

Gonorrhoea surge in England following COVID-19 restrictions lift



By [Vijay Kumar Malesu](#)

Aug 24 2023

Reviewed by [Lily Ramsey, LLM](#)

In a recent study posted to the [medRxiv](#)* preprint server, a group of researchers analyzed the rise in gonorrhea diagnoses in England post-coronavirus disease 2019 (COVID-19) restrictions and understand its implications across demographics and in comparison to other bacterial sexually transmitted infections (STIs).



Study: [The Influence of Ketogenic Diet on Gut Microbiota: Potential Benefits, Risks and Indications](#). Image Credit: [New Africa/Shutterstock.com](#)



***Important notice:** *medRxiv* publishes preliminary scientific reports that are not peer-reviewed and, therefore, should not be regarded as conclusive, guide clinical practice/health-related behavior, or treated as established information.



Background

The COVID-19 pandemic caused significant disruptions to daily life, impacting sexual health services (SHSs) in England, leading to reduced testing and a 33.5% drop in new STI diagnoses in 2020 compared to 2019.

However, after lifting all COVID-19 restrictions in July 2021, England saw social norms return, and with it, a resurgence in service provision.

By 2022, there was a 23.8% surge in new STI diagnoses compared to the previous year. Notably, gonorrhoea experienced the highest rise, with a 50.3% jump in diagnoses from 2021 to 2022. Therefore, further research investigating the testing and diagnosis trends of gonorrhoea post-COVID restrictions is necessary.

About the study

The study analyzed data on gonorrhoea tests and diagnoses from 1 January 2019 to 31 December 2022. In England, all tests, and diagnoses for STIs from SHSs are recorded by the Genitourinary Medicine Clinic Activity Dataset (GUMCAD) STI Surveillance System, often referred to as GUMCAD.

To ensure accuracy, only a single test or diagnosis was counted per individual SHS service user within a time span of 42 days to avoid duplication.

The researchers utilized this data to study quarterly trends and looked into data based on various criteria, including different age brackets (15-24, 25-34, 35-44, and 45+ years), gender, and sexual orientations such as gay, bisexual and men who have sex with men (GBMSM), heterosexual men, women who have sex with women (WSW), and women who have sex with men (WSM).

Additionally, they examined data based on the local authority (LA) district

where the individuals resided.

The study aimed to understand the post-COVID resurgence of gonorrhoea in England. However, any records that lacked information on the stated demographic parameters were not considered in their corresponding analyses.

All the data processing and analysis were performed using the software Stata V.16.1, developed by StataCorp LLC, situated in College Station, Texas.

Study results

After the removal of COVID-19 restrictions in the third quarter of 2021 up to the end of 2022, England observed a significant shift in the statistics related to gonorrhoea. Tests for gonorrhoea saw a rise of 5.6%, moving from 483,717 to 510,792.

However, the increase in actual diagnoses was even more pronounced, escalating by 63.8% (from 13,715 to 22,471). Notably, the total diagnoses for 2022 set a record. By the end of 2022, the testing rate had only just approached the numbers from 2019.

The surge in diagnoses coincided with the period right after the lifting of COVID-19 restrictions. A significant rise was especially noticeable among the younger age group of 15 to 24 years. In this group, diagnoses soared by 141.3% during the mentioned period, changing from 3,747 to 9,041.

In contrast, individuals aged 25 and above only saw a 34.8% increase. Delving deeper, those aged between 19 and 20 years registered the steepest climb in diagnoses at a whopping 229.0%, though the exact figures were not displayed.

Concurrently, testing rates for the younger age bracket remained somewhat consistent, marking a minor rise of 1.5%. By the end of 2022, test numbers either matched or surpassed 2019 figures for all age categories, except for the 15-to-24-year-olds, where there was a 12.4% drop.

Examining the data across gender and sexual orientation, the group of gay, bisexual, and other men who have sex with men (GBMSM) showed the highest count of gonorrhoea diagnoses.

In terms of growth rate post the lifting of COVID-19 curbs, Women who have Sex with Men (WSM) led the tally with a 104.7% jump, succeeded by heterosexual men with a 90.4% increase and then GBMSM with a 39.7% rise.

There was a surge in testing among the GBMSM when compared to 2019 statistics – up by 21.8%. In contrast, WSM and heterosexual men saw a decline in testing by 20.3% and 8.1% respectively during the same period.

Focusing on the 15-to-24-year-old demographic, heterosexual individuals displayed the most significant spike in diagnoses (179.6%) compared to GBMSM (63.2%) from the third to the fourth quarter of 2021.

However, for those 25 and older, the growth in diagnoses for heterosexuals and GBMSM was closer at 33.7% and 35.8% respectively.

In a regional breakdown, every part of England witnessed a rise in gonorrhoea diagnoses after the COVID-19 restrictions were lifted.

The most substantial increases were observed in the Southwest, with a 226.0% uptick, and the North East, experiencing a 194.0% rise. Remarkably, 91.3% of the local authorities reported a growth in diagnoses during this timeframe.

Conclusions

To summarize, there's been a noticeable rise in gonorrhoea diagnoses in England from mid-2021 to the end of 2022, following the lifting of COVID-19 restrictions.

This uptick was prevalent across various demographics, especially among the 15 to 24 age group and heterosexuals. This trend mirrors observations from other European nations that have reported similar surges.

Despite the resumption of testing after restrictions, numbers have not matched 2019 levels, indicating the rise is not due to increased testing but likely a genuine spread of the infection.

While treatment resistance has not been a significant factor, the surge is not limited to gonorrhoea alone, as other bacterial STIs have shown increases too.

The future trajectory of these numbers post-COVID-19 remains uncertain, emphasizing the need for vigilant monitoring and understanding the underpinning causes to effectively manage and curb the transmission.



***Important notice:** *medRxiv* publishes preliminary scientific reports that are not peer-reviewed and, therefore, should not be regarded as conclusive, guide clinical practice/health-related behavior, or treated as established information.



Journal reference:

- **Preliminary scientific report.**

Fountain, H. et al. (2023) "Post-COVID rebound of gonorrhoea in England".
doi: 10.1101/2023.08.18.23294107. <https://www.medrxiv.org/content/10.1101/2023.08.18.23294107v1>



Written by

Vijay Kumar Malesu

Vijay holds a Ph.D. in Biotechnology and possesses a deep passion for microbiology. His academic journey has allowed him to delve deeper into understanding the intricate world of microorganisms. Through his research and studies, he has gained expertise in various aspects of microbiology, which includes microbial genetics, microbial physiology, and microbial ecology. Vijay has six years of scientific research experience at renowned research institutes such as the Indian Council for Agricultural Research and KIIT University. He has worked on diverse projects in microbiology, biopolymers, and drug delivery. His contributions to these areas have provided him with a comprehensive understanding of the subject matter and the ability to tackle complex research challenges.