





# ENVIRONMENTAL HEALTH PRACTITIONERS NEWS

Newsletter of Professional Board for Environmental Health Practitioners



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Health Profeser of South Africa

# CHAIRPERSON'S MESSAGE

Greetings to all practitioners across the different categories of registration. It is unbelievable that it is already three years since the inauguration of the current Professional Board for Environmental Health Practitioners (PBEHP). It seems like yesterday when I introduced to you the members of the PBEHP through the 2021 newsletter.

The Board is proud to acknowledge and congratulate the following Board members on their achievements:

- Dr Samantha Lange on obtaining her Doctorate from the University of Johannesburg
- Mr Daniel Hlanyane on being elected the President of the South African Institute of Environmental Health.

As a Board we also wish to take this opportunity to acknowledge all the Board members for the hard work and commitment that they have shown since this Board's inauguration. Thanks to the Secretariat team for the support provided to the Board. It is also appropriate to thank and appreciate you as registered practitioners for supporting this Board and ensuring that this profession remains regulated in order to preserve the profession's status.

2023 has also seen the launch of the Border Management Authority where many of our practitioners are now officially based. We wish them all the best as they continue to safeguard the country at the various ports of entry.

The last twelve months have been very turbulent for the profession. The PBEHP would like to express condolences to the families, friends and colleagues of all the practitioners we lost during this period. It is also a year that experienced

floods in South Africa in February-March 2023 affecting seven provinces, including Eastern Cape, Northern Cape, Mpumalanga, KwaZulu-Natal, and North West. As usual these calamities result in serious environmental health challenges such as the destruction of houses, disruption of water supply and sanitation infrastructure, roads, etc. This then demands that we are up to the task as a profession in preventing and controlling diseases and ill health that may result. This also indicates the importance that we should place on climate change and its effects on environmental health.

We have also experienced outbreaks of food poisoning, monkey pox, mumps, measles and cholera. Cholera was particularly devastating and continues to be every now and then in Southern Africa. We unfortunately experienced the loss of lives in the process. Again, environmental health was called upon and did stand up to the task in managing this outbreak.

The Board is concerned about the rising encroachment on the scope of the profession by various individuals, including employers, and the private and public sector, this is particularly so where spaza shops are concerned.

The Board is happy to announce that the cases of infringement reported to the PBEHP have been attended to and successfully concluded. We however remain one of the least reporting professions in terms of scope infringements. We hereby encourage practitioners to please report formally, so that these can be attended to.

Our current registration numbers are as follows:

| Active Members Registered (A | As at 31 January | 2024) |
|------------------------------|------------------|-------|
|------------------------------|------------------|-------|

| BRD_CODE  | REGISTER_TYPE      | REG_CODE | REGISTER_NAME                        | Total |
|-----------|--------------------|----------|--------------------------------------|-------|
| EHO       | Practitioner       | FI       | FOOD INSPECTOR                       | 9     |
|           |                    | HI       | ENVIRONMENTAL HEALTH PRACTITIONER    | 4,313 |
|           |                    | HIA      | ENVIRONMENTAL HEALTH ASSISTANT       | 61    |
|           | Practitioner Total |          |                                      |       |
|           | Student            | HI S     | STUDENT ENVIRONMENTAL HEALTH OFFICER | 1,956 |
|           | Student Total      |          |                                      | 1,956 |
| EHO Total |                    |          |                                      | 6,339 |

The total current registrations is 6 339, which is an increase from 5 980 in March 2023.





# CHAIRPERSON'S MESSAGE CONTINUED

These numbers are unfortunately not a true reflection of the actual practitioners who are currently practising in various fields of the profession. The Board has developed and is reviewing policies on an ongoing basis, to make the process of registration and reregistration more user friendly for the practitioners.

Paying annual registration fees is very important to keep the various Boards active. The President of the HPCSA, Professor Simon Nemutendani has announced that Council has managed to keep annual fee increases for all practitioners to 2% for the 2023/24 financial year, this is below the current Consumer Price index (CPI) of 7,1%. Council over the last three financial years has managed an average annual fee increase of 2,73% which is below average inflation for these years of 4.95%

The Board would like to commend universities for their commitment to work with this Board and a lot of progress has been made through the Advisory Committee which is composed of members of the Board and members representing the universities.

The Board is also proud to recognise the growing number of practitioners who have acquired higher qualifications. There has been a significant growth within the profession of graduates in the Masters and Doctorate programmes. This also includes those who have been conferred with Professorships.

The Board salutes you and is also aware that there are more practitioners that the Board may not be aware of. Congratulations to all of you! Practitioners are reminded to update their qualifications on their HPCSA portals, so that the qualifications can be properly captured on the register. This year we made a call to practitioners to send through articles for consideration into our annual newsletter, we are happy to announce that we received an unprecedented number of articles from practitioners. Thank you for sharing your studies, your experiences, etc. We unfortunately could not publish all of them, however we have kept all the articles, which also contribute to identifying priorities when mapping up our strategies. I also wish to acknowledge the editorial team for the hard work in consolidating all the articles submitted to the Board

We also made a call to practitioners to get involved in designing a new logo for the profession. Thank you to all of you for all the brilliant entries received. We are happy to announce that our committee, together with the HPCSA Corporate Affairs have decided on the winning logo. The logo is displayed for the first time on this newsletter. Congratulations Ms Tshepiso Modupe for submitting the winning logo. We hope that practitioners will identify with and be proud of the new logo. This new logo was presented to Council, and will soon replace the old one in all official PBEH media statements/documents/website etc.

The Board will be having its next Stakeholder engagement in the North West in 2024. We are looking forward to meeting the practitioners in the North West, and that the rest of the country will be able to attend online, as we will be accessible nationally. The Board will be sharing important developments and progress made on its strategic goals.

#### Chairperson of the Professional Board for Environmental Health Practitioners (PBEHP)

#### **MR J SHIKWAMBANE**



# THE PBEHP LOGO DESIGN COMPETITION WINNER

The Professional Board for Environmental Health Practitioners (PBEHP) conducted a logo design competition from 21 June – 17 July 2023.

The competition received an enthusiastic response from the practitioners as the Board believes that amongst its practitioners there are those who are creative and can make a meaningful contribution in terms of interpreting the profession.

The submitted artwork was judged by a panel based on the criteria that best represents the view of the profession, reflecting a balanced view of scope of practice for environmental health by including various elements of the profession. The other requirements were that the participants should use any of the colours depicted on the HPCSA logo and that colours used should be easily identifiable with the Environmental Health profession.

The entries were evaluated by a duly constituted screening committee which shortlisted the following three entries as prize winners:





The PBEHP congratulates all the winners and the participants and thank them for their interest in the competition.





### **CITY OF EKURHULENI MEAT SAFETY FORUM;** *A MEAT SAFETY INITIATIVE AMIDST A PANDEMIC AND BEYOND...*

#### Makhudu Molepo [HI: 0065471] on behalf of the City of Ekurhuleni Meat Safety Forum

The City of Ekurhuleni (CoE) Meat Safety Forum is a multi-disciplinary inter-sectoral committee that was formed in 2021 in line with the blueprint set out by the neighbouring City of Tshwane Metropolitan at the request of the then Gauteng Member of the Executive Council (MEC) of Health, Dr Bandile Masuku. One of the main formation aims was to strengthen trans-boundary response and interaction between municipalities on meat safety transgressions in the Gauteng province.

