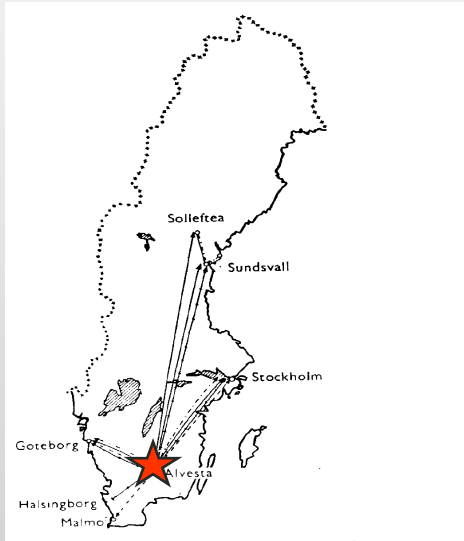
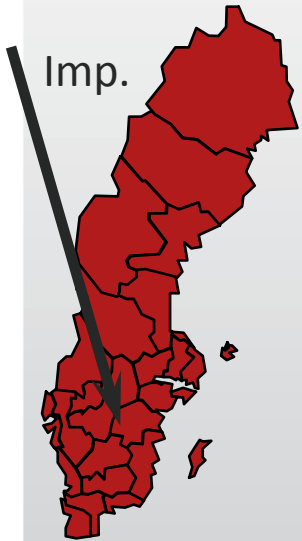


# *Salmonella* control in pig production in Sweden

Helene Wahlström, Zoonosiscenter, SVA



# Historik salmonella

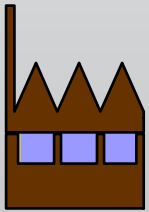


SWEDISH SALMONELLA CONTROL PROGRAMMES FOR LIVE ANIMALS, EGGS AND MEAT

National Veterinary Institute  
Swedish Board of Agriculture  
National Food Administration

1995-01-16

§  
1:st salmonella-regulation



Alvesta  
9000  
90



50-talet

53/54

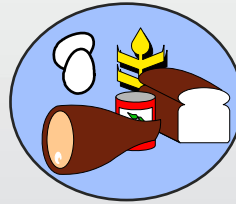
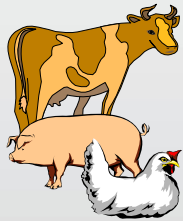
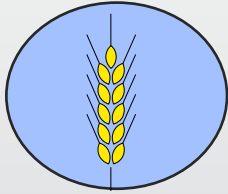
1961

