

## PREVALENCE, PREVENTION AND CONTROL OF BOVINE SPONGIFORM ENCEPHALOPATHY

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**Summary.** Bovine spongiform encephalopathy (BSE) is a subacute cattle disease caused by atypical, enzyme protease-resistant protein, called prion ( $\text{PrP}^{\text{Res}}$ ), which accumulates in the brain and courses degeneration of nerve cells. BSE affected cows show behavioral changes, abnormalities of posture and movement and hyperesthesia. Since 1986, 182929 cattle were found infected. BSE was diagnosed in 14 European countries, but mostly it was spread in UK. All countries have been classified into four BSE geographical risk categories. BSE suspected cattle, all over 30 months of age died, risk group and slaughtered for human consumption cattle must be tested for BSE. Histopathology and immunohistochemistry are used to confirm BSE diagnosis. Immunoblotting and ELISA tests are used for the rapid diagnosis of BSE. Application of prevention and control measures minimizes BSE risk, but not removes it completely. Official data usually do not reveal real situation of BSE in a country, because some BSE infected cattle during incubation period can not be detected.

**Keywords:** BSE, prevalence, prevention, control.