The CoE Meat Safety Forum identified the following stakeholders with their related key functions within the meat value chain to add value to the forming objectives and address all meat safety transgressions to ensure that only meat that is of acceptable quality and safe for human consumption is sold to the public, namely:

## Environmental Health Practitioners (City of Ekurhuleni) as the lead stakeholder

- Monitor and enforce compliance to the Regulation Governing General Hygiene Requirements for Food Premises, the Transport of Food and Related Matters (R638 of 22 June 2018)
- Promote the safe handling of meat and meat products through, education and awareness, meat premises inspections and certification of meat handling premises; etc.
- Ensuring food safety in respect to acceptable microbiological and chemical standards, quality of meat for human consumption and optimal hygiene control throughout the meat supply chain from the point of origin to the consumer
- Imposition of prohibition orders at any meat premises where meat is found to be handled in any manner that might compromise meat safety and hygiene

## Veterinary Public Health (Gauteng Department of Agriculture and Rural Development)

- Monitor non-compliance in relation to meat sourced from non-approved suppliers and the prohibition of slaughtering practices at anyplace other than a registered abattoir.
- Verification of transport permits accompanying game carcasses in the chillers including the ones being worked on during joint inspections.

#### Agency for Food Safety and Quality (better known as Food Safety Agency [Pty] Ltd)

- Food Safety Agency (Pty) Ltd,was appointed as an assignee by the now Department of Agriculture, Land Reform and Rural Development (DALRRD) in terms of the Agricultural Products Standards Act, 1990. (Act 119 of 1990)
- Assigned the mandate to enforce regulations related to poultry meat, eggs, processed meat products and certain raw processed meat products

#### South African Meat Industry Company (SAMIC)

- SAMIC was appointed as an assignee by the now Department of Agriculture, Land Reform and Rural Development (DALRRD) in terms of the Agricultural Products Standards Act, 1990. (Act 119 of 1990)
- Assigned the mandate to enforce the Regulations Regarding the Classification, Packing and Marking of Meat Products Intended for Sale in the Republic of South Africa (Regulation No. 1283 of 04 October 2019)

## Gauteng Office of Consumer Affairs (Gauteng Department of Economic Development)

 Responsible in discharging functions assigned to a provincial consumer protection authority in terms of the National Consumer Protection Act (Act 68 of 2008) The CoE Meat Safety Forum also identified the **South African Police Service** (Stock Theft Unit) on a cooptation basis to address matters related to suspicion of meat sourced from livestock theft and to address the criminal elements thereto.

The following are the short-and -long -term objectives of the forum:

- To monitor, control and enforce legislative compliance on all meat and meat products premises in relation to meat hygiene, safety and quality requirements.
- To strive for the maintenance of a high standard of hygiene compliance in all meat and meat products premises.
- To control and enforce correct grading of carcasses.
- To prohibit and control illegal slaughtering.
- To prevent the sale of uninspected and non-compliant carcasses, meat and meat products
- To ensure all meat and meat products are compliant with the Labelling Regulations (R146 of Foodstuffs, Cosmetics and Disinfectant Act, Act 54 of 1972).
- To empower the consumer through educational campaigns with the necessary information essential to make purchasing decisions based on the quality and grading of meat and meat products.
- To advocate for equal access to wholesome animal originated protein food product that is safe, nutritious, inspected and approved for human consumption.

To date, over **one hundred and fifty (150)** joint inspections have been carried out at over **eighty (80)** meat handling premises and meat processing facilities, with the following immediate outcomes:

- An increased regulatory compliance from meat handling premises previously operating without Certificates of Acceptability.
- A marked improvement in meat hygiene and handling practices in meat handling premises issued with compliance orders.

- Enhanced coordination of functions between stakeholders that underpins the importance of intersectoral combined effort in strengthening food control.
- A resolve to undertake continued awareness activities to empower the consumer with sufficient education and information to guide informed choices and decisions when buying meat in line with all health and consumer protections legislations.

The activities of the CoE Meat Safety Forum although not adequately documented, has strong links with similar active Meat Safety Forums in Gauteng (including that of the City of Tshwane and City of Joburg) and, would go a long way in paving a way for the province to device and tighten measures to address trans-boundary meat safety transgressions, as well as create a platform for Gauteng municipalities to share information and responses to meat safety matters of common concern. Perhaps it might act as a blueprint and a springboard for the rest of the neighbouring provinces to follow suit and to initiate a nation-wide coordinated response that might assist in guiding regulatory change to address gaps in legislative frameworks identified during operations.

It is through coordinated effort and intersectoral collaboration that Environmental Health would be able to address some of the many societal ills that affect human health and safety. It is high time that municipalities initiate measures to address common problems in a coordinated approach to maximise limited and diminishing resources.



A multi-sectoral collaborative awareness and education activation on Meat Safety commemorating World Food Safety Day



## ENCROACHMENT OF SCOPE OF PRACTICE FOR ENVIRONMENTAL HEALTH PRACTITIONERS IDENTIFIED BY THE INSPECTORATE OFFICE

The Inspectorate Office was established as a compliance enforcement unit to ensure that registered practitioners comply with the provisions of the Health Professions Act, as well as all rules and regulations governing the practitioners. The main responsibility of the office is to enforce compliance through conducting inspections and attend to complaints of unregistered persons practising illegally. The office receives complaints of encroachment of the scope of practice for Environmental Health Practitioner (EHP) from members of the public, practitioners, and the Board.

#### Identified trend from inspection and investigations.

- 1. Most cases of encroachment of the scope of Practice for Environmental Health Practitioners were against municipalities in different provinces.
- 2. The cases involved municipalities, appointing managers and or senior managers who are not registered EHPs or who have been suspended from the register being appointed to manage Environmental Health/Municipal Health sections /departments. These managers review and approve reports/work of the EHPs, whereas such functions must be performed by the registered EHPs.
- 3. In other cases, people who are neither trained nor registered as EHPs are appointed as EHPs even though the advertisement required a person who is qualified and registered with the HPCSA.
- 4. Others are employed as Environmental Health Assistants to perform functions which falls within the scope of the EHP, while not registered as such.
- 5. There are also those who practise whilst their registration is suspended, which not only amounts to an unethical conduct but also a criminal offence.

#### Legislative Framework

Practising while not registered is a contravention of Section 17 of the Health Professions Act, 56 of 1974, which makes registration with the HPCSA a prerequisite to practise any health profession, registrable in terms of the Act. The Act further provides that practising while not registered amount to a criminal offence.

#### Investigation process

The investigation process involves, conducting the inspection to gather in depth detail from the complainant to verify where there is contravention of the Act. The matter will then be reported to the South African Police Service (SAPS) for further investigation and to effect arrest of the unregistered persons practising illegally. The police will then charge the persons and take them to Court for prosecution by National Prosecuting Authority (NPA).

Where there is evidence of unethical conduct by a registered or suspended practitioner, the matter is referred to the Complaint Handling and Investigation for further consideration by the Pre-liminary Committee.

