CONTROL OF SWINE FEVER IN ENDEMIC AREAS BY REGIONAL VACCINATION FOR LIMITED PERIODS USING C-STRAIN VIRUS

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Methods to control swine fever in the Netherlands have repeatedly been brought in line with new data on the epidemiology of the disease and improved laboratory methods for diagnosis. The disease became notifiable in 1936 and records of outbreaks have been kept since. A partial slaughter system comprising affected, suspected, pregnant and very young pigs was adopted in 1951 and changed in favour of a stamping out policy for all pigs on infected premises in 1967. The partial slaughter system was supported by vaccination of the remaining pigs on infected farms with baby pigs vaccine and swine fever hyperimmune serum.

The use of attenuated vaccine was prohibited with the introduction of the total stamping out policy. At the same time vaccination of pigs on non-infected premises with crystal violet vaccine was no longer subsidised, as evidence had been obtained that the use of this vaccine hampered the progress towards final eradication. Despite the control measures, the disease maintained its position with peaks every 3 to 5 years. Cyclical changes in the structure of the pig population related to peaks in pigment prices are suspected of being responsible for the periodicity of swine fever outbreaks (1). The high pig density in areas of intensive farming, leading to animal population in close contact with land, the movement over long distances of pigs for fattening – resulting in non-traceable contacts – and the discontinuation of the virus in swill seriously impeded the control of the disease. The situation was further complicated by the appearance of very virulent and highly contagious, persistent and inapparent infections (3). After field trials with pregnant sows and young pigs had shown no untoward side-effects from vaccination with the so-called "Heksev" (O) strain, various production parameters (2), emergency vaccination...