

Syphilis: What can HIV clinics do?

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Declaration of interests relating to this presentation

- Honoraria for consultancy work from ViiV and Gilead.
- Sponsorship to attend conference from Gilead.

Why this talk?

- Infectious syphilis is a risk factor for HIV acquisition and may hamper impact of PrEP
- HIV+ MSM are particularly affected
- Syphilis can cause serious illness and permanent disability

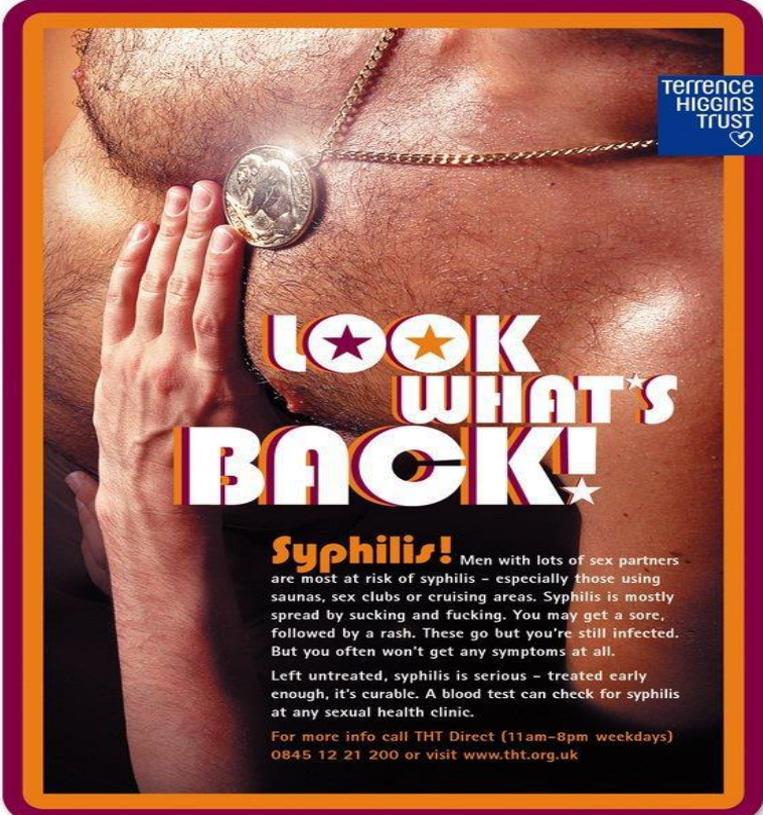
Early Syphilis “non-classic” features

- Often asymptomatic or not noticed
- Secondary may be non-specific systemic symptoms: malaise, fevers, weight loss, myalgia
- Approx 5% have meningitic disease
 - Ocular disease (uveitis), cranial nerve involvement can cause permanent sensory loss
- Meningovascular disease 2-7 years after infection
- Other organs: hepatitis, immune complex kidney disease

Epidemiology

- Syphilis epidemic parallels HIV – highest rates Sub-Saharan Africa, W Pacific, Americas
- Higher rates MSM – HIV+ in USA /Europe
- More recent return of congenital syphilis reported in UK (and in USA)

When I was young...



Terrence HIGGINS TRUST

LOOK WHAT'S BACK!

