**Vaccines and vaccination against exotic animal diseases (FMD/CSF/LSD/ASF) 2018**

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In the face of an outbreak of an exotic disease within Europe, a number of control measures can be implemented. These include imposing enhanced bioscurity, stamping out of infected herds, restrictions on animal movements, increased surveillance and the use of emergency vaccination. Clearly, the selection of measures actually used will depend on the specific circumstances and the availability of manpower and vaccines. Use of vaccination against FMD, CSF, LSD and ASF is not allowed during ”peacetime” due to interference with serological surveillance and trade restrictions. For FMD, CSF and LSD, there are commercially available vaccines and vaccine banks exist for FMD and LSD. In the case of FMDV, it is important to determine the match between available vaccines and the specific outbreak strain before deciding which vaccine to use. When using emergency vaccination, it is important to be able to differentiate between vaccinated animals and those that have been infected (DIVA). Therefore, there has been a major focus on the DIVA properties of vaccines. To date, the focus of DIVA has been on the use of serological tests but genetic tests to discriminate between vaccines (e.g. based on live attenuated viruses or viral vectors) and field strains of virus are also possible (genetic DIVA) and may become increasingly important. Due to the continuing spread of ASF in Eastern Europe, there is considerable concern about the introduction of the virus into additional countries and a major threat to those that have large pig production industries. Thus, there is a need for improved control measures against this virus. Unfortuantely, currently no vaccine is available to combat ASFV.