The Inspectorate Office has no power to arrest nor prosecute, the Constitution of South Africa bestows these powers to the SAPS and the NPA respectively, hence the matters are reported to the police for further investigation and prosecution.

#### **Reporting of complaints**

The HPCSA has implemented an online complaints management system for ease of lodging and tracing a complaint. Complaints can be lodged on the following link - *https://hpcsaonline.custhelp.com/*. You will be required to register your profile before you can lodge a complaint alternatively choose the **anonymous** option and complete the complaint form including the names and address details of the person or practitioner complaint of.

Complaints can also be reported using the following platforms:

Email address:InspectorateOffice@hpcsa.co.za or<br/>VincentS@hpcsa.co.zaPhone number:012 338 3984Cell:0609972857 Mr Eric Mphaphuli

### **ETHEKWINI MUNICIPALITY'S NORTH 2 ENVIRONMENTAL HEALTH TEAM** RECOGNISED AT THE CUSTOMER SERVICE REWARDS AND RECOGNITION AWARDS



#### Siphesihle Masimula

The North 2 (N2) Environmental Health team received recognition at the eThekwini Municipality's Customer Service Rewards and Recognition Awards ceremony, which was held at the Moses Mabhida Stadium. This Environmental Health team won the Best Community Facility and Team Award, which was a symbol of appreciation for all the efforts that the team put together for safeguarding public health and contributing to the eThekwini Municipality's vision of being "Africa's most caring and livable city, where all citizens live in harmony by 2030". This team includes five Senior Environmental Health Practitioners (Nomthandazo Mkhithi, Nompumelelo Dlamini, Sanele Ngesi, Sinothile Molefe and Siphesihle Masimula), one Principal Clerk (Zinhle Mthembu) and one Environmental Health Services Manager (Phindile Vilakazi).

Working within the Health Unit of eThekwini Municipality, this Environmental Health team services the KwaMashu area which entails a business district, residential township, and informal settlements. This area is characterised by high crime, being overpopulated, underserviced, and overloaded infrastructure with continuous failures of the reticulation system, solid waste management challenges, sewer surcharges, blocked storm water drains, vectorrelated challenges, polluted streams, informal traders, as well as illegal connections of drainage pipes, potable water, and electricity. Many environmental health challenges in this area are a result of socio-economic issues like poverty and unemployment in the community. These are social determinants of health, which have an impact on the health and well-being of community members.

In July 2021, during the traumatic experience of civil unrest (looting) that took place in the KwaZulu-Natal province and other regions of South Africa, the N2 Environmental Health Services Office was vandalised, with all its equipment and working tools looted. The N2 team took it upon themselves to roll up their sleeves to clean and clear up all the remaining waste in their offices for the resumption of services. The team continued to bring their personal laptops and other working tools from home in the interest of service delivery and continued to do so until they received donated computers and other equipment a year later from a sister department within the Municipality.

Amid all these challenges, the N2 Environmental Health team continues to show wavering resilience, dedication, and commitment to the health and well-being of the public through the provision of environmental health services and collaboration with other stakeholders to promote a healthy and safe environment for all. In the midst of all routine environmental health duties, this team has excelled in providing health and hygiene education through community outreach programmes, community driven cleanup campaigns and bi-weekly health talks on a local radio station, as well as collaborating with other law enforcement agencies in joint law enforcement operations. Information dissemination and compliance monitoring are key towards the promotion of healthy and safe environments.

Even in challenging times, as we saw during the peak of the COVID-19 pandemic, environmental health services are essential and play a very key role in protecting and improving public health. Environmental Health Practitioners need to mobilise individuals and communities through environmental health education, awareness and participation, in order to reduce the vulnerability of communities environmental challenges and thus improve overall societal well-being and resilience.



On the picture above: eThekwini Municipality Mayor Cllr. Mxolisi Kaunda, Deputy City Manager Dr Musa Gumede, Head of Health Mrs Rose Van Heerden, Acting Deputy Head Ms Nono Lugongolo, and the N2 Environmental Health



### UNLEASHING THE POWER OF CONTINUING PROFESSIONAL DEVELOPMENT: TRANSFORMING ENVIRONMENTAL

HEALTH PRACTICE

#### Introduction

The field of Environmental Health has undergone a significant transformation, shifting from a mere focus on law enforcement to adopting a more scientific approach influenced by education. This shift has not only impacted the courses offered in higher education institutions, but it has also revolutionised the way professionals in the field develop their skills while on the job. But what is the ultimate goal of Environmental Health education? While the ultimate goal of Environmental Health education should not be limited to employability alone, it should create comprehensive professionals who are capable of making extraordinary strides in the profession, and a lasting social impact. This introduces the concept of Continuing Professional Development (CPD). Simply put, it can be seen as a deliberate personal pledge undertaken by professionals to enhance their knowledge, skills, and competencies throughout their professional journey to improve the quality of service. The prominent questions I want to raise regarding CPD programmes are as follows: Do EHPs attend CPD events for compliance with the HPCSA, are the majority of CPD events specifically designed to meet the needs of EHPs, and do EHPs believe CPD events are transformative tools towards enhancing our profession?

# Teaching pedagogies, construction of knowledge and learning cycles

Continuing Professional Development should be viewed as a systematic long-term learning process, in the sense that the procedures and activities implemented must be representative of the dynamic societies we serve. Thus, the CPD initiatives should be underpinned by sound learning pedagogies, which are defined as methods and practices of teaching. Mukhalalati and Taylor (2019) have mentioned a significant challenge that demands our attention, and this can be further advanced in the realm of Environmental Health education. The lecturers or educators often lack formal training in education, relying instead on their industry experience and research. This creates a gap where the full potential of educational design is not realised in CPD programmes. As a result, the application of learning theories becomes weak, hindering the participants' optimal learning experience.

To bridge this gap, we must focus on the construction of knowledge and the implementation of learning cycles. As Mukhalalati and Taylor advocate, knowledge is best constructed through interactions with the real environment. By engaging students in practical, hands-on experiences, we allow them to develop key competencies through repetition and practice. This approach is inspired by the pioneering work of David Kolb, who crafted the four stages of the learning cycle. He emphasises that learning is a continuous process that involves concrete experiences (hands-on activities), reflection (critically analyse and evaluate experiences), conceptualisation (connecting observations and existing theories or frameworks), and experimentation (application of newly acquired knowledge and insights) (Illeris, 2018; Morris, 2020). All educational practices are reinforced by learning theories which are foundational in the acquisition of knowledge and skills. It is pivotal for instructors to understand and select the relevant instructional strategies, assessment and learning objectives (Aliakbari et al., 2015; Kay and Kibble, 2016; Mukhalalati and Taylor, 2019). The diverse behaviours and capabilities of participants should also be taken into account when designing CPD content and learning outcomes. This tailored approach, as highlighted by Aliakbari et al., Kay and Kibble, and Mukhalalati and Taylor, enhances student learning experiences in the health sciences, ensuring that knowledge acquisition and skill development are optimised. Figure 1 depicts a workshop session in progress.



