
Animal and Plant Health Unit (ALPHA UNIT)

Minutes of the 4th meeting of the Working Group on *Echinococcus multilocularis* infections in animals

Held on 29-30 June 2015, teleconference

(Agreed on 8 July 2015)

Participants

- **Working Group Members:**
 - Rene Bødker
 - Helen Roberts
 - Thomas Romig
 - Helene Wahlström
 - Preben Willeberg
- **Hearing Experts¹:**
 - Not applicable
- **European Commission and/or Member States representatives:**
 - Not applicable
- **EFSA:**
 - ALPHA Unit: Frank Verdonck
 - AMU Unit : Gabriele Zancanaro, Federica Barrucci (only 29 June)
- **Others:**
 - Not Applicable

¹ As defined in Article 17 of the Decision of the Executive Director on the selection of external experts:
<http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>.

1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from Adriano Casulli.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes² and the Decision of the Executive Director on Declarations of Interest³, EFSA screened the Annual Declaration of Interest and the Specific Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of this meeting.

4. Scientific topics for discussion

The conceptual models on the probability of introduction and the probability of establishment were reviewed and edited during the meeting. Different scenarios will be described for wild canids and domestic animals. The models will be populated with data from Norway, Sweden, Finland, Malta, United Kingdom and Ireland where possible. It is expected that data will be available to assess at least the effect of border checks on the probability of introduction via movement of dogs. Furthermore, it was agreed (on 29 June) to document that implementation of early detection is not possible for *E. multilocularis* but no modelling effort will be done. On the other hand, the use of the Bayesian methodology to take the history of *E. multilocularis* surveillance into account when assessing parasite freedom will be explained in the opinion. For the efficacy of deworming treatment, it was agreed to focus on studies using the recommended dose of 5 mg/kg bodyweight in dogs. Data from the EU summary report on trends and sources of zoonoses have been consulted when describing the *E. multilocularis* status of countries and when describing human Echinococcosis cases. In addition, Member States were contacted to provide additional information on prevalence in host species, human cases, surveillance, notification and dog movements.

5. Next meeting

25-26-27 August 2015, Brussels

² <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

³ <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

Animal and Plant Health Unit (ALPHA UNIT)

Minutes of the 3rd meeting of the Working Group on *Echinococcus multilocularis* infections in animals

Held on 7-8 May 2015, Parma (Italy)

(Agreed on 25 May 2015)

Participants

- **Working Group Members:**
 - Rene Bødker
 - Adriano Casulli
 - Helen Roberts
 - Thomas Romig
 - Helene Wahlström
 - Preben Willeberg
- **Hearing Experts¹:**
 - Not Applicable
- **European Commission and/or Member States representatives:**
 - Helene Klein (via teleconference on 8 May, 9.30-10.30)
- **EFSA:**
 - ALPHA Unit: Frank Verdonck
 - AMU Unit : Gabriele Zancanaro
- **Others:**
 - Not Applicable

¹ As defined in Article 17 of the Decision of the Executive Director on the selection of external experts:
<http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>.

1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from Franz Conraths.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes² and the Decision of the Executive Director on Declarations of Interest³, EFSA screened the Annual Declaration of Interest and the Specific Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of this meeting.

4. Scientific topics for discussion

The approaches to answer the Terms of Reference were discussed in detail. The *E. multilocularis* status of Member States and adjacent countries will be reported as endemic, non-endemic or uncertain endemicity status. The prevalence data reported in the literature will be presented in a table. The role of different species as definitive or intermediate host will be described based on the available scientific literatures. This will also be done for risk factors regarding introduction and establishment of *E. multilocularis*, although only very limited information is available. Different scenarios on the introduction and establishment of *E. multilocularis* will be described to compare the role of wildlife and domestic animals, border checks and presence/absence of definitive wildlife hosts. Wildlife experts will be contacted to obtain information on the number of juvenile male foxes crossing country borders and on the fox population densities. The surveillance and monitoring programmes in endemic and non-endemic countries will be described and, for a few scenarios, calculations will be provided on the number of samples to be taken to document freedom of disease or to perform early detection. Studies performed aiming at the control of *E. multilocularis* in wildlife host species will be described based on the available scientific literature. The number of reported and estimated human alveolar echinococcosis (AE) will be reported in a table and Member States will be contacted to obtain information on the notification requirements. The risk factors for human AE will be described based on studies performed in Europe and Asia. The burden of AE and the economic cost in humans/animals will be documented based on the available scientific literature to assess the impact of *E. multilocularis* infection in animals on public health. A model that quantifies the number of eggs excreted in a non-endemic area will be used to estimate the efficacy of treatment protocols. Both the drug efficiency and treatment compliance will be taken into account. Finally, the advantages and disadvantages of the different laboratory tests to detect *E. multilocularis* and to use them in surveillance/monitoring programmes will be described. Only few studies provide clear data on test sensitivity estimates and will be described in the main text of the opinion, other studies will be cited in the relevant text sections of the corresponding appendix. Different options will be provided on how better estimates of diagnostic test sensitivity might be obtained in the future.

