

## Implementation of Integrated Pest Management Bongani Regional Hospital, South Africa

### GGHH Agenda Goals

- Chemicals

### Hospital Goal

- To promote the use of Integrated Pest Management (IPM) system as a preferred method of pest control and thus promote environmental sustainability.
- To advocate for better and environmentally sound pest control practices in the hospital.

### Progress Achieved

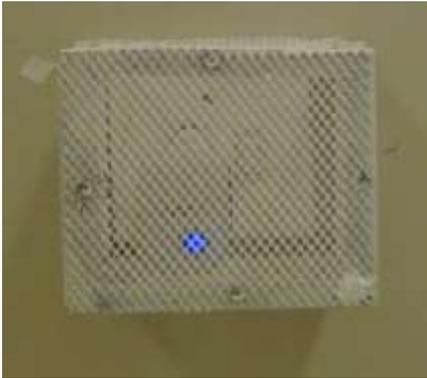
#### Financial benefits

The roll-out of IPM is being done in phases, currently we are at phase 3 and the forecast is that once all the phases are concluded (phase 1 to 5) then the hospital will reap the cost saving fruits of the IPM system. Below is the breakdown of costs incurred per phase so far:

Phase	Expenditure	Activity	Financial year
1	\$9462.74 USD (R 119,827)	Pest repellents	2015-2016
2	\$40,000 USD (R 3158.80)	Sterilization of natural predators	2016-2017
3	\$11051.85 USD (R 139,950)	Installation of insect light traps	2017-2018
4	\$ 15794 USD (R 200,000) approx.	Bird control	2018-2019

#### Environmental benefits

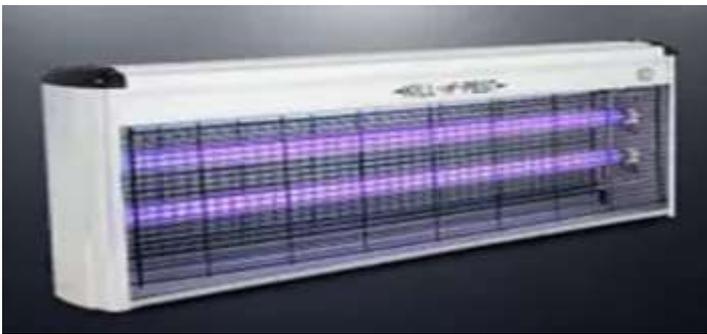
- The hospital is no longer using harmful pesticides for pest control for the past 3 years.
- Completed phase 1 (Ultrasound pest repellents) and 2 (Natural predators): The pest reject device was procured and used in phase1 of IPM implementation as a substitute for fumigation, and the natural predators (cats for rodents, owl boxes also for rodents and wasps for flying insects) were strategically placed and controlled in such a way that patients, staff or community don't come into direct contact with this control measures.
- Recently concluded phase 3 (Insect Light Traps): Using 20 Watt UV light attracts flies, moths, mosquitoes, stink bugs and other flying insects and kills the bugs upon contact with the electrically charged metal grids. 50 indoor units were installed in all the wards in the hospital.



Phase 1



Phase 2



Phase 3

### **The Issue**

Before the implementation of the GGHH chemical goal the hospital was experiencing problems in the following areas of concern:

1. Exposure of harmful pesticides to patients and staff through fumigation.
2. The use of fumigation was costly and not effective as it only lasted for few weeks, and also some patients and staff would react during fumigation service as a result of offensive chemicals being used for pest control.

### **Sustainability Strategy Implemented**

1. Implementation of IPM as a preferred method of pest control
2. Drafting and documentation of IPM policy for the hospital as well as the province (Free State) to ensure that the system becomes a legally binding strategy.

### **Implementation process**

IPM implementation was introduced to supply chain unit using the green procurement principle which favored procurement of environmentally sound services for pest control, and also an IPM policy was drafted to ensure that this green initiative is legislated.

There is progress in chemical goal as far as initiatives are concern since phase 1 till the recent phase 3.

### **Challenges and lessons learned**

The challenges faced during the implementation of the agenda goals were related to approval of procurement of IPM devices, which resulted in the development of IPM policy that was used as a binding document to enforce this initiative to be implemented in the hospital. The lessons learned were that initiatives that do not require financial assistance were easier to achieve as compared to those requiring financial backing.

### **Demographic information**

Bongani Regional Hospital is a level 2 hospital offering specialized health care service to the community of Lejweleputswa district (DC 18). The bed capacity of the hospital is 450 beds with personnel staff number of approximately 1000. The hospital uses a referral system to admit patients from 5 district hospitals namely Nala, Mohau, Thusanong, Katleho and Winburg all of which are located in the vicinity of Lejweleputswa district, with exception only made for emergency trauma services.

### **Links**

Access to Bongani Regional Hospital and information on the services offered-

- [www.fshealth.gov.za/portal/page/portal/fsdp/OUR\\_DEPARTMENT/Hospitals/Bongani%20Hospital/welcome](http://www.fshealth.gov.za/portal/page/portal/fsdp/OUR_DEPARTMENT/Hospitals/Bongani%20Hospital/welcome)

Free State Department of Health Provincial Health Care Waste Management Strategy-

- [http://www.fshealth.gov.za/portal/page/portal/fsdp/intranet/resource\\_documents/health\\_programmes/Environmental%20Health](http://www.fshealth.gov.za/portal/page/portal/fsdp/intranet/resource_documents/health_programmes/Environmental%20Health)

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