

Incidence des IST chez les PrEPeurs

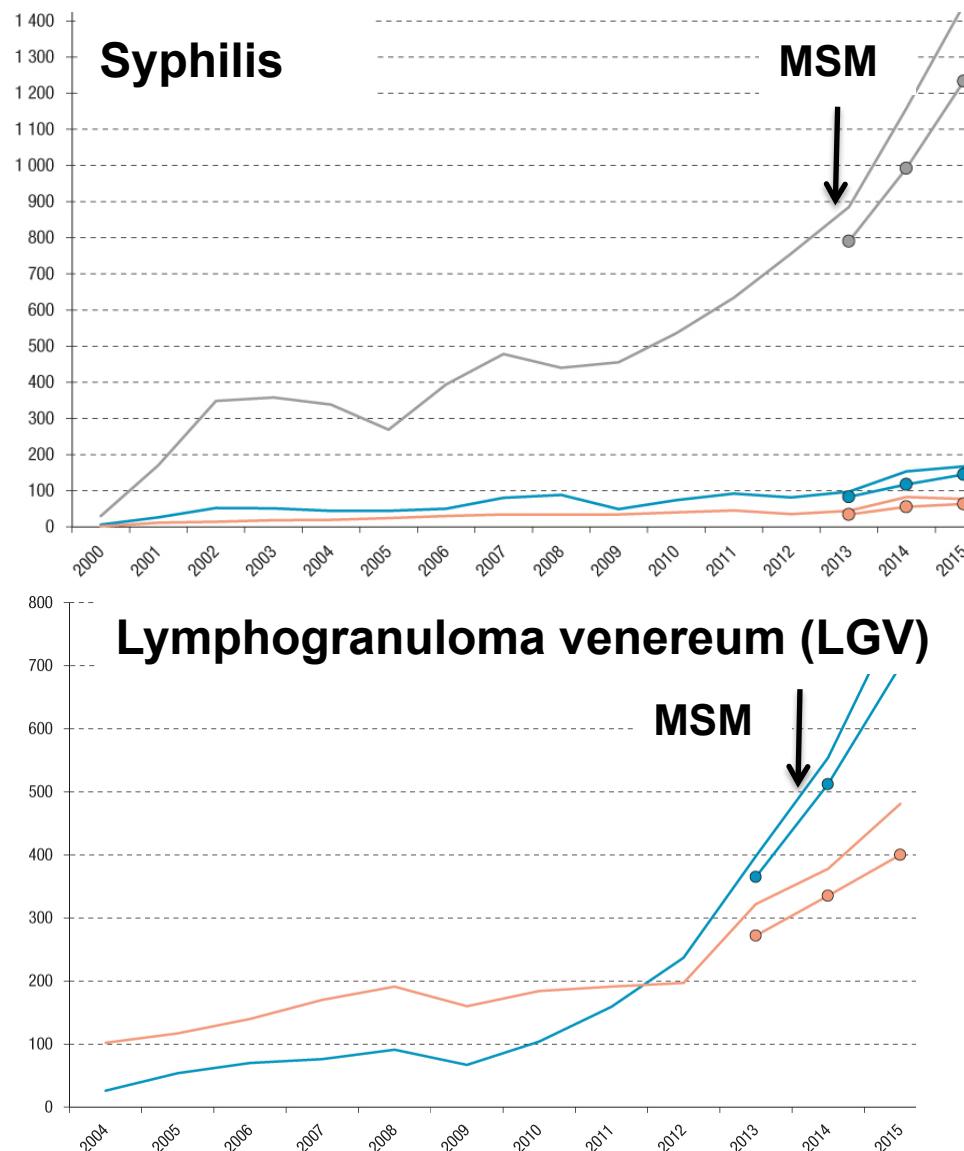
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PrEP, IST et Santé Sexuelle, 29 Mars 2018, Paris

La PrEP en France

- Début de la RTU en Janvier 2016
- Environ 7000 personnes sous PrEP en 2018
- Efficacité en vie réelle > essais cliniques
- Contribue au contrôle de l'épidémie VIH
- Bonne tolérance confirmée
- Rare selection de VIH résistants au TDF/FTC
- Coute-efficace
- Responsable de l'augmentation des IST ?

