

Including CHIVA Parallel Sessions



## **Dr Valerie Delpech**

**Public Health England** 

9-10 October 2014, Queen Elizabeth II Conference Centre, London

#### **BHIVA AUTUMN CONFERENCE 2014**

Including CHIA Parallel Sessions



## Dr Valerie Delpech

## Public Health England

COMPETING INTEREST OF FINANCIAL VALUE ≥ £1,000:					
Speaker Name	Statement				
Dr. Valerie Delpech	None				
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# Primary infection Public health perspective

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We gratefully acknowledge

persons living with HIV,

clinicians, health advisors, nurses, microbiologists, public health practitioners, data managers and other colleagues who contribute to

the surveillance of HIV and STIs in the United Kingdom



## HIV in the UK: 2013 data

#### **HIV diagnoses, AIDS & deaths**

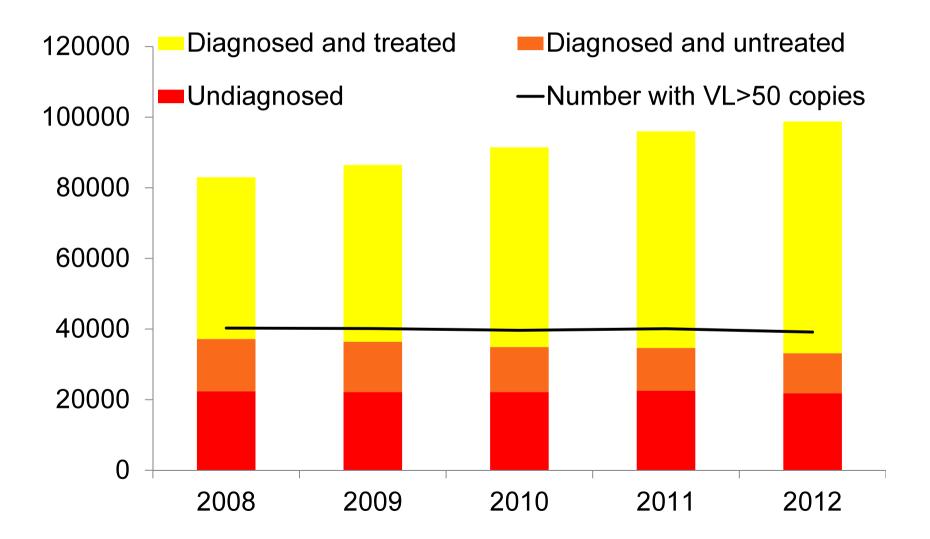
- 6,000 new HIV diagnoses
- 42% diagnosed late
- 319 reports of AIDS
- 577 deaths 75% are late diagnosed

#### 81,512 people receiving HIV care

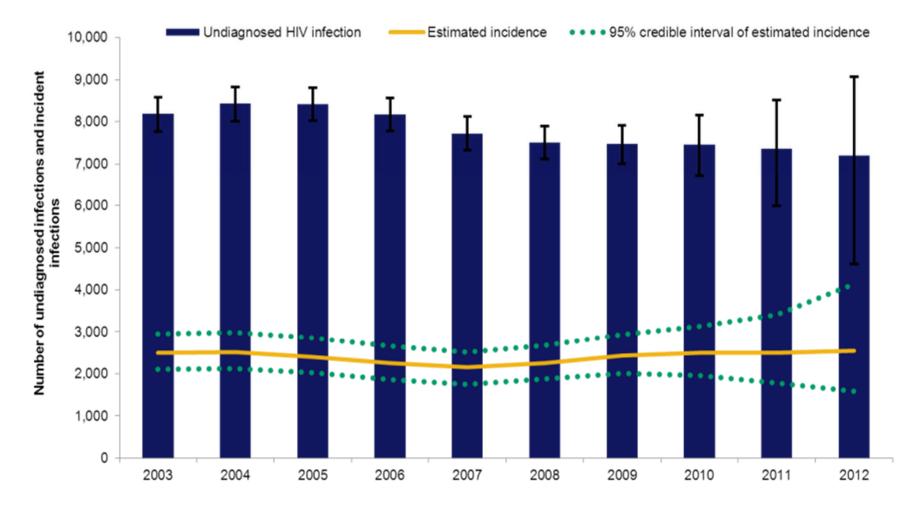
- 97% linked to care within 3 months
- 95% retained in care annually
- 92% in need of treatment are on treatment (87% of all diagnosed)
- 95% on treatment achieve VL<200 copies/ml



