

BUILDING A CULTURE OF QUALITY THROUGH COLLABORATION



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NICD QUALITY ASSURANCE CERTIFICATES



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Prof
Adrian Puren

MESSAGE FROM **THE EXECUTIVE DIRECTOR**

Dear Colleagues,

Welcome to Pulse, the National Institute for Communicable Diseases (NICD) quarterly newsletter. In this issue, we acknowledge and honour collaborations within our environment. We rely on collaborations and partnerships with various stakeholders locally and abroad to thrive and achieve our organisational goals. These partnerships fuel our passion and keep us grounded and committed to our mission.

In this issue, you will find articles that attest to these collaborations and partnerships, such as the Division of Public Health Surveillance and Response, which collaborates with various stakeholders as part of surveillance and outbreak response measures. The Division is the vital link between the NICD and national/provincial health departments, with critical sections including the Outbreak Response Unit, Notifiable Medical Conditions, Provincial Epidemiology Team, and GERMS-SA.

Recently, the NICD, in partnership with Wellcome Connecting Science, hosted a Genomics for Antimicrobial Resistance Surveillance and One

Health symposium and workshop. Science experts from 28 countries with diverse backgrounds attended the workshop to address this pressing issue.

As part of collaborations with our partners on the continent, the NICD's Nevashan Govender, a World Health Organisation-Afro technical expert for the Public Health Emergency Operations Centre and course trainer, participated in the Public Health Emergency Management Course in Mozambique.

The NICD was recently acknowledged and honoured at the Gauteng Department of Health Services Excellence Awards for its outstanding contribution to the response to the COVID-19 pandemic. A well-deserved congratulations to all!

The stories in this edition testify to the power of collaborations and partnerships for the public good. As the African proverb states, "If you want to go fast, go alone. If you want to go far, go together." At the NICD, we believe that when we work together, we can achieve more.



MEET OUR Editorial TEAM



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WHAT ARE PEOPLE SAYING ON SOCIAL MEDIA?



East Rand Physicians
225 followers
1w · Edited · 🌐

A great initiative from the **National Institute for Communicable Diseases (NICD)** - CoughWatch SA. Especially important as we enter into **#fluseason** 🤧😷

#DYK, you can register on the platform and contribute to research and help with surveillance for communicable respiratory diseases within South Africa? The aim is to provide data on the burden, severity and seasonality of respiratory illnesses and to better understand the impact on the broader community.

Click here to learn more: <https://lnkd.in/dEeVwUBz>

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26,378 followers
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It's **#WellnessWednesday**, and what better way to take care of yourself than by participating weekly on CoughWatchSA? Your participation not... see more

It's #WellnessWednesday, what better way to take care of yourself?

Your participation not only protects your community but also contributes to research. Let's make wellness a priority together! 📝

Comments Most recent

Susan Nzenze-Chinyoka · 2nd
Medical Doctor, Health Economist, Public Hea...
2mo

Enjoyed teaching an enthusiastic class on policy and policy briefs. Exciting topics too.

Responding as National Institute for Communicable Diseases (NICD) Post

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Today, we kick off the second cohort of the **#DataToPolicy (D2P)**, programme designed to equip professionals with the skills to champion data-driven policy agendas. From stakeholder analysis to gender-inclusive policies, **#D2P** participants are intended to drive positive change.

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Today, we kick off the second cohort of the **#DataToPolicy (D2P)**, programme designed to equip professionals with the skills to champion data-driven policy agendas. From stakeholder analysis to gender-inclusive policies, **#D2P** participants are intended to drive positive change.

Empowering Change Agents: Launching the Second Cohort of Data to Policy (D2P) Programme

BLOOMBERG DATA FOR HEALTH INITIATIVES ECHO

You and 18 others 2 comments · 4 reposts

Isabela Malta @belamalta10 · 04 Apr

Wanted to share these images from the National Centre for Communicable Diseases (@nicd_sa). Even amidst serious work combating infectious diseases, people there cannot possibly get stressed, can they? 🐣🐣 **#TB** **#infectiousdiseases** **#genomicsurveillance** **#bioinformatics**

gavin preller @gpreller · 02 Apr

Will the @HealthZA and @nicd_sa and @SAHPRA1 comment on this worldwide increase in cancers seemingly attributed to the covid19 vaccine. How did you authorise use of a killer experimental drug

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Dr Ramokone lisbeth lebelo · 3rd+
Principal Medical Scientist, Lecturer, Mentor, ...
2mo





Surveillance Superheroes: How the Division of Public Health Surveillance and Response is Leading the Charge in Outbreak Control

Dr Susan Nzenze: Head of the Notifiable Medical Conditions (NMC) and the Acting Head of the Division of Public Health Surveillance and Response (DPHSR)

By Siyabonga Mbatha

Dr Susan Nzenze is a woman of many hats, serving as both the Head of the Notifiable Medical Conditions (NMC) and the Acting Head of the Division of Public Health Surveillance and Response (DPHSR). In our conversation, Dr Nzenze provided a comprehensive insight into the intricacies of the Division, shedding light on its critical components and functions within the broader framework of public health in the country.

