

# Melbourne Sexual Health Centre

Annual  
Report  
2022



**MSHC**

MELBOURNE SEXUAL HEALTH CENTRE

Part of **AlfredHealth**

# Excellence award for an excellent team



**2022 Australian Infectious Diseases Research Centre Eureka Prize for Infectious Diseases Research:**  
Prof Christopher Kit Fairley, Prof Deborah Williamson, Prof Catriona Bradshaw,  
Prof Jane Hocking, Assoc Prof Eric Chow, Prof Marcus Chen

# CONTENT

---

04	About Melbourne Sexual Health Centre
05	Director's report
07	Monkey pox
08	IT Innovations
10	Victorian Sexual Health Network
11	MSHC Wellbeing
12	Research
13	Service and Consultation





## ABOUT MELBOURNE SEXUAL HEALTH CENTRE

Melbourne Sexual Health Centre (MSHC) is a service within Alfred Health. The vision of the MSHC is to be a leader in the management and prevention of Sexually Transmitted Infections (STIs) and its mission is to maximize sexual health through innovation and excellence in public health, education, clinical care and research.

It is the only centre that provides full-time, free sexual health services to the people of Victoria. The services provided by MSHC include general clinics for the management of STIs and HIV and a variety of specialist clinics. The service provided is predominantly walk in led by nurse triage service that focuses on high-risk individuals.

### About this report

This annual report outlines the operational performance for MSHC from 1 January 2022 to 31 December 2022. We value transparency and accountability and aim to have all our reportable data available to the community in this publication.

## DIRECTOR'S MESSAGE 2022



2022 saw the return towards the pre-covid era. Demand rose during the year and is now approaching to the levels that it was before the Covid-19 pandemic, where long waiting times have returned. Unfortunately, there are now clients with important symptoms who we cannot see and who we refer to other services. We hope, for them and for the control of sexually transmitted infections in Vitoria, that they are able to seek treatment elsewhere. Our dedicated staff work as efficiently as possible to treat as many clients as possible but unfortunately demand has once again outstripped our capacity to serve them. In 2023, we anticipate we will once again be nudging 60,000 consultations a year. The pressure that this places on our wonderfully dedicated staff is significant but is significantly mitigated by the tremendous work of our wellbeing team lead, Claire Randall.

We appreciate how critically important access to health services is for the effective control of STIs and that is why we have been working so hard to find alternatives to our on-site service. With the support of the Victorian Department of Health and Human Services (DHHS) we now have 6 partner general practice clinics as part of the Hub and Spoke initiative. We are recruiting more practices in 2023. We are also working hard to create alternative services that don't rely on general practices which are themselves under an enormous clinical load and so in 2022 began planning for a revolutionary eSTI service. This service is being developed in partnership with Professor Hocking's team at the University of Melbourne, DHHS and others and will provide testing and treatment services through a virtual clinical services with many steps being entirely automated. Ultimately this service would test clients through an external laboratory and we would only provide clinical services to those who test positive. We have also been working hard to develop AI tools to assist in the virtual diagnosis of images and symptoms that can be incorporated into this eSTI service (Professor Zhang).

We are also working constantly to improve the efficiency of our systems and processes. A big part of this has been work to improve the client flow through the service to maximise the number of clinical services we can provide. In 2022, our IT lead, Rash Rahman secured support to upgrade our electronic registration and history taking processes with the new 'Digital Front Door'. This new system will allow clients to register their details and clinical history on their own mobile device and book appointments. It replaces the end of life monitors in the waiting areas and free up sexual health nurse time for additional clinical services.

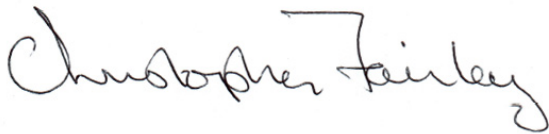
Our agility has also been tested in 2022 with the appearance of a new STI, the Mpox virus. We were able to quickly change our processes to ensure all possible cases were detected as soon as possible to limit onward transmission. These adjustments and the early availability of a vaccine formed a successful public health responses and essentially the complete disappearance of endemic Mpox virus transmission in Victoria.

Our research continues to be a consistent strength of our service and has underpinned many of the changes to our clinical service. We had a stellar year with publications (133), grants and prizes. As an example the MSHC team were lucky enough to win the Eureka Prize in September 2022 which was great fun. But, it is a reflection, not of just those in the photo but of the tremendous support for our research receives of everyone at MSHC and the credit goes to all staff. Lei Zhang was promoted to adjunct Professor at Monash University and means that MSHC now have four full professors.