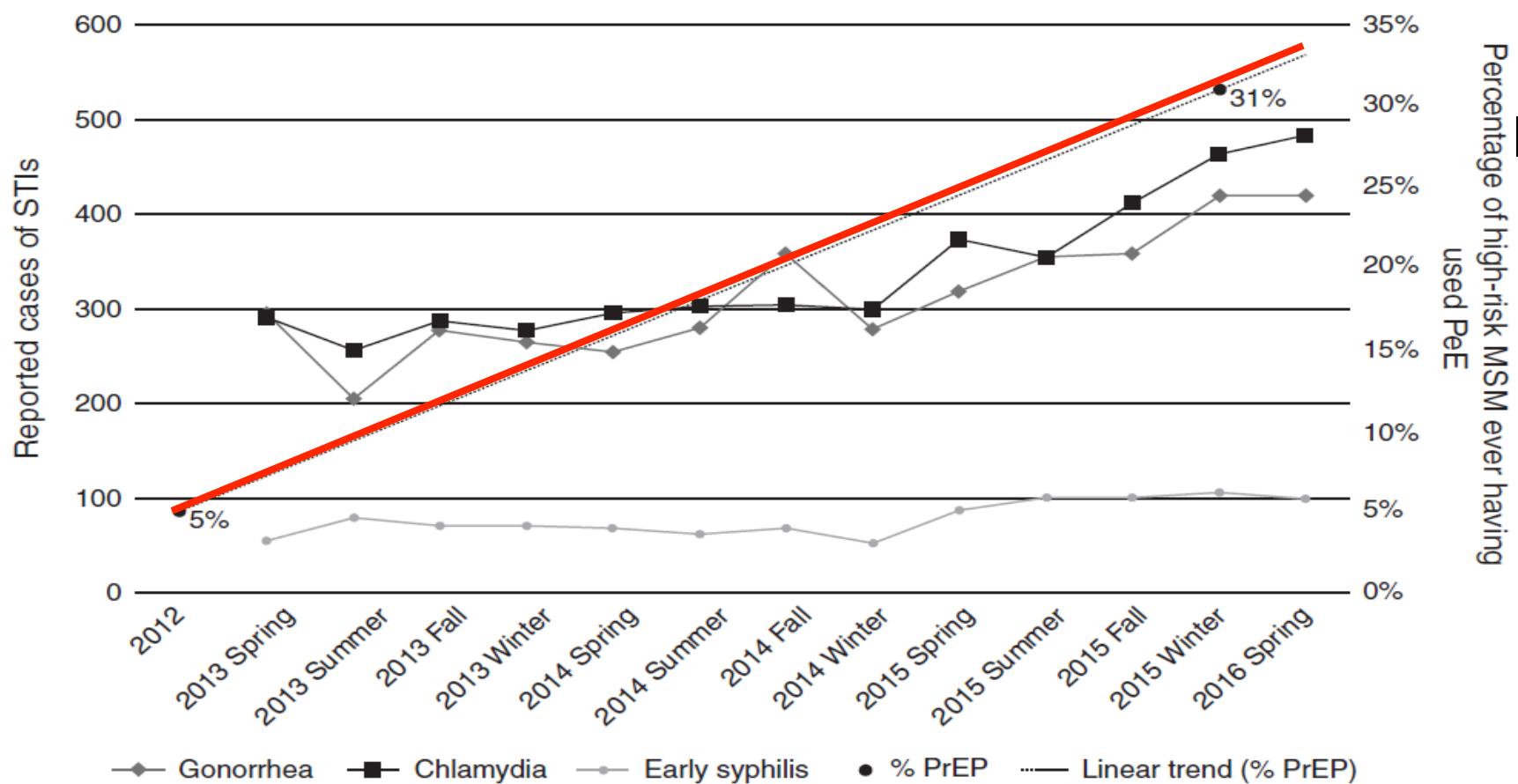
Reported STIs in France: National Data for Syphilis, Gonorrhoea and LGV



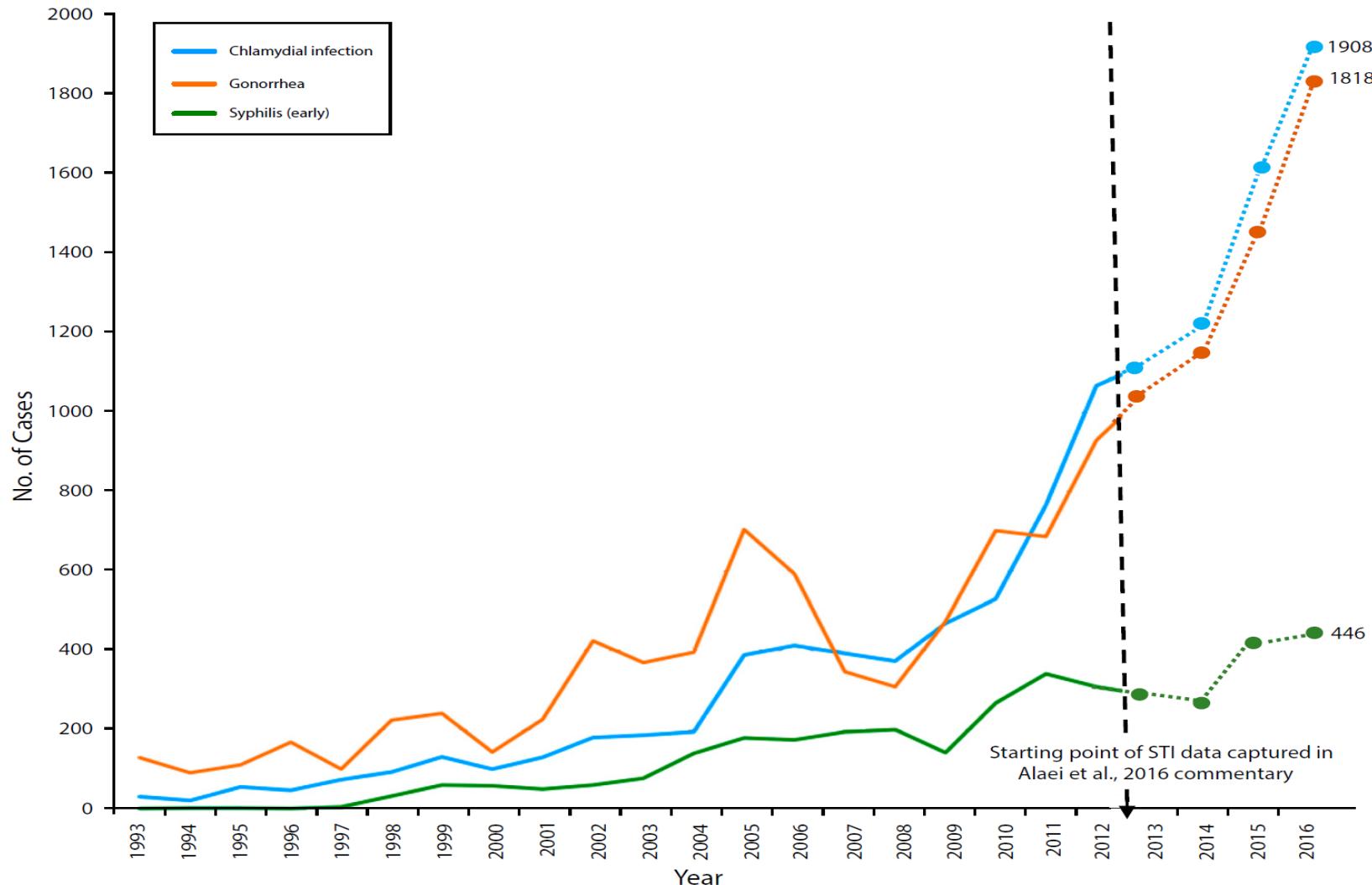
Early syphilis, gonorrhoea and LGV infection increase in France, especially among Men who have Sex with Men (MSM)