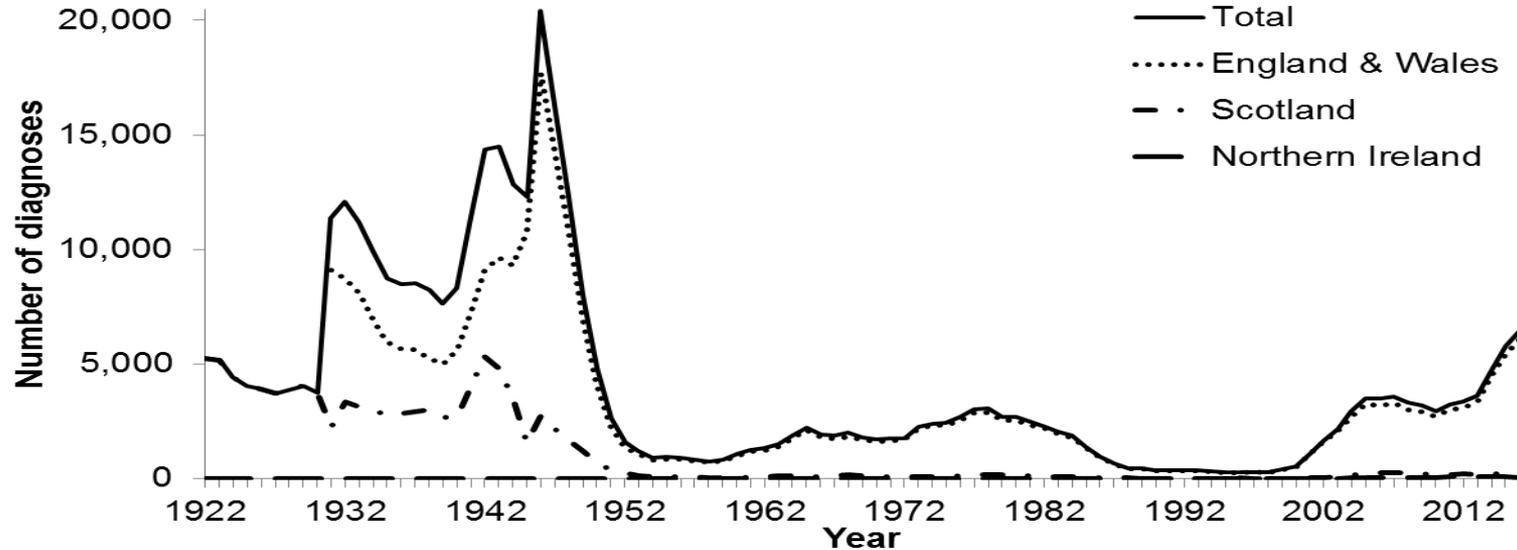
Syphilis! Men with lots of sex partners are most at risk of syphilis – especially those using saunas, sex clubs or cruising areas. Syphilis is mostly spread by sucking and fucking. You may get a sore, followed by a rash. These go but you're still infected. But you often won't get any symptoms at all.

Left untreated, syphilis is serious – treated early enough, it's curable. A blood test can check for syphilis at any sexual health clinic.

For more info call THT Direct (11am-8pm weekdays) 0845 12 21 200 or visit www.tht.org.uk

