#### THE FEDERATION OF INFECTIOUS DISEASES SOCIETIES OF SOUTHERN AFRICA

Points of interest

New structures for SAASP

Celebrating world TB day

Ebola - notes from the field

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# FIDSSA Quarterly

Volume 6 Issue 1

1st March 2015

## FIDSSA 6 Conference taking shape

# **FIRST ANNOUNCEMENT**

# 6th FIDSSA Congress 5 – 8 November 2015 Champagne Sports Resort • Drakensberg

KwaZulu Natal • South Africa

FIDSSA 6, the Federation's next biennial conference is taking shape nicely under the expert guidance of Chair, John Black of IDSSA. A host of excellent international and South African speakers will come together to deliver a diverse programme. In a year dominated by the Ebola epidemic, Professor Dan Bausch from Tulane University, a leading authority on Ebola joins local speakers who have experienced working at the coalface in a special plenary symposium tackling this infection. We welcome back one of South Africa's favourite sons, Professor Keith Klugman, head of Pneumonia at the Bill and Melinda Gates Foundation, who will discuss developments in prevention of childhood pneumonia. A separate track will deal with laboratory and therapeutic interventions in the fight against antimicrobial resistance, and the Global Health Security Agenda will be highlighted. Following its popularity at FIDSSA 5, Infectious Diseases practice in rural South Africa will again be the subject of a symposium, and developments in Vaccinology will be highlighted by Prof Jim Buttery from Australia, an expert in adverse events following immunization, and Prof Lynn Morris who will discuss HIV vaccine challenges. The FIDSSA conference is always a great social occasion too and a chance to spend time with old friends and meet new ones. Look forward to seeing you in beautiful Drakensberg!

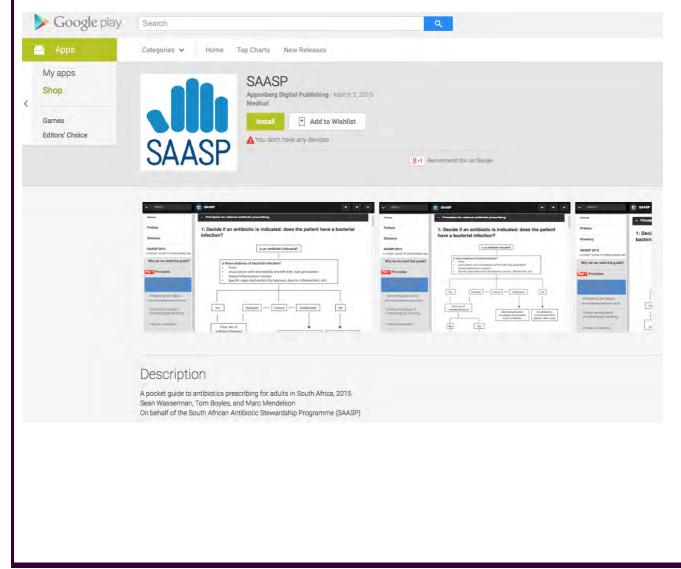
# SAASP Antibiotic Prescribing Guidelines for adults in South Africa, 2015



The new SAASP algorithmic guidelines for prescribing in adults

are now available both as a pdf and as an app for android phones. The pdf can be downloaded from the FIDSSA website home page at http://www.fidssa.co.za. Additionally, the SAASP app is now available free of charge at the Google Play Store and is going through registration with Apple, to ensure that iPhone and iPad users will be able to access the app on their devices shortly.

