



WORLD HEALTH ORGANIZATION  
MEDITERRANEAN ZOOZOSES CONTROL PROGRAMME

# ECHINOCOCCOSIS

and Public Health

Information Pamphlet for the Protection of Public Health and National Economy from Echinococcosis/Hydatidosis



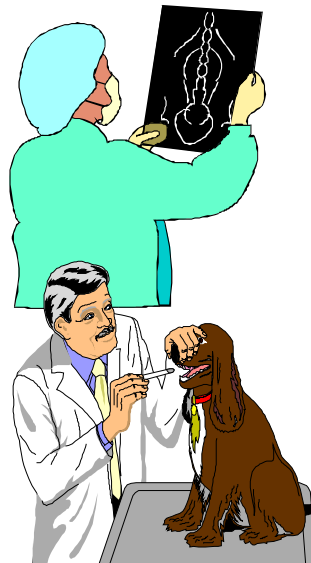
Dr. Nikolaos Charisis (WHO/MZCP)

# SYMPTOMS OF ECHINOCOCCOSIS /HYDATIDOSIS IN HUMANS AND ANIMALS

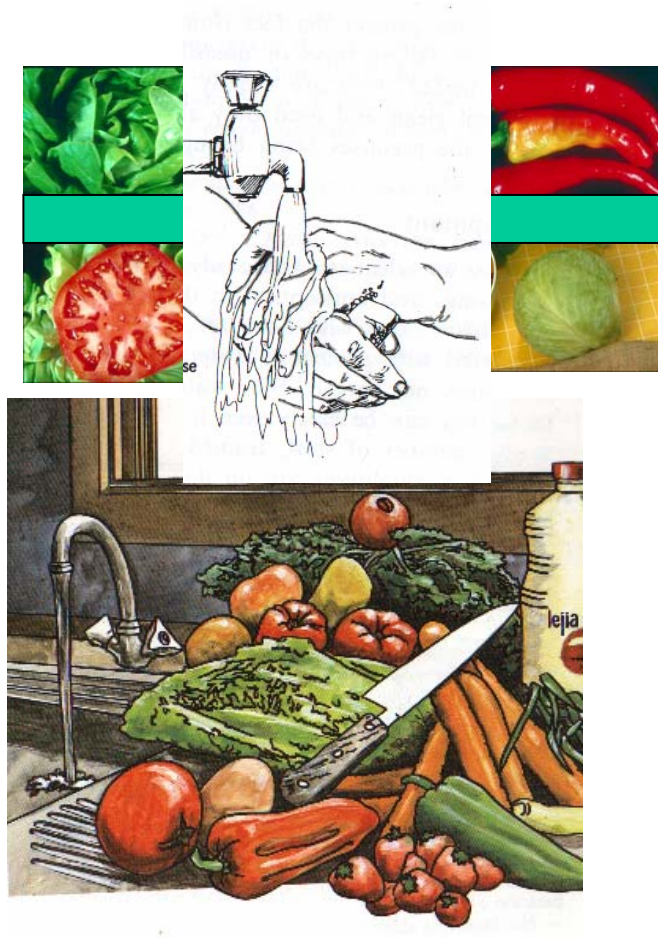


Cysts in the liver of sheep

- In man and productive animals the symptoms vary according to the size and the location of the cysts. These are growing slowly and may eventually exceed 10 cm in diameter, especially in adults and elderly people. The cysts are located mostly in the liver and lungs and less often in the kidney, spleen, bone, the Central Nervous System or elsewhere.
- When the cysts are not affecting vital organs in such a way to interrupt their proper function, they do not cause symptoms and they are detected only on routine x-rays or autopsy. When they affect vital organs they should be removed surgically.
- **Infected dogs do not present any symptoms and do not suffer from the disease. Therefore the dogs are only carriers and show completely healthy.**



# PREVENTION AND CONTROL OF ECHINOCOCCOSIS/HYDATIDOSIS



- Wash properly fruits and especially all vegetables which are eaten raw (raw salads).
- Treat periodically with anti-parasitic drugs all high risk dogs, especially those that hang around the streets where there is a possibility to consume viscera from infected animals (mostly hunting and shepherd dogs).
- Do not give to your dog raw food specifically viscera.
- In highly infected areas control the population of stray dogs.
- Avoid to place the hands in the mouth if are not properly cleaned. Wash well hands with soap and water before handling or preparing food (especially after handling a stray or unknown dog).
- Farmers or shepherds should always slaughter their animals in authorized slaughterhouses. Animals dying from any reason should be incinerated or – if impossible in field conditions - buried deep into the ground when possible or at least covered by large stones in such a way that the carcasses won't be unearthed by the dogs or other carnivores.
- All infected organs condemned in the slaughterhouses should incinerated

# MODE OF TRANSMISSION



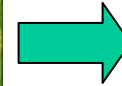
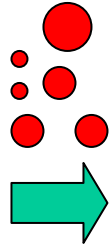
Viscera infected with Echinococous cysts)



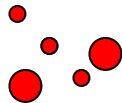
The dogs become infected by eating viscera containing hydatid cysts.



Thousands of eggs spread in the environment with the feces of infected dogs, thus contaminating pastures, vegetables and surface water (headstreams, rivers)



Sheep, goats, bovines and pigs are usually contaminated after the consumption of grass containing eggs of the parasite.



People are contaminated after the consumption of contaminated fruits and raw vegetables or by hand-to-mouth transfer of tapeworm eggs from dog feces.