We had some major changes in staff. We had to say our goodbye to some key staff that have worked at MSHC for many years but we are pleased to welcome new faces to our team. We said some tearful goodbyes to Suzanne Amisano who we were lucky enough to have with us for 18 years. We said goodbye to Afrizal who had been working with us for 14 years providing innovative IT solutions. Thank you also to Shauna Hall, Wendy Zeng, Susan Petersen and Jocelyn Verry who we will miss greatly.

We made some important changes to the structure of the management team at MSHC during 2022. Importantly, in recognition of the critical importance of IT at the centre we asked Rash Rahman to join the management team. He is playing a critical role in the IT/clinical service developments. Welcome also to Esther David who replaces Suzanne Amisano on the management team.

Finally, and as always, the greatest thanks go to the MSHC staff. Thanks for seeing so many clients, who as individuals are so grateful that you fitted them in. Victoria is also grateful because every infection treated is one not passed on and translates to improved STI control. We are proud of what we do and proud to be part of Alfred Health.

A handwritten signature in black ink that reads "Christopher Fairley". The signature is written in a cursive, flowing style.

Professor Christopher Fairley,

Director MSHC



## ACHIEVEMENT: MONKEYPOX CHALLENGE

An electron micrograph showing numerous monkeypox virus particles. The particles are spherical, with a distinct outer envelope and a dense, granular internal core. They are scattered across a blue, textured background. A red text box is overlaid on the upper right portion of the image.

We have monkeypox vaccine available to our clients as part of routine care.

In May 2022, an unexpected global outbreak of monkeypox (subsequently renamed mpox) began, mainly affecting gay, bisexual and other men who have sex with men. Prior to this mpox, was not considered a sexually transmitted pathogen. The first cases of mpox were seen at MSHC in July 2022. The WHO named the mpox outbreak a global health emergency and control was a priority for the Victorian Department of Health. MSHC managed a large proportion of the mpox cases reported in Australia. As our doctors and nurses had not seen mpox cases previously, we had to learn and adapt rapidly, acquiring information as it emerged internationally, establishing diagnostic and management strategies within weeks. We learnt how mpox presents clinically and that it causes highly infectious lesions and can result in complications such as severe pain and bacterial infection requiring hospital admission. A number of cases we managed needed hospital admission to the Alfred Hospital Infectious Diseases Unit.

MSHC reconfigured patient flow in order to manage patients, as there was a need to manage suspected mpox cases within MSHC's isolation room with full PPE, and patient samples handled with special precautions to prevent infectious exposure. Management required coordination with Local Public Health Units and additional follow up procedures for MSHC follow up nurses. In addition to managing these cases, MSHC became one of several services in Victoria to roll out the mpox vaccine. This commenced in August 2022.

MSHC researchers in collaboration with researchers at the Doherty Institute conducted a study to examine the infectiousness of mpox. This study, published in the Lancet Microbe showed that mpox virus is shed without symptoms from the mouth and rectum, with infectious virus continuing to be shed after mpox skin lesions had healed.