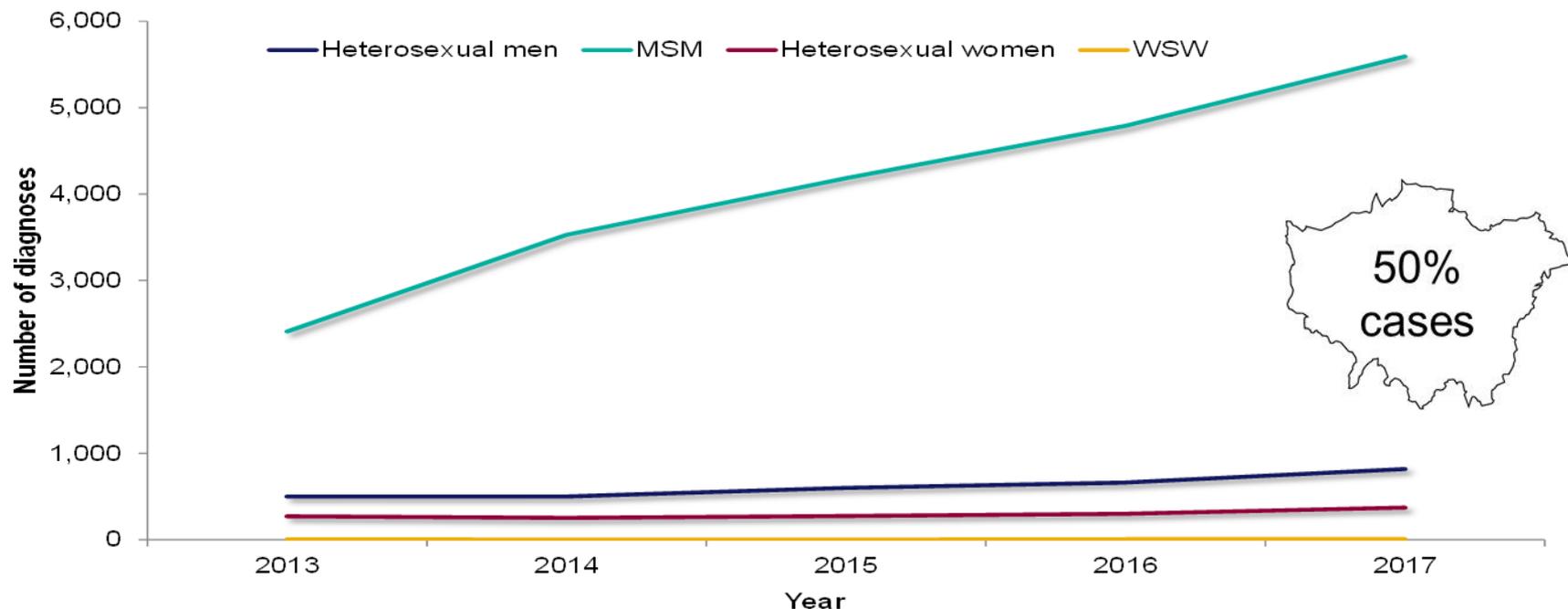


Number of syphilis (primary, secondary & early latent) diagnoses by country: UK, 1922-2016



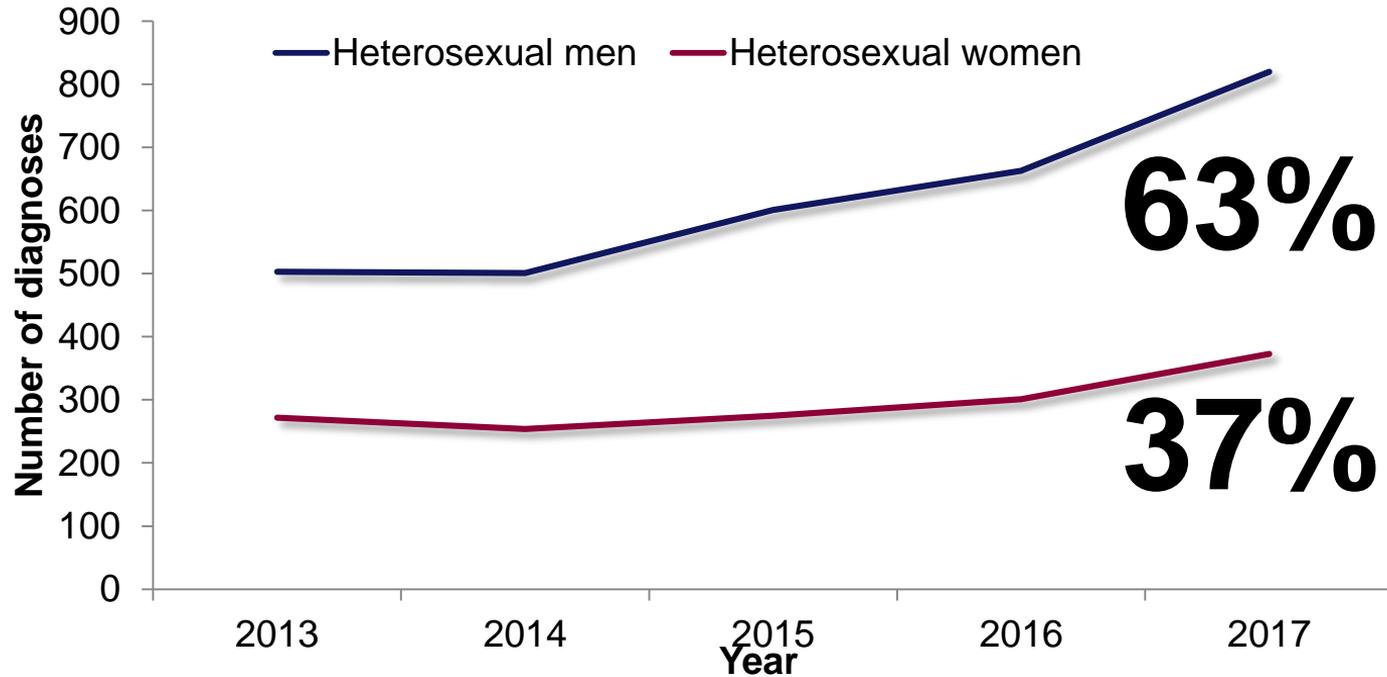
Source: Data from routine sexual health services' and laboratories' surveillance returns

