advancinglife

Issue 4 | January 2025



In the rest of the world, it is called Universal Health Care (UHC) and in South African we call it National Health Insurance or NHI, which is a health financing system that aims to provide access to quality affordable personal health services for all South Africans health needs. NHI will create one public health fund to effectively meet the needs of the entire population. Access to healthcare is a human right and we need healthcare that is fair and equal. It is important because most people in South Africa still cannot easily get the care they need. By changing the way our country pays for healthcare, NHI will improve access to services for the majority of people.

The SAMRC has long been at the forefront of health research and innovation, driven by its unwavering vision to improve the health of our population. As the healthcare research arm of the South African government, the SAMRC has a critical role to play in leading research and innovation and is uniquely positioned to lead in this endeavour of making healthcare universal.

Some of the activities that the SAMRC has been involved to make this a reality includes, the SAMRC President and CEO Prof Ntobeko Ntusi hosting the Honourable Deputy Minister of Health Dr Joe Phaahla to discuss how our organisation can contribute to making the implementation of National Health Insurance (NHI) a success. Also, with the hosting of the Health Systems Research Symposium, which brought together local and international experts from academia, government and civil society to discuss the challenges and examine case studies for what is working now to improve health coverage.

Prof Ntusi said "As we look to the future, addressing the determinants of health will require a holistic approach. Our research must reflect the behavioural, biological and socio-cultural drivers of disease. It is critical that we employ a multisectoral approach that allows for better integration and sustainability of health research, ultimately contributing to improved health outcomes for all South Africans. We must ask the right questions and produce data and evidence that supports government, civil society and academia. As the SAMRC, our commitment to justice, dignity, and equitable health services for all our citizens remains unwavering."

Photo above: The Honourable Deputy Minister of Health, Dr Joe Phaahla and SAMRC President and CEO, Prof Ntobeko Ntusi



Over 20 years

of femicide research

in South Africa





The SAMRC's Gender & Health Research Unit (G&HRU) recently launched the results from their 4th National Femicide Study at an event in Pretoria. The report covers the four surveys from 1999 up to 2020/21.

According to the report, 60% of women murdered in 2020/21 were killed by an intimate partner, an increase from previous years. Despite an overall drop in femicide during the COVID-19 pandemic's alcohol ban periods, intimate partner femicide increased. Convictions also dropped, with fewer than 1 in 5 intimate partner femicide cases resulting in a conviction.

"Femicide is preventable. Yet, in South Africa, reports of another femicide have become the new normal," said Prof. Naeemah Abrahams, Chief Specialist Scientist at G&HRU. "The fact that conviction rates are so low, and the number of unsolved cases is growing, should be a resounding call to improve our justice system's response to gender-based violence. These figures are devastating. Femicide is not just a criminal justice issue—it reflects deeply rooted societal inequalities and requires a comprehensive, multi-sectoral approach to prevent and reduce it. When we allow these cases to go unsolved and unpunished, we not only fail the victims but also send a message that gender-based violence and femicide are tolerated", concluded Prof. Abrahams.

The full report can be accessed via our website: www.samrc.ac.za

WHAT IS FEMICIDE?

Femicide is the intentional murder of women because of their gender and includes any killings of women or girls. The SAMRC has been studying femicide in South Africa for more than 20 years. Findings from the report showed that South Africa continues to have some of the highest femicide rates in the world. The Eastern Cape continues to report the highest femicide rates in the country, while Gauteng saw a significant increase in cases during 2020/21. Provinces like the Western Cape, Northern Cape, and Free State saw slight decreases.

Contact the 24-hour Gender Based Violence Command Centre toll-free number **0800 428 428** to report abuse.



Empowering Africa's

Next Generation of Scientists:

TFS-SAMRC Centre of Excellence Gears Up for 2025 Launch

Thermo Fisher Scientific (TFS) and the South African Medical Research Council (SAMRC) have joined forces to establish an advanced training facility designed to strengthen molecular biology expertise across Africa.

This flagship hub, to be located in Pretoria, will be complemented by five regional hubs across the continent, each dedicated to addressing critical skills gaps by delivering targeted training in molecular techniques for postgraduate students and researchers. The initiative, which combines TFS's technological leadership with SAMRC's infrastructure and training expertise, emerged from a shared commitment to building scientific capacity and driving research innovation in Africa.

The centre of excellence's curriculum emphasises hands-on technical training in key molecular methodologies such as polymerase chain reaction (PCR), aseptic mammalian cell culture, and proteomics. Alongside technical competencies, participants will develop essential laboratory management and financial planning skills to support broader career

advancement in academia and industry. This dual focus aims to prepare graduates comprehensively for the demands of careers in molecular biology, genomics, and other life sciences sectors.