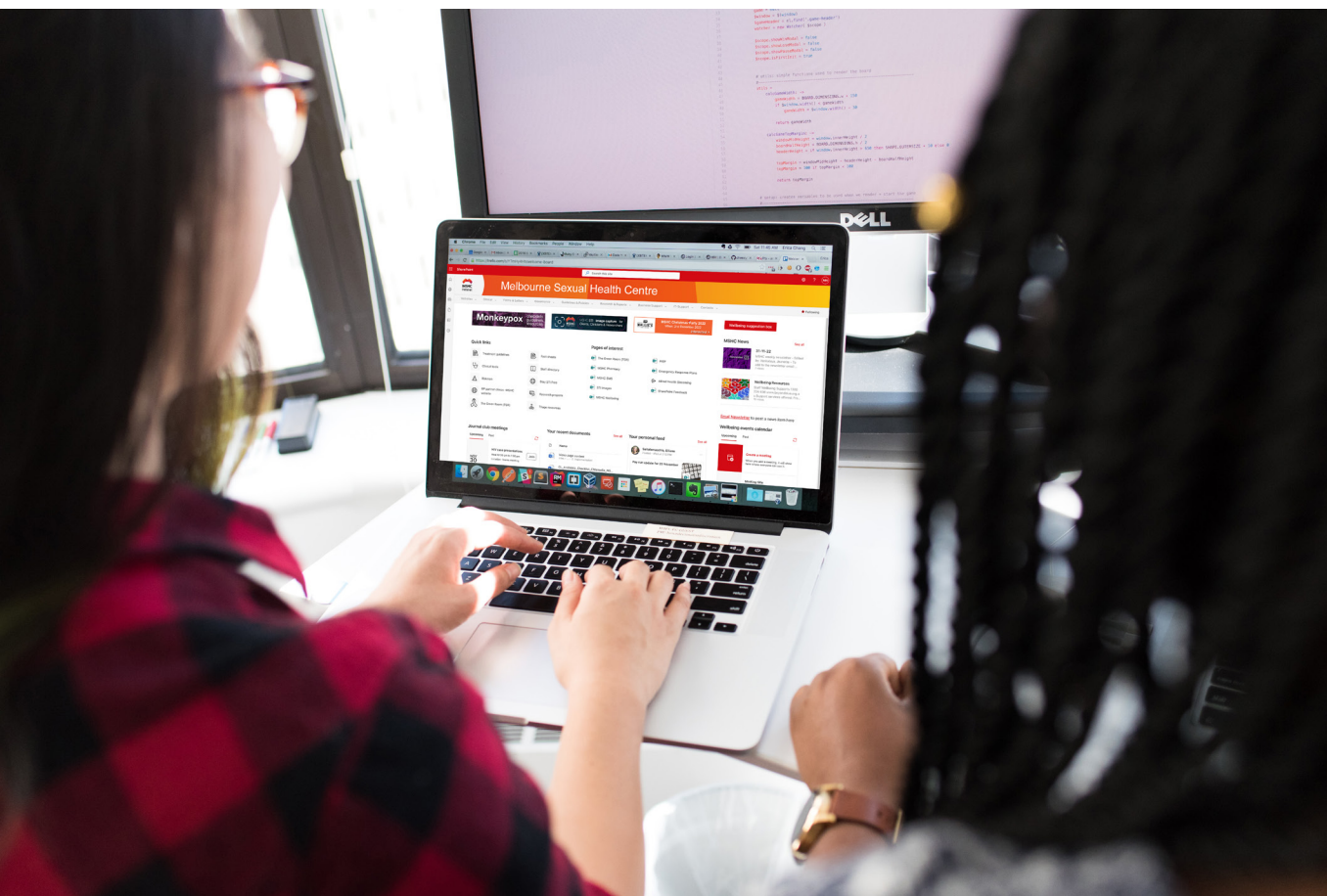
By late 2022, no further cases of mpox were identified in Victoria or Australia. Given the size of outbreaks in other high-income countries, this was a remarkable achievement which reflected the rapid and concerted efforts of the community organisations, health services and government agencies in coming together to control the outbreak.



## ACHIEVEMENT: IT INNOVATIONS

In today's fast-paced and highly competitive business environment, technology plays an increasingly critical role in determining the success of any enterprise organisation. MSHC's Infrastructure modernisation project contributes a positive impact in the short and long term, including improved efficiency, enhanced security, better patient experience, cost savings, innovation, and scalability. Some of the key innovations from MSHC modernisation include:

1. Upgrade Network link from 20Mbps to 1Gbps (1000Mbps) – Faster network speeds over dark fibre connection help MSHC's staff work more efficiently and quickly complete their tasks. It improves the patient experience by reducing wait times, increasing website responsiveness, and enabling faster downloads of digital content.
2. Upgrading an analog phone system to a digital one provides many benefits to MSHC, including improved call quality, increased flexibility, enhanced features, cost savings, integration with other technologies, and remote work capabilities.
3. Migrating physical servers to virtual servers significantly impacts an MSHC by providing cost savings, increased flexibility, improved availability, enriched security, and increased performance.
4. Migrating from an on-premises Exchange Email server to Office 365 cloud - provides several benefits for MSHC, including reduced infrastructure costs, improved scalability, greater security, increased accessibility, simplified administration, and always up-to-date software.
5. Upgrading a legacy kiosk application CASI (Computer Assisted Self Interview) to DFD (Digital Front Door) application – benefits MSHC, including improved patient experience, enhanced functionality, reduced maintenance costs, improved data analytics, better integration with other clinic practice management systems and overall business efficiency.





6. Implement SHAVE (Sexual Health Automated Visit Email) System – significantly improves patient engagement by sending a daily email of their visit summary at the clinic.
7. Image collect web-based application - a positive impact on the STI (Sexually Transmitted Infection) treatment where a patient can take pictures from their smart devices and upload images securely to the MSHC's server without leaving digital prints on their mobile phones. This application will be essential in AI (Artificial Intelligence) research projects for diagnosing, treating, and preventing STI diseases.
8. Upgrading the MSHC intranet to SharePoint offers several benefits, including improved collaboration, document management, enhanced search capabilities, security, mobility, and integration with other systems.
9. Automate AIR system with CPMS - The Australian Immunisation Register (AIR) is a national database that plays an essential role in promoting public health and reducing the incidence of vaccine-preventable diseases in Australia. By providing accurate and up-to-date information on vaccination status, the AIR helps healthcare providers and individuals make informed decisions about immunization, ultimately contributing to improved health outcomes for all Australians.
10. Clinical Service Dashboard – integrated with Alfred Data Warehouse, provides an effective tool for visualizing and analyzing data. The centralized data, consistent reporting, real-time data, scalability, advanced analytics, and interactive visualisation provided by a data warehouse can help MSHC management gain valuable insight