Number of syphilis (primary, secondary and early latent) diagnoses by sexual risk: England, 2013 to 2017



- Data from specialist and non-specialist SHS (GUMCAD returns)
- Data type: service data

Number of syphilis diagnoses in heterosexuals, by gender, 2013 to 2017, England



Source: sexual health services' GUMCAD returns

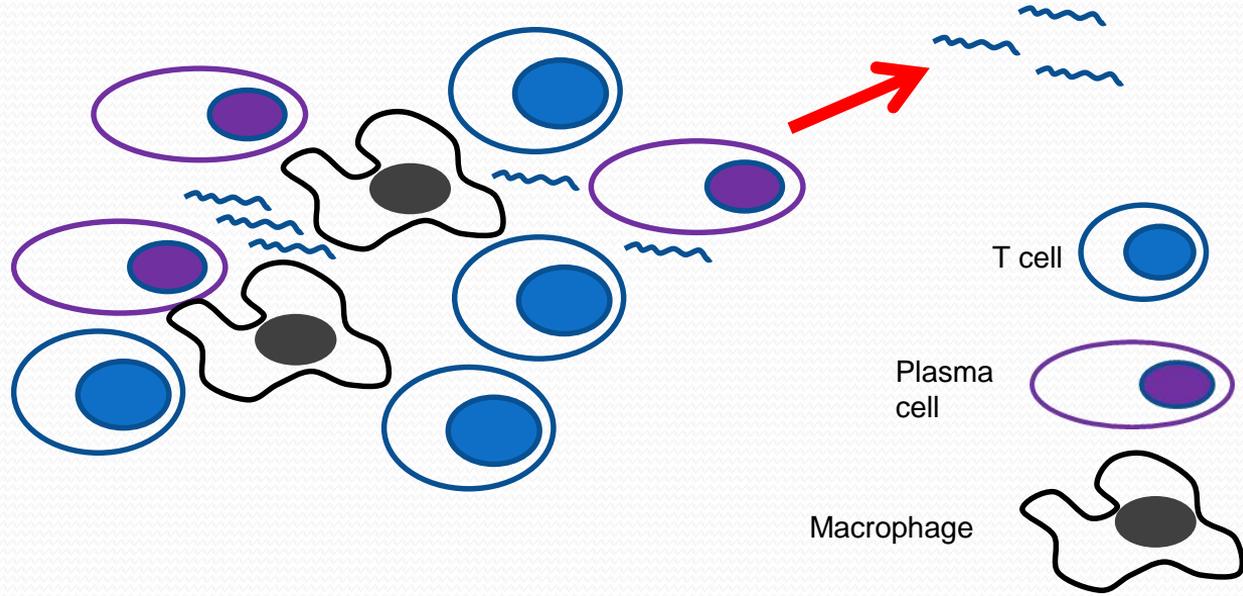
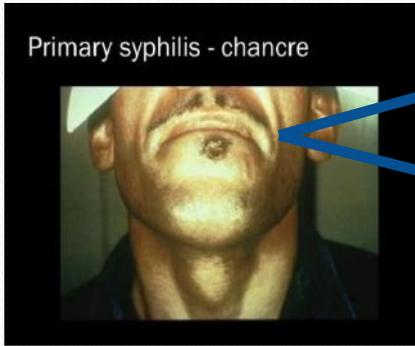
London: enhanced surveillance in MSM, Oct 16 – Jan 17

- Over 50% infectious syphilis in HIV+
- Contacts in previous 3 months:
 - Median = 4
 - Max = 90
 - Median traceable = 2
- Chemsex in 46% HIV+ vs 26% HIV negative
- 48% routine STI screen, 33% symptomatic

