

ZOONOTIC DISEASE AWARENESS DAY - ONE HEALTH DAY STUDENTS INITIATIVE – GAUTENG, SOUTH AFRICA, 11 NOVEMBER 2016

The One Health initiative in Gauteng Province took a giant leap into reality on the 11th November 2016, when 150 stakeholders of zoonotic disease control, from different disciplines gathered at Suikerbosrand Nature Reserve for a day of capacity building to detect and respond to 8 selected zoonotic diseases of public health importance.

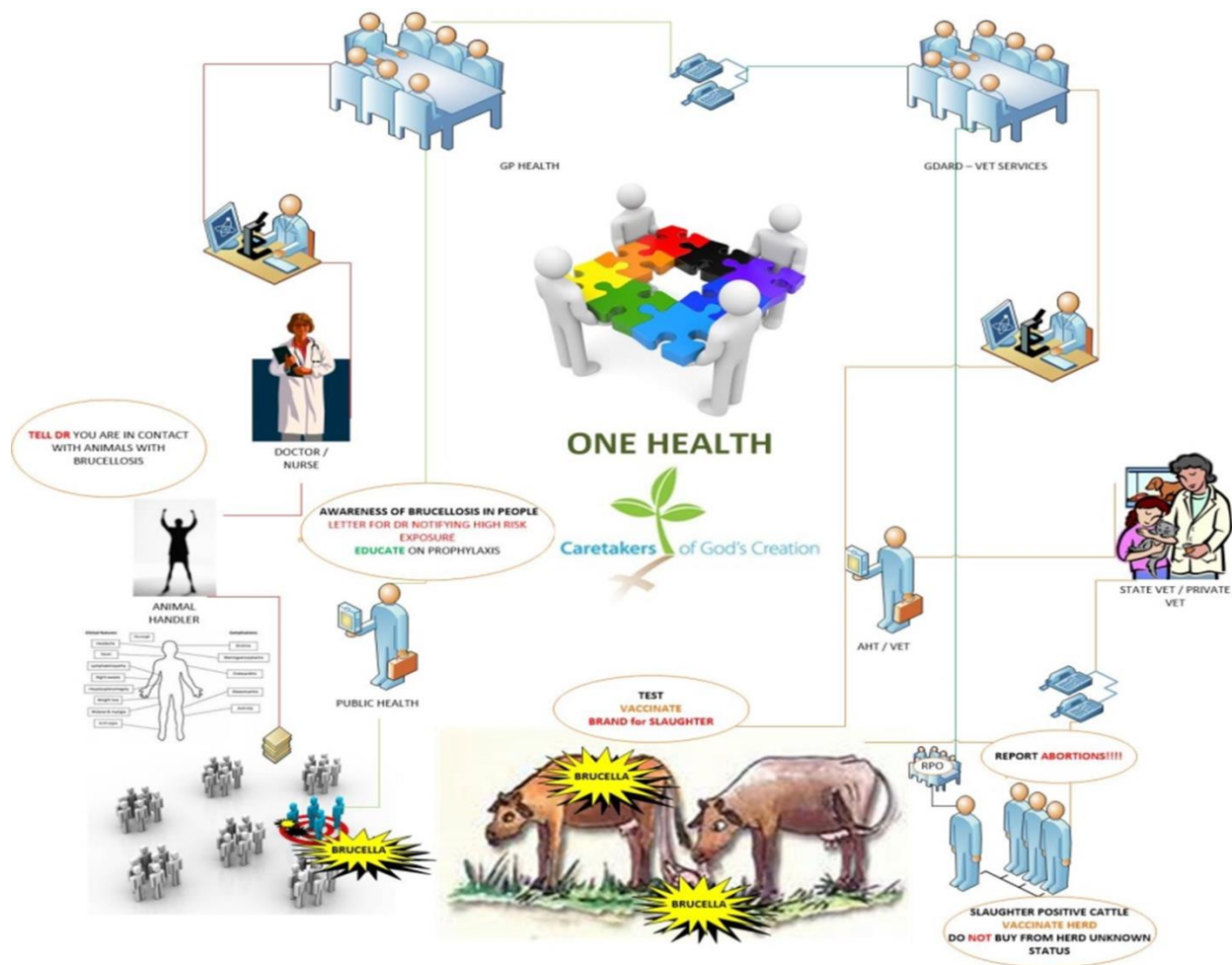
The day was organized by a multidisciplinary team of eighteen students from the University of South Africa, Tshwane University of Technology and three faculties of the University of Pretoria, namely, the faculty of Veterinary Science, faculty of Health Sciences and Faculty of Natural and Agricultural Sciences. Over a course of five months, these students worked to design high quality, scientifically accurate, user friendly brochures and mugs illustrating the transmission cycle of eight zoonotic diseases: **Rabies, Brucellosis, Leptospirosis, Bovine Tuberculosis, Cysticercosis, Rift Valley Fever, West Nile Virus & Anthrax** in colorful animations that can be understood by persons at all levels of literacy. The brochures are a unique product of the One Health Initiative, by having animal and human symptoms of the disease side by side.