*Figure 1:* 2022 Workshop: Central University of Technology, Free State

## Need for adaptation and review of CPD programmes

It is essential to consistently review and adapt the professional development programmes for EHPs in South Africa with input from the National Department of Health and EHPs. The proliferation of short-term learning programmes offered by private institutions poses a threat to the profession's relevance, as industries are increasingly favouring a cheaper workforce possessing quick qualifications neglecting the value of a degree or diploma. In the face of this challenge, we must take action. We must consistently review and adapt the training of EHPs through impactful CPD programmes to ensure that they stay ahead of the curve. However, it is important to reiterate that these CPD programmes must be democratised, meaning they must be accessible and affordable to those in need. Whilst there are many approaches to CPD rendering (training, mentoring, community of practice, transformative, collaborative information sharing etc.) as noted by Mwila and his colleagues (2022).

# Adapting to the Fourth Industrial Revolution and designing meaningful programmes

In the era of the Fourth Industrial Revolution (4IR), it is vital to adapt our approach to CPD events, considering factors such as data connectivity and simulation challenges. While online learning and assessment are increasingly favoured in higher education, particularly for their flexibility and accessibility, it is important to acknowledge the budgetary and infrastructural constraints that may hinder their widespread implementation in developing countries (Kebritchi, Lipschuetz and Santiague, 2017). Virtual simulations and hybrid events can partially bridge the gaps, but there are certain elements that online platforms cannot fully replicate, especially when it comes to practical demonstrations. Designing meaningful CPD programmes is a constant

challenge, given the evolving demands and expectations placed on graduates and professionals. By continually adapting and innovating in our approach to CPD, we can ensure that the training provided in Environmental Health meets the highest standards and equips professionals with the necessary skills to navigate the ever-changing landscape of the Environmental Health field.



#### Call to action and conclusion

Join us in embracing the power of CPD that work for us to revolutionise Environmental Health. Engage with CPD programmes that go beyond compliance and see them as transformative tools for personal and professional growth.

For further inquiries, please contact us via email at ENVHCPD@cut.ac.za Dr Kgomotso Lebelo Senior Lecturer: Environmental Health Central University of Technology, Free State

# INSTITUTIONALISATION OF GLOBAL GREEN AND HEALTHY HOSPITALS

## NETWORK IN FREE STATE - BONGANI REGIONAL HOSPITAL(PERSPECTIVE)



#### **Global Green and Healthy Hospitals Network**

Global Green and Healthy Hospitals (GGHH) brings together hospitals, health system (MHS), and health organisations from around the world under the shared goal of reducing the environmental footprint of the health sector and contributing to improved public and environmental health. The framework and roadmap to reach this goal is provided by the GGHH Agenda and its 10 interconnected sustainability goals for hospitals and health systems to work towards their facilities or jurisdiction.

Bongani Regional Hospital joined the network in 2016, and adopted two goals (out of 10) Waste and Chemicals. In both goals the hospital has developed and implemented strategic initiatives that promotes sustainable practices in healthcare, rendering the public health sector to be more effective and resilient on climate actions and decarbonisation strategies.

Both goals' strategic initiatives have been recognised internationally and locally, with the recent accolade being the Health Care Without Harm's Health Care Climate Challenge (HCCC), attaining Silver Status on Climate resilience. Furthermore, the two initiatives have aided the development of electronic system (software application for EH professionals) as well as the policy on sustainable pest control for Free State Department of Health.

#### About Tshepo Mokhadi:

Tshepo Mokhadi is an Environmental Health Practitioner at the Free State Department of Health, stationed at Bongani Regional Hospital. With over 10 years' experience in the field of EH, passionate about training EHPs, building their capacity to be aware of factors in environment that affect health such as the prevention of ill health. Spearheading the inception of Global Green and Healthy Hospitals network in South Africa and promoting sustainable practices in the provision of healthcare in public sector. Recognised as a trailblazer by the Centre for Public Sector Innovation (CPSI), recipient of the Alfred Nzo Environmental Health Excellence Award (Overall winner- Innovation Category) and Futurist certified by Centre for Futures Research and Intelligence (CFAR).



# GGHH STRATEGIC INITIATIVES AT BONGANI REGIONAL HOSPITAL



#### 1. WASTE

On this goal the hospital developed a flagship project that was initially meant for healthcare risk waste monitoring (generation trends/tonnages per ward).



#### Waste Information System(WIS)

The WIS is a monitoring tool that was first developed in 2015, to monitor and evaluate medical waste generation at the facility. The system has now evolved into software-based application called the **EHIS**.

#### **Environmental Health Information System (EHIS)**

The EHIS was recently launched on 25 January 2023 as a pilot, the system renders monitoring and evaluation functions of the following aspect of Environmental Health:

- Waste
- Food
- Occupational Health and Safety
- Water Quality

NB: During the 20<sup>th</sup> anniversary the EHP received a tablet as a token of appreciation for the Trailblazer Award 2022 from CPSI, the tablet was then used to enhance and formulate the system to a more efficient Android application, rendering the system more effective and fully digital, which is in line with the e-Health strategy that was first introduced in 2012.

#### 2. CHEMICAL GOAL

On the chemical goal the hospital developed and implemented the Integrated Pest Management (IPM) system. The system was implemented in phases due to financial constraints, it introduced alternative pest control measures that could be implemented within a hospital environment, to render a more sustainable, less toxic, environmental sound and chemically free, with an added cost effectiveness.

#### Phase 1 Ultrasound Pest Repellents



- These devices deter pests with ultra-high-frequency sound, frequencies higher than 20,000 hertz. Humans can't hear the sound emitted by these devices, but some animals and insects are fully capable of picking up ultrasonic sound waves. The high-pitched sound ranges from irritating to deadly, depending on the critter and the strength of the device in question. Ultrasonic devices are powered by electricity and available in plug-in or battery-operated models.
- It's important to note that this type of device is not effective against all pests. Certain insects, like ants, are more resilient than others when it comes to ultrasonic frequencies. Some studies have also shown that ultrasonic repeller may even attract critters (such as mosquitos) into your dwelling. Correct positioning and use of these units is the best way to maximise effectiveness, but don't think of it as an instant solution to pest problems. It takes time for repeller of this type to produce a measurable effect.

**6. Simple to use:** There's no setup required. Just plug in a unit and forget about it.

NB: Some of the pesticides that were discontinued as a result of implementation of the pest repellents include but not limited to: D-phenothrin, D-tetramethrinand Prallethrin(ETOC) found mainly in aerosol insect sprays.

#### Phase 2 Flying Insect Bait traps



With its discreet design, the insect light trap is designed for kitchens, hospitals and food production areas. It renders 30% improvement on performance over conventional units due to its unique attraction grid which reflects the light on to the landing spot thereby stimulating the landing behavior of flying insects.

#### Phase 3 UVC Germicidal Lamp



The **germicidal lights** eliminate micro-organisms found in the air and surfaces so air quality improves exponentially. The air you breathe needs to be of top-notch quality. The ultraviolet **light** disinfects the air so it becomes much cleaner.

#### **Advantages**

It's non-toxic. Unlike harsh chemicals that are sometimes used in cleaning and sanitisation products, UV light is environmentally friendly. UV light disinfection is a physical process, not a chemical one making it an affordable sanitisation method. UV disinfection is a dry method, you can be sure that it will take care of existing mould and prevent its growth.