Trends of STIs and PrEP in MSM

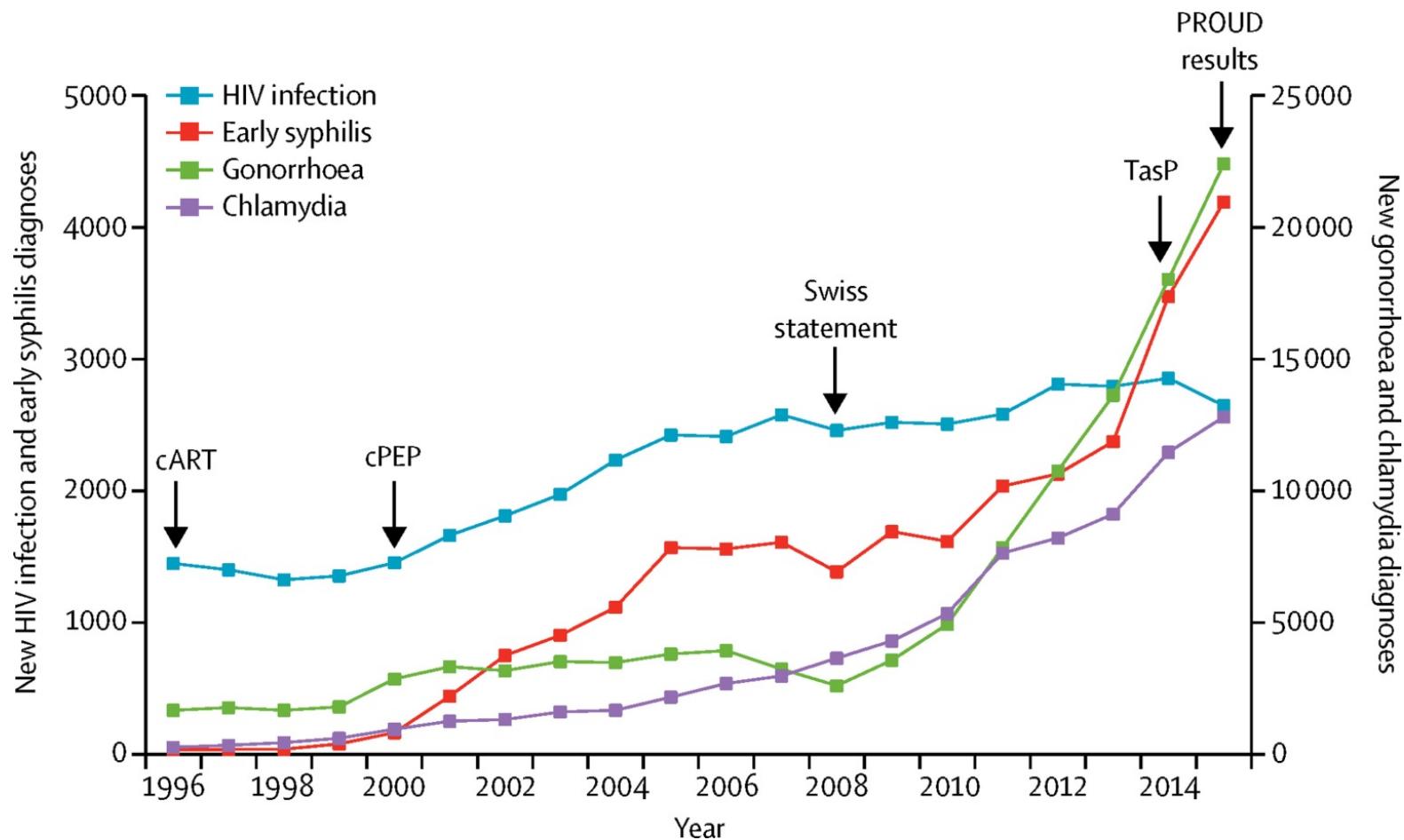
- Data from King County, Washington state from 2012 to 2016



