Animal health

Dedication and professionalism for a healthy and competitive livestock sector





Tragsatec is a leading company in the study, monitoring, control and eradication of diseases in domestic and wild animals that affect the health of the population, reduce livestock productivity and make products less competitive in the market.

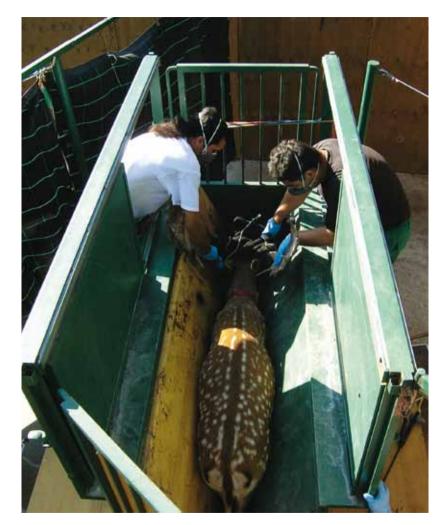
study monitoring control eradication

Our main values

The principles that define us in our efforts to improve animal health:

- High response capacity and efficiency via the implementation of intervention protocols, quality controls and application of the latest technology.
- We have a multidisciplinary team of technical personnel with over 20 years' experience able to act quickly in all parts of Spain.
- We adapt the available resources to the specific characteristics of each sector, operating systems and health situations.

high CAPACITX EFFICIENT response intervention PROTOCOLS quality CONTROL latest TECHNOLOGY TECHNICAL personnel multidisciplinary TEAM



Products and services

Animal disease control

- Participation in the implementation of national disease monitoring programmes in production animals.
- 2. Intervention in health emergency actions related to disease eradication.
- 3. Collaboration in the development of wild animal health plans.

Key projects

We contributed to the eradication of African swine fever in Spain. In 1995, after 35 years of restrictions, Spain was declared free of the disease and exports were reintroduced.

Since 2000 we have participated in the control and elimination of bovine spongiform encephalopathy (BSE), or mad cow disease, preventing the productive sectors related to cattle from collapsing.

In October 2009 we collaborated in the eradication of the "highly pathogenic avian influenza in poultry (H7 serotype)" outbreak declared in the town of Almoguera (Guadalajara) and that declared in May 2013 in Gimenells i el Pla de la Font (Lleida).

Integrated management of animal health and genetic laboratories

- Provision of technicians specialised in diagnostics and research: training in specific techniques, adapting methods to the latest technologies, assistance in animal facilities.
- Support for the implementation of quality systems in laboratories in accordance with the UNE EN ISO 17.025 standard guaranteeing the reliability of the tests and results obtained.
- Design and development of computerised information systems (LIMS) for the management and traceability of samples and results, obtaining reports and the deployment of communications and information exchange networks to enhance coordination between laboratories.

Key projects

Support to national reference laboratories of the Spanish Ministry of Agriculture, Food and Environment. Since 1994 we have cooperated with the Spanish government in the diagnosis and investigation of animal diseases which, based on national and international health criteria, have threatened or continue to threaten our country's livestock and wildlife, collaborating in diagnosis in order to control the diseases and conducting analytical techniques established under European Union and World Organisation for Animal Health rules.

Technical assistance service for the management, control and maintenance of the animal installations of the Animal Health Research Centre (CISA) of the National Institute for Agricultural and Food Research and Technology. Conducting activities related to the health inspection, care and management of test animals, as well as the maintenance of animal installations and facilities for the control of diseases such as Rift Valley fever, bird flu, swine fever or the *West Nile* virus.





Epidemiology

- 1. Design and management of health monitoring and alert networks.
- 2. Definition of epidemiological action units for the detailed study of animal diseases.
- Disease modelling for the monitoring and study of disease evolution and associated risks.
- 4. Epidemiological monitoring of diseases and evaluation of the measures put into place to control and eradicate them.

Key projects

- Application of the
- hyperimmunisation protocol against viral haemorrhagic disease (RHD) in natural wild rabbit populations. We have developed and patented a new rabbit hyperimmunisation method and kit against the disease, which serves as an alternative to the current commercially available vaccine. The method allows wild

rabbit populations to build up a level of defence naturally, without resorting to the stressful administration of the vaccination, lowering implementation costs and facilitating the vaccination of target populations.

- Conducting an epidemiological study of wild animals in the region of La Rioja (2009-2010 hunting season). Tragsatec conducted a study of health data obtained from the big game animals killed in hunting activities in this Spanish autonomous community.
- Study of the epidemiological situation and disease control among the wild swine populations in the province of Cordoba (2012-2013). We carried out scheduled boar

captures using trap cages in farms located in the province of Cordoba for subsequent slaughter, autopsy and sampling with a view to conducting a study of disease indicators in this species.