Applications for the first cohort is estimated to open in March 2025, with onboarding scheduled for June 2025. Stipends covering accommodation, travel, and daily expenses will be available, ensuring the program's accessibility to diverse student populations. The Centre's strategic goals include training 5,000 Masters and PhD students and researchers across Africa over the next five years. This collaborative initiative aims to build a robust foundation of scientific talent in Africa, fostering innovation and addressing the continent's unique research and healthcare challenges for years to come.





SAMRC and Thermo Fisher Scientific Roadshow, visiting the University of Venda, University of Limpopo, Sefako Makgatho Health Sciences University, and Tshwane University of Technology.

Starting Young, Living Long -

Promoting Cardiovascular Health from Childhood to Elderly Care in South Africa

Cardiovascular diseases (CVDs) remain a huge challenge in South Africa. These are diseases of the heart and blood vessels and can cause heart attacks, strokes, or blood clots in the legs or the lungs.

The SAMRC Extramural Unit for Hypertension and Cardiovascular Disease's goal is to enhance the quality of life by decreasing the prevalence and impact of CVDs through increased awareness, early intervention, and effective treatment strategies.

The research involves early detection in children, e.g. preventive cardiology addressing early risk factors such as high blood pressure and early vascular aging, to advanced stages of CVD development in the elderly. The research unit aims to understand disease development and identify behavioural, lifestyle, and physiological predictors, as well as early biological markers of CVD, while also addressing genetic and lifestyle factors unique to South African communities.

As part of outreach activities, the unit participated in a global awareness initiative called 'May Measurement Month', for hypertension awareness and developed cartoon-style educational materials for children on healthy lifestyles that can protect against CVDs, which



were handed out at schools and clinics in the region. Another example was a comic strip that was designed to teach the public the importance of salt reduction for blood pressure regulation.

Prof Marlien Pieters, Unit Director, said "Understanding the different causes of CVD amongst the different population groups in South Africa is an important step in reducing inequalities in health in SA and developing evidence-based targets for CVD prevention. These practices should be tailor-made to the South African context e.g., taking cultural diversity into account; making use of locally available foods affordable to the broader public; considering the specific genetic make-up of the different population groups and taking the co-existence of infectious diseases and the metabolic consequences of their treatment into account."

The food-based dietary guidelines for the prevention of CVDs

- Eat plenty of vegetables and fruit every day.
- Use salt and food high in salt sparingly.
- Use fats sparingly. Choose vegetable oils rather than hard fats.
- Use sugar and foods and drinks high in sugar sparingly.
- Be active!
- Eat dry beans, split peas, lentils and soya regularly.
- · Enjoy a variety of foods.
- Fish, chicken, lean meat or eggs can be eaten daily.
- · Have milk, maas or yoghurt every day.
- Make starchy foods part of most meals.
- Drink lots of clean, safe water.

There is an urgent need for communities to boost their resilience against environmental hazards and the impacts of climate change in the face of increasing natural disasters and the far-reaching consequences of a changed global climate, which include changes in the water cycle, bringing intense rainfall and droughts to certain areas, an escalation in the melting of the ice caps, rising sea levels that continue to devastate coastal regions, as well as changes to the ocean, including warming, more frequent marine heatwaves, ocean acidification, and reduced oxygen levels, all of which affect wildlife.

At the SAMRC, the Environment and Health Research Unit (E&HRU), conducts population-based research on environmental risks to health

- with particular emphasis on those living in poverty. Addressing environmental factors can protect and promote human health.

Why does it matter?

Environmental health encompasses the relationship between people and their environment and especially how environmental factors impact our health and well-being. As climate change accelerates, extreme weather events like tropical cyclones, floods, and wildfires become more frequent and severe. These events not only threaten lives but also strain and damage infrastructure and thereby disrupt communities. By addressing disaster risks and adapting to climate changes, we can

protect our health and ensure a safer, more sustainable future.

What can you do?

- Learn and Share Knowledge about local climate risks and disaster preparedness.
 Share this knowledge within your community to increase collective awareness.
- Reduce Your Carbon Footprint by making ecofriendly choices like reducing energy use or minimising waste and opting for sustainable products.
- Join local environmental or disaster response organisations and volunteer for cleaning-up efforts or participating in community planning can enhance local resilience.

Science meets Art







Health Awareness Walk



Showcasing our work and raising awareness for an informed and healthier communities at Green Point Lighthouse

National Science Week



SAMRC participated in the Launch of National Science Week, aiming to inspire the future generation.

'Jars of Hope' Mandela Day







Generation Science (Gen S)



During Youth Month, we hosted Grade 11 and 12 learners for our Gen S Job Shadow Programme, showing them more about the work we do and how we make SA healthier.



ABOUT THE SAMRC

The SAMRC is dedicated to improving the health of South Africans. Established in 1969, the organisation, has for the past five decades been at the forefront of responsive research, medical innovations and transformative science – the organisation conducts and funds health research, health innovation, development and research translation.