## ACHIEVEMENT: VICTORIAN SEXUAL HEALTH NETWORK

### **Victorian Sexual Health Network VSHN (formerly the MSHC Hub and Spoke partnership).**

MSHC expanded support to other clinical services in the Victorian Sexual Health Network, a measure critical to improving STI control in the state. It has continued to grow with three new GP clinics added in Cranbourne West, Yarram (Gippsland) and Kardinia (Geelong) hence six general practices to assist STI management in areas of need from the North-West to South-East of Victoria.

### **VSHN 2022 in review**

2022 has provided not only the opportunity to expand but also to support the VSHN to ensure it has a sustainable framework to maintain ongoing capability and engagement of GP (General Practitioner) partners. In early 2022, Kardinia Health and Yarram & District Health Service launched their Sexual Health in Practice services which has reached regional communities in Victoria. MSHC have provided 2 experienced clinicians in roles as Operation Leads who have overseen some changes to ensure the long-term sustainability of each GP Partnership. Some of these changes were introducing a hybrid model of care and the introduction of mix billing. Our GP partners now provide sexual health services which are both financially viable and of high standard to their local communities.

MSHC have continued to provide regular education sessions which have included both face to face learning and on-line Zoom sessions. Staff at our GP partners have participated enthusiastically therefore building on their level of knowledge and understanding. This has ensured that the whole GP practice is offering a warm welcoming environment for people from diverse genders and backgrounds.

MSHC would also like to call attention to key stakeholders involved in supporting the VSHN. Thorne Harbour Health, The Victorian NPEP service, RhED, and Sexual Health Victoria have all played a vital part in delivering education to our network.

Some highlights from 2022 include GP Partner visits and introducing a new system for data collection called ACCESS (Australian Collaboration for Coordinated Enhanced Sentinel Surveillance). The VSHN is now working with the Burnet Institute which will provide biannual data from our GP Partners.

In July / August 2022, we saw the outbreak of a new sexually transmissible infection – Mpox virus - and a subsequent rapid response from the Department of Health and community groups in relation to treatment and vaccination. Currently, 4 of MSHC's GP partners provide MPox vaccines to locations lacking these services.



*Chantal providing SHIP training to the nursing team at KPMC*



# MSHC *Wellbeing*

Our Wellbeing team work closely but autonomously in establishing get together to help support our working lives as well as providing us with a platform for representation as a small site of Alfred Health.

We have demonstrated this through sharing informative sessions during lunchtimes or social gatherings after work. This enables us to grow and get to know one another, thus enhancing the physical, emotional, and social wellbeing of all the MSHC team!

In 2022 the MSHC Wellbeing team were shortlisted for an Alfred Health award. This reflects the recognition from Alfred Health in the busy year we have had which included valuable contributions from Claire Randall, Linda Liu, Hannah Juhmann, Annie Lang, Mark Thompson, Beth Costello, Kate Pottapel, Megan Smith, Tina Schmidt, Roisin Dineen, Shari Boyanton, Bec Wigan, Liz Griffiths, Mark Chung, Marleen Tschaepe, Monica Owlad, Finn Mercury, Saskia Fell, Lauren Bryar, Surbhi Bird, Nikhil Arram, David Nguyen and Jason Kenna.

In 2022, this team organised among others, the many events listed here - tree jumping event, lunar new year celebration, our garden project, Christmas celebrations, pet celebrations, Ride to Work Day, lunchtime guided breathing sessions, Wear it purple day celebrations, ran Zumba sessions after work, a staff bowling event, Pride celebrations, a comedy evening celebration, and an informative session for the 16 day of activism of violence against women and of course the many birthday celebration events.

Indeed, a very busy year, achieved only through the tireless efforts from the team!





# ACHIEVEMENT: RESEARCH



It was another very successful year for research at MSHC. MSHC had the highest number of publications (n=133) ever in its more than 100 year history. Quite an achievement considering in 2002 we published just 6 papers. Our research program is now mature and well integrated into our clinical services with research findings often adopted into routine clinical practice. Perhaps the best example of this is our resistance guided therapy for mycoplasma genitalium.

We had a successful year with more than 100 abstracts at scientific meetings rewarded by prizes for oral and poster presentations.

We've had recent publications in the top ranking Infectious Diseases Journal in almost every STI area (Gonorrhoea, mycoplasma genitalium and syphilis). We're regularly sort for our commentary in the press relating to important public health issues.

