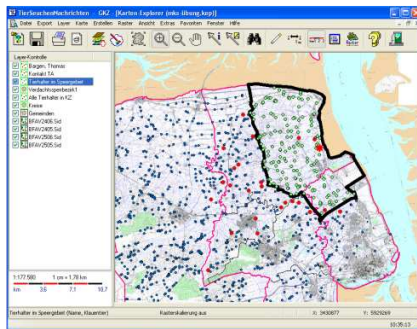
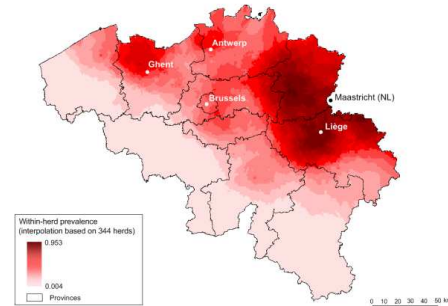


Epidemiological tools to support veterinary authorities and risk managers in controlling animal disease epidemics

Objectives

Incursions of highly-virulent infections such as classical swine fever, foot and mouth disease, bluetongue or avian influenza require prompt actions to avoid an uncontrollable disease spread with severe economical consequences. The success of controlling highly-infectious disease epidemics lays in an early detection and elimination of infection sources and the restriction of spread to populations at risk. Veterinary authorities and risk managers wish to rely on science-based experts advice to decide upon the most efficient outbreak control measures.



Epidemiological research studies diseases in populations and may therefore provide important information and tools to risk managers during disease epidemics. However, the emerging situation of such epidemic requires specific short-term research actions.

The aim of the workshop is to explore aspects of epidemiological research which can support risk managers and veterinary authorities in controlling animal disease epidemics. Common epidemiological methods will be applied in the context of the emergence of a highly-infectious epidemic disease, where resources and time are limited and data are scarce. During the workshop, participants will contribute to the formulation of risk management options, based on real-time examples.

Workshop philosophy

The workshop aims to help participants understand rather than just learn about applications of epidemiology when controlling disease outbreaks. This can only be achieved in a relaxed, informal and interactive environment using plenty of examples and hands-on exercises where participants apply and adapt what they have learned.

Target audience

This workshop is designed for researchers and professionals involved in the control and management of animal disease outbreaks, i.e. policy makers, risk managers, risk analysts, epidemiologists, virologists, microbiologists, diagnosticians, field veterinarians that may be involved in investigation of suspicions of notifiable animal disease outbreaks and/or (clinical) surveillance during epidemics, etc. Some experience in veterinary epidemiology is an asset but no requirement.

Workshop programme

Day	Time	Session	Format
Day 1	8:30 - 9:00	Welcome	
	9:00 - 10:00	Introduction	theory
		Epidemiological research vs. field epidemiology	
	10:00 - 10:30	Coffee break	
	10:30 - 12:30	Introduction to the case study: FMD outbreak in the Republic of Epsilon (hypothetic country)	exercise
	12:30 - 13:30	Lunch break	
	13:30 - 15:00	Data: sources, availability, disclosure	theory
	15:00 - 15:30	Coffee break	
	15:30 - 17:30	Data: collection and management	theory
Day 2	8:30 - 10:00	Case study: data collection and management	exercise
	10:00 - 10:30	Coffee break	
	10:30 - 12:30	Epidemiological tools and surveillance	theory
	12:30 - 13:30	Lunch break	
	13:30 - 15:30	Case study: epidemiological tools and surveillance	exercise
	15:30 - 16:00	Coffee break	
	16:00 - 17:30	Decision tools	theory
Day 3	8:30 - 10:00	Epidemiologic research during and post epidemic	theory
	10:00 - 10:30	Coffee break	
	10:30 - 12:30	Case study: decision tools	exercise
	12:30 - 13:30	Lunch break	
	13:30 - 15:00	Risk communication tools	theory
	15:00 - 15:30	Coffee break	
	15:30 - 17:00	Case study: risk communication tools	exercise
	17:00 - 17:30	Closure	

Instructors

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Koen Mintiens is a senior risk analysis consultant at Vose Consulting specialized in epidemiology and risk analysis related to animal health management. With a background in veterinary epidemiology and biostatistics, Koen has been providing science-based expert advice to national and international authorities related to the control of animal disease for more than 15 years. He has been involved in the control of animal disease epidemics (classical swine fever, foot and mouth disease, avian influenza, bluetongue) by providing risk options and risk-based surveillance tools to risk managers. Koen has equally been involved in contingency planning and the organization of simulation exercises. Koen has been consultant for the European Commission (DG SANCO), the European Food Safety Authority (EFSA), the Food and Agriculture Organization (FAO), and the International Organization for Animal Health (OIE). He has been project manager for many national and EU funded scientific research project on different topics related to animal disease control.

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Armin Elbers was attached to the national and local crisis centre as an epidemiologist during several notifiable animal disease epidemics in the Netherlands : classical swine fever (CSF) in 1997-1998; Foot-and-Mouth Disease (FMD) in 2001; Avian Influenza (AI) in 2003.

After 17 years with the Dutch Animal Health Service in various research positions, he is now working for 6 years as an epidemiologist within the Quantitative Veterinary Epidemiology and Risk Analysis group, Department of Virology of CVI, with a main focus on development of early detection systems for notifiable animal diseases. Presently, he works on research projects involving AI, FMD, CSF and Bluetongue. He has been consultant for several international institutions in relation to control of animal disease epidemics (European Commission (EU), European Food Safety Authority (EFSA), and the Canadian Food and Inspection Agency (CFIA)).

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Christoph Staubach is working since 1995 as senior scientist at the Institute of Epidemiology. As member of the task force he investigated outbreaks in husbandry and wildlife animals. He is experienced in the management of large databases using database software, web applications and geographical information system (GIS). Furthermore, he is the manager of the GIS at the FLI and responsible for the spatial component of the animal disease notification and crisis management system of Germany (TSN). In the framework of TAIEX and twinning programs of the EC and FAO he supported veterinary authorities to improve animal disease control.

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