Detecting syphilis

- Dark Ground Microscopy
- Rapid tests – not helpful if re-infection
- Serology
 - Antibodies can be detected from ~7 days after primary lesion (approx 5 weeks after infection)
 - Still rely on RPR/VDRL – based on test from 1906
 - Both delayed sero-reactivity and exaggerated response reported in HIV
- PCR – not widely available

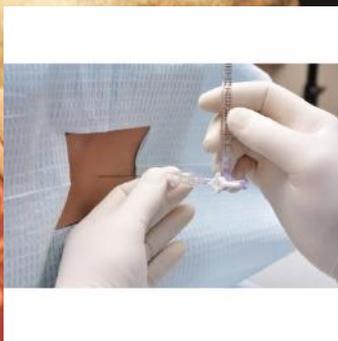
Immunology



Neurosyphilis and HIV

- CNS invasion may be more common and related to CD4 count (<350)
 - CSF abnormalities in up to 30-40% early syphilis but of uncertain significance
- False negative CSF serology is common
- CSF protein and WCC abnormalities are more suspicious in those on treatment with VL<40 and CD4 >350
- Neurosyphilis is more likely if serum RPR >1:32 ¹
- Recently:
 - Cognitive impairment not associated after controlling for confounders²
 - Serofast after treatment = increased risk neurosyphilis?^{3,4}
 - Or treatment failure, or – re-infection?

To LP or not to LP?



s but

and

Treatment considerations

- Neurosyphilis regimens based on preference for high levels of penicillin in CSF
- No strong evidence that response to treatment is related to HIV status
 - Based on single, under-powered RCT from 1997
 - Two further studies (one RCT) did not assess CSF/neurosyphilis clinical outcomes

Controlling syphilis

Frequency of testing

In “high risk” MSM

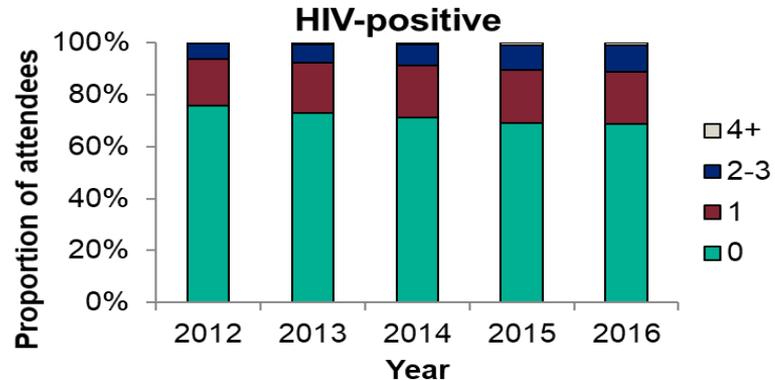
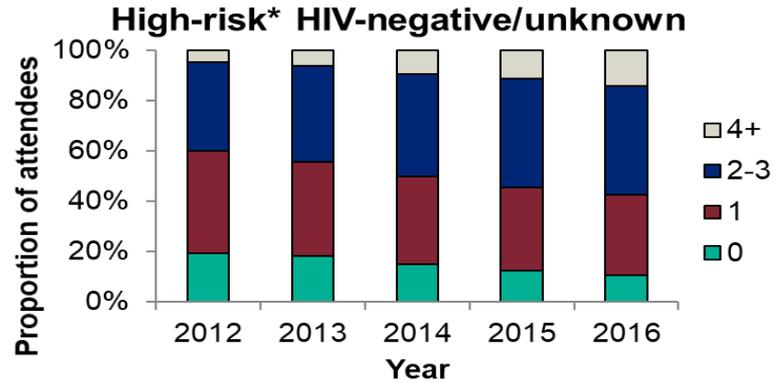


BHIVA clinical standards and guidelines

- Syphilis serology: at least annually and every three months in higher risk patients
 - “**MSM + frequent partner change** /IDU/chaotic lifestyle/adolescent/CSW/other drug use/**chemsex**/other risk”
- Adding syphilis serology to all routine HIV bloods resulted in substantial increase in detection of early, asymptomatic infections (3 monthly testing)
- But bloods now every 6 months



Annual frequency of syphilis testing in GBMSM attending level 3 sexual health services, England



Source: GUMCAD

* high-risk - history of HIV testing and bacterial STI diagnosis in the year preceding the first attendance in each calendar year