Developed on behalf of SAASP by Sean Wasserman, Tom Boyles and Marc Mendelson, in collaboration with the Appenberg Digital Publishing Project at UCT, the guidelines went through a series of reviews by specialists in antibiotic prescribing and stewardship across the county. In addition, they are aligned with Structured Treatment Guidelines and the EDL. We look forward to your feedback so that future iterations will enhance the usability and usefulness of this management tool. Please send any comments to saaspfeedback@gmail.com



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## SAASP Update



# New organizational structure to respond to the needs of the South African National Strategic Framework

Following the National Antimicrobial Resistance Summit in October 2014, the NDoH has been finalizing the South African National Strategy Framework and implementation documents that will be published shortly. To align SAASP's work with the needs outlined in the document, a number of sub-groups have been formed under the overall governance of the SAASP Working Group. All interested persons are encouraged to join the work of these sub-groups, which will feedback to the core working group at the annual SAASP WG Strategy Meeting. The leads and objectives for 2015 are outlined as follows:

## Governance - Marc Mendelson and Adrian Brink

- 1. Completion & publication of the National AMR Strategy Framework and implementation plan
- 2. Negotiation of medium term financial assistance to employ a SAASP administration team
- 3. Representation of SAASP at international meetings to feed into the finalization of the WHO Global Action Plan, Global Health Security Agenda, and development of collaboration with international partners
- 4. Perform a situational analysis of provincial AMR activities and AMS programmes at central hospitals to target future initiatives

## Surveillance and Reporting - Chetna Govind and Nelesh Govinder

- 1. Run a workshop with stakeholders to strengthen national AMR surveillance, developing action items, identify resources and determine roles & responsibilities of all stakeholders
- 2. Develop a platform to integrate private and public sector laboratory data on selected AMR pathogens
- 3. Work with the Center for Disease Dynamics and Economic Policy (CDDEP) on an AMR map for selected pathogens

## Antimicrobial Stewardship - Tom Boyles and James Nuttall

- 1. Develop a pocket guide for antibiotic prescribing in adults for South Africa, in pdf and App form, and commence work on a paediatric version
- 2. Produce a web-based, CPD accredited course towards certification for an antibiotic prescribing license, to be required by all antibiotic prescribers in South Africa
- 3. Run the first SAASP residential 'Train the Trainers' course to up-skill key prescribers nationally

## Infection Prevention and Control - Briette du Toit and Joy Cleghorn

- 1. Develop and national hand hygiene (HH) campaign including posters and DVDs, based on the WHO multimodal approach
- 2. Develop a standardized audit tool to be used for HH audits in facilities, and policy and procedures documents
- 3. Ensure national provision of HH products in collaboration with office of standards
- 4. Situational analysis of HH products used in South African health care facilities

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## Education - Andrew Whitelaw and Dena van den Bergh

- 1. Develop a framework of different formal educational opportunities for aspiring AMS practitioners
- 2. Antibiotic Stewardship Programme CME events including a calendar of education events for display on the SAASP website, a focus on 2015 education events e.g. SAASP Pharmacists' conference and the FIDSSA 6 conference
- Host an abstract writing and ASP practice research webinar and/or workshops in each province to increase participation in presenting AMS experience at national and international conferences
- 4. Augment the SAASP website in terms of educational tools available, building a repository of AMS tools that are open access
- 5. Run a short workshop on Twitter 101 and set up a group LinkedIn

### Public Awareness - Andriette van Jaarsveld and Kim Faure

- 1. Develop and integrated communication strategy, which has an approved budget from NDoH or sponsers
- 2. Develop materials to be used in community and healthcare professional awareness campaigns
- 3. Rollout initial HH and cough etiquette campaign to the community

## SAASP Pharmacists' Conference 2015

On Friday 13th February, 180 pharmacists from all over South Africa converged on the Sandton Hilton Hotel for this important event, bringing together public and private pharmacists to hear and debate the current challenges pharmacists face in delivering antimicrobial stewardship in South Africa. Professor Debbie Goff and Dr Kari Bauer from Ohio State Medical Center were among the invited speakers. Debbie is an international advisor to SAASP, and gave 3 talks that inspired the audience. Kari delivered a lecture on Pk/Pd aspects of antibiotic prescribing. Antifungal stewardship was also in the limelight with talks from Adrian Brink and Jennifer Coetzee from Ampath. The conference ended with

a Q&A session where delegates had the chance to ask the panel of expert pharmacists about their challenges and approach. Feedback has been excellent, and SAASP would like to thank MSD for the unconditional educational grant that allowed an independent programme to be constructed.