1995

Law of epizootics

Salmonella law

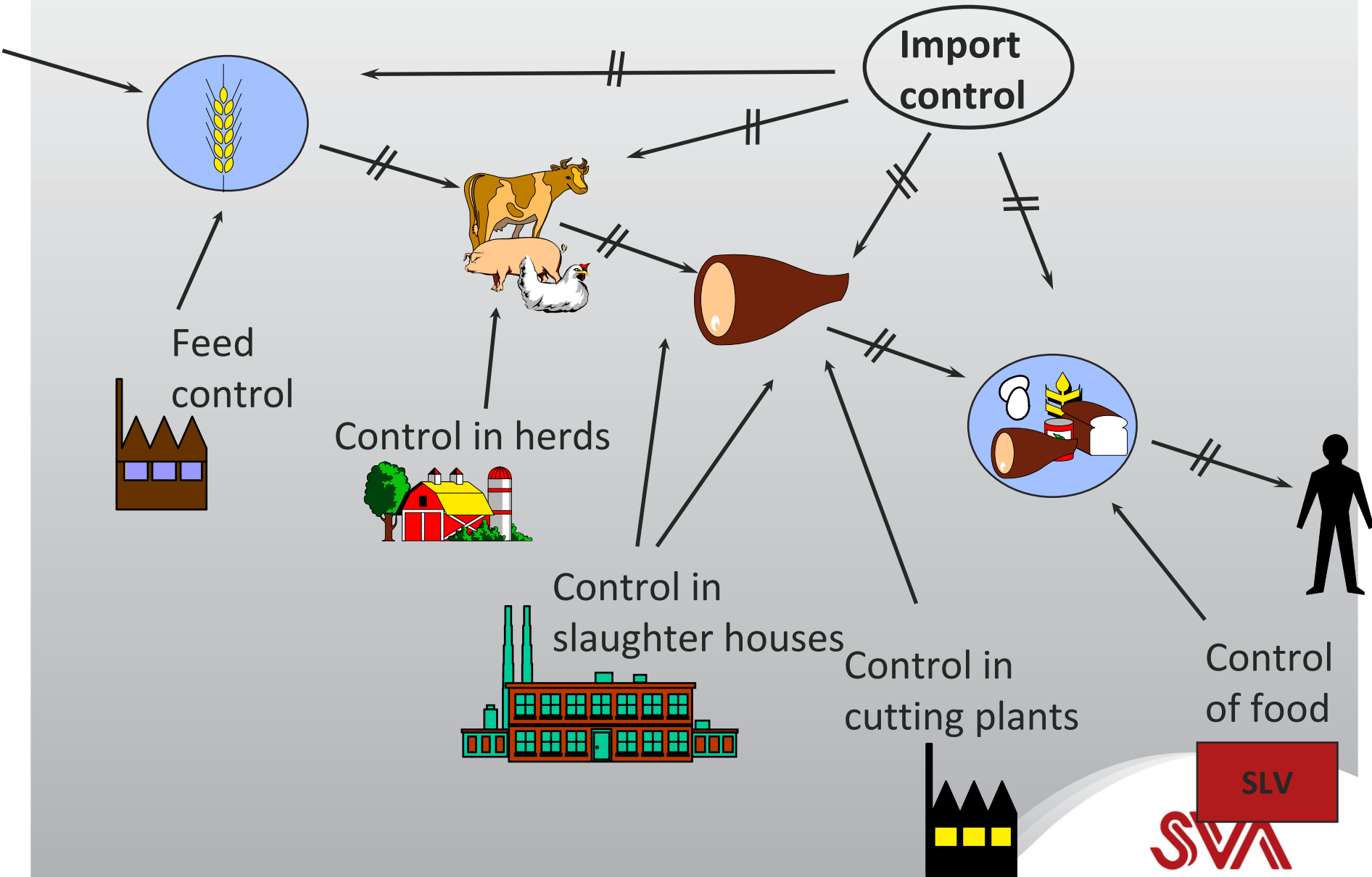




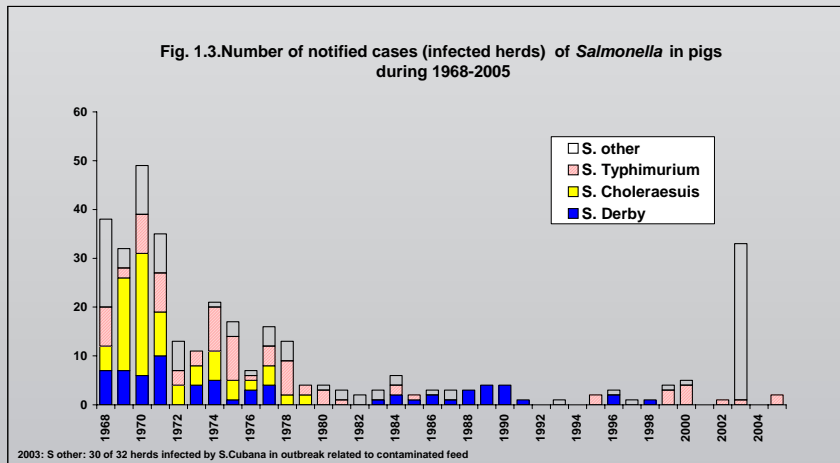
- All serotypes are notifiable
- Action always taken to eliminate *Salmonella* infection/contamination