This team of highly motivated students made it their mission to go beyond the limitations of their own disciplines and unite beneath a One Health Banner in a strategic, creative effort to build capacity within Gauteng to detect and respond to Zoonotic Diseases by focusing on the following activities on the 11th November:

- (1) Promote the importance of One Health and where zoonotic diseases fits beneath the One Health Umbrella
- (2) Present results of Zoonotic Brucellosis seroprevalence study, Gauteng, 2016
- (3) Measure knowledge of the 8 selected zoonotic diseases before and after the presentation of awareness material, using a questionnaire of 19 carefully selected questions.
- (4) Distribute awareness material (brochures and mugs)
- (5) Give people access to the source of the awareness material (through <https://onehealthstory.com>), so that it can be replicated and distributed freely
- (6) Use awareness material to transfer knowledge of the 8 selected zoonotic diseases
- (7) Establish network of One Health Stakeholders in Gauteng for further One Health projects

Members of the public (farmers), government (health & agriculture) and private sector stakeholders attended the day. It was emphasized on the day, that all the stakeholders present have existing defined roles & responsibilities that they are currently functioning in when it comes to zoonotic disease control even though they might not have realized how it all fits together with other stakeholders. The students demonstrated that, just as all the different groups were seated in one room, in the same way there needs to be one united team effort to manage zoonotic diseases. People were encouraged to be curious about the discipline and knowledge of the person sitting next to them in the auditorium and invited them to learn from each other over lunch.

The following diagram that was drawn to explain the One Health Methodology for the Zoonotic Brucellosis seroprevalence study (conducted in Gauteng, 2016), was used as a guide to explain how the different groups present on the day fit together despite education levels, age and background.



The attendees consisted of approximately 150 adults (ranging from 23 years to 60 years old). These persons included,