The Division serves as the vital link between the National Institute for Communicable Diseases (NICD) and national/provincial health departments, with key divisions including the Outbreak Response Unit, NMC, Provincial Epidemiology Team, and GERMS-SA. These divisions work cohesively to ensure effective surveillance and response to outbreaks, a task that requires seamless coordination and rapid action. Dr Nzenze emphasised the Division's role in receiving outbreak notifications, verifying information, disseminating alerts to relevant stakeholders through platforms like the NMC app, coordinating with affected centres, and provinces and providing technical support as needed.

In 2022, the Division faced diverse challenges, from managing the Mpox outbreak amidst international interest to addressing the cholera outbreak in Hammanskraal. Additionally, foodborne illnesses highlighted the risks posed by informal food vendors, particularly affecting children.

Amidst these crises, the Division's commitment to training and professional development shone, with staff receiving accolades both nationally and internationally. Mr Nevashan Govender and Mr Darren Muganiri were the first two fellows from South Africa to graduate from

the prestigious Public Health Emergency Management Fellowship offered by the US Centers for Diseases Control in Atlanta, Georgia. Mr Wellington Maruma received the North West Department of Health Chief Directors' Award at the annual 2023/24 Lekgotla for strategic health planning event.


Looking ahead to 2024, Dr Nzenze outlined key projects and initiatives which aim to enhance public health surveillance and response capabilities. She said: "The upcoming 21st anniversary of GERMS-SA gala signifies the Division's commitment to robust surveillance systems and contributions to public health."

Dr Nzenze added that initiatives like event-based surveillance (EBS) and emergency operations centre (EOC) training, offered to various centres, will empower staff. System improvements to the NMC app and workshops like the Data to Policy programme demonstrate a focus on leveraging technology and data-driven insights for effective policy making and response strategies.

Amid ongoing challenges such as vaccine shortages and resource constraints, Dr Nzenze remains optimistic. As she aptly summarises, "everybody who works here wants to serve the public, so we have a great team that continues to do amazing work."

This ethos underscores the Division's commitment to safeguarding public health and fostering resilience in the face of evolving health challenges. Through a blend of expertise, technology, and strategic foresight, they continue to be at the forefront of safeguarding the nation's health, setting a high standard for excellence.





"Inspired by a desire to give back to her community, she found purpose in ensuring the seamless flow of steam to support public health initiatives."

Steam and Strength: Igniting Healthcare Innovation with Vuyiswa Kheswa at the Boiler House

By Nande Harmans

In the bustling heart of the NICD campus lies a vital yet often overlooked hub—the Boiler House. Here, amid the hiss of steam and the hum of machinery, you'll find Vuyiswa Kheswa, a remarkable 26-year-old woman breaking barriers and ensuring the uninterrupted operation of critical healthcare services.

Vuyiswa's journey began at just 18 or 19, when she delved into the world of boiler operation and maintenance. Today, she stands as the sole female operator in her field at the NICD, defying norms and stereotypes with every shift she completes. Her role is pivotal; without her expertise, the laboratories—our organisation's lifeblood—would grind to a halt.

At the heart of the institution's operations lies the indispensable role of steam. It powers autoclaves, sterilising equipment crucial for maintaining the integrity of our research and diagnostic capabilities. Vuyiswa understands this significance intimately, and her dedication to ensuring a steady supply of steam underscores her commitment to public health.

But Vuyiswa's motivation runs deeper than mere duty. Inspired by a desire to give back to her community, she found purpose in ensuring the seamless flow of steam to support public health initiatives. Her commitment is unwavering, fuelled by a personal loss that drives her to prevent others from enduring similar struggles.

Yet, her path hasn't been without challenges. As an introvert navigating a traditionally male-dominated environment, collaboration didn't come easy. But through perseverance and a dedication to her work, she discovered the power of teamwork in upholding critical services.

