

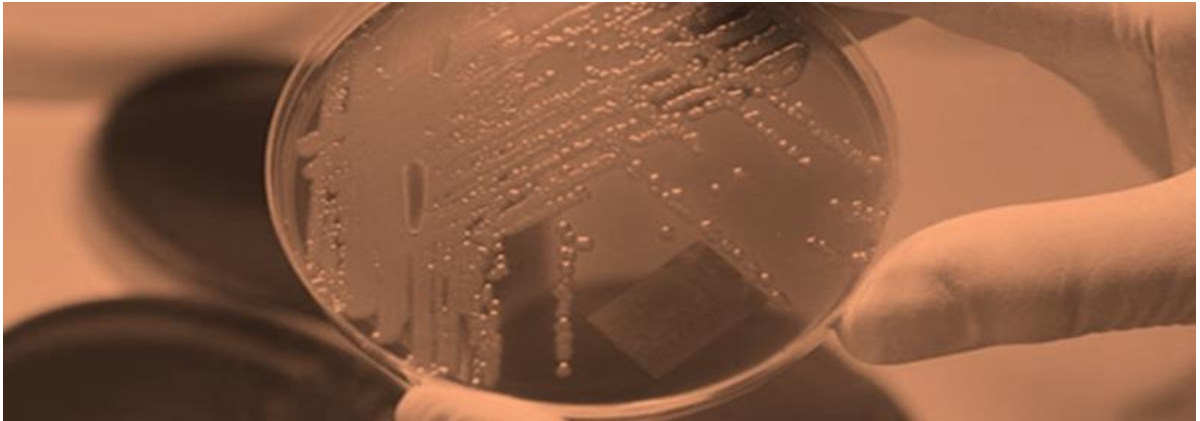
#8-18- P

Technology

Animal Health

Vaccine to Reduce Bovine *Escherichia coli* O157:H7 Colonization

<https://www.argentina.gob.ar/inta/tecnologias/vacuna-para-reducir-la-colonizacion-de-escherichia-coli-o157h7-en-bovinos>



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#HUS | #Escherichia coli | #animal | #excretion | #vaccine | #O157 | # E. coli | # hemolytic–uremic syndrome

Enterohemorrhagic *Escherichia coli* (EHEC) is a pathogen that may cause diarrhea, hemorrhagic colitis and hemolytic–uremic syndrome (HUS), a serious systemic disease that affects mainly children. In Argentina, HUS is considered endemic and the highest annual incidence corresponds to children under 5, accounting for approximately 500 cases yearly.

Bovine cattle are the main reservoir for EHEC O157:H7, and the most important source of infection for humans. Bovine cattle vaccination is a potential intervention strategy to reduce the contamination of beef and other foods.

The INTA Institute of Pathology and Biotechnology has developed a subunit vaccine formula, injected in calves under experimental conditions, with positive outcomes in reducing excretion of EHEC O157:H7 in faeces.

The market includes companies who wish to meet the demand from farmers who seek to sustain innocuousness in bovine farming, and control STEC O157 bacteria in cattle, by way of a vaccine available to control it.

Subunit vaccine; safe and reproducible at industrial scale.

Reduces bacterial excretion in live cattle.

Enhances competitiveness to meet the external market demand for control solutions and contributes to public health.

Subunit vaccine with proven effectiveness in bovines in experimental settings. Pending field tests, scaling and marketing.

Can be protected as industrial secret.

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VETERINARY VACCINES