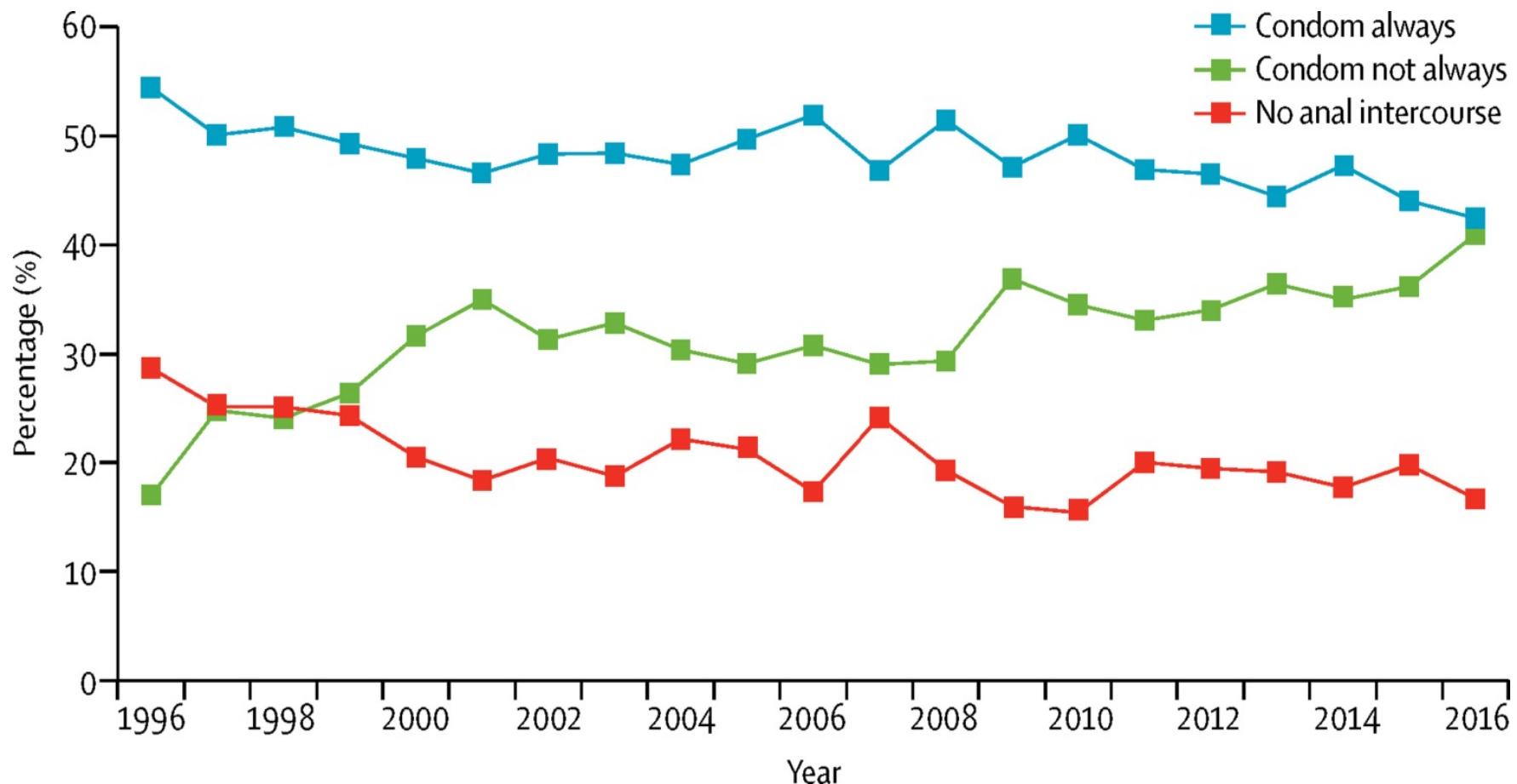
Nb of Cases of STIs Among MSM King County, WA



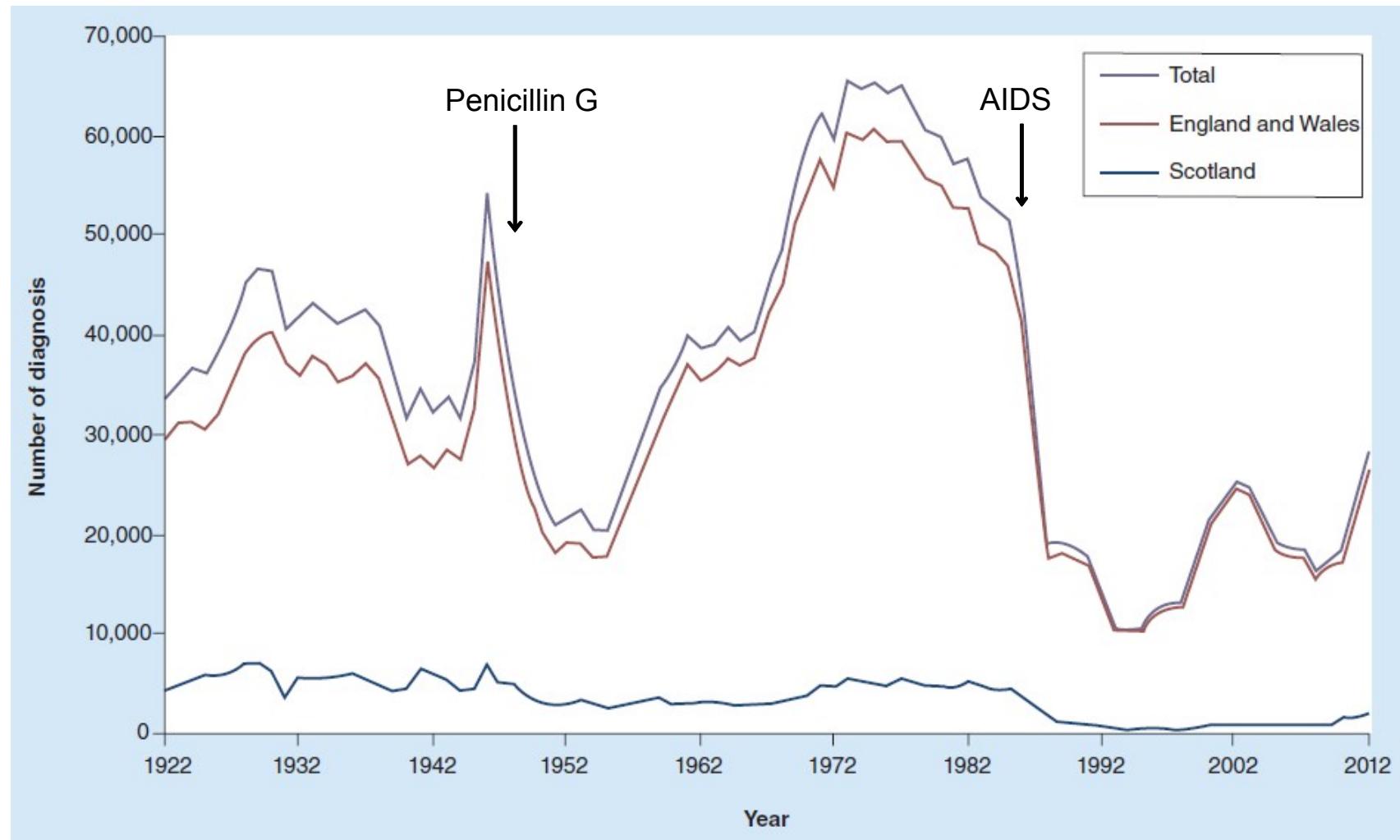
New diagnoses of STIs from 1996 to 2015 in MSM in England