# People living with HIV by diagnostic and treatment status, and number with detectable viral load, UK, 2006-2012



#### Back-calculation estimate of HIV incidence and prevalence of undiagnosed infection among MSM: UK, 2003-2012



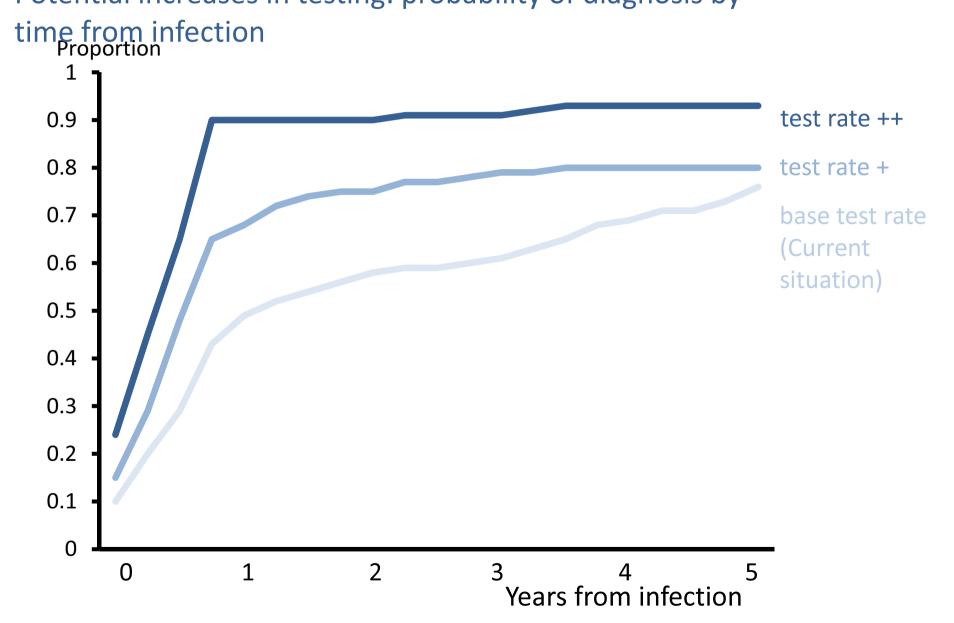
HIV in the United Kingdom: 2013

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#### Phillips model of MSM in the UK Potential increases in testing: probability of diagnosis by



### HIV incidence among MSM, Phillips model

Number of new infections

#### per year base test rate ART at 350 base test rate ART at diagnosis 5000 ART at diagnosis test rate + ART at 350 test rate + test rate ++ ART 350 ART at diagnosis test rate ++ 4000 3000 95% CI given for two 2000 lines to illustrate uncertainty over mean effect 1000 0 2015 2030 2020 2025 Year

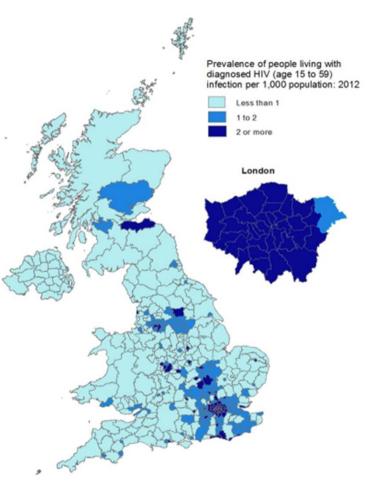
### So why can we not eliminate HIV in the UK?

Undiagnosed remain too high

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- Failure to implement testing guidelines
  - low uptake in key populations despite new technologies
  - geographical testing not working is 2/1,000 threshold still relevant?
- how frequent does testing need to be?
- primary infection substantially contribute to onward transmission







- Different definitions of primary infection variation in duration, microbiological vs clinical (6 weeks) vs epidemiological definition (recently infected – RITA 4-6months) modelling (3 months)
- Primary infection is likely to substantially contribute to onward transmission
- Models and phylogenetics work show considerable variability however (15-50% of new infections are acquired from a person unaware of their infection in primary infection)
- Targeting persons in primary infection for early treatment and partner notification is likely to have a substantive impact on transmission
- The challenge is identifying persons in early infection

## Public Health England Identifying persons in primary infection

#### Clinical symptoms

- screening of men with the acute symptoms (*Fisher* triad)
- screening of men with IMN and other HIV indicator conditions
- Increase awareness among gay men to present and seek test