#### Phase 4 Eagle Eye Bird Repellents



The Eagle Eye is an optical bird repellant that harmlessly deter birds from unwanted areas in the hospital especially roof and gutters, by making use of light beams reflected from direct sunlight. The reflective pyramid rotates sending beams around in a menacing pattern. The light spectrum reflected back by the Eagle Eye and deviate in flight and fly to another destination.

#### **Advantages**

The devices are eco-friendly and does not harm or kill the animals, and durable making it cost effective.

#### Phase 5 Hygiene Monitoring Devices



The lights cause materials such as micro-organism, urine, seminal fluids and blood, to "fluoresce," so that the naked eye can detect them. Typically, UV lights are used to test surfaces especially when there is a disease outbreak or any sudden increase in occurrences of a specific disease at a particular time or place

#### Conclusion

In conclusion healthcare has a central role and responsibility to help lead the way to a green, low carbon, climateresilient future by leveraging its economic, political and ethical clout. Health Care Without Harm and Global Green and Healthy Hospitals network has stood ready as always, to work with members and partners to transform this vision in to reality and Bongani Regional Hospital epitomises the institutionalisation of this strategy in Free State Province.

Global Green and Healthy Hospitals is promoting deep member encouragement throughout the network by pursuing a series of strategies to expand collaboration and innovation. As a result of Health Care Without Harm partner groundWork's efforts, GGHH programme is now accredited by the Health Professions Council of South Africa, so that EHPs who participate (actively) in GGHH workshops can receive CEU points.

GGHH programmes include: Medical Waste, Toxic Materials, Safer Chemicals, Green Building and Energy, Healthy Food, Pharmaceuticals, Sustainable Procurement, Transportation, Water, Climate and Health.

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Continuing Professional Development (CPD) programme is a legislated programme that is applicable for all healthcare practitioners registered in terms of Section 26 of Health Professions Act, 1974 (Act No. 56 of 1974). All registered healthcare practitioners are required to comply with certain conditions relating to CPD programme as a pre-requisite for continued registration. Essentially, the above means that if a healthcare practitioner is not compliant to minimum CPD requirements as determined, the HPCSA has authority to deregister such a healthcare practitioner.

The Health Professions Council of South Africa (HPCSA) may, after consultation with a Professional Board, makes rules which:-

- a. determine conditions relating to CPD to be undertaken by persons registered in terms of this Act in order to retain such registration;
- b. determine the nature and extent of CPD to be undertaken by the persons registered in terms of this Act;
- c. relate to the criteria for recognition of CPD activities and of providers offering such activities; and
- d. relate to offences in respect of, and penalties for, noncompliance with Section 26 of the Health Professions Act.

#### Responsibility

Every health practitioner has a responsibility to ensure that they continually update their professional knowledge and skills for the end benefit of themselves as well as to the ultimate benefit of their patient or clients. As such, the HPCSA has mandate to determine conditions of compliance to CPD programmes, determine nature and extent of such compliance to minimum requirements as well as criteria, in order for health practitioner to remain professionally competent.

The HPCSA duty to ensure that the health practitioner's maintain and enhance the dignity of the relevant health profession and the integrity of the persons practising such profession, includes assessing compliance to CPD requirements.

#### **Determination of compliance**

Health practitioners are required to accumulate Continuing Education Units (CEUs) on an annual basis. Attendance and/ or participating on the CPD recognised activity earns such CEUs; inclusive those for professional practice, ethics, human rights and medical law. Each CEU is valid for 24 months from the date on which the activity took place. This means that practitioners should aim to accumulate a balance of CEUs by the end of their second year of practice, and thereafter top-up on an ongoing basis.

#### Current developments

There are ongoing developments in the CPD programme, mainly affecting the matter in which CEUs, or any evidence of compliance, are submitted to the HPCSA for recording purposes. The important changes to the existing programme which practitioners must note -

- The process of random selection of health practitioners from the HPCSA's database to verify compliance has been discontinued. All registered health practitioners are now expected to comply with the set CPD requirements on a continuous basis.
- The online self-service platform is available on the HPCSA's website to all registered health practitioners to submit enquiries and/or upload the required evidence of CPD compliance. Registered health practitioners can also view their CPD status online. The link below provides a step-by-step procedure on how to access the online portal: https://www.hpcsa.co.za/Uploads/Professional\_Practice/CPD/2021/CPD\_Manual\_for\_Practitioners\_2021.pdf.
- The HPCSA has approved that authorised facilitators and providers of CPD programmes submit the attendance registers directly to the HPCSA in order to update the practitioner's CPD profile. This has been effectively commenced for some Professional Boards, as implemented on 1 March 2022.
- The issuance of CEUs certificates is no longer a mandatory requirement, as the information relating to CPD compliance will be provided directly to the HPCSA by the approved facilitators and providers of the CPD activities.
- The online portal remains active in order to cater for the exceptions, that is the activities not accredited by local providers, but recognised for CPD purposes, for example, when submitting evidence of 'self-study' activity.
- Registered health practitioner will receive a notification, at their nominated contact, of any update on the CPD profile.
  Please contact the HPCSA should such notification not be received within two weeks of attending the CPD activity or if the CPD status is not updated according to activities attended.

#### Non-compliance

As health practitioners are expected to meet minimum CPD requirements on an ongoing basis, the relevant Professional Board, at any time, may resolve to take action to all non-complying health practitioners, such as: -

- Changing the category of registration to supervised practice; until proof of compliance with the CPD requirements are submitted;
- · Successfully passing a Board Examination;
- Suspension from the register until submission of proof of compliance with the CPD requirements is submitted; or
- Any other resolution by the relevant Professional Board.





### OVERVIEW OF ADVANCED ISSUES AFFECTING EHP AND RELATED STAKEHOLDERS

ARTICLE NL MONONELA; EH GROUP Gov./pmc/articles/PMC9257219/

#### ABSTRACT

Research in environmental health is becoming increasingly reliant upon data science and computational methods that can more efficiently extract information from complex datasets. Data science and computational methods can be leveraged to better identify relationships between exposures to stressors in the environment and human disease outcomes, representing critical information needed to protect and improve global public health. We aimed to address this gap by developing the inTelligence And Machine IEarning (TAME) Toolkit, promoting traineedriven data generation, management, and analysis methods to "TAME" data in environmental health studies.

Training modules were developed to provide applicationsdriven examples of data organisation and analysis methods that can be used to address environmental health questions. Target audiences for these modules include students, post-baccalaureate and post-doctorate trainees, and professionals that are interested in expanding their skillset to include recent advances in data analysis methods relevant to environmental health, toxicology, exposure science, epidemiology, and bioinformatics/ cheminformatics. Modules were developed by study coauthors using annotated script and were organised into three chapters within a GitHub Book down site.

The first chapter of modules focuses on introductory data science, which includes the following topics: setting up R/R Studio and coding in the R environment; data organisation basics; finding and visualising data trends; high-dimensional data visualisations; and Find ability, Accessibility, Interoperability and Reusability (FAIR) data management practices. The second chapter of modules incorporates chemical-biological analyses and predictive modeling, spanning the following methods: doseresponse modeling; machine learning and predictive modeling; mixtures analyses; -omics analyses; toxic kinetic modeling; and read-across toxicity predictions. The last chapter of modules was organised to provide examples on environmental health database mining and integration, including chemical exposure, health outcome, and environmental justice indicators. Training modules and associated data are publicly available online *https://uncsrp.github.io/data-analysis-training-modules* Together, this resource provides unique opportunities to obtain introductory-level training on current data analysis methods applicable to 21st century science and environmental health.

