# WHAT IS Q FEVER?

Q (query) fever is an infectious disease of animals and humans. This is the most common zoonosis caused by Coxiella burnetii, that affects both humans and animals.

# WHICH ANIMALS ARE MOST AFFECTED BY THE DISEASE?

The natural reservoirs of the causative agent of Q fever - C. Burnetii bacteria are very different and widespread and present in more than 125 species of mammals, numerous arthropods (most commonly among 50 different species of ticks), rodents and birds.

Cattle, sheep and goats are most commonly infected animals, but other animals such as pigs, dogs, cats, etc. can also be infected. Wild animals are most easily affected.

# WHY IS IT IMPORTANT TO CONTROL THE Q FEVER?

Q fever is a zoonosis (transmitted from animals to humans) and poses a significant public health concern. Even a very small dose of *C. Burnetii* can infect humans, with spores exhibiting very high environmental resistance with very easy - aerogenic transmission of the infection.

The disease causes economic losses (miscarriages or stillbirths).

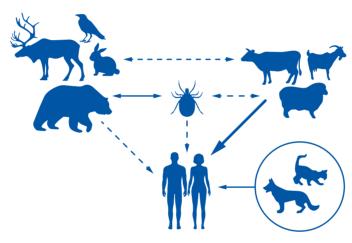
## **HOW IS THE DISEASE GEOGRAPHICALLY WIDESPREAD?**

The disease is first recorded in Australia in 1935 and today is widespread throughout the world, with the exception of New Zealand. Q fever is endemic in some areas (along the Mediterranean and the Middle East, North-East Australia and South Africa). In Republic of Serbia, the disease is most prevalent in Vojvodina.

### **HOW IS Q FEVER TRANSMITTED?**

Among animals infection occurs through direct contact, alimentary, aerogenic and through the skin.

C. Burnetii bacteria that is the cause of Q fever is found in the placenta and body fluids (urine, blood, milk and faces) of animals that are infected or are carriers of the disease



A WAY OF TRANSMITTING DISEASE FROM ANIMALS TO HUMANS

# WHAT ARE THE CLINICAL SIGNS OF Q FEVER?

Disease in animals usually flows inapparently. Cattle, sheep and goats are most often subclinical carriers that excrete large amounts of pathogens by their secretions and excreta into the external environment.

Clinical symptoms in ruminants are: reproductive disorders (miscarriages), endometritis, mastitis, stillbirth.

Symptoms of rhinitis, bronchitis and bronchopneumonia may also occur.



LATE-STAGE ABORTION

### **Q FEVER IS A RISK TO PUBLIC HEALTH**

Q fever is easily transmitted to humans. Farmers, veterinarians, slaughterhouse workers and laboratories are most at risk of infection.

The virus is transmitted to humans aerogenically, by dust, alimentary, through injured skin. Humans are most commonly infected with assisting in the delivery of animals or after miscarriages when environmental contamination occurs through infected body fluids or the placenta.



THE DEATH OF ANIMALS







# HOW Q FEVER CAN BE PREVENTED AND CONTROLLED?

- Good hygiene practices in premises dealing with animals, particularly with sheep, cattle and goats, will help prevent transmission of the bacteria that causes Q fever;
- Cleaning and disinfection, sanitary measures to remove amniotic fluids and placenta, and to clean and disinfect areas where animals have given birth.

# WHO SHOULD I CONTACT, IF I SUSPECT Q FEVER?

Q fever has been reported in both humans and animals in Serbia. If you suspect the disease, consult your veterinarian or veterinary inspector immediately.



The project "Reinforcement of animal health and welfare" funded by the European Union supports the development and improvement of agriculture in Serbia.

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# WHAT WE NEED TO KNOW ABOUT THIS DISEASE?