#### Targeting high risk persons

- Promotion of 3 monthly HIV screening among MSM with new partner/UAI
- Recall of STI attendees MSM with previous STI and/or history of UAI
- New diagnostics (home sampling/testing) and outreach (eg Dean St)

Partner notification of recently infected (RITA recent, neg test previous 6 months)



### Why is HIV transmission among MSM remaining high

• Role primary infection likely to be substantive 30%- 60% of all infections

#### **Other factors**

- High rates of STIs and other co-infections
- Low investment in primary prevention
  - Condom uptake remains too low serosorting is not safe
- Changing social networks with wide use of apps to find casual partners
- Increase in chemsex
- Insufficient uptake of Treatment as Prevention
- Failure of partner notification policies
- Low uptake of TasP



- Primary prevention remains important holistic approach
- Prep
- Tasp
- Partner notification
- Improve culture of testing
- Recall of high risk STI attendees
- Greater emphasis on combination of identifying persons in primary infection+ early treatment/TasP + intense PN



#### **Sexual Health Messages**

#### PHE advice for MSM

Have an HIV/STI screen at least annually, and every three months if having unprotected sex with new or casual partners.

- Unprotected sex with casual and new partners who are believed to be of the same HIV status (serosorting) is unsafe.
  - For HIV positive men, serosorting poses a risk of acquiring other STIs and hepatitis with serious treatment implications.
  - For HIV negative MSM it carries the risk of HIV transmission (as a quarter of HIV positive MSM are unaware of their infection), as well as acquiring STIs

Need tor tailored messaging for individuals based on risk assessment



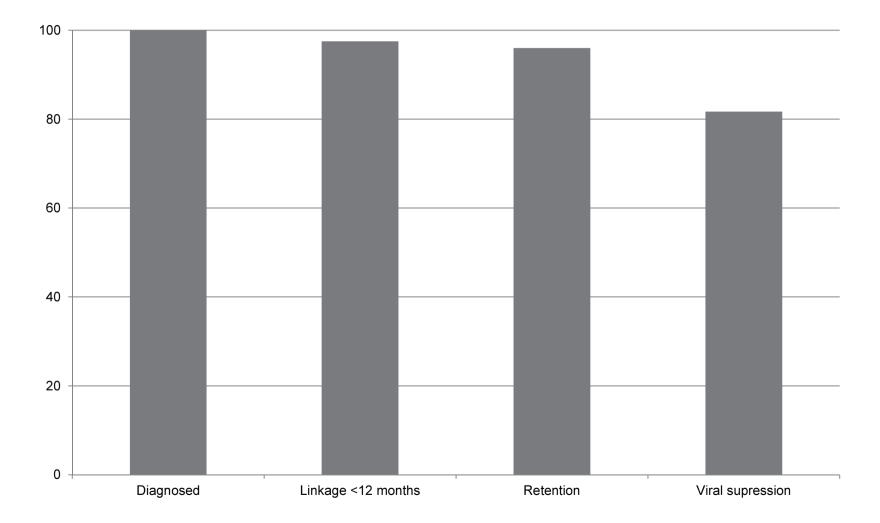
# THOUSANDS OF GAY MEN HAVE HIV FOR YEARS

THINK, TEST, TAKE CONTROL Go to www.thinkelV.coust to find your represt clinic.

TODA COOL







Presentation title - edit in Header and Footer

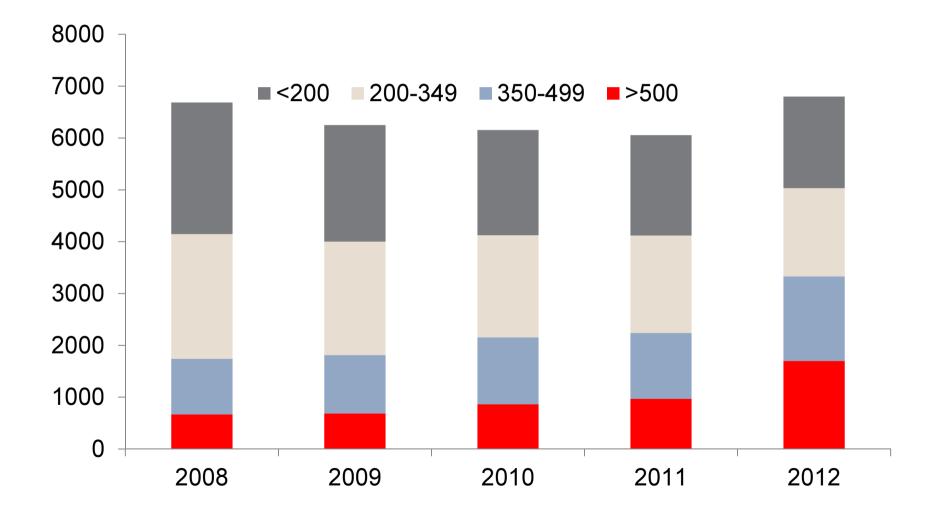
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### Breakdown of patients on ART, UK, 2008-2012

