WVA Position Statement on Cysticercosis and Cystic Echinococcosis (Hydatidosis)

Background:
Cysticercosis is a parasitic disease that has severe public health implications and consequences on the quality of life in regions in which this disease is endemic. It is caused by ingesting eggs (ova) of *Taenia solium*, the pork tapeworm (cestode), shed in the feces of an infected human, the definitive host. Humans become infected by eating undercooked pork products with cysticerci (*T. solium* larvae), allowing the parasitic life cycle to be completed in humans. A person who ingests *T. solium* eggs, from undercooked food, from water or due to poor hygiene, will also develop the larval stage (cysticerci). It is the *T. solium* larval cysts that result in the deleterious condition of cysticercosis, with clinical signs dependent on where the cysts form (nervous tissue versus muscle). The prevalence of cysticercosis is often higher in rural and peri-urban areas where pigs are raised in close contact with humans and sanitary conditions are suboptimal. It can also occur in urban settings where poor hygiene prevails.

Cystic echinococcosis (CE), also referred to as hydatidosis or hydatid disease, is also a geographically widespread zoonosis caused by the larval stage of another parasitic cestode, *Echinococcus granulosus*, the adult tapeworm of dogs and other canids. The geographic distribution of CE depends on the prevalence of the intermediate host of the parasite and their close contact with the final host, the dog. CE is a zoonosis of public health significance because humans can serve as an intermediate host of *E. granulosus*, and the cystic infection in humans can become a chronic disease resulting in severe complications.

WVA Position Statement:
Veterinarians and veterinary para-professionals have key roles in mitigating and eliminating the public health risks of *T. solium* and *E. granulosus*. Veterinarians, particularly those in cysticercosis and hydatidosis endemic regions, should advocate for strict implementation of hygienic slaughtering practices that include strict meat inspection and effective disposal procedures to ensure infected organs are removed from further processing and disposed in facilities not accessible to stray dogs or other animals.

The following all contribute to control and towards eventual eradication of cysticercosis and Cystic echinococcosis:
1. Increased public health education regarding risks
2. The need for hygienic conditions in human dwellings
3. Surveillance and early detection of parasitic diseases
4. Development and Implementation of veterinary policies to manage stray dog populations (including the benefits of regular treatment of at-risk dogs with cestode-effective parasiticides)
5. Ensuring that occupational health and safety measures are in place and are well regulated.

With diligent attention, support, and input from veterinarians the human and animal impact of these two important but often neglected zoonotic diseases may be significantly reduced.