

Japan's comments on the Code Commission Report of the February 2012 meeting

Japan would like to express its appreciation to the Terrestrial Animal Health Standards Commission (TAHSC) and related *ad hoc* Groups for all the work they've done and thanks the TAHSC for giving us the opportunity of offering comments on proposed revisions to Terrestrial Animal Health Code texts.

Generally we are satisfied with the proposed texts. According to comments from our experts in Japan, however, we would like to propose the following revision for clarification.

1. Chapter 8.4-Infection with *Echinococcus granulosus*

CHAPTER 8.4.

INFECTION WITH *ECHINOCOCCUS GRANULOSUS* (CYSTIC ECHINOCOCCOSIS)

(Rationale)

Japan believes the OIE Code should be user-friendly. The “cystic echinococcosis” is a familiar name of “infection with *Echinococcus granulosus*”.

Article 8.4.1.

General provisions

Echinococcus granulosus is a cestode (tapeworm) found worldwide. The adult worms occur in infect the small intestines of canids (definitive host), and larval stages the larvae (hydatid cysts) are parasitic on in tissues of liver, lung and other various organs of other mammalian hosts mammals (intermediate host), including humans. Infection with the larval stage of the parasite the hydatid cysts in the intermediate host, referred to as ‘cystic echinococcosis’ or ‘hydatidosis’, is associated with significant economic losses in livestock production and causes a major disease burden in humans.

For the purpose of the *Terrestrial Code*, infection with *E. granulosus* (Cystic echinococcosis) is defined as a zoonotic parasitic infection covering the infection of the adult worm of canids (definitive host) as well as the infection of the larvae (hydatid cysts) of ungulates (ovine, bovine, cervid, camelid and porcine strains), and macropod marsupials and humans (intermediate hosts) with *E. granulosus* (ovine, bovine, cervid, camelid and porcine strains).

Transmission of *E. granulosus* to canids (definitive hosts) occurs through ingestion of hydatid cysts-infected offal viscera from a range of domestic and wild species of herbivores and omnivores (intermediate hosts).

(Rationale)

The definitive hosts and the intermediate host have different progress of the disease. Japan proposes what the definitive hosts and the intermediate hosts are be clearly described in the Code. Humans are also important intermediate hosts even if the OIE Code does not cover human diseases.

A term of “offal” is not defined in the OIE Code. The “offal” can be assumed to have different meanings; it means “viscera and trimmings of a butchered animal often considered inedible by human” or “the entrails and internal organs of an animal used as food” according to dictionaries. Japan proposes to replace the “offal” with “viscera” because the most important infection sites of the parasite are liver and lung regardless of whether they are for food or not.

Article 8.4.3.

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- a) Dogs should not be fed viscera and offal from any animal species unless it has been treated in accordance with Article 8.4.6.

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- d) When livestock cannot be slaughtered in a *slaughterhouse/abattoir*, and are home-slaughtered, dogs should be prevented from having access to viscera and offal, and not be fed viscera and offal unless it has been treated in accordance with Article 8.4.6.

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- b) Dogs known to be infected or suspected of having access to raw viscera and offal, or in contact with livestock should be dewormed at least every 4-6 weeks with praziquantel (5 mg/kg) or another cestocidal product with comparable efficacy; where possible, faeces excreted up to 72 hours post treatment should be disposed of by incineration or burial.

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b).....

- i) viscera and offal containing hydatid cysts should be destroyed by incineration or burial, or rendered, or treated in accordance with Article 8.4.6.;

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Article 8.4.6.

Procedures for the inactivation of *Echinococcus granulosus* cysts in viscera and offal

For the inactivation of *E. granulosus* cysts present in viscera and offal, one of the following procedures should be used:

(Rationale)

As mentioned above, viscera such as liver and lung are important for prevention of the disease regardless of whether they are for food or not. It is desirable to define “offal” in the Code but, otherwise, Japan proposes to write “viscera” with the offal to prevent liver and lung that are not covered by the offal from being exempted from the targets.

2. Chapter XX-Infection with *Echinococcus multilocularis*

CHAPTER X.X.

INFECTION WITH *ECHINOCOCCUS MULTILOCULARIS* (ALVEOLAR ECHINOCOCCOSIS)

(Rationale)

Japan believes the OIE Code should be user-friendly. The “alveolar echinococcosis” is a familiar name of “infection with *Echinococcus multilocularis*”.

Article X.X.1.

General provisions

Echinococcus multilocularis is a cestode (tapeworm) which is widespread in some parts of the Northern Hemisphere, and it is maintained mainly in wild animal populations. The adult worms occur in infect the small intestines of canids (definitive host), particularly foxes, and larval stages the larvae (metacestode) are parasitic on in tissues of liver and other various organs of other mammalian hosts (commonly rodents), including humans. Infection with the larval stage of the parasite larvae in the intermediate host, causes severe disease in humans after the years of incubation period (referred to as ‘alveolar echinococcosis’), but does not cause discernible health impacts in livestock. in many cases of livestock, they are slaughtered for consumption before showing clinical signs.

For the purpose of the *Terrestrial Code*, infection with *E. multilocularis* (alveolar echinococcosis) is defined as a zoonotic parasitic infection covering the infection of the adult worm of domestic and wild canids, and felids, (definitive hosts) as well as the infection of the larvae (metacestode) of rodents, and livestock such as pigs and horses and humans (intermediate hosts) with *E. multilocularis*.

Transmission of *E. multilocularis* to canids (definitive hosts) occurs through ingestion of metacestode-infected viscera from a range of wild small mammalian species (intermediate hosts) and predation of wild rodents (intermediate hosts). Foxes and some other wild canids are the most important definitive hosts in maintaining the cycle at the wildlife-human interface through contaminating both rural and urban environments. Dogs may also act as important and efficient definitive host in both rural and urban environments, providing an important potential source for human infections. Even though the potential role of felids in transmission of infection to humans cannot be excluded, their epidemiological role is considered almost negligible. Pigs may become infected but the parasite remains infertile; therefore, they have no role in transmission of the parasite normally the parasite in them remains immature and lacks the ability to infect the definitive hosts.

(Rationale)

The definitive hosts and the intermediate host have different progress of the disease in the same way as infection with *E. granulosus*. Japan proposes what the definitive hosts and the intermediate hosts are be

clearly described in the Code. Horses and other livestock and humans are also important intermediate hosts.

It is appropriate to add the predation of metacystode-infected wild rodents as the infection route of *E. multilocularis* to the definitive hosts because it is also usually observed in the natural world as well as the ingestion of viscera of wild mammals.

It is extremely rare in nature that the parasite in pigs infects the definitive hosts because it remains immature or previous stages of the metacystode. But it can develop to the metacystode which can reproduce itself, under some conditions.