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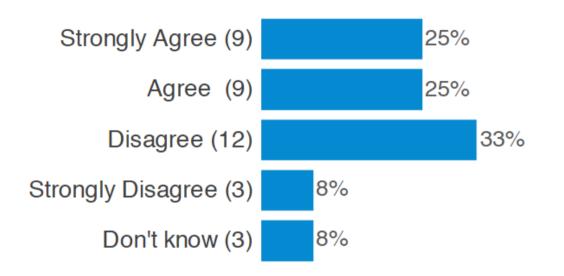
Year	Total <sup>1</sup>	On ART No. (%)	Started ART		Nerrahar
			< report year	In report year	Number untreated
2008	59,657	45,167 (76)	38,394	6,686	14,490
2009	63,605	49,615 (78)	43,316	6,250	13,990
2010	67,709	55,358 (82)	49,162	6,154	12,351
2011	72,559	60,668 (84)	54,580	6,055	11,891
2012	76,705	65,487 (85)	58,662	6,800	11,218





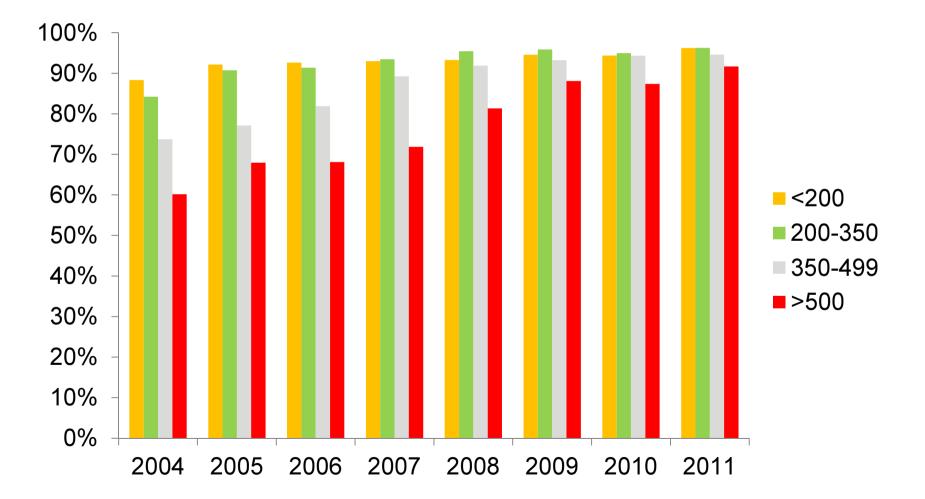


I would prefer to start HIV drugs now, in order to make me less infectious to a sexual partner





Proportion of patients with VL <200 copies 12 months after ART initiation, by CD4 at ART start, UK







Two-thirds of HIV positive people with detectable viral loads are unaware of their infection and those in early infection are most likely to transmit their infection to others

Expanded and targeted testing with novel diagnostics must be scale up.

Efforts to Identify persons in primary infection is critical. Once diagnosed, they should be offered earlier treatment and prioritise for partner notification. Novel interventions are underway. What works needs scaling up.

Other prevention strategies including condom use, PREP, reduced partners, treatment of STIs, and improvements in sexual wellbeing, mental health and non-harmful use of drugs and alcohol remain critical in the control of HIV and other STIs epidemic.



## Recently diagnosed young man, UK

From the year 2014 as i became hiv, my life just changed. my mum does not want to know me or to see as i told her about my sexuality and her last word was to me that, because i am a muslim and a gay men that's why i am paying for my sins. she also told me that i have chose hell here in this world and also after i will die.





#### Dr Alison Brown and the HIV team at Colindale, PHE MPES team, Andrew Phillips Persons living with HIV, Clinicians, health advisors, nurses, microbiologists, public health practitioners, data managers and other colleagues who contribute to the surveillance of HIV and STIs in the UK

**THANK YOU**