

Press Release

The Cysticercosis Working Group in Eastern and Southern Africa meets again

The 2nd meeting on a serious emerging parasitic disease, *Taenia solium* cysticercosis, was held recently in Tanzania. This meeting followed the August 2002 International Action Planning Workshop on the 'Emergence of the Zoonotic Pork Tapeworm, *Taenia solium*, as an Important Economic and Public Health Problem in Developing Countries' held in Arusha, Tanzania. Last year's workshop was a landmark meeting attended by 90 of the world's experts in this field. The aims of the workshop were to increase awareness to improve human health and well-being, pig production, the domestic food supply and export opportunities for pork in Eastern and Southern Africa (ESA). The 2002 Workshop delegation agreed to develop and implement an appropriate and sustainable surveillance, prevention and control programme for cysticercosis caused by *T. solium*. This was followed up at the meeting held in Dar es Salaam, Tanzania 25–26 June, 2003 which was attended by 37 persons from 11 countries. These included Burundi, Denmark, Kenya, Madagascar, Mozambique, Portugal, South Africa, Tanzania, Uganda, Zambia and Zimbabwe. Professor R C Krecek and Dr Robyn Hyde represented South Africa.

The recent meeting held in Dar es Salaam was organised and funded by the Cysticercosis Working Group in Eastern and Southern Africa (CWGESA) in cooperation with the Danish Bilharziasis Laboratory, the DANIDA funded ENRECA Livestock Helminths Research project in Eastern and Southern Africa, and the WHO/FAO Collaborating Centre for Parasitic Zoonoses in Denmark. Three aims were realised: to update the status of human and porcine cysticercosis in the region, including current or planned research and control efforts, to discuss and formulate the implementation and monitoring strategy for the Regional Action Plan for Combating Cysticercosis

in Eastern and Southern Africa and to formalise the governance structure of the CWGESA.

Delegates of the 9 endemic ESA countries represented (*i.e.* Burundi, Kenya, Madagascar, Mozambique, South Africa, Tanzania, Uganda, Zambia and Zimbabwe) gave an update on the status of human and porcine cysticercosis in their country, with emphasis on the current or planned research and control efforts since the International Workshop 1 year ago. In addition, activities on cysticercosis at the international level with ramifications on the ESA region were also discussed, including a new global WHO initiative on assessing the burden and impact of cysticercosis, review of the eradicability of cysticercosis by the International Task Force for Disease Eradication, and discussion of cysticercosis at the 2003 World Health Assembly. Activities outlined were aimed at implementing 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. A formal organisational structure for the CWGESA was adopted, which includes a Secretariat, Regional Technical Advisory Group and a Task Force for Advocacy and Resource Mobilisation.

T. 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 with the infected person's stool and can be ingested by free-roaming pigs if people defaecate 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 that 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 significantly 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 where 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. Complicating the situation is the importation of the disease into urban areas through the transportation and sale of infected pork.

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