Speakers & Chairs from left to right: Natalie Schellack, Adrian Brink, Marc Mendelson, Debbie Goff, Andriette van Jaarsveld, Dena van den Bergh, Kari Bauer, James Nuttall, Sabiha Essack and Guy Richards



## Celebrating World TB day

March 24, 2015, marks world TB day and in many ways it will be a celebration of advances in a field that despite being one of the biggest killers in South Africa, remains something of an ancient disease with "ancient" diagnostics and "ancient" treatment. The roll out of Gene Xpert in South Africa has been the largest in the



world and has highlighted many deficiencies in the area of drug resistant TB (DR-TB), with one of the most important being the treatment gap between those diagnosed with DR-TB and those accessing treatment. Despite earlier diagnosis in those accessing treatment, outcomes remain poor in many parts of the country. One of the reasons for this is that there are increasing numbers of patients with extended resistance to the DRTB drugs ("pre-XDR" and XDR) that are only classified as Rifampicin resistant on the Gene Xpert. The empiric National treatment programme regimen for DR-TB has not had the adequate cover to make a suitable impact on outcomes in these groups. The empiric use of the standardized regimen with delayed access to results on extended sensitivities has allowed this group of patients to burgeon in high burden areas and in one cohort in South Africa at 5 years, 73% of 107 patients with XDR tuberculosis had died<sup>1</sup>. The per patient cost of XDR-TB is approximately four times greater than MDR-TB and 100 times greater than drug-sensitive TB and despite DR-TB comprising only 2.2% of the case burden, it consumed 32% of the total estimated 2011 national TB budget<sup>2</sup>.

On this background, strides have been made to improve the diagnostics and treatment of those with extended drug resistance. One of these candidate tests is the GenoType<sup>®</sup> MTBDR*sl* which has shown promise in providing a result within 48hrs in smear positive patients. It has a variable sensitivity depending on the drug tested, but a meta-analysis for the diagnosis of XDR against culture based DST has shown the pooled sensitivity to be 70.9% and specificity to be 98.8%<sup>3</sup>. The NHLS will hopefully be providing this test as a means of reducing the time to the diagnosis of extended drug resistance in patients with confirmed MDR TB.

New drugs are also imminent, with the Health Minister announcing the expanded access to bedaqualine to 3000 patients following the success of the bedaqualine access programme. Together with linezolid and a number of candidate drugs, there is the hope that there may be the ability to make inroads into the dismal treatment outcomes of patients with DR-TB and provide a less toxic regimen. With this comes the caution of responsible use to ensure the newer drugs are not condemned to the same fate as many other drugs due to their inappropriate use. Already cross resistance between bedaqualine and clofazamine has been described which has tempered some of the enthusiasm to use bedaqualine in those previously exposed clofazamine. To access these drugs, provincial TB programmes will be required to set up expert committees to ensure the safe and responsible use of these agents. It has been proposed that any patient with MDR with any additional resistance to the quinolones or second line injectable agents, MDR drug toxicity or a specific mutational pattern will be eligible to access the new drugs through the advisory body. Together with the new diagnostics, this has the potential to reduce the time to appropriate therapy initiation with more effective drugs. The promise that has been shown now relies on the TB programme and NHLS logistics to be sorted out to provide the timely access to both the diagnostics and drugs.

What has yet to be addressed however are the failures of the TB control programme to interrupt transmission and to ensure patients who are diagnosed with TB receive the correct level of care. With the primary transmission of extended drug resistance in communities and ineffective passive case finding strategies that are widespread in much of South Africa, many people will not be able to access

appropriate care and transmission of this disease will continue. Within this group are those who have failed treatment and are not eligible for new drugs who continue to transmit highly drug resistant TB within the community. The promise of new drugs and diagnostics is unlikely to make an impact on the numbers of new patients requiring this treatment unless combined with broader strategies to ensure patients with DRTB are actively sought to start the correct treatment, are kept on treatment and infection control and palliative care strategies are put in place.