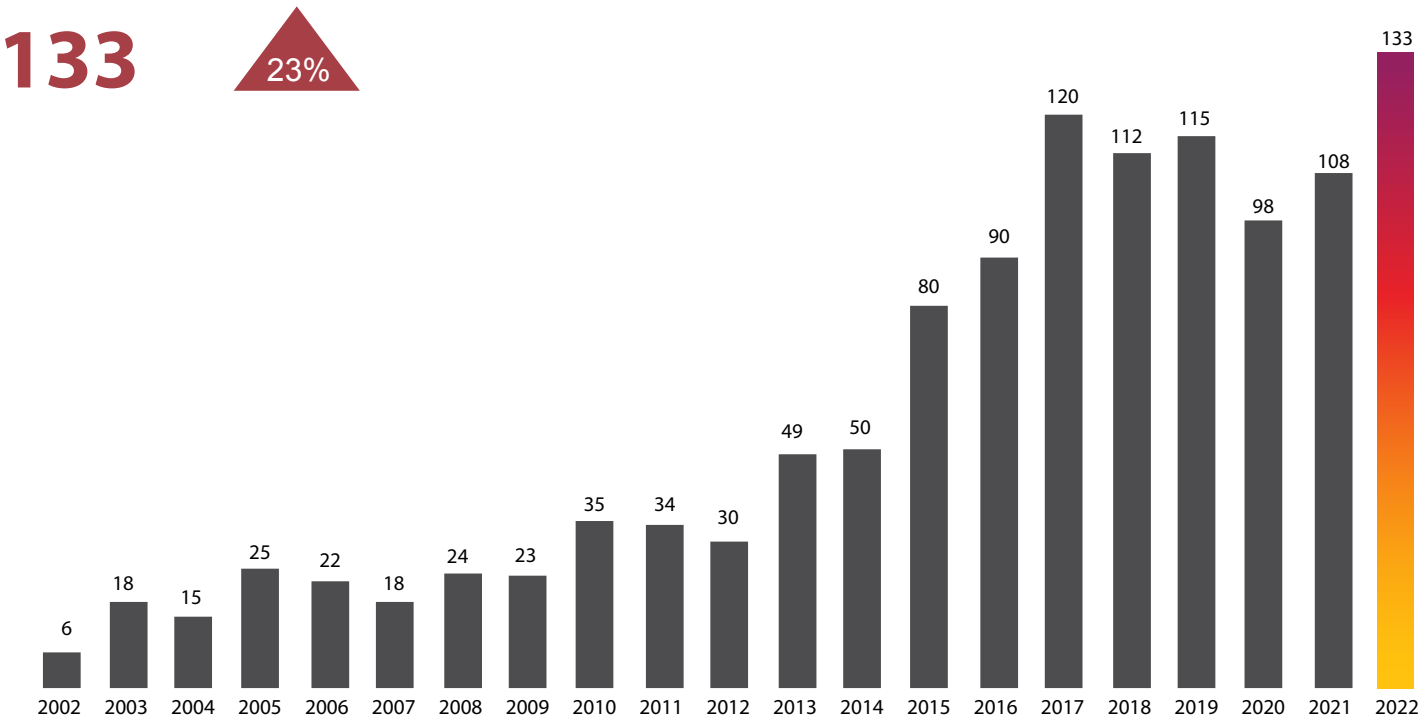
Our work is supported by many grants from NHMRC, US National Institutes of Health, University and investigator led industry studies from Jason Ong, Eric Chow, Tiffany Phillips, Erica Plumber and others.

We won the prestigious Eureka Prize this year and were recognised in the Alfred by the 2022 Improvement, Innovation & Research, Recognising Excellence Outstanding Achievement Award, Alfred Health.

Lei Zhang was promoted to adjunct professor within the central clinical school and MSHC. Lei's promotion now means we have four full professors based at MSHC, given an indication of the depth of our research strength in 2022.

And all of this would not be possible without our outstanding clinic team that are the backbone to every successful clinical service with a strong research component. They deserve our greatest thanks.