**Keywords:** bioinformatics and computational biology, cheminformatics, data science, epidemiology, exposure science, machine learning, public health, toxicology graphical abstract highlights

- Training that translates data science into environmental health research is needed
- Modules were developed to teach coding basics and introductory data science
- Also cover chemical-biological modeling, machine learning, and database mining
- Modules exemplify methods to uniquely address environmental health issues
- Modules allow for improved training towards current data analysis methods

#### **1. INTRODUCTION**

The field of environmental health is rapidly expanding efforts aimed at the improved data science methods and data integration. Data produced in environmental health studies are becoming larger, with increased resolution and expanded variable coverage paralleling technological advancements and improved record keeping. These data now serve as critical resources to increase the understanding of relationships between chemicals in the environment and disease outcomes.

Multiple organisations have recently advocated for increased reliance and proficiency surrounding in silico approaches to advance the science of toxicity testing, improve chemical exposure assessments, and increase data sharing and associated analysis tools (NAS, 2007; NAS, 2017; EU, 2019; Florance, 2020; Sim et al.

However, there remains high demand for personnel that is adequately trained to analyse and manage large datasets to address environmental health issues, representing a timely concern that requires updated resources and training opportunities. We therefore aimed to contribute towards this critical gap through the development of an online toolkit, titled the intelligence And Machine learning (TAME) Toolkit, to promote didactic data generation, management, and analysis methods to "TAME" data in environmental health studies.

The TAME Toolkit was developed to provide a publicly available, self-guided tour on topics spanning introduction to computer programming, chemical-biological analyses, predictive modeling, and environmental health database mining. The majority of computer programming information and examples provided within the TAME Toolkit were based in the R coding language, since this coding environment is publicly available, widely used, and well-documented (The R Project for Statistical Computing, 2021).

Because of this open licensing format, R has emerged as an avenue for world-wide collaboration, benefiting from the continual expansion through thousands of userdeveloped packages that aid in improved data analyses and methods sharing. Packages have varying utilities, spanning basic organisation and manipulation of data to cutting-edge approaches to parse and analyse data through artificial intelligence (AI) and/or machine learning (ML) (CRAN, 2021a; Bio conductor, 2021).

#### 2. METHODS

Data analysis examples were included in the TAME Toolkit to span topics relevant to environmental health, which is notably multi-disciplinary and includes exposure science; epidemiology, toxicology, bioinformatics/cheminformatics, and related disciplines. Examples were developed by the team of authors, pulling from their real-world datasets and expertise in environmental health data analytics. Training modules were organised to include examples of each authors' area of expertise, to provide a broad foundation in data science methods relevant to environmental health. Modules contained within the TAME Toolkit were organised into three chapters spanning 1) Introductory data science; 2) chemical-biological analyses and predictive modeling; and 3) environmental health database mining.

#### 3. RESULTS

Modules were designed to aid in the training of students, post-baccalaureate and post-doctorate trainees, and professionals that are interested in expanding their skillsets surrounding data analysis techniques relevant to environmental health, toxicology, exposure science, epidemiology, and bioinformatics/cheminformatics. These modules will continue to be expanded and improved upon in the coming years, to continue the expanded use of data management and analysis tools to address timely environmental health research topics and promote meaningful collaborations across this multi-disciplinary field of study.

#### 4. DISCUSSION AND CONCLUSION

1 Overall Approach to Organising the intelligence And Machine learning Toolkit (The TAME Toolkit) was developed with the goal of guiding participants with various backgrounds through data organisation and analysis methods that are useful towards evaluating big data in exposure science, epidemiology, toxicology, and environmental health studies. Modules were developed to cover three primary focuses (organised1) Introductory data science; 2) chemical-biological analyses and predictive modeling; and 3) environmental health database mining.

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### MISNOMERS AROUND RABIES: A CASE STUDY IN BUFALO CITY MUNICIPALITY

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#### ABSTRACT

Rabies remains one of the most fatal zoonotic diseases globally. It continues to cause ten thousand deaths mainly in Asia and Africa, 40% of whom are children under the age 15 years.

The Buffalo City Metropolitan Municipality was amongst the regions that was affected by a rabies outbreak between September 2022 and April 2023. The Municipal Health Unit investigated three cases during this period.

Environmental health practitioners played a crucial role in the investigation of these cases in the metro. Furthermore, this investigation revealed several misnomers in the management of suspected rabies.

#### INTRODUCTION

Rabies is a preventable viral disease caused by Lyssavirus which attacks the central nervous system ultimately causing disease in the brain and death (Centers for Disease Control and Prevention, 2020).

There are tens of thousands of deaths caused by the disease every year, mainly in Asia and Africa, 40% of which are the deaths of children under 15 years. In addition, dogs are the main source of human rabies deaths, contributing up to 99% of all rabies transmissions to humans. (World Health Organization, 2023).

#### South African context

Rabies is endemic in South Africa. The KwaZulu-Natal and Eastern Cape have the highest incidence (Blumberg & Herman-roloff, 2023). According to the National Institute of Communicable Deases (2023) there were two municipalities that were affected by rabies in the Eastern Cape, namely, The OR Tambo District Municipality and Buffalo City Metropolitan Municipality.

#### Geographical setting and demographics

Buffalo City Metropolitan Municipality (BCMM) is one of the eight metropolitan municipalities in South Africa and one of the two in the Eastern Cape Province. It is located 1 000 kilometers from Cape Town on the Southeast coast of South Africa. According to the Department of Cooperative Governance and Traditional Affairs (2020) the Metro has a population of 893 157 people and houses 1.5% of South Africa's population. Furthermore, it was also reported that the Eastern Cape Province had a female population accounted for 52.45% of the total population. Based on the present age-gender structure (The Eastern Cape Socio-Economic Consultative Council, 2017).

#### Burden of disease in BCMM

The percentage of deaths by broad cause, deaths are classified into four groups, namely: (i) injuries; (ii) noncommunicable diseases; (iii) HIV and TB; and (iv) communicable diseases together with maternal, perinatal, and nutritional conditions. According to Day et.al (2020) the fourth category causes more than 50% of deaths of children under 5 years, 11% for those under 14 years. Rabies deaths are reported under this category.

# TRANSMITTION MODE, PREVENTION AND SYMPTOMS

Humans are exposed to rabies through bites (and other wounds) inflicted by rabid animals. The virus is contained in the saliva of a rabid animal. Most human rabies cases in South Africa are associated with domestic dog exposures. Although a fatal infection, rabies can be controlled and prevented through vaccination of domestic dogs (and cats) and the use of rabies post-exposure prophylaxis in exposed human cases (Centre for Disease Control, 2020).

According to the National Institute of Communicable Disease (2023) the incubation period for rabies is typically 2–3 months but may vary from 1 week to 1 year, depending on factors such as the location of virus entry and the viral load. Initial symptoms of rabies include generic signs like fever, muscle weakness, headache, pain and unusual or unexplained tingling, pricking, or burning sensations on the wound.

