



Benefits and Risks for People and Livestock of Keeping Companion Animals: Searching for a Healthy Balance

T. Sterneberg-van der Maaten^{*}, D. Turner[†], J. Van Tilburg[‡]
and J. Vaarten^{*}

^{*}Federation of Veterinarians of Europe, Avenue de Tervueren 12, Brussels, Belgium, [†]International Association of Human-Animal Interaction Organizations, 2005 West Broadway Suite 100, Columbia, MO, USA and [‡]Federation of European Companion Animal Veterinary Associations, Avenue de Tervueren 12, Brussels, Belgium

Summary

The mission of the CALLISTO (Companion Animals multisectorial interprofessional Interdisciplinary Strategic Think tank On zoonoses) project was to provide an overview of the current situation on the role of companion animals as a source of infectious diseases for people and food animals. It also aimed to identify knowledge and technology gaps for the most important zoonoses and propose targeted actions to reduce the risk of zoonotic diseases transmitted via companion animals. After a 3-year study, its members have developed practical recommendations for improved data collection on companion animal numbers and the mechanisms for disease surveillance in companion animals. They highlight the importance of introducing a system for the unique identification of dogs and other companion animals with an implanted microchip transponder and storage of the details it contains on an internationally accessible online database. Their report also emphasises the need for balanced communication with the public on the risks and benefits of pet ownership and the value of the ‘One Health’ concept to encourage closer collaboration between veterinary and human medical professionals.

© 2015 Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Keywords: companion animal; human–animal bond; One Health; zoonotic disease

Introduction

People have kept companion animals since wolves were first tamed at least 15,000 years ago to become the ancestors of the domestic dog (Freedmann *et al.*, 2014). Pet ownership is, to varying degrees, a feature of every human culture in the world and in many European countries up to 50% of households are home to one or more pet animals (Messent and Serpell, 1981; Serpell, 1986).

People own pets for many different reasons including companionship, sport and entertainment. Therefore, even those people who do not have pets of their own may benefit from the influence of those

around them. Pet ownership contributes both to the personal wellbeing of their owners and to the overall economy, with pet related expenses providing an estimated €12 billion per year in tax revenues across the European Union (EU) (personal communication K. Davenport, European Pet Organisation, 2012).

However, keeping pets is not an activity that is free of inherent risks. Companion animal species, food animals and human beings share much of their evolutionary history and as a consequence, they can act as hosts for pathogenic and parasitic organisms, which may be readily transmitted from one species to another. Therefore, the infections transmitted by pets are a potential cause of serious diseases in both their owners and their domestic livestock.

Moreover, many pet species, if mishandled or kept under inappropriate conditions, can potentially pose

Correspondence to: T. Sterneberg-van der Maaten (e-mail: talina.sterneberg@gmail.com).

a physical danger to the people around them. The growing popularity of non-traditional pet species is another possible hazard either through the transmission of exotic pathogens by novelty pets such as fruit bats, or as a possible new route for the transmission of well-established pathogens to people or livestock, in the case of ornamental pig species. The potential impact on public health, the economy and the environment resulting from the trade in wild-caught animals for the pet industry has been highlighted by the Eurogroup for Animals report on the Health risks from new companion animals (<http://eurogroupforanimals.org/files/publications/downloads/Zoonotic-risk-report.pdf>).

Yet, despite such concerns the popularity of companion animals in Europe appears to be increasing. Recent estimates suggest that there are around 66 million cats, 61 million dogs, 39 million ornamental birds, 21 million small mammals, 6 million horses and 9 million aquaria in the EU. The numbers of cats has certainly grown, with the number of households keeping them as pets ranging from 10 to 40% in different countries of the EU. In recent years there has been an unprecedented increase in the numbers of exotic animals kept as pets, notably rodents, birds and reptiles (<http://www.fedial.org/facts-figures/>).

However, reasonably accurate figures on the pet population may only be available for particular species of pets and for certain regions or countries of the EU. Therefore, much of the data are based on rough estimates and, where the information is available, it is often incomplete and difficult to access.

Without accurate data on the numbers of companion animals and how they are distributed across Europe, it is very difficult to determine the health risks from zoonotic diseases carried by pets for their owners and other EU citizens. Better information on pet animal populations will also be indispensable for the design and operation of effective and proportionate measures to prevent or mitigate such risks.

The CALLISTO project was established by the European Commission in 2012 with funding from the EU Seventh Framework initiative. This involved a multidisciplinary, multisectorial and inter-professional network of experts representing the major relevant stakeholders and was established with a 3-year work programme. Its purpose was to develop a detailed overview of the role of companion animals as a source of infectious diseases for people and food animals and to gather information on disease incidence and geographical distribution in the different host categories. It was also tasked with identifying knowledge and technology gaps in the prevention and intervention options of the most important zoo-

noses transmitted by companion animals and proposing targeted actions that would contribute to reducing the risk of infectious disease outbreaks in people and food animals.

Its members formed seven Expert Advisory Groups (EAGs) working on specific issues (Fig. 1), with cross EAG meetings and an annual synthesis conference to ensure coordination across the expert level inputs and to stimulate interdisciplinary interaction between the experts. The following report concerns the activities of three EAGs (EAG I, User Community; EAG II, Policy Actions; and EAG VII, Sociology and Welfare). The work of the other four groups (EAG III, Virus Infections; EAG IV, Bacterial Infections; EAG V, Parasitic Infections; and EAG VI, Epidemiology and Underlying Factors) are discussed in separate contributions within this supplement.

From the outset, the members of EAGs I and VII recognized that their investigation should focus on the role of animal keepers, as it was evident that the role of this group is crucial in maximizing the benefits and minimizing the risks of interactions with animals for the whole community. EAG II focused on policy and therefore governments, the European Commission and its agencies, the World Organisation for Animal Health (OIE) and even policy/outreach by non-governmental organizations (NGOs).

The main aim of the actions recommended by EAGs I, II and VII was to develop a clear insight into issues such as:

- Who and where are these owners?
- Which animals do they keep?
- How do we make them aware of potential risks associated with keeping such animals?
- What can they do to avoid these risks?
- How can we motivate them to take appropriate actions?

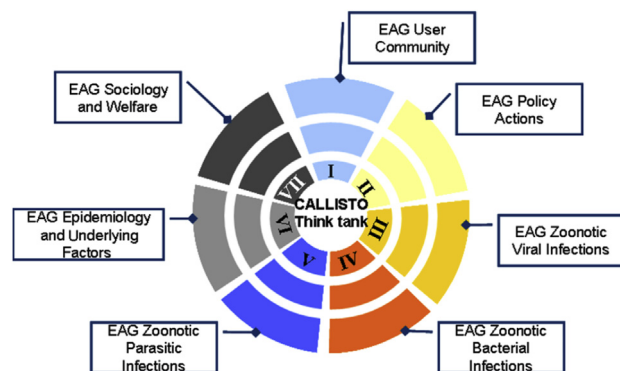


Fig. 1. The seven Expert Advisory Groups of the CALLISTO Project.

Download English Version:

<https://daneshyari.com/en/article/2437052>

Download Persian Version:

<https://daneshyari.com/article/2437052>

[Daneshyari.com](https://daneshyari.com)