- 1. Pietersen E et al. Long-term outcomes of patients with extensively drug-resistant tuberculosis in South Africa: A cohort study. Lancet 2014 Jan 17; [e-pub ahead of print]. (http:// dx.doi.org/10.1016/S0140-6736(13)62675-6)
- Pooran A, Pieterson E, Davids M, Theron G, Dheda K (2013) What is the Cost of Diagnosis and 2. Management of Drug Resistant Tuberculosis in South Africa? PLoS ONE 8(1): e54587. doi:10.1371/journal.pone.0054587
- 3. Theron G, Peter J, Richardson M, Barnard M, Donegan S, Warren R, Steingart KR, Dheda K. The diagnostic accuracy of the GenoType® MTBDRsI assay for the detection of resistance to secondline anti-tuberculosis drugs. Cochrane Database of Systematic Reviews 2014, Issue 10. Art. No.: CD010705. DOI: 10.1002/14651858.CD010705.pub2.

## Ebola - A view from the field - by Tom Boyles

My experience of responding to the Ebola epidemic in west Africa was primarily at the Connaught hospital in Freetown, the largest public sector hospital in Sierra Leone. The hospital hastily constructed an isolation unit once the first cases ar-

rived in the city in May 2014. Isolating cases of Ebola Virus Disease (EVD) is clearly necessary to break the cycle of transmission in the community but the aim of the unit was primarily to protect staff in other parts of the hospital so they could work as normally as possible. As such, all patients presenting to the hospital for care were screened for EVD. Screening has to be highly sensitive to prevent EVD patients progressing to the general hospital wards and it is therefore necessarily non-specific. As a result 30-40% of patients admitted to the isolation unit did not have EVD, which raises some obvious concerns. Most important was the need to practice high quality IPC between patients to prevent nosocomial transmission and secondly was a need to provide treatment for whatever condition the EVD negative patients actually had. There were no diagnostic tests at all so we decided to give all patients anti-malarials and ceftriaxone in case of typhoid or other bacterial infections. It cuts against the grain of an antibiotic steward to use empiric treatment in this way but this was no ordinary situation.

The mortality from EVD in West Africa is estimated at around 60%. For foreign healthcare workers presenting in the early stages to high resource settings it is 0% and the ultimate reason for this is clearly resource availability. There is no good evidence that novel therapies such as Zmapp or convalescent plasma make a huge difference, rather it is meticulous attention to detail regarding fluid and electrolyte balance, prompt recognition and treatment of secondary bacterial infection and a host of other basic interventions that are important.

In contrast to high resource settings the unit I worked at in wasn't able to test any blood parameters or even regularly monitor temperature and blood pressure. Fluid inputs and outputs could only be measured in the most rudimentary ways. The average amount of time spent with a patient each day



was around 20 minutes, in other units it was less. The important clinical question therefore was how to spend those 20 minutes most wisely so you could tip the balance in favour of survival for as many patients as possible.

Although EVD has always been considered a Viral Haemorrhagic Fever there has been very little bleeding seen during the current epidemic. Rather it is a severe viral gastrointestinal disease with associated fever and thrombocytopaenia. Fluid and electrolyte replacement are critical and it is important to choose the route carefully. Patients who were alert and oriented without vomiting could be encouraged to drink large volumes of Oral Rehydration Solution (ORS) and intramuscular anti-emetics could be used if needed. The decision to use intravenous fluids was hotly debated amongst the team I worked with. Proponents, including myself, pointed out the likely survival benefits from replacing lost volume and salts. Opponents had usually seen severe adverse events such as patients pulling out cannulae and bleeding profusely; something which was both a high level infection hazard and hastened death. Based on clinical experience we deemed intravenous fluids to be contraindicated in patients who were agitated or confused or who bled excessively when blood was drawn. In reality this group had a very poor outlook and we concentrated on palliative measured.

