FMD VACCINES: HARMONISATION OF THE QUALITY
AND IMPROVEMENT OF THE CONTROL IN THE MIDDLE EAST

V. Caporale
Istituto Zooprofilattico Sperimentale dell’Abruzzo e del Molise “G. Caporale”, Campo Boario, 64100 Teramo, Italy

The whole of the Middle-East area should be considered as one FMD epidemiological region, but with possible sub-regions reflecting different ecosystems for circulation of FMDV strains, requiring a set of co-coordinated prevention, control and eradication programs to be elaborated covering the entire region at risk.

The control of FMD is usually a national responsibility and, in many countries, the vaccine may be used only under the control of the Competent Authority.

Because of the presence of multiple serotypes of the virus, many FMD vaccines are multivalent and it is common practice to prepare vaccines from two or more different virus strains. In certain areas, it may be advisable to include more than one virus per serotype to ensure broad antigenic coverage against prevailing viruses.

Almost all Countries of the Middle–East region operate vaccination programs in large ruminants. These vaccination programs utilise vaccines from a wide range of sources, including producers based within the region and international suppliers. Four Countries in the Middle-East region are known to produce FMD vaccine: Egypt, Jordan, Turkey and Iran. The lack of standardisation may be a factor affecting control.

The consistent production of pure, safe, potent, and efficacious vaccines requires quality assurance procedures to ensure the uniformity and consistency of the production process.

Where possible, manufacturers should seek to obtain such a license or authorisation for their FMD vaccines as independent verification of the quality of their product.

Guidelines for the production of veterinary vaccines are given in Chapter 1.1.8 “Principles of veterinary vaccine production” of the OIE Terrestrial Manual. The OIE guidelines are intended to be general in nature and may be supplemented by national and regional requirements.

Immunisation of animals with high quality vaccines is the primary means of control for FMD.