




EFSA scientific and technical assistance on the collection and review of updated epidemiological data on porcine epidemic diarrhoea (PED)

Frank Verdonck

Animal and Plant Health Unit

European Food Safety Authority - EFSA

BACKGROUND



This request **follows the already published EFSA Scientific Opinion on PED¹** and emerging porcine deltacoronavirus, where it is highlighted that **limited active monitoring is conducted in the EU** and that **only few Member States reported PED clinical cases and/or PEDV-seropositive animals** within the last 10 years. Member States are concerned by the limited and scattered epidemiological data available on PED and expressed the **need for more efficient sharing of information on this disease.**

¹EFSA Journal 2014;12(10):3877 [68 pp.]. doi:10.2903/j.efsa.2014.3877



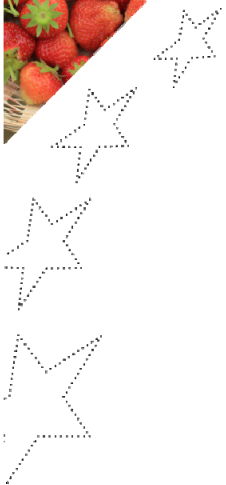
TERMS OF REFERENCE 1

TOR1

Guidance on PED data to be collected in Member States in order to optimise the coordination necessary to address the requests below.

This may include:

- a basic harmonisation of the case definition,
- the eligible diagnostic methods,
- the desired data sets and the frequency of reporting, as well as
- guidance on epidemiological investigations to facilitate data collection and to carry out the relevant epidemiological analysis.





TERMS OF REFERENCE 2

TOR2

An analysis of the epidemiological data and metadata available in the Member States and in recent scientific literature within and outside the EU, focusing on the occurrence of infection with different PED virus strains/types, as well as on the actual morbidity and mortality rates and severity of clinical disease so **as to quantify the direct impact on the pig production.**

First report by 1 July 2015

Second report by 15 December 2015



PREPARE REPORTING GUIDELINES AND COLLATE EPIDEMIOLOGICAL DATA FROM AFFECTED MEMBER STATES

- **Data model similar to that used in the Schmallenberg virus outbreak**
modified to allow the reporting of sequencing data for virus isolates and relevant clinical signs and impact indicators. Data providers' package prepared including reporting guidelines, data model, reporting templates and user guide.
- **Reporting guidelines to be presented at Member States**
- Option to support affected countries in performing sequencing of virus isolates to be explored?





UPDATE EXTENSIVE LITERATURE REVIEW PERFORMED FOR THE SCIENTIFIC OPINION ON PORCINE EPIDEMIC

- **Extensive literature search** performed in previous opinion will be updated for the period **Oct 2014 – Sep 2015**, including **reports provided** by affected Member States

- **Data extraction will update previous opinion tables**

Table 2: **PEDV occurrence** in North America and Asia and elsewhere in the world

Table 7: **Sequence differences** between PEDV strains

Table 8: **Clinical signs and pathological lesions** for different age groups of PEDV





OUTPUTS

- Report 1**
- descriptive statistics
 - exploratory temporal and spatial analysis of affected holdings
 - occurrence of PED virus strains in Europe
 - evaluation of available data for impact assessment

- Report 2**
- descriptive statistics
 - exploratory temporal and spatial analysis of affected holdings
 - occurrence of PED virus strains in Europe
 - updated tables for global occurrence, sequence analysis and clinical signs and pathological lesions
 - impact assessment
 - epidemiological trends of the evolution of the disease within and outside the EU





POSSIBLE LIMITATIONS AND HOW TO DEAL WITH THEM

■ **Difference in level of data submitted by the Member States**

- To encourage reporting, EFSA will keep the data reporting requirements simple and ensure full support during reporting periods.
- EFSA will also explore options for joint publications in scientific journals

■ **Reliable data on farm level mortality and morbidity is hard to obtain and comparable baseline data are also often not available**

- the availability of data to support impact assessment will be evaluated for report 1. In case of lack of data, alternative methods to obtain this data will be proposed.



**Coordination of the mandate by will done by
the Assessment and Methodology Unit (AMU)
with support from
the Animal and Plant Health (ALPHA) Unit
and in collaboration with
the EFSA Network on Animal Health and Welfare**

**Thank you for
your attention!**

Acknowledgements to the team!

