

Practical Epidemiology for Progressive Control (PEP-C) Course

In response to the requests of countries in West Eurasia, EuFMD are holding a four week practical epidemiology training course to help provide state veterinary services with the epidemiology skills needed to control FMD.

When implementing FMD control state veterinary services are faced with many unanswered questions, for example:

- Which groups of livestock and which activities are most important in the transmission of the infection?
- Which sectors within the value chain should I target when trying to control the disease?
- What is the impact of a vaccination programme and is it achieving its objectives?
- How should we conduct outbreak investigations in order to collect useful information to inform future control strategy?

Other questions concern estimation of disease impact and how to collate all this information to form a cost-effective control strategy given limited resources. These issues are challenging for any country but they can be overwhelming for countries with limited post-graduate or professional training opportunities in epidemiology. The PEPc course will provide participants with the basic skills and approach needed to tackle these issues. Importantly, knowledge and understanding gained during the course will unlock a wealth of epidemiology resources that were previously impenetrable.

The emphasis of this course is on the development of the 'epidemiological approach'. That is for any activity: define the objectives, design a study to meet these objectives, conduct the study, analyse the data, communicate the results and take appropriate action.



The course is based around the Progressive Control Pathway (PCP) and is very practical with lecture time minimised and students learning whilst working on problems using case-studies. Field investigations will

be conducted during the course. In addition course homework will require the participants to apply their newly acquired skills to problems they encounter when trying to control FMD in their own country.

The course is being held at the Pendik veterinary institute, Istanbul, Turkey and the course outline is as follows:

- Week 1: Outbreak investigation (10-14 September 2012)
 - Including information on prevalence, incidence, diagnostic tests, risk factors
- Week 2: Value chain, socio-economic impact assessment (1-5 October 2012)
 - Including information about risk, costs and benefits of FMD control, measuring FMD impact
- Week 3: Surveys: Sero-surveys, questionnaires and monitoring vaccination campaigns (12-16 November 2012)
 - Including sample size, survey design, data entry, analysis of data
- Week 4: Control Strategy development (10-14 December 2012)
 - Putting it all together

The course is being attended by two to four participants from each of Georgia, Armenia, Azerbaijan, Turkey, Iran and Egypt. The same participants return for all four weeks. The trainers consist of EuFMD epidemiology experts (Melissa Mclaws, Chris Bartels, Theo Knight-Jones and Giancarlo Ferrari). An FMD lab expert is also present throughout the course (Naci Bulut).

Initial feedback from the first week of the course was extremely positive and the EuFMD team believe the course will provide much needed technical skills to help inform animal disease control policy.