

The current global state of STIs trends

Angelica Espinosa Miranda, M.D., Ph.D. Brazilian Ministry of Health



Britain | Poxy reasoning

Syphilis rates are rising relentlessly in Britain

Health Life, But Better Fitness Food

As syphilis cases continue to surge in the US, recent federal efforts aim to tackle the alarming trend

By Deidre McPhillips, CNN ④ 5 minute read · Updated 5:15 PM EST, Tue January 30, 2024

The

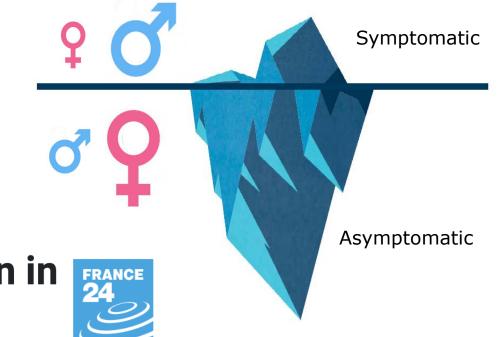


RISKY BEHAVIOUR

Sounding the alarm: France sees explosion in syphilis cases

Infants Are Born With Syphilis in Growing Numbers, a Sign of a Wider *Epidemic*

Congenital syphilis has become more than ten times as common over the past decade, the C.D.C. reported. "The situation is dire," said one expert.



Increase in STI Rates

- Over recent years, many countries have reported increasing rates of STIs such as chlamydia, gonorrhea, and syphilis.

- This trend has been observed across various age groups and demographics.

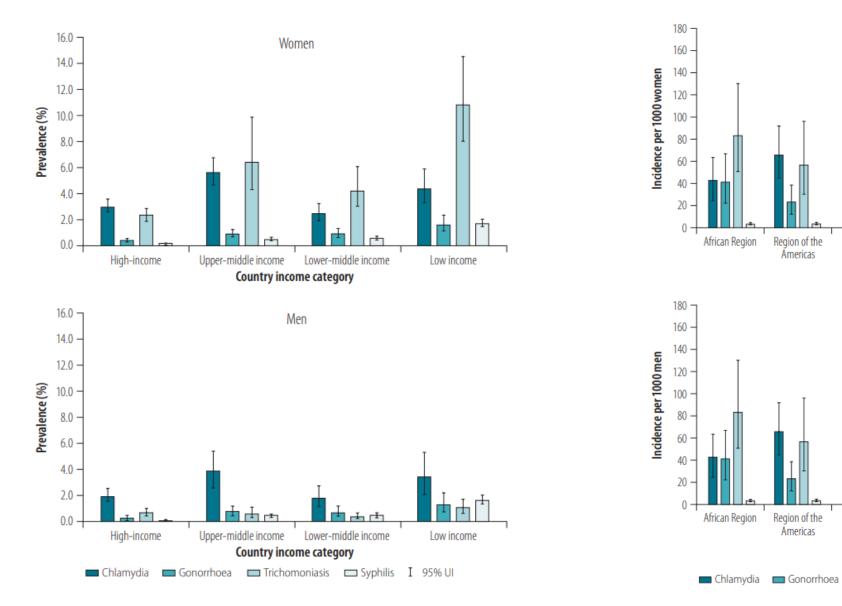
18 MILLION 31 MILLION MILLION 64 MILLION 39 63 MILLION MILLION

WHO, 2020

WHO regional estimates for new cases of Sexually Transmitted Infections

Syphilis, Chlamydia trachomatis, Neisseria gonorrhoea and Trichomonas vaginalis

&IAS Estimates of prevalent and incident cases for chlamydia, gonorrhea, syphilis and trichomoniasis



□ Syphilis I 95% UI (Rowley et al , 2019)

