

Press Release

Third meeting of the Cysticercosis Working Group in Eastern and Southern Africa takes place in Maputo

THE 3RD MEETING ON A SERIOUS EMERGING parasitic disease in the Eastern and Southern Africa (ESA) region was held in Maputo, Mozambique, from 11–13 November 2004. The focus of this meeting was *Taenia solium* cysticercosis/taeniosis and was held at the Faculty of Medicine, Eduardo Mondlane University, in Maputo. Two previous meetings of the Cysticercosis Working Group in Eastern and Southern Africa (CWGESA) were held in 2002 and 2003. The 1st was the 'International Action Planning Workshop on *Taenia solium* Cysticercosis/Taeniosis with Special Focus on Eastern and Southern Africa' held in Arusha, Tanzania, during August 2002 (*Acta Tropica* 2003, 87: 1–191). The 2nd took place in Dar es Salaam, Tanzania, 25–26 June 2003 (*Journal of the South African Veterinary Association*, 2003, 74(3): 62). This most recent meeting which took place in Maputo, Mozambique, was attended by more than 30 persons from 13 countries. Both Rwanda and Angola took part for the first time. The week's activities included a field trip to smallholder pig producers and to the diagnostic molecular laboratory at Eduardo Mondlane University. The countries

represented included Angola, Burundi, Denmark, Kenya, Madagascar, Mozambique, Portugal, Rwanda, South Africa, Tanzania, Uganda, Zambia and Zimbabwe. The 2nd and 3rd meetings built on the decisions taken at the 2002 meeting to increase awareness and improve human health and well-being, pig production, the domestic food supply and export opportunities for pork in ESA through development and implementation of an appropriate and sustainable surveillance, prevention and control programme for cysticercosis caused by *T. solium*.

The Maputo meeting was organised by the CWGESA with support from the Danish Bilharziasis Laboratory, the World Health Organization (WHO)/Food and Agriculture Organization (FAO) Collaborating Centre for Parasitic Zoonoses in Denmark, the International Livestock Research Institute (ILRI) with headquarters in Nairobi, the Medical Research Council and USAID in South Africa. Four aims were realised: updating the status of human and porcine cysticercosis in the region, including current or planned research and control efforts, assessing and formulating the implemen-

tation and monitoring strategy for the Regional Action Plan for Combating Cysticercosis in ESA, finalising formalisation of the governance structure of the CWGESA (including a constitution) and consideration of opportunities for increasing awareness and securing long-term support for CWGESA.

Delegates of 11 endemic ESA countries represented (i.e. Angola, Burundi, Kenya, Madagascar, Mozambique, Rwanda, South Africa, Tanzania, Uganda, Zambia and Zimbabwe) gave an update on the status of human and porcine cysticercosis in their countries with emphasis on the current or planned research and control efforts since the 2003 meeting. Representatives of the 2 newcomer countries to CWGESA, Angola and Rwanda, reported on the current state of the disease and related information in their respective countries. South Africa was represented by Professor Tammi Krecek (Krecek and Krecek CC and University of Pretoria), Professor Humberto Foyaca-Sibat (University of Transkei) and Mrs Zilungile Kwitshana (Medical Research Council). In addition, activities on cysticercosis at the international level with ramifications



on the ESA region included a new global WHO initiative on assessing the burden and impact of cysticercosis and the September 2004 Conference 'Establishing a Global Campaign for Combating Cysticercosis' held at the Rockefeller Foundation's Conference Centre in Bellagio, Italy. Activities were outlined for formulating an action plan for securing long-term support for CWGESA. The finalisation of the formal governance structure for the CWGESA included acceptance of a constitution and a standardised surveillance questionnaire for validation in pilot projects. This underpins the Regional Action Plan for combating cysticercosis in ESA by addressing the 6 focus areas of: organisation, surveillance, prevention and control, research, training and networking. Participants included the veterinary, agricultural and health sectors, a 1st step towards the formation of multidisciplinary teams that are needed to combat this disease sustainably.

Taenia solium is a parasite transmitted between humans and pigs. People become infected with the adult tapeworm

form of the parasite (taeniosis) by eating infected raw or undercooked pork. Eggs of the tapeworm pass out with the infected person's stool and can be ingested by free-roaming pigs if people defecate outdoors. Pigs develop the immature larval form of the parasite (cysticercosis) with hundreds to thousands of small cysts forming in their muscles, heart and brain, rendering the pork unfit for consumption. People can also become infected with the cystic larval form of the parasite by ingesting *T. solium* eggs either from direct contact with a human tapeworm carrier or from contaminated food or water (thus one does not need to raise pigs or consume pork to become infected with cysticercosis). In humans the cysts often develop in the brain, causing a condition called neurocysticercosis, which can cause severe headaches, epileptic seizures and sometimes death. Neurocysticercosis is considered to be a common, preventable cause of epilepsy, rendering people incapacitated and unproductive.

Pig keeping and pork consumption in the ESA Region have increased signifi-

cantly during the past decade, especially in rural smallholder communities. In addition, the increased demand for pork in urban areas of the region has resulted in the transportation of pigs from these rural smallholder communities to large population centres. Owing to conditions related to poverty such as inadequate sanitation, poor pig management practices and lack or absence of meat inspection and control, cysticercosis caused by *T. solium* has emerged as an important constraint for the nutritional and economic well-being of these smallholder farming communities. In addition, it is also emerging as a serious public health risk not only in these rural communities but also in the urban areas to which many infected pigs are transported and consumed. Thus cysticercosis in smallholder farming communities exacts a triple price as a barrier to marketing of pigs, thereby seriously reducing the farmers' household economy, promoting protein-energy malnutrition due to condemnation of pig carcasses, and infection of humans affecting their health and productivity.

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