5. Next meeting

29-30 June 2015, web meeting

² <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

³ <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

Animal and Plant Health Unit (ALPHA UNIT)

Minutes of the 2nd meeting of the Working Group on *Echinococcus multilocularis* infections in animals

Held on 24-25-26 March 2015, Parma (Italy)

(Agreed on 07 April 2015)

Participants

- **Working Group Members:**
 - Rene Bødker
 - Adriano Casulli
 - Franz Conraths (via web on 24 March)
 - Helen Roberts
 - Thomas Romig
 - Helene Wahlström
 - Preben Willeberg
- **Hearing Experts¹:**
 - Not Applicable
- **European Commission and/or Member States representatives:**
 - Not Applicable
- **EFSA:**
 - ALPHA Unit: Frank Verdonck
 - AMU Unit : Gabriele Zancanaro
- **Others:**
 - Not Applicable

¹ As defined in Article 17 of the Decision of the Executive Director on the selection of external experts:
<http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>.

1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from Helene Klein (EC).

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes² and the Decision of the Executive Director on Declarations of Interest³, EFSA screened the Annual Declaration of Interest and the Specific Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of this meeting.

4. Scientific topics for discussion

All the Terms of Reference were discussed in detail: what are the exact questions to answer, which data are available or should be gathered, which approach will be taken. The geographical distribution and prevalence of *Echinococcus multilocularis* in the European Union and adjacent countries will focus on the current situation rather than including old historical data. Temporal and spatial heterogeneity will be described. The importance and role of the different host species in the life cycle of the parasite will be assessed based on infectivity data and the probability of a species to take part in the life cycle of the parasite. A conceptual model will be generated to estimate the risk of introduction of *E. multilocularis* via domestic and wildlife species. The monitoring/surveillance programmes on *E. multilocularis* in definitive hosts which are in place in countries where the parasite has not been detected, will be described and analysed. Data on the number of alveolar echinococcosis (AE) in Europe will be collected, and as AE may not be notifiable everywhere this will require contact with MS. Risk factors for AE will be described that have been identified in Europe or that could be relevant to the European situation. The efficacy of deworming drugs will be assessed based on published studies and different scenarios for treatment protocols will be assessed using a model. The available diagnostic methods to detect *E. multilocularis* will be described and the sensitivity and specificity of the tests will be summarized. Requirements for documentation of test evaluation for the sensitivity of the tests used to document freedom will be discussed.

5. Next meeting

7-8 May 2015, Parma

² <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

³ <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

Animal and Plant Health Unit (ALPHA UNIT)

Minutes of the 1st meeting of the Working Group on *Echinococcus multilocularis* infections in animals

Held by WEB-conference, 26 February 2015

(Agreed on 05 March 2015)

Participants

- **Working Group Members:**
 - Adriano Casulli
 - Franz Conraths
 - Helen Roberts
 - Thomas Romig
 - Helene Wahlström
 - Preben Willeberg
- **Hearing Experts¹:**
 - Not Applicable
- **European Commission and/or Member States representatives:**
 - Not Applicable
- **EFSA:**
 - ALPHA Unit: Frank Verdonck
 - AMU Unit : Gabriele Zancanaro
- **Others:**
 - Not Applicable

¹ As defined in Article 17 of the Decision of the Executive Director on the selection of external experts:
<http://www.efsa.europa.eu/en/keydocs/docs/expertselection.pdf>.

1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from Rene Bødker.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes² and the Decision of the Executive Director on Declarations of Interest³, EFSA screened the Annual Declaration of Interest and the Specific Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of this meeting.

4. Scientific topic(s) for discussion

4.1 Terms of Reference

The background of the mandate and the Terms of Reference (TORs) were presented and discussed.

4.2 Systematic literature reviews

A consortium has provided an interim report on *Echinococcus multilocularis* systematic literature reviews in the context of an EFSA grant to prepare for this mandate. The systematic literature reviews are related to the TORs of this mandate. The detailed data extraction tables will be made available to the WG experts and a final report will be delivered by the consortium (June 2015).

4.3 Required information

A discussion took place to identify which information would be required, in addition to the systematic literature reviews, to address the TORs. It was agreed to contact all Member States via the AHAW Network. A list of data needs will be generated and discussed in the next working group meeting.

4.4 Task distribution

A lead expert was assigned to each TOR to prepare the structure of the section, assess the relevant systematic literature review and list other data sources that are available or will be required to present the relevant scientific evidence and uncertainties on the topic.

5. Any Other Business

The schedule of upcoming meetings was presented.

6. Next meeting

24-26 March 2015, Parma

² <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

³ <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>