Condom use for Anal Sex in MSM in Sydney, 1997-2016



Historic Trends in Gonorrhea in the UK



Prevalence and Incidence of STIs* in PreP Trials

Study	Prevalence	Incidence
Partners PrEP	7%	5%
CDC TDF2	17.5%	17%
FEM-PrEP	29.9%	21.7%
iPrEX	13%**	33%
IPERGAY	25.5%	49.1%
PROUD	64%***	57% vs 50%

* trichomoniasis, gonorrhea, syphilis or chlamydial infection **only for syphilis

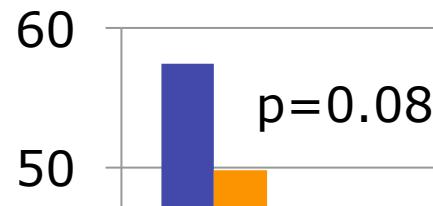
*** in past 6 months

Baseline demographics in the PROUD study

Characteristics		Immediate	Deferred
Age, median (IQR)		35 (30 – 43)	35 (29 – 42)
Ethnicity	White	80%	82%
Sexuality	Gay	96%	94%
Education	University	59%	60%
Employment	Full-time	70%	73%
PEP in past 12 months		35%	37%
Chemsex²		43%	45%
Number of anal sex partners²		10.5 (5-20)	10 (4-20)
Condomless partners, receptive anal sex²		3 (1-5)	2 (1-5)