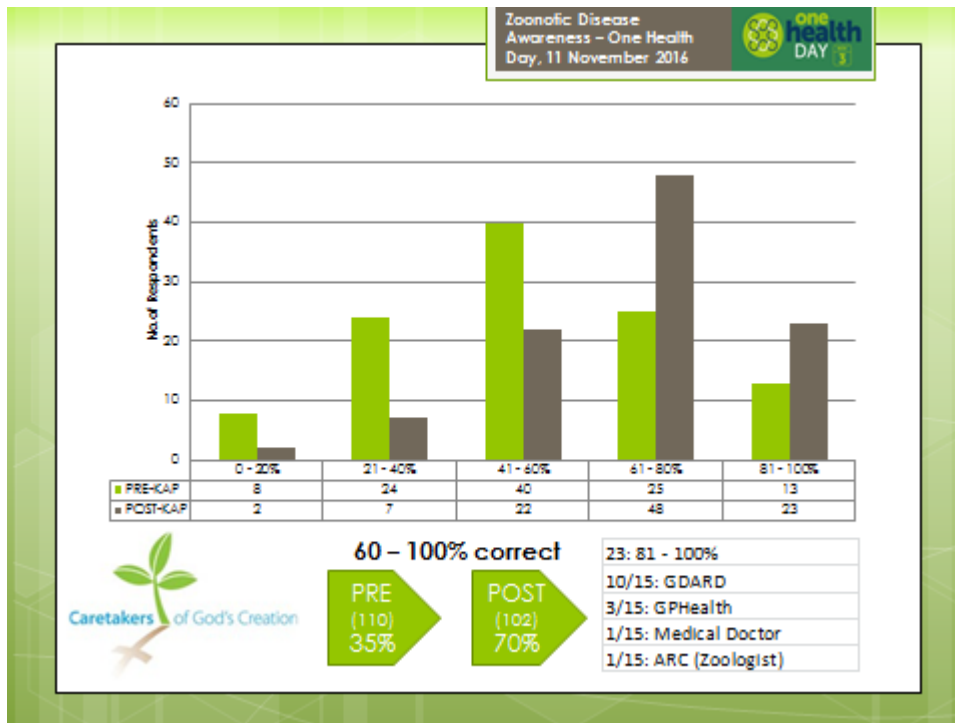
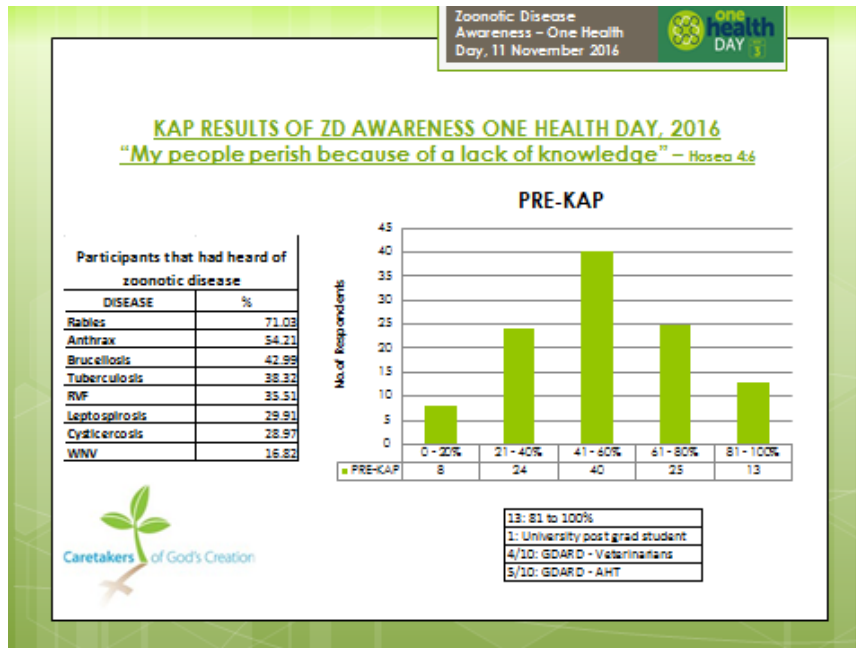
- (1) Emerging Farmers selected by Community State Vets as leaders in their communities
- (2) Farmers that participated in PhD Zoonotic Brucellosis Seroprevalence Study
- (3) Gauteng Department of Agriculture:
 - a. Animal Health Technicians (i.e. the field workers)

- b. State Veterinarians
- c. Veterinary Public Health Officials
- d. Managers
- e. Communications manager (covering the media for the event)
- (4) Gauteng Department of Health and local Health municipalities
 - a. Environmental Health Practitioners
 - b. Surveillance Officers
 - c. Communicable Disease Control managers
- (5) University Professors
 - a. Faculty of Veterinary Science
 - b. Faculty of Health Science
- (6) Laboratory
 - a. National Institute for Communicable Diseases – Special Pathogens Unit
 - b. Onderstepoort Veterinary Institute
- (7) Medical Doctors
- (8) Private Veterinarians
- (9) Red Meat Association
- (10) Media personnel from the University of Pretoria
- (11) POP-UP – NGO (1%) (People’s Upliftment Program)
- (12) Students
 - a. Postgraduate
 - b. Undergraduate
- (13) Health Manager for Mpumalanga Province

As part of the promotion of the day, the students set up a website (www.OneHealthStory.com) that attracted 1093 views and 408 visitors, from across the world, from mid-October to the second week in November 2016, with views still ongoing.

