

The Role of Vaccination within the “One Health” Agenda

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Abstract

The One Health agenda has been defined as “the integration effort of multiple disciplines working locally, nationally and globally to attaining optimal health for people, animals and the environment”. It recognises that there is a significant connection between the health of animals and that of humans, and the impact that they both have on the environment.

Vaccines have a key role to play within this agenda since they can control disease transmission between animals and human, and have a significant impact on their shared environments. As a prophylactic measure they can prevent the emergence of disease and as an intervention they can restrict its spread. Indeed, several vaccines are targeted towards domesticated animals and livestock in order to prevent the disease in both animals and humans.

In addition, collaboration between animal and human health vaccine researchers offers the potential to advance the understanding of mutually relevant diseases and expand the translational approach to medicine. It is also interesting to observe that many new vaccine technologies often find their first application within veterinary medicine.

The world’s population has already exceeded 7.7 billion people in 2019 and it continues to grow. As a result of this geographical expansion the contact between human and animal habitats increases.

This introduces a greater risk of exposure to new zoonotic disease causing pathogens. Advancing technologies and science-based evidence are improving our awareness, knowledge and understanding of the interdependency of the health of humans and animals, and their environments. This presentation will discuss how there is a clear association between the One Health agenda, vaccination and the development of improved vaccines.

Selected Publications

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