## Number of Publications

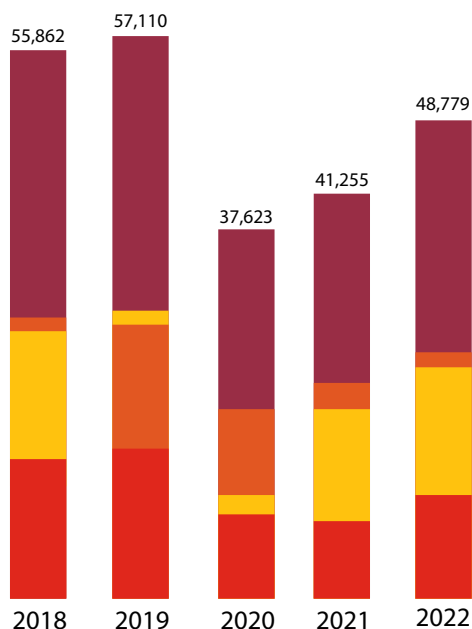


# SERVICE AND CONSULTATIONS

Number of consultations Jan 2018 - Dec 2022

48,779

18%

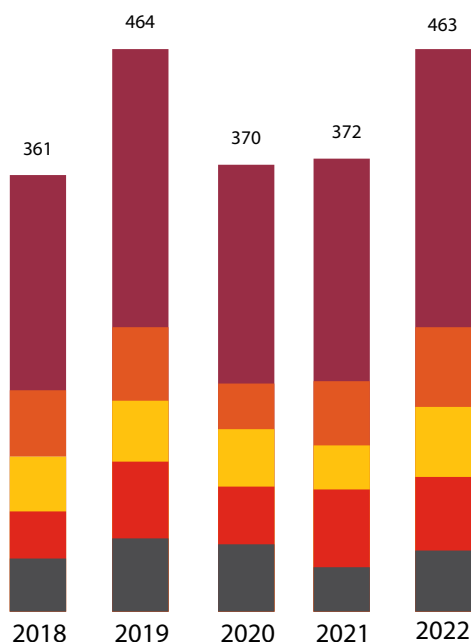


New clients  
Returns  
Individuals  
Total consults

Infectious syphilis quarter and year 2018-2022

463

24%

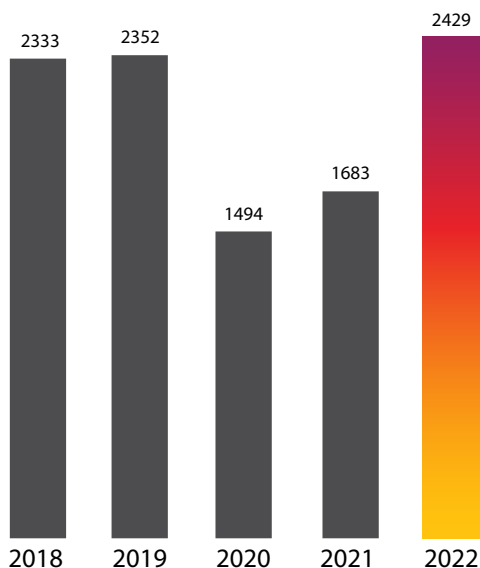


Q1  
Q2  
Q3  
Q4  
Total

Number of positive gonorrhoea tests 2018 - 2022

2,429

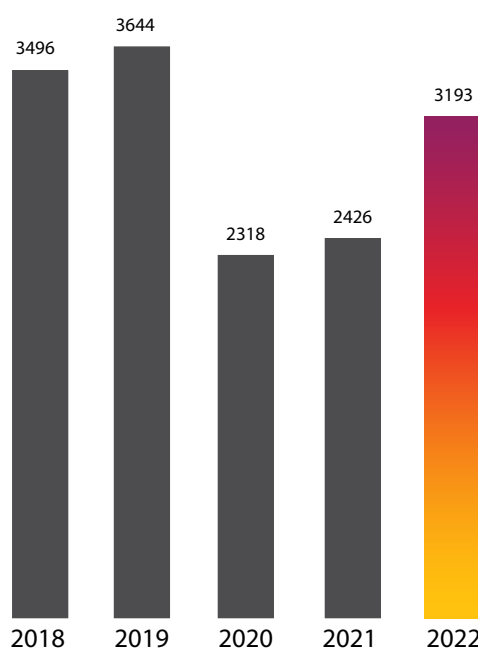
44%



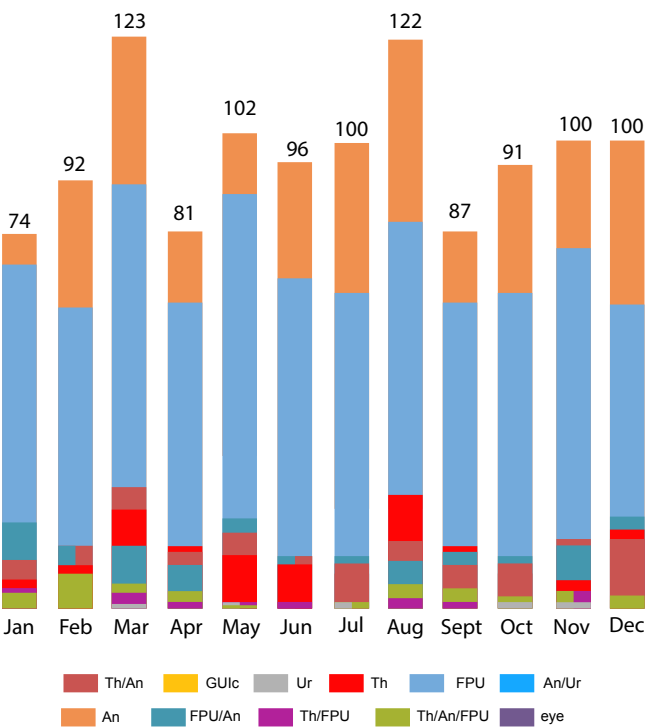
Number of chlamydia positives 2018 - 2022