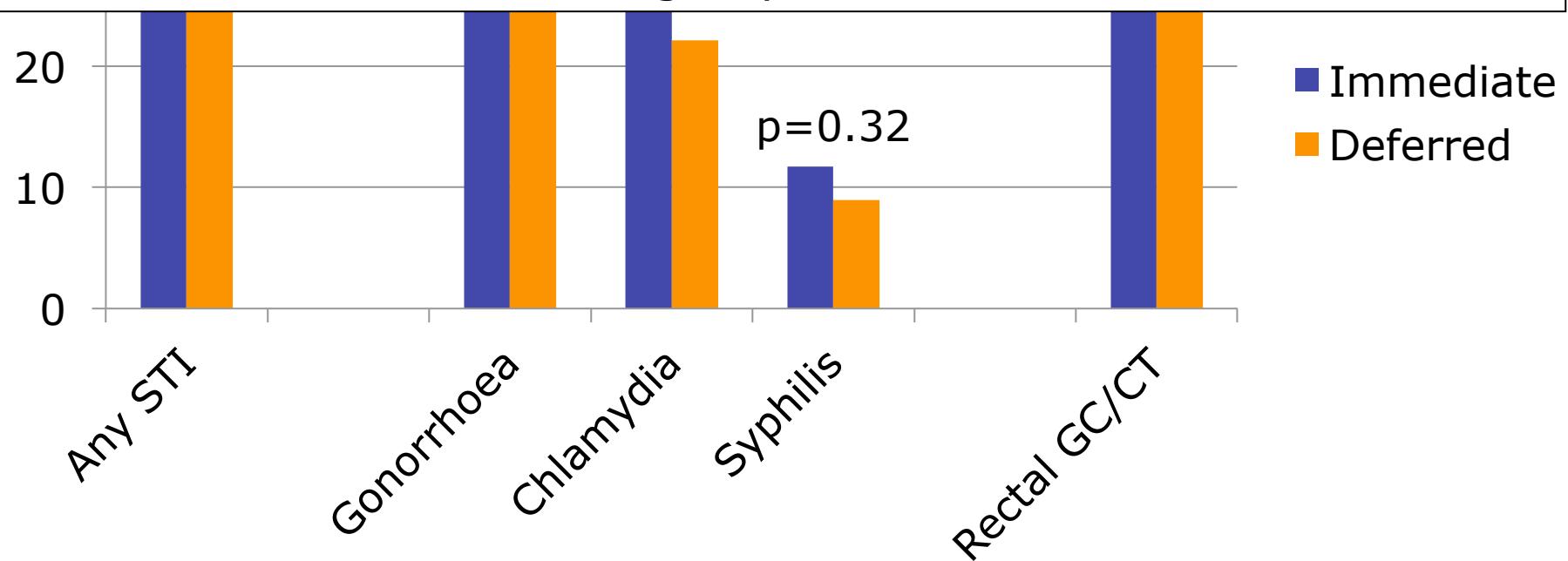
² in the last 90 days

STIs During Follow-up in PROUD

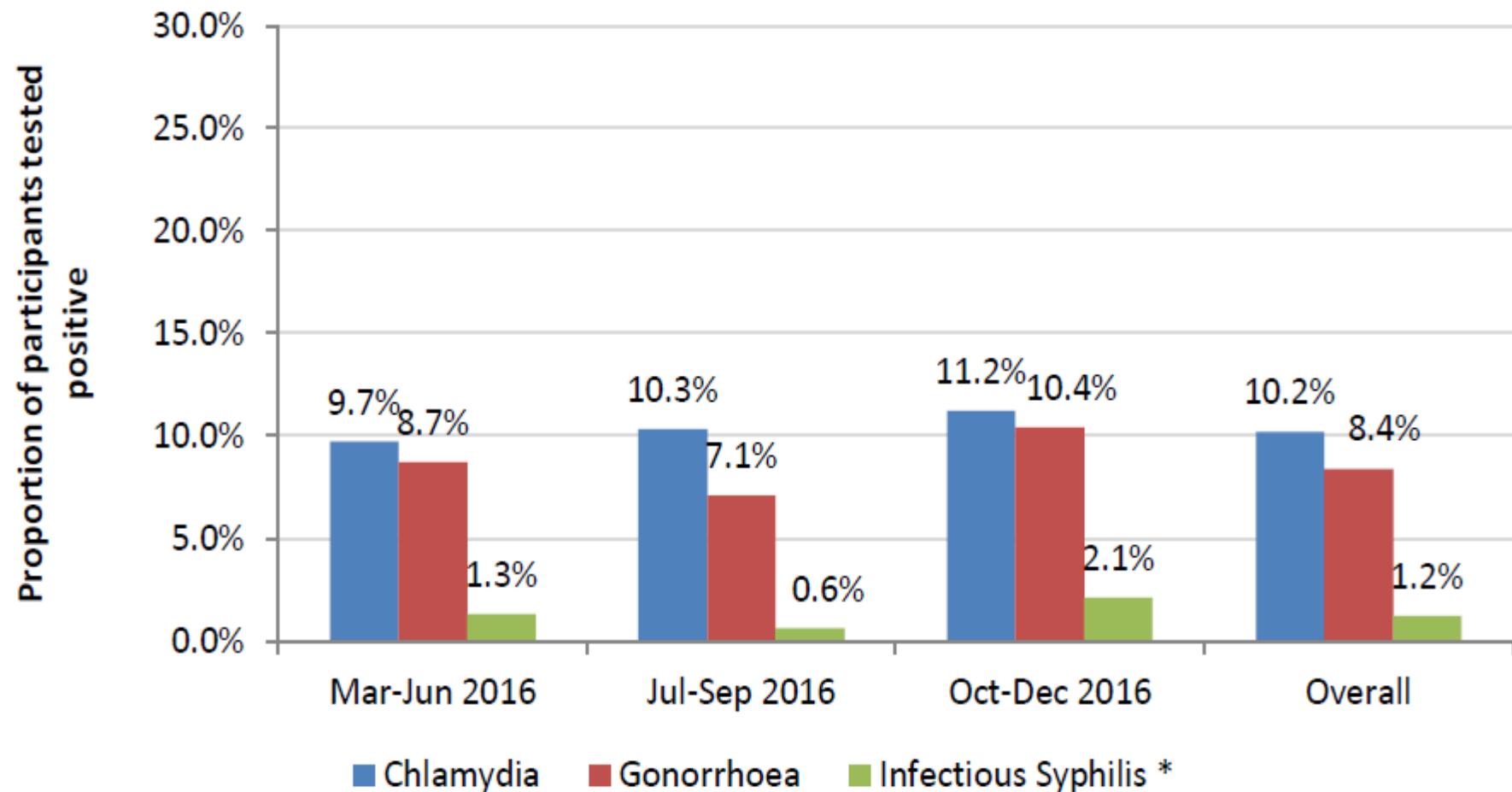


Caveat

Number of screens differed between the groups:
e.g. Rectal gonorrhoea/chlamydia
974 in the IMM group and 749 in the DEF



Bacterial STIs among MSM during the EPIC Study



Sexually Transmitted Infections

	Double-Blind Median FU: 9.3 months n=400		Open-Label Median FU: 18.4 months n=362	
	Nb Pt (%)	Nb Cases	Nb Pt (%)	Nb Cases
Chlamydiae	81 (20)	114	122 (34)	158
Gonorrhoeae	88 (22)	123	117 (32)	175
Syphilis	39 (10)	45	68 (19)	77
HCV	5 (1)	5	5 (1)	5
All STIs	147 (37)	287	210 (58)	415

Incidence rate of first STI

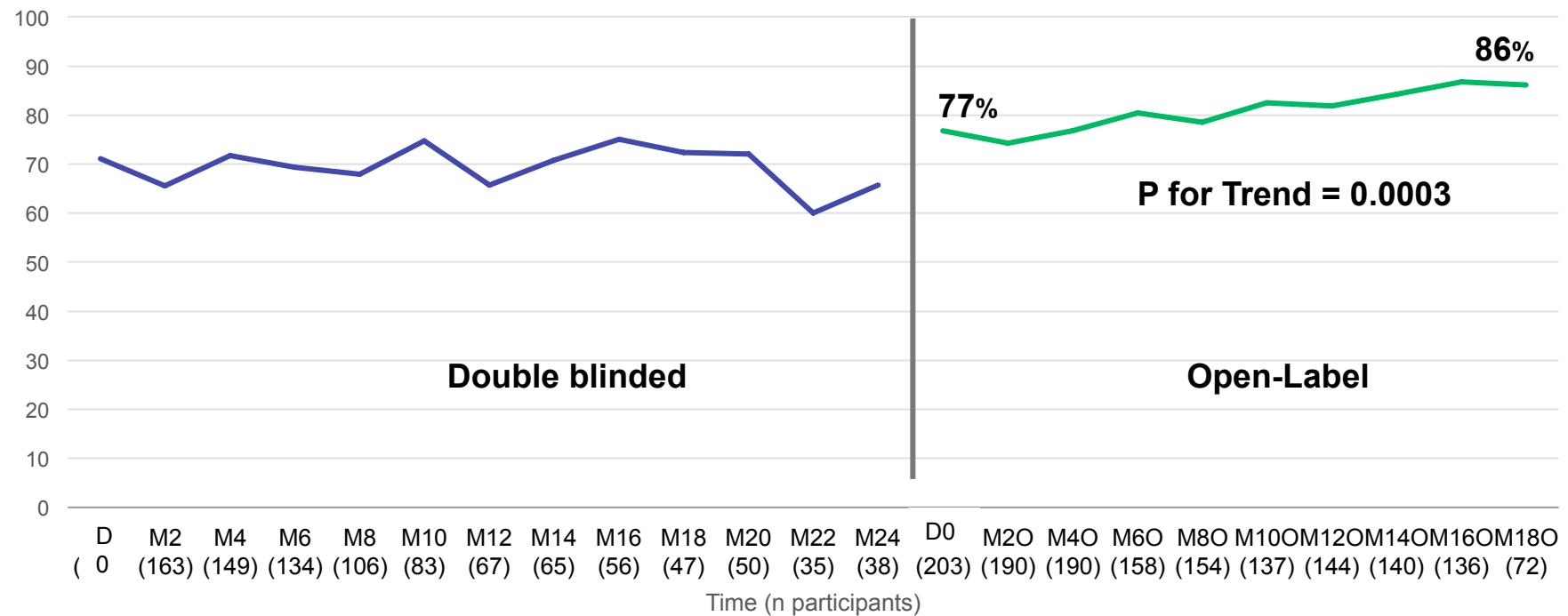
49 vs 59 per 100 PY in the double-blinded and OLE phases (p=0.11)

