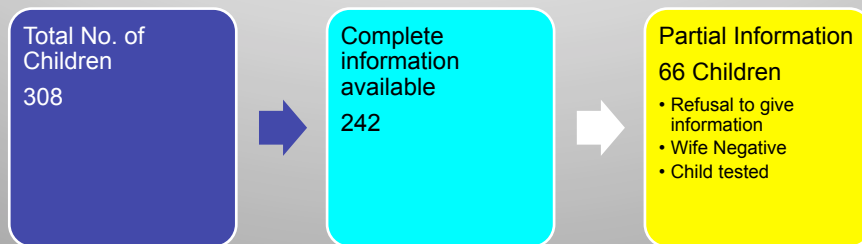
## Demographics

- Nottingham GUM - adult HIV cohort 660
- Data collected on **200** patients
- 114 (57%) women
- 86 (43%) men

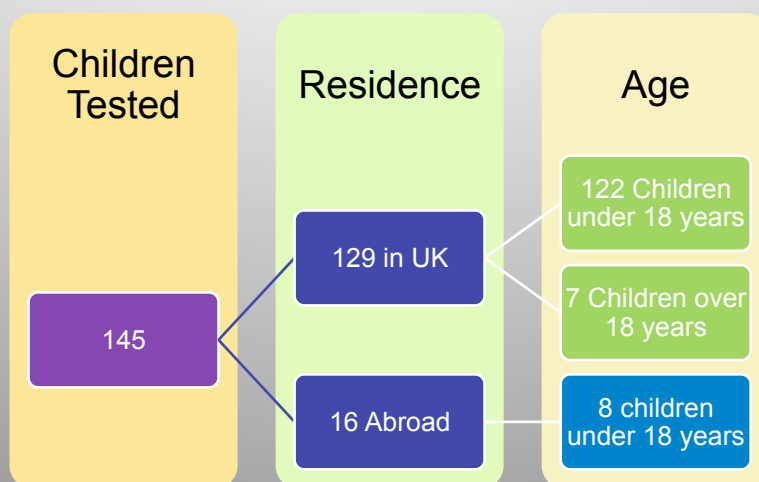
## Ethnicity



## Results 1



## Results 2



## Results 3



## Results 4

145/242 (60%) of children already tested overall

- There are 6 HIV positive children in this group

Of the 182 children in the UK, 120 (70%) were tested

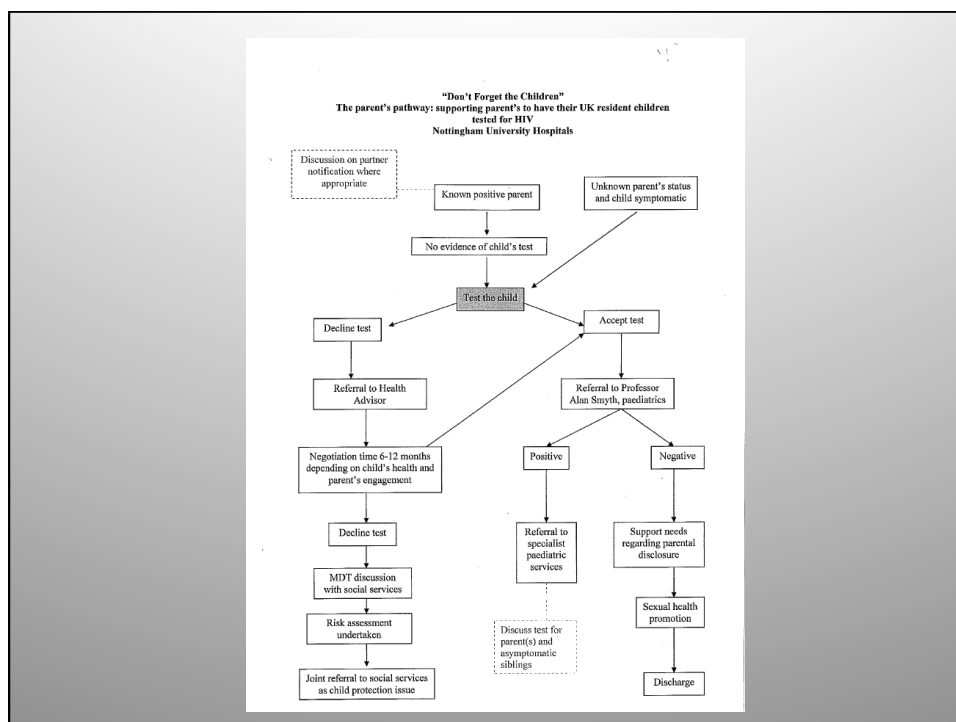
- 53 untested children are currently resident in the UK

35 children under 18 years untested, resident in the UK

- Of the 35, 7 parents refused testing, 11 parents undecided and 17 parents agreed to test the child

## Service Development

- ‘Children and Young Person’ s HIV Testing Pathway’ steering Group was formed
- Dr Smyth, Dr Cliffe, Dr Pammi, Dr Baugh, Sonia Butler
- Referral Pathway derived based on CHIVA document
- Referral template devised




## Referrals

- All parents whose child(ren) need(s) testing are seen by a health advisor
- The parent is informed about the benefits of testing the child
- Confidentiality discussed
- Child's consent – depending upon the age of the child

## Parents' reasons for not testing the children

- Physical well-being of the child
- Fear of disclosure
- Fear of 'feeling guilty' if a positive diagnosis is confirmed
- Inability to cope with a positive diagnosis

## Referrals so Far...

- 8 children referred for testing
- 
- 5 children tested negative, 3 ongoing
  - 1 child went to GP as per request (age 16)
  - 10 children did not need testing
- 16 children due to be referred
  - Issues to deal with- parental responsibility, consent, parent not ready, child recently arrived in the UK

## Who can test?

- Any competent clinician (GP, Nurse, midwife) can obtain informed consent and perform a HIV test

*This should be documented in the case notes and may be verbal or written, dated and signed by the person obtaining the consent*

## Who should be offered a test?

- All children/Young person where a parent or sibling is HIV positive or may have died of an HIV associated condition
- Children/Young person newly arrived from a high-prevalence area
- Children/young person with signs and symptoms consistent with HIV diagnosis
- Children/Young person presented for fostering/adoption

## Pre-test discussion

- To establish informed consent from parent(s) and from the child/young person where appropriate
- Issues around disclosure of their own diagnosis
- Negotiate –reason for testing the child
- Benefits of testing
- Full history of child' s health