3,193

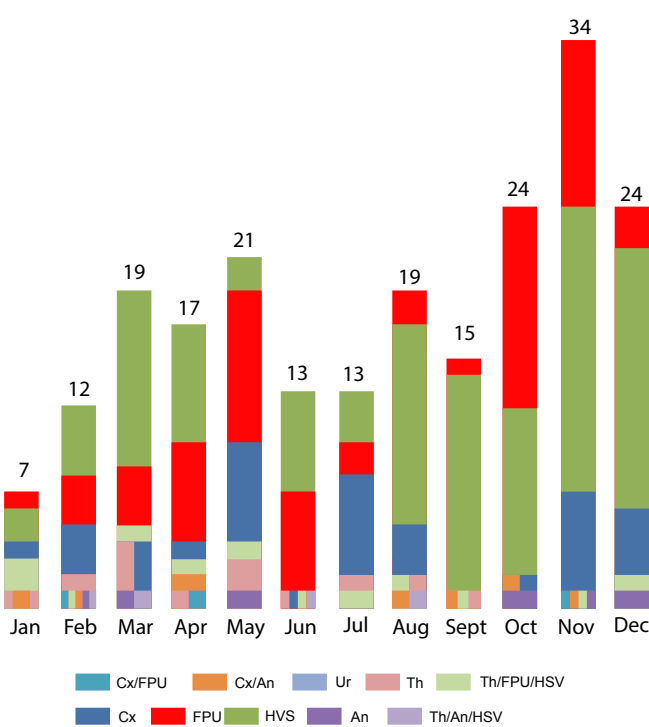
31%



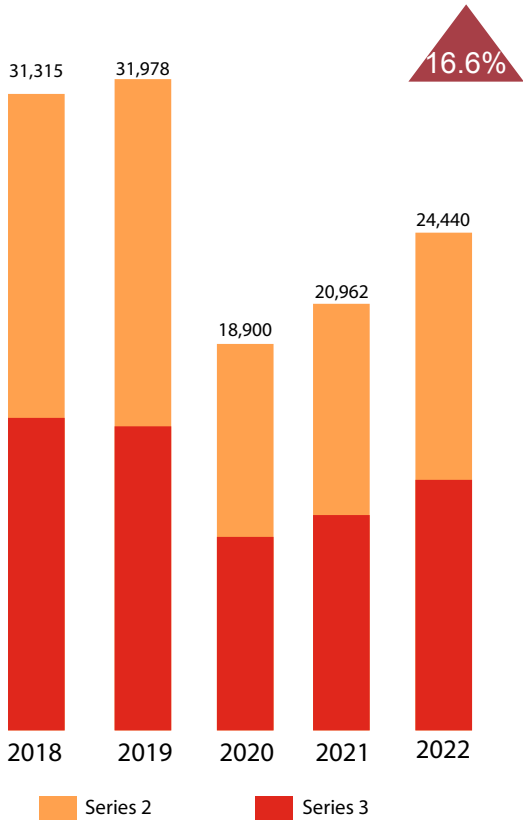
Sites of Chlamydia infection among males 2022



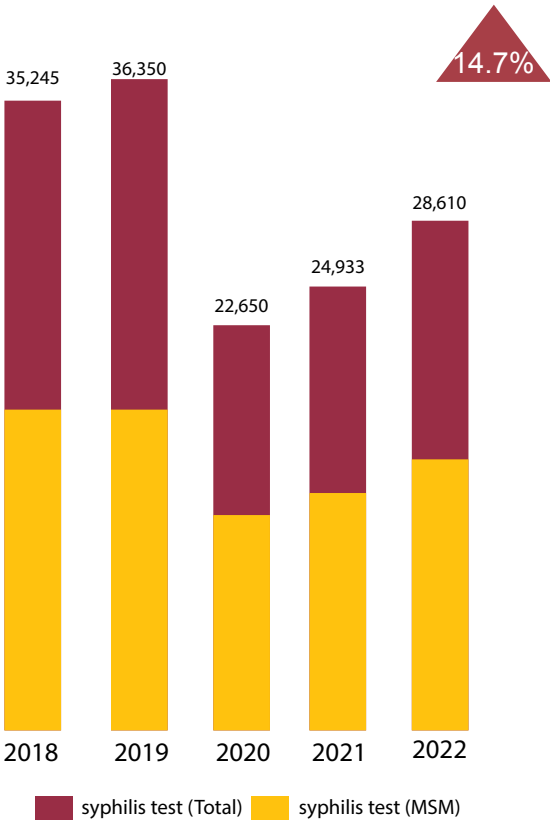
Sites of Chlamydia infection among females 2022