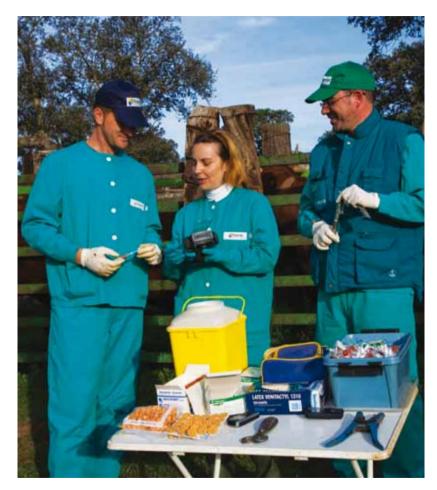
Training

- Managing the training of work teams for laboratory technicians, veterinarians, auxiliary personnel, etc.
- 2. Organising national and international technical conferences.
- 3. Designing and implementing animal health awareness campaigns.
- 4. Organising emergency drills.

Key projects

Organisation on behalf of MAGRAMA of the First International Conference on strategies for the eradication of low prevalence diseases: tuberculosis and brucellosis in cattle.

- Collaboration with the Ministry of Rural Development, Livestock and Fisheries of the Cantabria regional government in conducting a foot and mouth disease emergency drill as part of training for government workers.
- Coordination of training days to the poultry and related health sectors in connection with biosecurity measures in poultry farms and control procedures as part of the national salmonella monitoring and control programme.



Technology applied to animal health

Design and development of information systems for the livestock sector, from centralised management applications to tools for collecting field data via mobile devices with a view to gathering real-time information on diseases at regional and central levels.

This and other data on farms and tracking allows the health situation to be assessed with a view to coordinating the control measures to be put into place.

Key projects

| TRACES System: Consultation and monitoring of intra-Community movement and the importation of live animals and products of animal origin via web-based services with the European System of Veterinary Certification (National TRACES system). The system allows animal health professionals to use the data according to their needs.

- Computerised application of the Veterinary Health Alert Network (RASVE). Diseases information management to help in the assessment of the health situation and disease control decision-making.
- FOMEXPO: Actions for the promotion of the Foreign Livestock Trade, above all the implementation of the Foreign Livestock Trade Computer System (CEXGAN) that allows the official veterinary certificate to be used for

export with health guarantees on products of animal origin. It provides information on foreign markets, procedures and regulations related to the export process and lets users complete procedures via a "single access point", speeding up the process and ensuring that companies comply with applicable food safety rules.



R&D&I

The company's investment in R&D and innovation in this field, coupled with its capacity to adapt and its rapid and precise response, have resulted in cutting edge technology solutions and the provision of services of the highest quality.

Some of the most important work carried out in this area includes research relating to the control of bluetongue disease, consisting of observing the behaviour of the disease transmitting vector in relation to breeding habitats, mating conditions in the wild, etc. carrying out projects to determine the effectiveness of systems for preventing and combating the vector with a view to finding the most effective physical and chemical barriers in facilities, the countryside and means of transportation.

Similarly, the actions taken with a view to controlling TSEs include the development of a computer system

that ensured all parties involved in the sampling, removal and destruction of carcasses could communicate in real time; the application of geographical information systems so that collections could be optimised and the design of specific systems to ensure a safer and healthier removal (deodorisation, disinfection and storage systems, slaughter container and airtight transport, etc.). Finally, the company has developed and patented a hyperimmunisation kit against rabbit viral haemorrhagic disease, a breakthrough in disease control and an alternative to the current commercially available vaccine.





We are experts

- We put into place the necessary sanitary and biosecurity measures to control and prevent the spread of any outbreaks of disease.
- 2. We support laboratories in the research and development of the fastest, most specific, sensitive and best diagnostic techniques that facilitate quick assessment.
- We study and process epidemiological data collected in the field to assess the evolution of the disease and decide on the most appropriate disease fighting strategy at each given moment.
- 4. We organise efficient and agile teams to implement the health programmes designed by the public administrations and to immediately put into action procedures and measures to combat outbreaks of serious diseases that can cause public alarm.

Our references

Bovine, sheep and goat livestock sanitation campaigns. The campaigns to control tuberculosis, brucellosis, leucosis and pleuropneumonia in ruminants have been held annually in different regions of Spain since 1994.

We have participated in the control and eradication of the most serious outbreaks of diseases that have affected Spanish livestock since 1992. We participated in the eradication of the classical swine fever outbreaks declared in Spain in 1997 and 2001.

Since the reappearance of bluetongue disease in Spain, Tragsatec has participated in the disease's eradication and control from the time of the first outbreaks in the Balearic Islands to the implementation of the current monitoring, prevention and control measures.

In the light of the risk of a bird flu pandemic, we participated in the animal health monitoring system and the provision of human and material resources that were put into place to address the crisis. Integrated health monitoring services in natural areas managed by the National Heritage Council. Annual monitoring of diseases transmissible to humans or zoonoses in wild animals.



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