Despite the dreadful nature of the disease and the immense suffering of the patients, from a personal perspective my visit to Freetown was extremely rewarding. As an infectious diseases doctor it is refreshing to be at the centre of such an important event and I would highly recommend it to anyone feeling any inclination to go.

## Alexandra Men's Clinic, Region E Gauteng Metro -5 year experience (2005 - 2011)

Sexually Transmitted Diseases Society of Southern Africa

Alexandra Men's Clinic, based at the 8<sup>th</sup> Avenue Clinic in Alexandra, started operating in June 2005 as a joint venture between Gauteng Department of Health Region 8 and Centre for HIV & STIs (formerly Sexually Transmitted Infections Reference Centre) at NICD/NHLS. It operates once a week on Wednes-day mornings and is manned by a specialist male nurse and a male sexual health and HIV counselor.

The clinic is conveniently located for easy access by patients and offers STI testing services free of charge. The clinic was established as firstly, there were no other facilities in the region specializing in men's sexual health, and secondly, men are believed to be the key players' in STI spread and thus also central to its control. Men also have greater possibilities for STI transmission than women due to the fact that they tend to be more mobile than women, which translates to increased probability of having multiple sexual partners.

Men receive complete patient STI management incorporating history taking, examination, treatment, STI counselling, general health education on STIs and provision of condoms. Voluntary HIV counselling and testing is offered by the clinic. Treatment for the patients is based on a mixture of the symptomatic syndromic approach with laboratory-based aetiological diagnosis in asymptomatic men. Symptomatic patients presenting with male urethritis syndrome (MUS) are cultured for *Neisseria gonorrhoeae* in order to obtain bacterial isolates for antimicrobial susceptibility testing. With emerging antimicrobial resistance among gonococci, such ongoing monitoring is crucial. Follow-up visit are encouraged and further treatment is offered if the need arises due to any laboratory-based evidence of infection not covered by the syndromic STI management.

## **Results/Observations:**

The age range of the patients attending the clinic is 16-66 years. Less than 5% of those attending are under 20 years of age. The majority of the syndromes seen on average at the clinic are genital warts 336/793(42.4%), MUS 182/793 (23%), non-STI 183/793 (23.1%) GUS 62/793 (7.8%), and SSW (9/793 (1.1%). Only 19% of men with regular partners use a condom and only 23% use condoms with non-regular partners. More than 67% of men had never tested for HIV while only 37% know their status as being positive. The average prevalence data for the aetiology of STI were for NG (18), CT (17), TV (7), and MG (11) (see Table 1). Of the partner notifications slips offered at other clinics, 13% of partner no-tification attended the clinic. Laboratory testing for STIs, as compared to syndromic approach, illustrated that 2% of *Neisseria gonorrhoeae*, 50% of *chlamydia trachomatis*, 50% of *Mycoplasma genitalium* and 69% of *Trichomonas vaginalis* would have been missed if syndromic management was used alone.

Year	No.	NG	СТ	τv	MG	RPR	HSV-2(%)
2007	164	22 (13.4)	16 (9.8)	10 (6.1)	7 (4.3)	1 (0.62)	6 (3.7)
2008	177	23 (13.0)	17 (9.6)	4 (2.3)	17 (9.6)	6 (3.4)	9 (5.1)
2009		17 (13.3)	17 (13.3)	10 (7.8)	10 (7.8)	1	8 (6.3)
2010		8 (7.1)	16 (14.3)	2 (1.8)	11 (9.8)	5 (4.5)	7 (6.3)
2011	124	20 (16.1)	20 (16.1)	8 (6.5)	9 (7.3)	1	9 (7.3)

Table 1 STI aetiology among men attend	ing the Alexandra Men's Clinic 2007-2011
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**Key**: *Neisseria gonorrhoea* (NG); *Chlamydia trachomatis* (CT); *Trichomonas vaginalis* (TV); *Mycoplasma genitalium* (MG); rapid plasma reagin (RPR); herpes simplex virus type 2 (HSV-2); Lymphogranuloma vereneum (LGV).