#### **RABIES CASES IN BCMM**

The metro investigated three paralytic rabies cases. Aspects of misnomers are discussed in this chapter.

- The first case was a nine-year-old male, who stayed in Mdantsane. It was unclear how and when he was exposed to the virus. The case presented with muscle weakness. Sample of the saliva was taken for analysis. The results were positive. However, no prophylaxis was administered, he died in September 2022.
- The second case involved a seven-year-old-female, who stayed in Ncera village. The case presented with vomiting and breathing difficulties. The guardian reported an incident of kissing and sharing of sweets with an unknown dog to the family around August 2022. Prophylaxis was not administered, she died in November 2022.
- The third case involved a 28-year-old male, living in Amalinda. He was bitten by his own dog in December 2022. The dog that bit him was fully vaccinated, housed in a secured yard. Upon his first visit to a health facility, the wound was treated and sutured. Prophylaxis was not administered. He later presented with Myalgia, vomiting and agitation in March 2023 and died in April 2023.

The misnomers in these cases are highlighted below:

- Notification period for investigation, often happened when the cases had already presented with symptoms.
- Fully vaccinated dog in a secured yard was rabid, became vicious. Whilst second dog in the same yard did not show any signs of rabies.
- Suturing of the wound that is suspected to be infected with rabies.

#### Mystery of transmission

As part of consultation with local private and state vets, it emerged that a high number of dogs and cats that are kept in well secured yards with limited to no interaction other animals, although, fully vaccinated and yet tested positively for rabies.

The question that practitioners were grappling with is how did these animals get infected with rabies?

#### Rats trapping for rabies test

One of the suspicions was that rats might be carriers, transmitting rabies from the wild animals to domestic animals.

The vector-control team in collaboration with the state vet office humanly trapped rats in the selected areas of the metro to conduct serological test and test for rabies. The result of this study was that all the tested rats were no rabid. Whilst most studies agree that rats can be rabid, there is no conclusive evidence that rats transmit rabies to domestic animals.

#### **Recall bias**

It was also suspected that due to time lapse the family might have failed to accurately remember the events preceding the incident. Thereby omitting details that may bring light to the health personnel attending to the case.

#### **ENVIRONMENTAL HEALTH ROLE**

The following actions by an Environmental Health Practitioner (EHP) will therefore be required:

- Conduct an onsite interview of the effected person i.e., patient.
- Establish the cause of the incident i.e., when, how, where, who and what resulted in the animal attack or contact.
- Establish if the patient was previously vaccinated against rabies or not.
- Establish the condition and whereabouts of the animal involved in the incident. If possible, obtain the name, address and contact details of the owner of implicated animal.
- Confirm the vaccination status of the implicated animal, if possible. (Latest vaccination card)
- Ensure that the patient has received immediate professional medical attention and anti-rabies vaccination treatment.
- Conduct awareness and education to the community about human and animal behaviour to avoid potential animal bites or unnecessary contact with animals in general.
- Should there be a continuous and increase of animal bites in a specific area, a multi-disciplinary Outbreak Response Team should be activated by the district health office affected.
- However, an EHP should not wait for the activation of outbreak response team to investigate a suspected case.



#### CONCLUSION

Lack of information regarding rabies virus is one of the contributing factors that results in the loss of lives within the communities. To control and eliminate rabies, it is necessary to use a comprehensive 'One Health' approach involving community education, awareness, and the proper use of modern vaccines for both pre-exposure and post-exposure. However, the question around the reports from local vets indicating a trend of domestic animals getting rabid in their secured space as indicated above, remains a pertinent one. This question provides a basis for further studies around the transmission of the virus.



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### PROFILING YOUR AREA OF JURISDICTION: BY MTHETHO SITHONGA (HI 0051462)

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#### Contents

- 1. 9 key performance areas
- 2. Mapping your area
- 3. New developments and environmental impact assessments and comments
- 4. Intergovernmental, NGO and NPOs collaborations
- 5. Contents of area profile
- 6. Why area profile important?
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- 8. Explanatory notes.
- 9. References

#### 1. 9 KEY PERFORMANCE AREAS

\*The new Environmental Health Practitioner in the area should have his/her area of jurisdiction profiled with all the relevant information that he/she will need to do his work of identifying, evaluating, putting control measures on those physically, chemically biologically and ergonomic effects that may affect human life and environment.

- Profiling the area makes it easy to know, what your area is composed of e.g. Industrial area, informal settlement, mines, farms etc.
- It helps you to know which areas are problematic and what environmental health issues are there in the area.
- You will know the leaders in the area and other nongovernmental and governmental institutions operating in the area, that you may require assistance from when dealing with environmental health issues.
- Familiarise yourself with current information such as, statistics of the area so you can know which ratio in that area (ratio of one EHP: Population) demographics of the area, socio- economic status and education levels in that area, so you can device material that are relevant, when doing awareness campaigns and health education.
- When profiling the area make sure nothing is left out on our 9 key performance areas (municipal health services according to National Health Act, 61 of 2003) namely:
  - Water quality monitoring (drinking water, final effluent, recreational waters, rivers, lakes, springs) know where they are situated as monitoring sites.
  - **Food control** (have all formal and informal food out lets, whether manufacturing, preparation, packaging, transporting, slaughtering, sales and storages), they need to have certificate of acceptability according to regulation 638 of food, cosmetics and disinfectant Act 54 of 1972 as amended.
  - **Waste management** (recycling sites, sorting stations, transfer stations, waste water reticulations, pump stations and bio- digesters tanks) know where they are situated and problems encountered there.

- Health surveillance of premises (all governmental institutions and private institution places like hospital, prisons, barracks, nurses homes, where animals are kept, vacant plots, accommodation establishments, education institutions, care facilities, offensive trade, recreational facilities, barbers and hair dressers, tattoo parlous, farms and laundries, register them according to their addresses and contact details etc.
- Surveillance and prevention of communicable diseases (trace all communicable disease cases as it occurs, do home visit, trace absconders like MDR/ XDR .T.B liaise with local clinics. Know your outbreak response team in your area and their updated contacts numbers.
- Vector control (liaise with local municipality or private sector or relevant institution when there is a problem with, rodent infestation, fleas, bed bugs, cock roaches, flies and lice etc.)
- Environmental pollution control (air pollution, noise pollution, water pollution, soil pollution, normally comes as complains, other than that surveillance all potential polluters in your area. Like clay bricks, sawmills, mines, quarries, industrial fuel burning appliances, stone crushers etc.
- **Disposal of the dead** (know the crematoriums, mortality pits, grave yards, mortuaries and be involved in exhumations and re- burials enforce requirements and monitor.)
- **Chemically safety** (monitor chemical spillage clean ups, know who is responsible by South African Road Agency in your area, know your fire stations, also do awareness on disposal of chemical things like batteries, animal dip, energy saving bulbs as they contain mercury, car oils, expired pesticides / herbicides and disposal of chemical containers especially in farm areas.



