

One Health Approach Key Element of Policy-making for Today's World

Humanity faces many challenges that require global solutions. Solving today's issues and preparing for those arising tomorrow cannot be accomplished with yesterday's approaches. We are living in a time of 'One World, One Health' and we must devise innovative, forward-looking and multisectoral solutions to the challenges we face now and in the future.

The increasingly crowded nature of our planet – on which man and animals live in ever closer proximity – has enhanced the ability of diseases to jump between species. With today's evolving ecosystems, trade globalisation, increasing urbanisation and an ever-expanding population, these diseases can spread more easily than ever before. This is why, following the highly pathogenic avian influenza (HPAI) outbreak in 2003, the concept of 'One Health' was initiated to highlight the need for a multisectoral approach to tackling health-related issues. Zoonotic infectious diseases have shaped the course of human history. One only has to think of the Black Death (bubonic or pneumonic plague) which was rampant during the 14th century, and also came from the East. It was one of the most devastating pandemics in human history, resulting in the deaths of an estimated 75 to 200 million people. Nowadays, disease outbreaks such as Ebola, SARS (severe acute respiratory syndrome), MERS (Middle East respiratory syndrome) and avian influenza serve as a stark reminder that human and animal health will always be inter-connected.

The development of veterinary medicines has not only made huge strides in protecting animal health, but it has a big impact on public health. A number of breakthrough discoveries have in fact benefited both health sectors. Perhaps the first such breakthrough came from a doctor, Edward Jenner, who more than two centuries ago observed that milkmaids who shared a minor form of skin disease with the cows in their care didn't catch smallpox. His first use of cow pox antigens led to the development of human smallpox vaccines, which in 1979 finally eradicated the 12,000-year-old disease, thought to have killed as many as 500 million in the 20th century alone.

Innovation in preventive veterinary medicines, the widespread use of vaccines and the development of vaccine banks play an increasingly important role in combatting infectious diseases on a global level. Veterinary vaccines constitute 27% of the veterinary medicines market in Europe and are a major area of investment (veterinary vaccines make up 47% of all veterinary medicines that have been authorised in the EU via the Centralised Procedure since it began in 1995). Ectoparasiticides also play an important role in helping to control the insect vectors (such as ticks, biting flies, mosquitoes, etc.) that spread some of these diseases and are currently the largest sector of the veterinary medicines market, at nearly 32%.

From a public health and food safety perspective, the use of vaccines can be highly beneficial. Vaccination of poultry to protect against salmonella, along with other management measures, saw human cases reduced by almost 50% in the EU since 2004, with the prevalence of salmonella in poultry decreasing significantly at the same time. Food security is equally important to society; vaccines against circovirus in pigs have seen a dramatic reduction in losses in the pork sector, and foot and mouth disease vaccines will hopefully avoid further losses to the beef sector. The efficient production of high quality milk has played its role in improved nutrition, supported by the antibiotic treatment of mastitis which has reduced production losses, while also protecting milk quality and the welfare of dairy cows. A cooperative approach to further innovation in animal and public health is necessary. Hand-in-hand with consumer acceptance of new technologies, it is essential to foster a harmonised and predictable regulatory framework in which innovation should be a key focus. With added challenges such as the development of antimicrobial resistance (AMR), it is clear that only by working together as one – locally, nationally, and globally – can we hope to attain optimal health for animals, people and the environment.

IFAH-Europe recently called on G7 leaders to consider the One Health approach for policies on AMR. This is clearly an issue affecting both animal and human health and we are looking forward to the development of new EU actions to combat AMR. Promotion of R&D and innovation is very much welcomed by the veterinary medicines industry and we are encouraged that the report from the May 2016 G7 meeting recognises the need for the development of new diagnostics and increased innovation in the human and animal health sectors to combat infectious diseases and tackle resistance.

The One Health concept has been operational in animal health innovations for decades, but there is a clear need for further understanding and appreciation of the concept amongst the medical profession and the general public. We are pleased to see continued and increasing collaboration between the WHO, OIE and FAO to identify high priority issues in the One Health arena and IFAH-Europe lends its full support to these efforts. With ever more people working in either the animal or public health sectors adopting a One Health mindset, there is greater opportunity to address challenges of our interconnected One World ecosystem, and to facilitate the adoption of new technologies for animal and human disease.



Roxane Feller is Secretary General of IFAH-Europe, the representative body of manufacturers of veterinary medicines, vaccines and other animal health products in Europe. With membership covering 90% of the European Market, IFAH-Europe represents innovators and generics alike, as well as large, medium-sized and small companies. Employing some 50,000 people in Europe, the sector is resilient and innovative. IFAH-Europe's member companies invest over €500 million in research

and development each year.