## Challenges:

- Asymptomatic Chlamydia trachomatis Trichomonas vaginalis, Mycoplasma genitalium, and to a *lesser extent N. gonorrhoeae*, remain a challenge to diagnose in the absence of laboratory testing.
- There is a need to advertise the service offered at the clinic targeting the youth who are more vulnerable to STI infection
- Even though condoms are easily available and offered at the clinic, there remains a low rate of condom use with regular and non-regular partners.
- There is poor uptake of HIV testing by men and more educational strategies need to be implemented in this regard to improve the uptake.
- Those men with genital warts require substantial follow-up.
- There are referrals to the clinic of non-STI cases such as erectile dysfunction and premature ejaculation.

## Recommendations to improve sexual health services for men.

- Male-focused STI/HIV prevention programmes will be essential to increase men's understanding of STIs and HIV.
- Formulate programmes to educate men about STIs and HIV transmission that will help to change attitudes and reduce the stigma associated with these infections.
- The staff who provide the services need to be continuously evaluated to determine whether they still satisfy patient's need and feedback.
- Improve or introduce training of existing staff to provide a supportive environment for men and an ongoing monitoring of the quality of STI/HIV care
- Patients should always have a feeling of privacy during their clinic visits, thus more private rooms for consultation will be needed.
- There is a need for more information and communication among groups concerned about STI/ HIV.

Contribution: Frans Radebe, Charles Ricketts and Alex Vezi - NICD/NHLS



The ICSSA exco is in the process of getting an Advanced Diploma in Infection Prevention and Control recognized by the South African Nursing Council.

With the desire to be collaborative and encompass the needs of all Infection Prevention and Control Specialists in South Africa, a draft of the core competencies required to hold an Advanced Diploma in Infection Prevention and Control was circulated to all ICSSA Chapters as well as another interested party from the public sector in KZN for input and comment by 15<sup>th</sup> February 2015. Thank you to all Chapters as well as the KZN group for your support, encouragement and well thought through feedback. We will meet and present the changes to the SANC during March and discuss the way forward. An interim member, Marietjie du Toit has been co-opted and tasked to develop the curriculum.

In summary, the core competency framework is as follows: Domain 1: Professional, ethical and legal practice Domain 2: Clinical and non-clinical practice – care provision and management Domain 3: Personal development and quality of care Domain 4: Management and Leadership Domain 5: Research

During a meeting with a task team in KZN, Lesley Devenish discussed the process of forming a Chapter and encouraged the group to form an ICSSA Chapter in KZN.

Recently Marietjie du Toit had the opportunity as a guest speaker at a conference in Gaborone and secured an additional time slot to present and encourage a Chapter to be formed in Gaborone.

Regards, Joy

## Jaundiced about Yellow Fever - Albie de Frey and Garth Brink



South African Society of Travel Medicine

In the thirteen months since a six year old boy died unnoticed in the jungles of Guinea in West Africa, another 8 980 people followed him to an untimely death caused by Ebola. Twenty thousand people had to face up to this terrifying disease. In the same time period, two hundred thousand fell ill from another viral haemorrhagic fever and 30 000 died in Africa and South America. They suffered and died from Yellow Fever.

Yellow fever poses a risk to individual travellers to yellow fever affected areas in Sub-Saharan Africa and South America. It poses a public health risk to countries that do not have local transmission of the virus but in which the vector, *Aedes aegypti* is present. Yellow fever vaccination is therefore carried out for three reasons: to protect populations living in areas subject to endemic and epidemic disease; to protect travellers visiting these areas; and to prevent international spread by minimizing the risk of importation of the virus by viraemic travellers. The latter makes yellow fever vaccine the only vaccine in the world regulated by the International Health Regulations.

The Republic of South Africa harbours *A. aegypti* but has never been host to endemic yellow fever. In line with the IHR, Port Health Authorities have always demanded proof of yellow fever vaccination from travellers entering South Africa from yellow fever affected countries.

