

# S2.1

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## OVERVIEW OF THE GLOBAL AND REGIONAL SITUATION FOR FOOT AND MOUTH DISEASE



### CURRENT SITUATION OF FOOT AND MOUTH DISEASE RESEARCH AND RESEARCH NEEDS

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Research on foot-and-mouth disease (FMD) has a long history as it was the first animal disease for which a viral aetiology was demonstrated more than 100 years ago. Nevertheless, the threats posed by the disease have not yet been removed. Control measures would greatly benefit from improved vaccines and diagnostic tests as well as a better understanding of how the virus is able to persist and spread and priorities and progress in these areas will be reviewed. FMD research is very expensive in countries where the disease has been eradicated, due to the requirements for operations to be conducted under high levels of biocontainment. Meanwhile, countries where the disease is endemic generally lack resources, infrastructure and expertise to conduct such work. FMD research therefore tends to suffer from a low critical mass and wide geographical dispersion with much of the limited resource available channelled into applied work on outbreak preparedness at a national level. The development of improved vaccines could radically alter the prospects for disease control both in developed and developing countries and is a prime example of where there is need for a sustained and increased effort. Coordination is needed between the research carried out in different countries and involving different types of expertise; immunology, molecular biology, virology and animal testing. The Global FMD Research Alliance (GFRA) which has been formed in the last five years is one such vehicle to improve integration of effort and to help secure additional resources.