How to Contain the Spread of STIs ?

- Promotion of condom use
- Counseling and behavioral interventions
- Vaccines for viral STIs (hepatitis A and B, HPV)
- Vaccines for bacterial STIs (gonorrhea, chlamydia, syphilis)
- Scaling-up of more effective STI services
- Increase testing frequency for STIs in high risk individuals
- Test of cure after treatment
- Better notification and treatment of sex partners
- New biomedical interventions: Mouthwash, AB prophylaxis

Sexual Behavior

Proportion Pts with Condomless Sex for Last Receptive Anal Intercourse



No significant change in median Nb of partners or sexual acts during the open-label phase ($p= 0.42$ and $p= 0.12$)

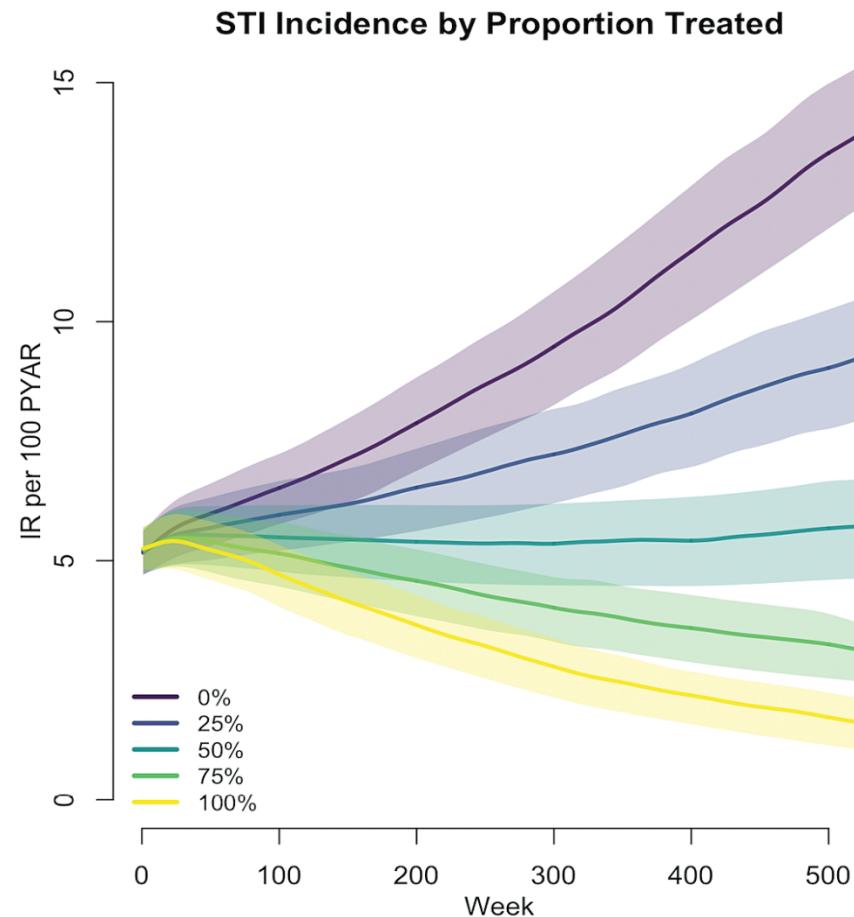
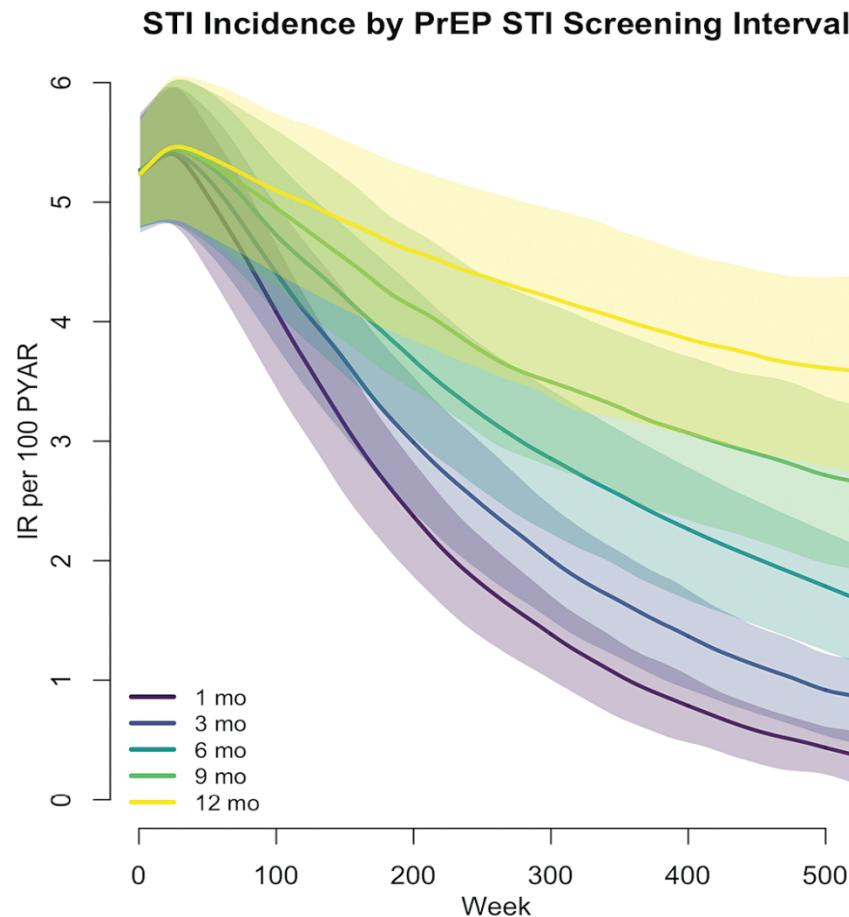
Partners not Condom Use Drive STIs Rates