Safety is paramount in Vuyiswa's line of work. From donning protective gear to adhering to stringent protocols, she understands the gravity of her responsibilities. Every action she takes is guided by a commitment to both productivity and the well-being of her colleagues.

Continuous training is key in an ever-evolving field, and Vuyiswa embraces the opportunity to expand her knowledge every two years. With each new skill acquired, she reinforces her role as a trailblazer in engineering. Beyond her technical prowess, Vuyiswa is a testament to the strength found in quiet determination. Her preference for solitude does not diminish her impact; rather, it amplifies her ability to excel in her chosen path.

As the firstborn of her siblings, Vuyiswa's hands-on approach to her work mirrors her leadership within her family. With every maintenance check and boiler switch, she ensures that the institution's mission of promoting public health is upheld with efficiency and care.

In Vuyiswa, we find not just an operator but a beacon of empowerment. Her journey inspires us to defy expectations, embrace challenges, and make a meaningful difference in the world around us.





Uniting Against Antimicrobial Resistance: A Collaborative Effort

By Mandy Tsotetsi

Antimicrobial resistance (AMR) is a formidable challenge to global health, threatening the efficacy of vital medical treatments and procedures. As bacteria, viruses, fungi, and parasites evolve to resist drugs, the risk of severe illness and mortality escalates, prompting urgent action worldwide.

Recently, the National Institute for Communicable Diseases (NICD), in partnership with Wellcome Connecting Science (WCS), hosted a Genomics for Antimicrobial Resistance Surveillance and One Health symposium and workshop. This pivotal gathering drew 101 science experts from diverse backgrounds from 28 countries to address this pressing issue. The NICD's Executive Director, Professor Adrian Puren, emphasised the significance of collaboration in tackling AMR, highlighting the organisation's commitment to training and partnership with the WCS organisation. "AMR is a critical issue for the world because it has all sorts of implications in terms of treating and managing patients that could include prevention, therapeutics and drugs, research, and so forth. This is an exciting venture for us to work with the Wellcome Connecting Science organisation because one of our pillars at the NICD is to provide training. This is a superb opportunity to work and collaborate with the WCS around working with

other countries in terms of establishing their particular programmes for antimicrobial resistance," said Prof. Puren.

Dr Doreen Shempela from Zambia hailed the workshop as a platform for African scientists to unite, exchange experiences, and confront shared challenges. She emphasised the importance of networking and collaboration in advancing AMR programmes across the continent. Dr Ewan Harrison of the Wellcome Sanger Institute echoed this sentiment, pleased with the newfound opportunities for African researchers to collaborate on AMR surveillance. The workshop provided essential training in experimental methods, quality control, and genomic sequencing, empowering participants to track pathogens and understand resistance mechanisms effectively.

Dr Stanford Kwenda, lead data analyst at the NICD said the symposium was central in showcasing African scientific pursuits and fostering collaboration in addressing AMR's impact on the continent.

Through shared expertise, collaboration, and commitment, these initiatives strive to address AMR and safeguard global health for generations to come.



PIONEERING TOTAL QUALITY MANAGEMENT AND SETTING THE STANDARD FOR EXCELLENCE



“

Our core mission is to serve the Republic of South Africa and the Department of Health by providing high-quality, accurate data and information.

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By Laura De Almeida

The NICD operates with a total quality management system, where all support departments such as HR, IT, and Communications are ISO certified and core functions are accredited. These ISO certifications significantly enhance NICD's quality management framework, distinguishing it as a total quality management system within the organisation. While other 9001 certifications may exist within the NHLS, the NICD stands out due to its structured approach with accredited support departments and laboratories, making it the sole total quality management system in the entire organisation.

“Our core mission is to serve the Republic of South Africa and the Department of Health by providing high-quality, accurate data and information. This entails prioritising outbreak surveillance and delivering dependable diagnostic test results to the public,” said Mr Henry Julius, NICD Quality Assurance Manager. “It's therefore imperative to recognise the invaluable contributions of our staff, demonstrated by our adherence to the updated ISO 15189 standard, showcasing our dedication to global

quality standards,” he added. Despite encountering 223 non-conformances during the 2023/24 internal audits across the organisation, the Institute demonstrated a remarkable ability to address and rectify issues. External audits yielded only 11 non-conformances across all three standards, underscoring our culture of continuous improvement and accountability. Mr Julius said there were departments that showcased exemplary dedication, with almost all audited members new to the process this year.

Despite this, they achieved outstanding results, with minimal non-conformances in internal audits and none in external audits. “This exemplifies our organisation's resilience and adaptability, even in the face of staff turnover or unexpected challenges.

