

#8 / The One Health Approach: A Holistic Perspective to Protect Health

The One Health approach is a collaborative, multisectoral framework designed to optimize the health of humans, animals, plants, and the environment, recognizing their interconnectedness. The European Commission highlights that health issues such as antimicrobial resistance (AMR) and zoonotic diseases (those transmitted from animals to humans) cannot be effectively addressed in isolation, as they lie at the intersection of species and ecosystems. By promoting collaboration across sectors such as public health, veterinary medicine, and environmental sciences, the One Health approach focuses on preventing and managing threats at their source, ensuring a balanced and sustainable response to global challenges that affect all forms of life.

A complex yet necessary challenge

While this framework has gained significance in recent years—COVID-19, caused by a zoonotic virus, underscored the connection between different health domains—its implementation remains challenging. The European Commission has pointed out the complexity of putting this approach into practice. Sandra Gallina, Director-General for Public Health and Food Safety at the Commission, has repeatedly emphasized the importance of breaking down siloed operations when addressing global health issues. She underscores the need for integrated collaboration among sectors like public health, animal health, and environmental protection, as problems like AMR demand a holistic and coordinated response that transcends traditional boundaries. Gallina has also stressed that no single sector or country can tackle these problems alone, calling for more interconnected action within the European Union and internationally.

The role of the RBDCOV Project

In this context, the [RBDCOV project](#) contributes to the implementation of the One Health approach on two levels. First, by bridging the gap between knowledge in animal health and human health. Second, by ensuring that the benefits of this approach reach diverse communities within society.

Regarding the first point, [HIPRA](#), with over 50 years of experience in animal health research and vaccine development, has applied its expertise in animal coronaviruses to open new avenues of research in human health during the COVID-19 crisis. Leveraging this knowledge, HIPRA has developed an innovative recombinant protein-based vaccine designed to induce a robust neutralizing immune response against the COVID-19 virus, ensuring high safety levels. This breakthrough was made possible by the company's strong investment in R&D. This technical approach, coupled with the project's commitment to innovation, breaks down the traditional silos separating human and

animal health, fostering a more integrated collaboration aligned with the One Health principles.

Towards shared health

However, the One Health approach will only be fully realized when its benefits extend to the entire population. In this regard, the RBDCOV project ensures that communities often overlooked during the early stages of global vaccine development—such as immunocompromised individuals, children, and adolescents—also benefit from the accumulated knowledge in both fields. For this reason, organizations like the [European AIDS Treatment Group \(EATG\)](#) and pediatric centers participating in the project help ensure a sufficient number of volunteers to conduct the necessary studies, overcoming traditional barriers.

Once the vaccine is developed, the involvement and engagement of these communities in its development are expected to increase the likelihood of achieving effective protection against the virus in the future. Therefore, an effective and safe vaccine for adolescents, children, and immunocompromised individuals will be key to the practical implementation of the One Health approach.

This specialised article was authored by Vines.