The Swedish Salmonella Control Program with Special Reference to Pig Meat Production

H. Wahlstrom¹, P. Haggblom² and H. Lindqvist³
Division of Epizootiology¹ and Laboratory of Feed Hygiene², National Veterinary Institute.
P.O. Box 7073, S-75007 Uppsala Sweden, E-mail Helene.Wahlstrom@sva.se

In 1953-1954 a severe Salmonella epidemic, involving almost 9000 people, occurred in Sweden (1). This event clearly demonstrated the need for a Salmonella control program. In 1961 the first governmental regulation concerning Salmonella control was implemented. A comprehensive description of the control program was presented at the International Course on Salmonella Control in Animal Production and Products (2). After joining the EEC some parts of the program were revised (3).

The Salmonella control is regulated by parliamentary law and covers animals, feed, food, human health and import restrictions. It regulates the power of the authorities, the routines in case of Salmonella infections in domestic animals, the obligations of the animal owner and the financial support to animal owners in cases of Salmonella infections in domestic animals. It also regulates domestic feed production and gives rules and recommendations regarding production, hygiene and monitoring of Salmonella. The import of certain animals and animal products is also regulated.

All isolates of Salmonella are notifiable. All isolates of Salmonella are characterized by serotyping the strains.

The Salmonella control program in swine has the following cornerstones:
1. Control of imported feed raw materials and domestically produced feed (6).
2. Testing for Salmonella of all sanitary slaughtered animals as well as any suspect animal at normal slaughter (3).
3. Surveillance at all slaughterhouses, including testing of individual animals (intestinal lymph nodes) as well as hygiene control (swab samples) (3).
4. Surveillance of breeding herds at farm level (fecal samples) (3).
5. General surveillance by clinical checks made by practicing and animal health veterinarians.
6. If Salmonella is found, infected herds are put under restrictions until the herd is considered free from infection. Farmers will be partly economically compensated for costs due to the restrictions.

The reported number of infected pig herds has continuously decreased. In the 1970's approximately 35-40 infected pig herds were reported annually. After 1979, on average, 3-4 infected pig herds have been reported annually (4,5). Since 1986 most outbreaks have occurred in fattening herds and have been caused by Salmonella derby. In a few herds infections persisted but measures taken seem to have eliminated the infection.

Surveillance during 1994-1995 showed a very low level of Salmonella infected/contaminated pigs. Only 15 (0.2%) out of 8888 examined slaughtered pigs were infected with Salmonella, 3 (0.03%) out of 8876 examined carcasses were contaminated with Salmonella and no Salmonella was found in fecal samples from approximately 8500 pigs originating mainly from elite breeding herds.

3. Swedish Salmonella Control Programmes for Live Animals, Eggs and Meat, Commission decision of 23
Feb. 1995


5. The Swedish Board of Agriculture, Records of outbreaks of *Salmonella*