Number of HIV test over time 2018 - 2022

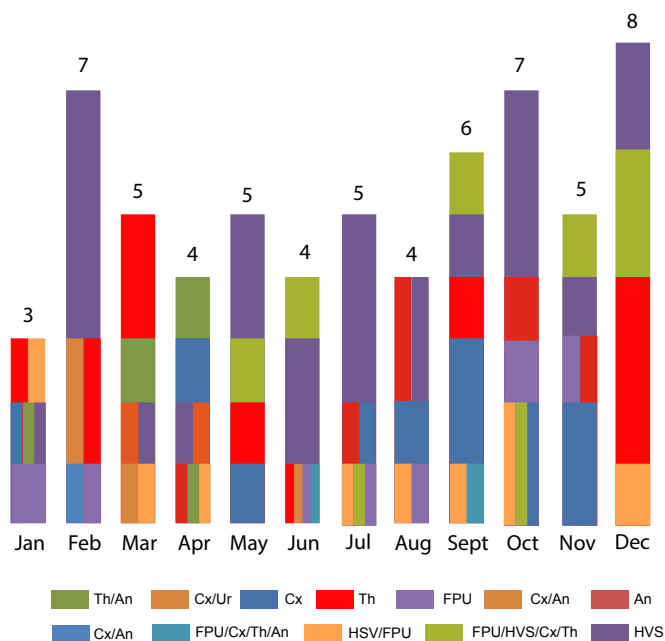


Number of syphilis test over time 2018 - 2022

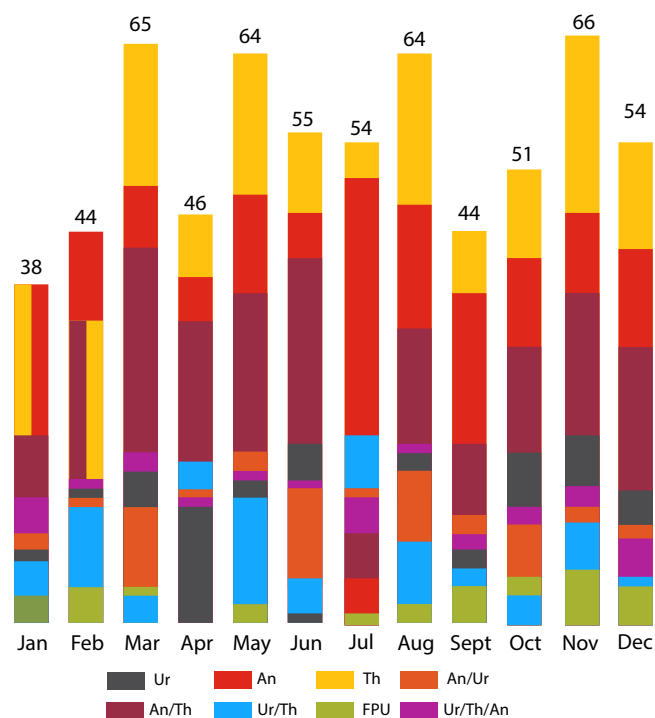




## Sites of gonococcal infectious among females 2022

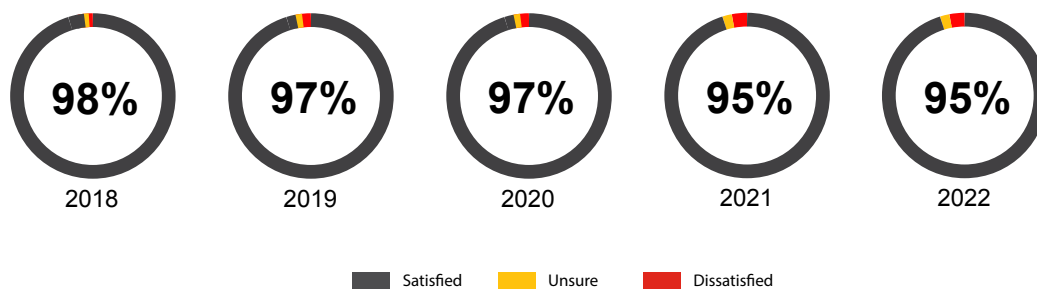


## Sites of gonococcal infectious among males 2022



## Client survey overall satisfaction

95%



This page is left blank intentionally