The day began with a presentation on what One Health is. After that, preliminary results of the Zoonotic Brucellosis Field Study that was conducted in 2016, using a One Health Field Methodology was presented, to highlight that such ‘One Health’ field studies are not only possible and highly feasible, but offers greater insight into the epidemiology of zoonotic diseases. A “Knowledge, Attitudes, Perceptions” (KAP) survey was then conducted, to evaluate the baseline level of knowledge of the audience of the 8 zoonotic diseases. After this, the students presented posters of the new designs for each of the eight diseases. Once this was done, a second KAP survey was conducted to measure the effectiveness of knowledge transfer.

Despite it being the first attempt at such a day, the students did extremely well by, increasing the overall zoonotic disease knowledge of the attendees by 100% on the day **(Indicator: no. of persons scoring over 60% of answers correct)**



There was an overwhelming positive result to the day by all attendees present. Everybody loved the mugs, the brochures, the food and all the creative efforts the students made to engage their guests.

Perhaps the greatest outcome of the day was the realization that the base knowledge of people who are directly affected by these zoonotic diseases or directly responsible for detecting and/or responding to these diseases was disturbingly inadequate. However, that situation can definitely be changed by investing in days such as these, which has proven to successfully transfer basic knowledge of these 8 zoonotic diseases. The second hallmark

response to the day was a subsequent formalization of the One Health Initiative into the Gauteng Department of Agriculture and Rural Development Strategic Plan going forward and the formalization of a multisector, multidisciplinary One Health management team.

Overall, the 11th of November was a day that set a precedent for Gauteng. In light of such an event, there can be little excuse left for stakeholders of zoonotic disease control to ignore the call to unite beneath a One Health banner in the mission to build capacity to detect and respond to zoonotic diseases of public health importance. More importantly though, this day served to illustrate yet again, the potential of South Africans to come together and enjoy each other, to learn from our diversity and to reach beyond the limitations of our individual disciplines to see a future of a healthy South Africa, filled with healthy people and healthy animals on a thriving land.

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ZOONOTIC DISEASE AWARENESS DAY: ONE HEALTH DAY STUDENT INITIATIVE, GAUTENG SOUTH AFRICA, 11 NOVEMBER 2016

Building Capacity to Detect and Respond to 8 Selected Zoonotic Diseases (Rabies, Brucellosis, Anthrax, Bovine Tuberculosis, Rift Valley Fever, West Nile Virus, Cysticercosis & Leptospirosis) in Gauteng Province

METRIC TO MEASURE SUCCESS OF EVENT:

- a. Overall increase in zoonotic disease knowledge of the attendees by at least 50% on the day (**Indicator: no. of persons scoring over 60% of answers correct**)
- b. No. of persons attending the day
- c. No. of different disciplines represented day.
- d. No. of organizations represented on the day.
- e. No. of Brochures distributed per disease on the day
- f. No. of Brucellosis mugs that are requested on the day
- g. No. of OneHealthStory cards distributed on the day
- h. No. of persons interested in One Health and further collaboration with their institutions and role/function and expertise, within a week of the event.
- i. No. of One Health Project concepts of Stakeholders present

COMMUNICATION / PROMOTION PLAN

OVERVIEW

The one health event marketing and communication initiatives include:

- Website management
- Publications
- Social media
- Advertising
- Events marketing
- Public relations
- Theatre

The goal of each of these communication tactics is to support the mission of the one health program and advance the efforts to educate the public :

- Building awareness of zoonotic diseases
- providing solutions to combat the diseases
- Creating awareness in African languages which can allow emerging farmers from South African rural areas access information and understand it