Western

Pacific Region

Women

South-East

Asia Region

South-East

Asia Region

European

Region

European

Region

WHO Region

Trichomoniasis

WHO Region

Men

Eastern

Mediterranean

Region

Eastern

Mediterranean

Region

Western

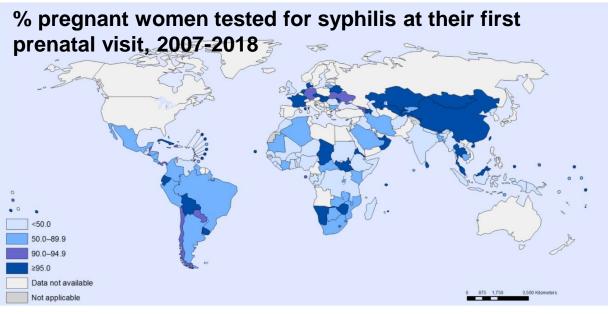
Pacific Region

WHO - Global Health Observatory data repositor

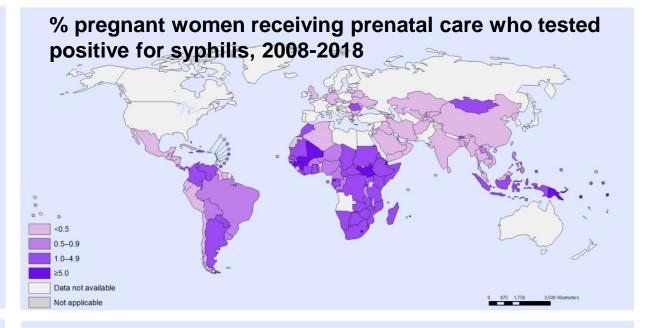
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Data not available

Not applicable



% men who have sex with men with active syphilis, 2008-2018





Youth at Risk

- Young people, particularly those aged 15-24, continue to be at higher risk for acquiring STIs.
- Factors such as lack of comprehensive sex education, inconsistent condom use, and multiple sexual partners contribute to this increased vulnerability.



WHO, 2020; CDC, 2023; Rusley JC, et al. Int J STD AIDS. 2022; Editorial - The Lancet Child & Adolescent Health, June 2022.

Drug-Resistant STIs

- There's growing concern about the emergence of drug-resistant strains of STIs, particularly gonorrhea.

- Antibiotic resistance is making some common treatments less effective, posing challenges for healthcare providers.

Unemo et al. Methods Mol Biol. 2019



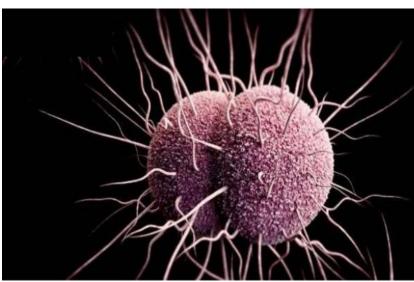
News & Views | Published: 10 June 2019

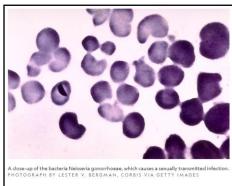
INFECTION

Neisseria gonorrhoeae resistance driven by antibiotic use

Huan V. Dong & Jeffrey D. Klausner 🔀

Nature Reviews Urology (2019) 🕴 Download Citation 🕹





Antibiotics Can't Cure 'Super-Gonorrhea'—Here's What That Means

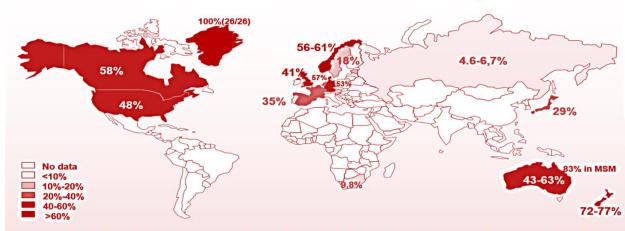
The sexually transmitted infection has been steadily becoming more resistant to antibiotics.