It's something to be very proud of, especially when you see staff come in and take on these roles,” boasts Mr Julius proudly.



Saluting Frontline Heroes: Gauteng's Health Excellence Awards

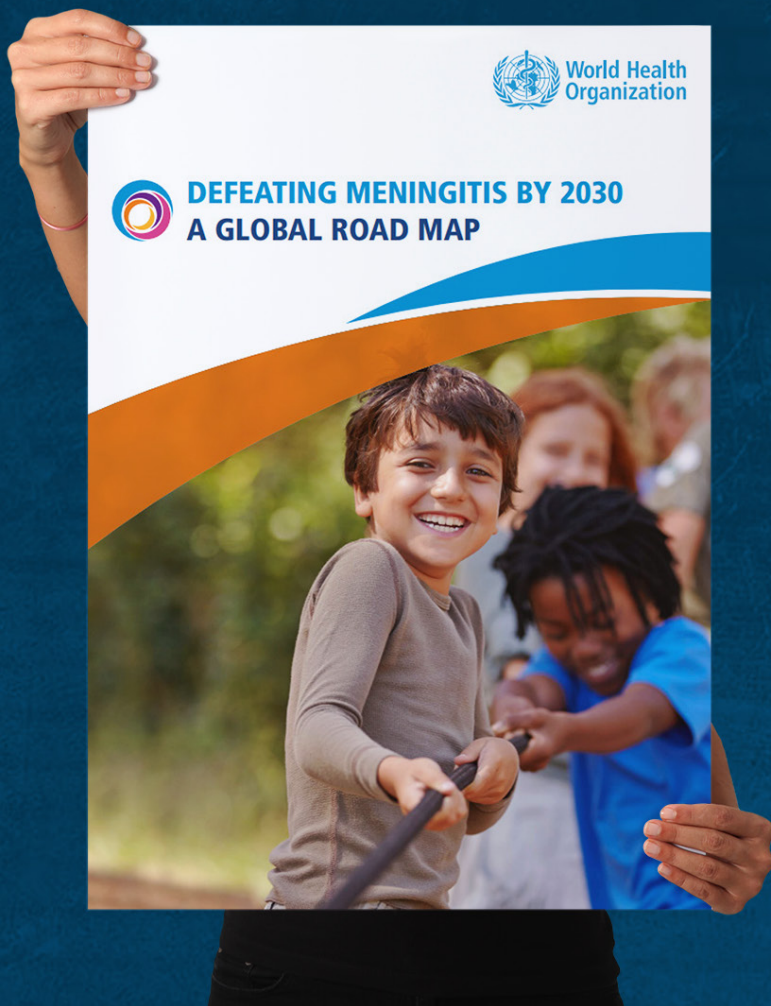


The NICD Executive Director, Prof. Adrian Puren (holding a certificate) and Deputy Director, Dr Natalie Mayet (holding a trophy), with staff members who were at the forefront of the COVID-19 response.



Frontline workers who weathered the storm during the COVID-19 pandemic have recently been honoured at the Gauteng Department of Health's Public Service Health Excellence Awards. These awards celebrated their collaborative achievements and innovative solutions that played a vital role in reducing and containing the spread of infectious disease from 2020 to 2022. It was a well-deserved recognition for these heroic healthcare workers who tirelessly worked to uphold the healthcare system during such trying times. Additionally, the NICD was acknowledged as a key stakeholder for its outstanding contribution to overcoming the COVID-19 pandemic.

The Outbreak Response Team, which provides technical support for all aspects of communicable disease outbreak investigation, was at the forefront in the fight against COVID-19.



NICD SUPPORTS SOUTH AFRICA'S COMMITMENT TOWARDS DEFEATING MENINGITIS BY 2030

By Susan Meiring

The South African government committed to the implementation of a country-specific strategic plan towards "Defeating Meningitis by 2030," at the World Health Organization (WHO) high-level meeting in Paris, France, in April this year. In 2020, at the 73rd World Health Assembly gathering, South Africa was one of 13 member states that co-sponsored the resolution on meningitis prevention and control, which led to the development of the "Defeating Meningitis by 2030" global road map.

Meningitis, defined as inflammation of the tissues surrounding the brain and spinal cord, can affect people of all ages in all parts of the world, particularly countries in sub-Saharan Africa. Meningitis strikes quickly and can cause epidemics. Bacterial meningitis frequently leads to death or the development of lifelong disabilities in affected individuals. Meningitis has serious health, economic, and social consequences, and the cost of losing or caring for a loved one may drive families into poverty. In South Africa, over 1 per 1000 people may develop meningitis each year from various viruses, fungi, or bacteria - many of which are vaccine-preventable. Persons at highest risk of disease include infants, the elderly, and people living with HIV.