- SPARK: Community-based PrEP demonstration project in NYC
- 261 MSM followed until M12 after PrEP initiation
- No increase in STI diagnosis but decrease in condom use: 61% to 46%

Predicting Factors of STIs	aOR	95% CI	p
Age < 25 years old	3.67	1.11-12.25	< 0.05
> 5 casual partners at BL	2.80	1.43-5.50	< 0.01
STIs in 6 months pre-PrEP	2.22	1.07-4.59	<0.05
Increase in Nb casual partners	2.16	1.07-4.38	< 0.05

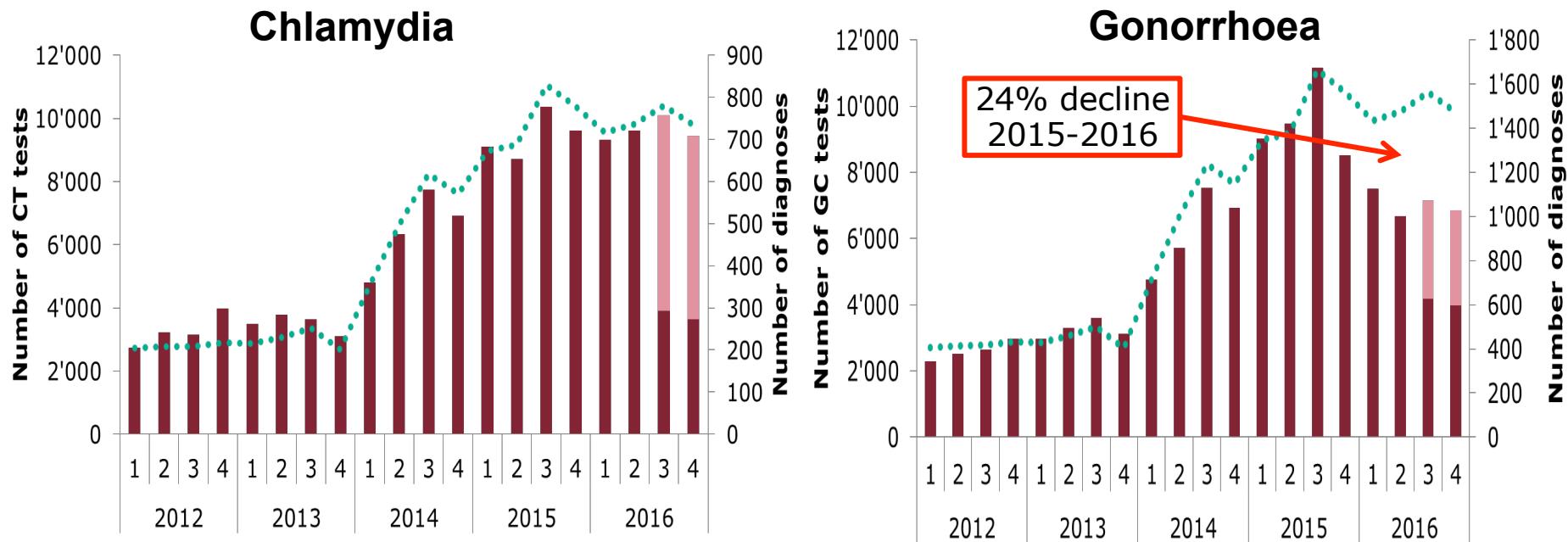
Neither overall condom use nor change in condom use were associated with STIs diagnosis in the 12 months following PrEP uptake

Incidence of Gonorrhea and Chlamydia among MSM using PrEP



Over the next decade, 40% of NG and CT infections would be averted (40% PrEP coverage)

Chlamydia and Gonorrhoea tests and diagnoses in HIV negative MSM



PHE GUMCADv2 datasets from Dean Street 2012-16 (NHS sexual health clinic)



Protecting and improving the nation's health



Summary

- Increase in STIs predicated PrEP implementation
- PrEP is associated with a decrease in condom use and a high rate of STIs which did not undermine PrEP efficacy
- Frequent testing is warranted in high risk individuals (every 3 months)
- More than 70% of diagnosed STIs are asymptomatic
- Early treatment and better partner notification might reduce STIs incidence in PrEP users
- PrEP cohorts are a unique opportunity to assess new strategies to prevent STIs
- Need to foster research in STIs prevention

Acknowledgments



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