F 🈏 🖻

Y ELAINA ZACHOS

PUBLISHED MARCH 29, 2018 • 6 MIN READ





Prevalence of macrolide resistance in *M. genitalium*

Also, resistance for Chlamydia trachomatis and Mycoplasma genitalium

Anagrius, PloS one 2013; Tagg, J. Clin. Microbiol. 2013; Pond, Clin. Inf. Dis. 2014; Salado-Rasmussen, Clin. Inf. Dis, 2014; Kikuchi, J. Antimicrob. Chemother. 2014; Hay, Sex. Transm. Dis. 2015; Gushin, BMC Infect. Dis. 2015; Nijhuis, J. Antimicrob. Chemother. 2015; Gesink, Can. Fam. Physician, 2016; Getman, J. Clin. Microbiol. 2016; Gossé, J. Clin. Microbiol. 2016; Shipitsina, Plos One, 2017; Basu, J. Clin. Microbiol. 2017; Tabrizi, J. Clin. Microbiol. 2017; Barbera, Sex. Transm. Dis. 2017; Dumke, Diagn Microbiol infect Dis, 2016; Coorevits, J. Glob. Antimicrob. Resist. 2017; Anderson, J. Clin. Microbiol. 2017; Interno, Clin. Microbiol. 1nfect. 2017.

Sabine Pereyre - Global challenge of antibiotic-resistant Mycoplasma genitalium - Symposium ECCIMID, 2018.

Future Microbiol. 2012 December ; 7(12): 1401-1422. doi:10.2217/fmb.12.117.

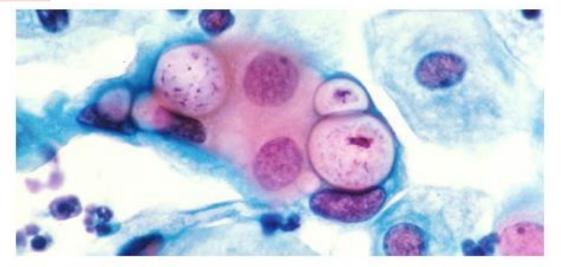
Emergence of multidrug-resistant, extensively drug-resistant and untreatable gonorrhea

Magnus Unemo^{1,1} and Robert A Nicholas²

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²Departments of Pharmacology & Microbiology & Immunology, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599, USA



Chlamydia trachomatis –Urgent need for an effective T cell vaccine to combat the silent epidemic of a stealth bacterial pathogen

Posted February 25, 2015 by PLOS Pathogens In General

Access to Testing and Treatment

- Disparities in access to STI testing and treatment persist, with marginalized communities often facing greater barriers.

- Limited access to healthcare, stigma, and discrimination can hinder individuals from seeking testing and treatment services.

> Ong et al. Int J Environ Res Public Health. 2022; Chitneni P, et al. Sex Transm Dis. 2023; Saleem K, et al. J Int AIDS Soc. 2023.

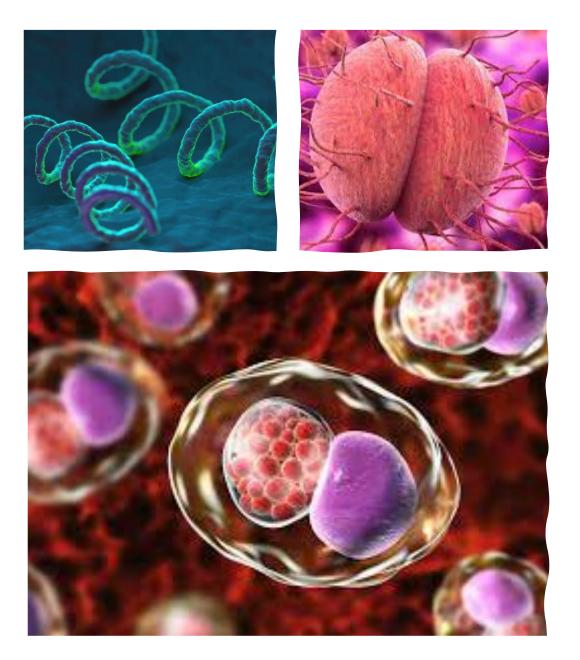


Impact of COVID-19

- The COVID-19 pandemic has had complex effects on STIs trends.

- While some regions experienced temporary declines in STIs diagnoses due to lockdown measures and reduced social interactions, others saw increases as healthcare resources were diverted away from STIs services.