To address this problem, in November 2022, members from the National Department of Health, WHO country office, and NICD attended a WHO Defeating Meningitis workshop in Brazzaville, Congo, to initiate the development of South Africa's strategic plan for defeating meningitis by 2030. The holistic plan is structured around five pillars, including prevention, diagnosis and treatment, surveillance, aftercare for those affected, and advocacy.

The NICD conducts surveillance and outbreak investigations on meningitis through platforms such as Notifiable Medical Conditions, the GERMS-SA national surveillance programme for invasive bacterial and fungal infections, the Outbreak Response Unit, and the various NICD Reference laboratories. Implementation of the new Integrated Disease and Surveillance Response strategy will also assist with future monitoring of all-cause meningitis cases and outcomes.

At the recent high-level meeting in Paris, South Africa indicated there is high political will for the implementation of the strategic plan for defeating meningitis, and the NICD will work with all stakeholders to strive for the global goal "towards a world free of meningitis."



The 19th cohort of FETP-Frontline graduates from SAFETP – Western Cape Province



We are pleased to announce the successful completion of the FETP-Frontline cohort in the Western Cape, training 12 healthcare workers and bringing the national total to 342 graduates.

In February 2024, SAFETP enrolled its first cohort in the Western Cape, training managers from various health directorates, including environmental health, infection prevention, quality improvement, occupational health, primary health care, and facility-based programs. Trainees gained vital skills in outbreak investigation, disease

surveillance, data analysis, and scientific communication. On April 25, trainees showcased their fieldwork, including outbreak investigations and data analysis, in support of the International Health Regulations (IHR) and the Integrated Disease Surveillance and Response (IDSR) strategy. To celebrate this milestone, SAFETP and the Western Cape Centers for Diseases Control (CDC) joined forces with representatives from the US CDC, the US Consulate, and the Western Cape Government Department of Health and Wellness on April 26th. Congratulations to the Western Cape cohort!

Strengthening Public Health Emergency Management: Nevashan Govender's Contribution

Mr Nevashan Govender, a WHO-Afro technical expert for Public Health Emergency Operations Centre (PHEOC) at the NICD and course trainer, participated in the Public Health Emergency Management Course in Mozambique in February 2024. During the course, Mr Govender emphasised the pivotal role of trained personnel in enhancing PHEOC effectiveness. He anticipated that the training would establish a robust foundation for managing

public health emergencies in the country, advocating for a paradigm shift in emergency preparedness and response strategies.

"We hope the training brings a shift in thinking on how public health emergency management and response can be improved and restructured from what is being done at the moment," said Mr Govender.



Wellington Maruma's Selected for the GOARN Fellowship



Congratulations to Mr Wellington Maruma on being selected for the GOARN fellowship—an outstanding achievement that fills us with immense pride. We wish him the utmost success on this programme.

The GOARN Berlin Fellowship Programme offers an opportunity for partner institutions to support the WHO Pandemic Hub's objectives in Berlin. This multi-sectoral programme engages experts from various fields, including public health, veterinary health, and academia, to contribute to the WHO Pandemic Hub's priority activities. Fellows benefit from capacity development and collaboration with global health experts, both within the WHO Pandemic Hub and the broader health community in Berlin and Potsdam, including the Public Health Intelligence team of the Robert Koch Institute (RKI). The programme aims to enhance the capacity of GOARN partners, with successful applicants returning to their home institutions after completing the fellowship.

National Cancer Registry's Landmark Contribution to GLOBOCAN Data

With the establishment of the Ekurhuleni Population-based Cancer Registry (EPBCR), South Africa now has a reliable urban population-based cancer registry, allowing for corrections to national pathology-based estimates. For the first time, GLOBOCAN's (Global Cancer Observatory) cancer statistics platform reports actual South African data, rather than estimates from neighbouring countries. GLOBOCAN 2022 utilises data from the national pathology registry, scaled using EPBCR data for improved accuracy and reliability. This is an important milestone in cancer surveillance in South Africa. By utilising data collected directly from within SA's borders, the accuracy and reliability of cancer statistics are greatly improved. This transition not only enhances our understanding of the burden of cancer within the country but also enables more informed decision-making in healthcare policy, resource allocation, and research efforts.