#### 2. MAPPING YOUR AREA

- Get the latest topographical map of your area, showing all the physical features like, rivers, lakes, dams mountains etc, as well as artificial features like town, malls, industries, roads, mines, water treatment works, sewage purification works and its disposal site, farms, formal and informal residential areas etc.
- Display it on top of the table (glass cover)or attached on the wall visible to see all the features you would like to identify
- Colour code it, with different colour pins or markers e.g. all water sources mark it with blue colour, education institutions purple, businesses dealing with food gold colour etc. choose any colour of your choice to mark on the map, but all similar features mark them with same colour e.g. dairy farms.
- By doing so, you will know what you have in your area and where to find it in your area and how many of those are in your area. Automatically if you do surveillances you will know the problems as well.

#### 3. NEW DEVELOPMENTS AND ENVIRONMENTAL IMPACT ASSESMENT

- The Environmental Health Practitioner should be involved in planning phase, implementation phase and completing phase of any development project in his/her area.
- Submission of comments on environmental impact assessment of the area.
- Submission of comments and consents on building plans.
- The projects of low cost house (RDP), the Environmental Health Practitioner should be involved as the end user trainer as well.
- The municipal infrastructure grant has got a portion in the fund, for end user training that supposed to be used by environmental health practitioner to device means and ways to do end user training programme, before the houses are given to the new owners.
- The end user training budget, in most municipalities is being used for something else, where as it's supposed to be given to environmental health section to do end user training for the new houses owners.

#### 4. INTERGOVERNMENTAL AND NONGOVERNMENTAL COLLABORATIONS

- The Environmental Health Practitioner must familiarise himself/herself with other governmental and nongovernmental institutions operating in his/her area, their objectives and programmes, in case there is a need to collaborate programmes like awareness campaigns at the community, schools and crèches focusing on environmental health issues e.g. recycling and swap shops at schools. Health education at schools and crèches.
- Remember, if projects of your interest are not funded by your institution, you can source funding in the private sector by means of requesting sponsorship. The big companies has got community responsibility budget, that is available to assist projects that benefit those communities in which the company is situated. The funding is not free; the company claims it back from South African Revenue Services on tax rebates. There is nothing stopping environmental health practitioner from doing projects in the community.
- Be part of integrated development plan and budgeting in your area where you operate, so that you know, what are the budgeted projects that will take place soon, in your area, as well as future plans.
- Collaboration e.g. with police, dealing with non compliances also visiting initiation schools etc.
- Collaborate e.g. with green scorpions dealing with open water source polluters etc.
- Collaboration is a need, when you have to enforce compliance with legislation.

#### 5. CONTENTS OF AREA PROFILE

- The area profile should be very inclusive of all elements that have to do with environmental health.
- The 9 key performance areas, should be your guide, also depending in each area, each area is unique same as the problems encountered, some areas are along the coast line, some are in land, some areas has got mines, some has got agricultural farms.
- Build your area profile according to 9 key performance areas as well according to the areas of interest in community development, bare in mind it must address environmental health related issues.
- Environmental health has got broad scope that is why every governmental institution should consider having an Environmental Health Practitioner.

#### 6. WHY AREA PROFILE IS IMPORTANT?

- You will know who is in charge in your area e.g. (The King, the Chief, Headman, Induna, ward councilor or committee.)
- You will know who to collaborate with, NGOs, NPOs, other state institutions.
- You will know your area just like your palm of your hand.
- You will know where to put your most energy where it needed most.
- The best of all, your successor will continue where you stop, not to start all over again gathering information about the area, he or she will update the area profile as it necessary as changes occurs.

#### 7. CONCLUSION

It is critically important for each area, for each Environmental health practitioner to have an area profile, in order to know current status of his/her area and for continuity. Whenever you leave your current employment for greener pastures, you should submit an updated area profile for your successor to continue where you stop.

#### 8. EXPLANATORY NOTES

- E.G. It's for an example
- ETC.: its etcetera (meaning and others)
- NGO: stand for Non Governmental Organisation.
- NPO: Non Profitable Organisation.

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- C.M. Sithonga (learn from experience).







### ENSURING SAFE PLAYGROUND EQUIPMENT FOR PRESCHOOLS

#### Thamaga Hilda Thopola

The playground for day care facilities is the one area where children should feel safe and be free to roam. Environmental Health Practitioners (EHPs) are the regulators who determine the compliance, hygiene and safety of preschools, keeping in mind that providing a quality preschool education to children can lay a foundation to future learning and development of the child. Playgrounds equipped with the necessary and relevant equipments, do provide many learning opportunities for children through different types of plays and exercises. The value of plays or exercises to children within playgrounds is affected by the environment and types of equipments therein, such as:

- Swings;
- Rocking equipments;
- Slides;
- · Rotating and spinning equipments and
- Climbing equipments and elevations





Value delivered to playing children is dependent on types of equipments, such as follows:

- Swings and climbing equipments assist with the development of motor skills;
- Elevation assists with developing different perspectives and stimulate imagination;
- All equipments contribute to children learning about cause and effect, physical mastery and manipulation;
- All equipments contribute to a child learning how to have a good relationship with other children; and
- All equipment contributes to children avoiding obesity through physical activity.

To this end, all plays deliver emotional and behavioral benefits.



Environmental Health Practitioners (EHPs) are responsible for issuing health certificates under Annexure A (2) of the National Environmental Health Norms and Standards for Premises and acceptable Monitoring Standards for Environmental Health Practitioners (Notice 1229 of 24 December 2015). These certificates are renewed annually and part of the certification process is ensuring that outdoor equipment is compliant with Section 7 of Annexure A (2). This section clearly states that the play equipment provided must be free from sharp points or corners, splinters, protruding nails or bolts or rusty parts, hazardous small parts, lead-based paints, poisonous material, or flaking or chalking paint. The play equipment should also be designed to guard against entrapment or situations that may cause strangulation.

Although there are many other aspects of compliance for outdoor play areas in preschools such as rodent control, sufficient size, hygiene etc. safe play equipment is essential to reduce the risk for children. In order to apply the requirements of the Norms and Standards and ensure that preschool premises comply for certification the information and recommendations for different play equipment are made.

#### **Recommendations for Environmental Health**

- To ensure that children are able to play freely in a safe outdoor environment. EHPs should implement an equipment inspection/auditing practice by preschool operators/owners which can be audited and verified by EHPs during their annual certification process.
- EHPs should ensure that the inspection of playground equipment forms an integral part of their routine quarterly inspections as per the required inspection frequency of the National Norms and Standards using the recommendations above to reduce risks where possible.

#### REFERENCES

SANS 51176-1, SANS 51176-2, SANS 51176-3 and SANS 51176-6



# **GENERAL** INFORMATION

### For any information or assistance from the Council direct your enquiries to the Call Centre Tel: 012 338 9300/01

Fax: 012 328 5120

#### Where to find us:

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Working Hours: Monday – Friday : 08:00 – 16:30 Weekends and public holidays – Closed

#### Certificate of Good Standing/ Status, Certified Extracts Verification of Licensure, Registrations, Erasures

Email: hpcsacgs@hpcsa.co.za

#### Ethics and Professional Practice, Undesirable Business Practice and Human Rights Of Council: ADV. NTSIKELELO SIPEKA Tel: 012 338 3946 Email: NtsikeleloS@hpcsa.co.za

#### Complaints Against Practitioners Legal Services Fax: 012 328 4895

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