Prior to 2001, this included, inter alia, Zambia. When the WHO Publication "International Travel and Health" was published in 2002, yellow fever had mysteriously disappeared from the maps of "... countries / areas where there is a risk of yellow fever transmission... (considered to be endemic areas)"

Following the publication of concerns regarding the safety of yellow fever vaccine (of which millions of doses had undeniably saved thousands of lives in endemic areas and opened up vast areas to economic development, the Panama Canal being just one example) and in an attempt to minimise the risk inherent in receiving the vaccine the WHO revised the Yellow Fever maps in 2011 from showing yellow fever "endemic" areas in which "...either yellow fever has been reported or the presence of vectors and animal reservoirs creates a potential for risk of infection..." to maps indicating geographical areas for which yellow

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fever vaccination for travellers were "...recommended..", "... not recommended..." and "generally not recommended...". Zambia, along with a number of other African countries, was suddenly back on the map, this time in the latter category.... Tanzania, previously classified as having endemic Yellow Fever, was up / down graded to the new category as well.



South African travel health practitioners brought the situation to the attention of the South African health authorities and after several weeks the Department of Health took the stand that if there was ANY risk of unvaccinated travellers to South Africa returning with the virus (from any country...) they must show proof of vaccination.

The status quo, long forgotten by the travelling public and health 'authorities' alike, returned and travellers between South Africa and Zambia had to show proof of yellow fever vaccination. Many questions regarding the scientific basis on which the decisions were made were asked and remain, to this day, largely unanswered. It would appear that the decisions to remove Zambia, then reclassify it as a country / region with "some risk" was based on research done in the 1940 and '50's... not very scientific at all. So much for evidence based travel and public health.

In the last week of January 2015 snippets in the lay press alluded to the fact that the Zambian Government announced that South Africa will no longer demand proof of yellow fever vaccination from travellers from Zambia, a draconian measure allegedly instituted to damage Zambia's tourism industry...

The South African Society of Travel Medicine once again found itself scrambling to find out what the actual situation was and was told, along with some officials in the Department of Health, that the requirements had been scrapped during a meeting of the World Health Assembly in Geneva on Friday 30 January 2015, with immediate effect.

The authors are unaware at the time of writing of any official publication on the matter from the WHO and although the 2010 map of yellow fever recommendations for South America had been revised in 2013 - showing the progress in large areas of the continent from "Vaccination generally not recommended" to "Vaccination recommended" ... the map for Africa had NOT been revised in any manner.

We await with great interest a new map showing that Zambia, along with several other countries has NO risk of yellow fever transmission and that the lower third of the Democratic Republic of Congo, the Katanga province, now *does* carry a recommendation for the administration of yellow fever since the documented outbreak of yellow fever in the Kikondja district in February 2014?

Public health concerns apart - the WHO and representatives of the South African Department of Health

apparently have none, the question remains: If a South African traveller consults a travel health practitioner prior to travel to Zambia and is NOT given a yellow fever vaccine and DOES contract yellow fever in the far west of Zambia, why would a court of law not deem the doctor to be negligent as long as the WHO maps state: "Yellow fever vaccination is generally not recommended .... However, vaccination might (?!) be considered for a *small subset* of travellers to these areas who are at increased risk for exposure to YF virus because of prolonged travel, heavy exposure to mosquitoes, or inability to avoid mosquito bites"

A *large* number of South Africans live and work in Zambia in mining and other industries. All of them fall in the category "prolonged travel" and "inability to avoid mosquito bites", the latter witnessed by the many malaria cases we see in expats and travellers throughout the year.

Do we now NOT vaccinate these people?

South Africans being 'bullet proof' in general, will as a rule NOT visit travel clinics for 'just travel vaccines' - if there is no legal requirement there is NO incentive to seek travel advice. This means that, in addition to remaining concerned about the possible exposure to yellow fever as an individual and the medico-legal implications this may have, an opportunity to counsel travellers on other vaccine and non-vaccine preventable disease - of which malaria is the most obvious - will be missed.