Challenges

- Does your clinic perform syphilis serology with every blood draw?
 - BHIVA monitoring audit 2015: 73% MSM tested within previous 8 months
- How can we understand the true testing frequency as SH and HIV move further apart?
 - PHE using GUMCAD data
 - HIV clinic re-organisation following SH tenders
 - Promotion of online testing

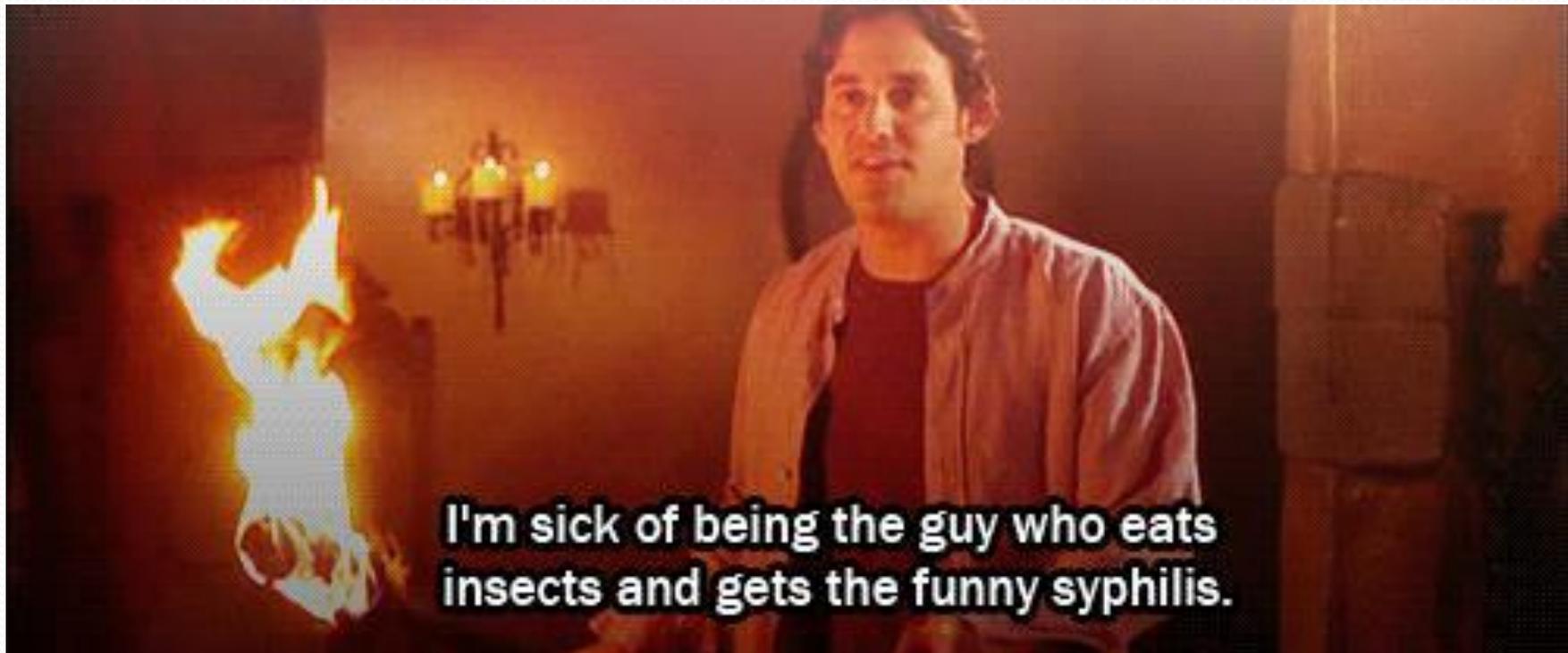
Recommendations for HIV clinics

- Retain high clinical suspicion for syphilis
- Ask about new onset headache, visual and acoustic symptoms
- Opt-out syphilis testing
- Promote 3 monthly testing in those at risk
- Foster strong links with SH services if you have been consciously uncoupled

Thank you

PHE slides very kindly provided
by Hamish Mohammed





I'm sick of being the guy who eats insects and gets the funny syphilis.