> Lescure TN, et al. AIDS Patient Care STDS, 2023; Chang JJ. Sex Transm Dis., 2022; Sentís, A. BMC Public Health, 2021; Guiriguet C, et al. BMC Prim Care. 2024.



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HIV/AIDS

- Although not solely classified as an STI, HIV/AIDS remains a significant global health concern.

- Efforts to combat HIV/AIDS continue, with progress seen in some regions due to increased access to antiretroviral therapy and prevention programs.

- However, challenges such as stigma, discrimination, and access to healthcare persist.

Cohen MS. J Int AIDS Soc. 2019; Georgiadis N, et al. AIDS. 2024.

CDC: "Effectively No Risk" of Sexual **HIV Transmission if Undetectable**

The strongest federal endorsement to date of the messaging behind the "Undetectable Equals Untransmittable" campaign.

U=U taking off in 2017

The fact that people infected with HIV who are virally suppressed cannot sexually transmit the virus to others is now accepted in the HIV/AIDS community as a result of accumulating evidence since the early 2000s. In early 2016, the Undetectable-Untransmissable (U-U) slogan was launched by the Prevention Access Campaign to promote the finding. The campaign has been rapidly

1166 HIV-serodiscordant couples (also both homosexual and heterosexual) from 14 countries across Europe with more than 58000 instances of unprotected sex reported. Although 11 HIV-negative partners became HIV positive, none of these transmissions were linked. Finally, results of the most recent study, the Opposites Attract study, were presented this July at the 9th International AIDS Society

Language used to convey HIV infection risk is important

The recent Comment by Jens Lundgren and Andrew Phillips¹ raises important issues about how we convey risk of HIV transmission to those who need community as a result of accumulating

that U=U (Undetectable equals that this better conveys the risk to a Untransmittable)".3 The Editorial in this journal in November⁴ gets it right: "The fact that people infected with HIV who are virally suppressed cannot sexually transmit the virus to others is now accepted in the HIV/AIDS

"the science really does validate HIV-negative partner", and we agree broad audience than the wording we used in the article.

U=U

UNDETECTABLE UNTRANSMITTABLE

JL is supported by the Danish National Research Foundation, award number 126. AP declares no competing interests.

*Jens Lundgren, Andrew Phillips jens.lundgren@regionh.dk

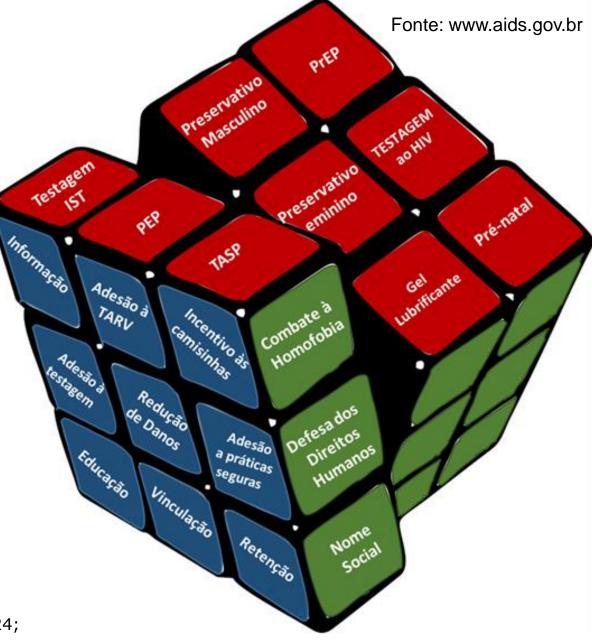
What about other Sexually Transmitted Infections?

Prevention Efforts

- Prevention remains a cornerstone of addressing STIs, with efforts focused on promoting safe sexual practices, increasing access to testing and treatment, and destigmatizing conversations around sexual health.

- Comprehensive sex education, access to condoms, and regular screenings are crucial components of prevention strategies.

Georgiadis N. AIDS. 2024; Tremblay F et al. BMC Public Health. 2024; Rosen AO, et al. Int J Adolesc Med Health. 2024



International AIDS Society iasociety.org





2020







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Thank you!

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