In South America, where health care and medical surveillance is much more sophisticated than in Africa, yellow fever is clearly on the march. The majority of yellow fever deaths occur in Africa and yellow fever coverage in endemic areas is dismal. But with little or no chance of yellow fever returning to the suburbs of Philadelphia and the ports of Europe this first cousin of Ebola Superstar is unlikely to attract the attention of the media it deserves... and arguably continue its relentless march across our continent.

1.http://apps.who.int/ebola/en/ebola-situation-report/situation-reports/ebola-situation-report-4-february-2015

2.http://www.who.int/mediacentre/factsheets/fs100/en/

3.http://www.who.int/immunization/diseases/yellow\_fever/en/

4.Background for the Consultation on Yellow Fever and International Travel, 2010 (update February 2011) Informal Working Group on Geographic Risk of Yellow Fever (WG), a subgroup formed from the World Health Organization (WHO) Consultation on Yellow Fever (YF) and International Travel 5.http://www.who.int/csr/don/2014\_04\_24\_yellowfever/en/

6.http://gamapserver.who.int/mapLibrary/Files/Maps/ITH\_YF\_vaccination\_africa.png?ua=1 7.http://www.who.int/mediacentre/factsheets/fs100/en/

## SASCM Surveillance Workshop



The theme of a recent SASCM Workshop on 14 February 2015 was **Strengthening SASCM Surveillance for Antimicrobial Resistance**.

The National Dept. of Health has partnered with FIDSSA's South African Antimicrobial Stewardship Programme (SAASP) in an effort to control antimicrobial resistance (AMR) in South Africa. Laboratory-based surveillance for antimicrobial resistance is an important part of this initiative. Clinical microbiologists from all over the country met with a view to optimise and unify the current surveillance structures.

Despite the distractions of St. Valentine's Day, the dedicated group put on their "microbiology thinking caps" to address the workshop objectives listed below:

- 1. To develop a list of action items in order of priority to strengthen surveillance in SA and identify possible resources to take these forward,
- 2. To develop a clear understanding of roles and responsibilities of SASCM, NICD, SAASP and the AMR mapping group in coordinating and reporting on AMR surveillance in SA.
- 3. To discuss objectives of AMR surveillance reports and agree upon a format.

This was not a simple task, given the time constraints, but many resolutions were reached!

The group agreed on the following objectives for SASCM's lab-based national AMR surveillance:

- 1. Provide trends of laboratory-confirmed AMR by place, time and person (by producing dynamic national AMR maps) for selected pathogen-agent combinations in SA public and private laboratory sectors
- 2. Determine prevalence of laboratory-confirmed AMR infections (on an annual basis)
- 3. Add antimicrobial consumption data for selected agents to AMR surveillance data on national AMR maps

Currently, the group agreed that private and public sector SASCM reports are not aligned in terms of format: maps/ graphs vs. tables; pathogen-agent combinations; specimen types, etc. Trend data are also not presented despite this being the primary objective and there are obvious statistical "gaps", e.g. no 95% CI. This alignment will be easily achieved when data from both sectors are combined and reports are generated from a single allocated "site" (most likely the National Health Laboratory Service's Corporate Data Warehouse [CDW]). Pathogen- antimicrobial agents to be reported on were agreed upon (full list to be made available on FIDSSA-SASCM website).

There was also an update on the "soon to be released" draft South African Regulations on Notifiable medical conditions – watch this space, laboratories, for your expanded role in reporting!! Again not un-expectedly, the debate on carbapenemase producing/ resistant Enterobacteriaceae (CPE/CRE) continued!

The meeting ended on a positive note with respect to there being the possibility of a single data repository for NHLS and private lab data at CDW. Currently, real-time maps of AMR for the NHLS dataset are being generated by the CDW team. The ideal solution is to keep South African AMR data management in-country using sustainably-funded IT infrastructure.

A need was identified for future SASCM workshops to look at diagnostic stewardship guidelines and a SASCM "master class" for microbiologists on AMR mechanisms, harmonised reporting, treatment, etc.

## SAVE THE DATE! Remember Cape Town 2014? Next stop, Hyderbad!!