# Salmonella

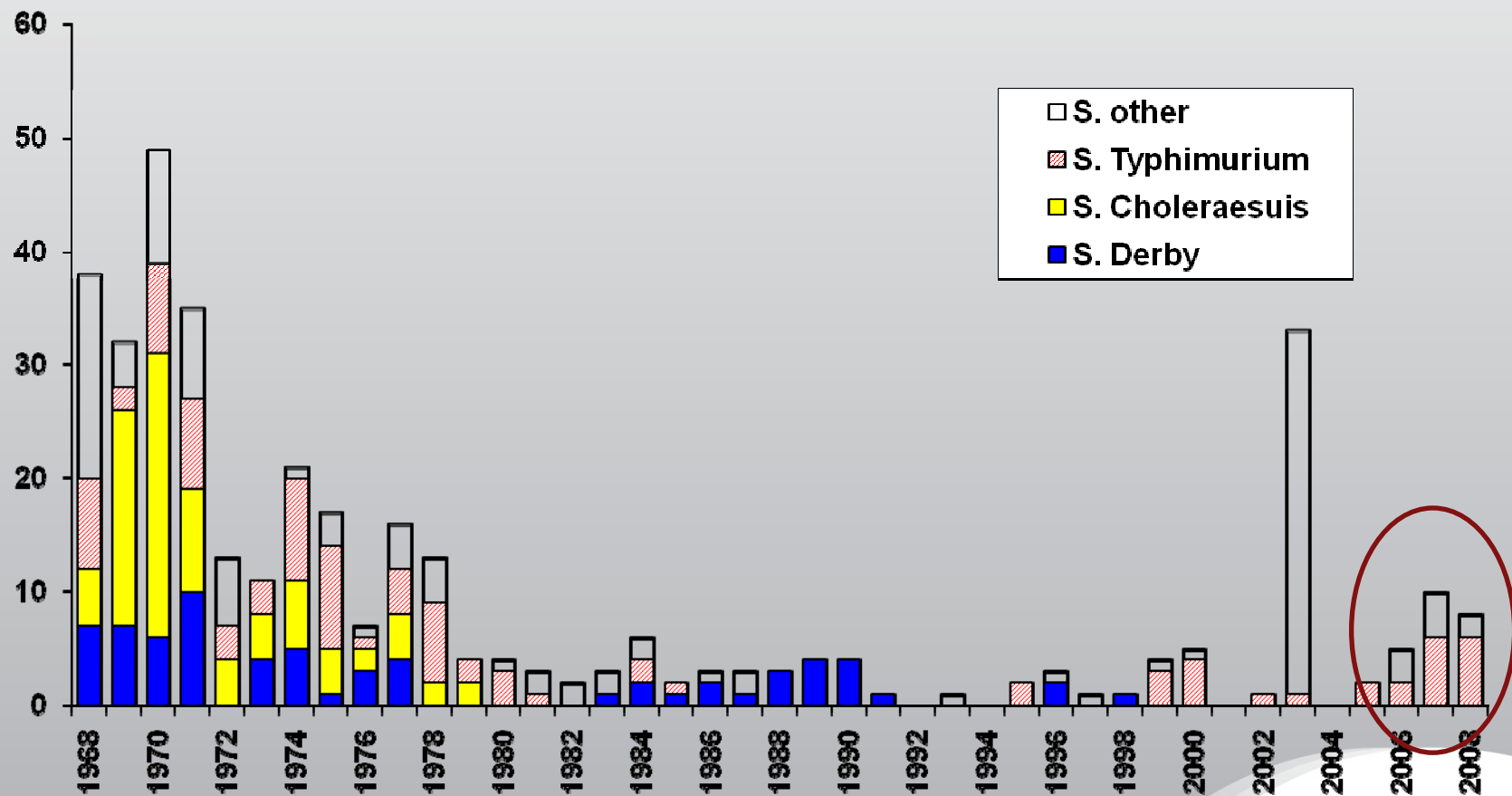
Strategy



# Number of notified salmonella infected pig herds 1968-2004

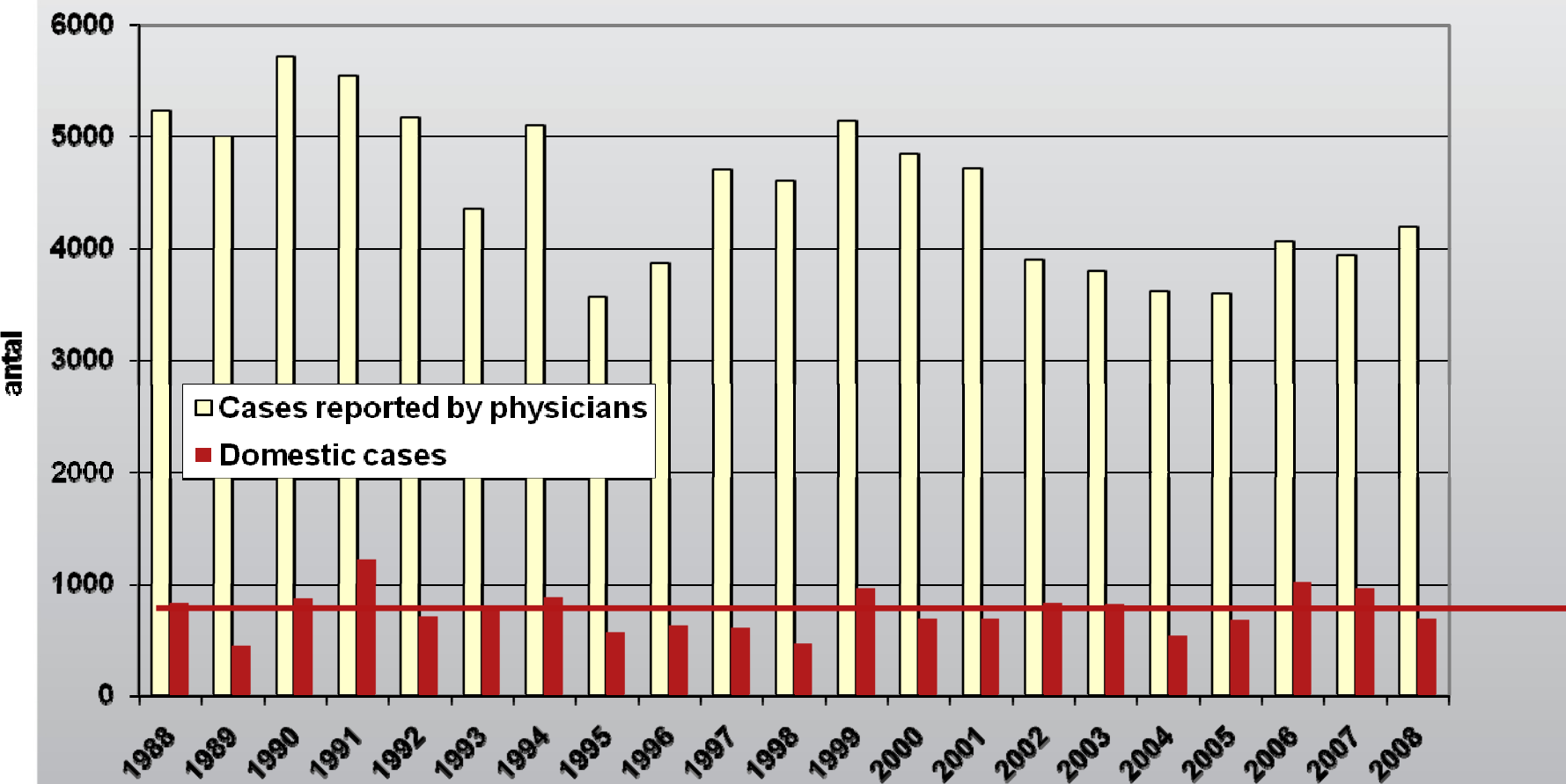


**Fig. 1.3. Incidence of pig herds infected with *Salmonella* during 1968-2008**



2003: S other: 30 of 32 herds infected by *S. Cubana* in outbreak related to contaminated feed

**Figure 1.5. Number of cases of Salmonella in humans reported by physicians 1988 -2008**



## Problems:

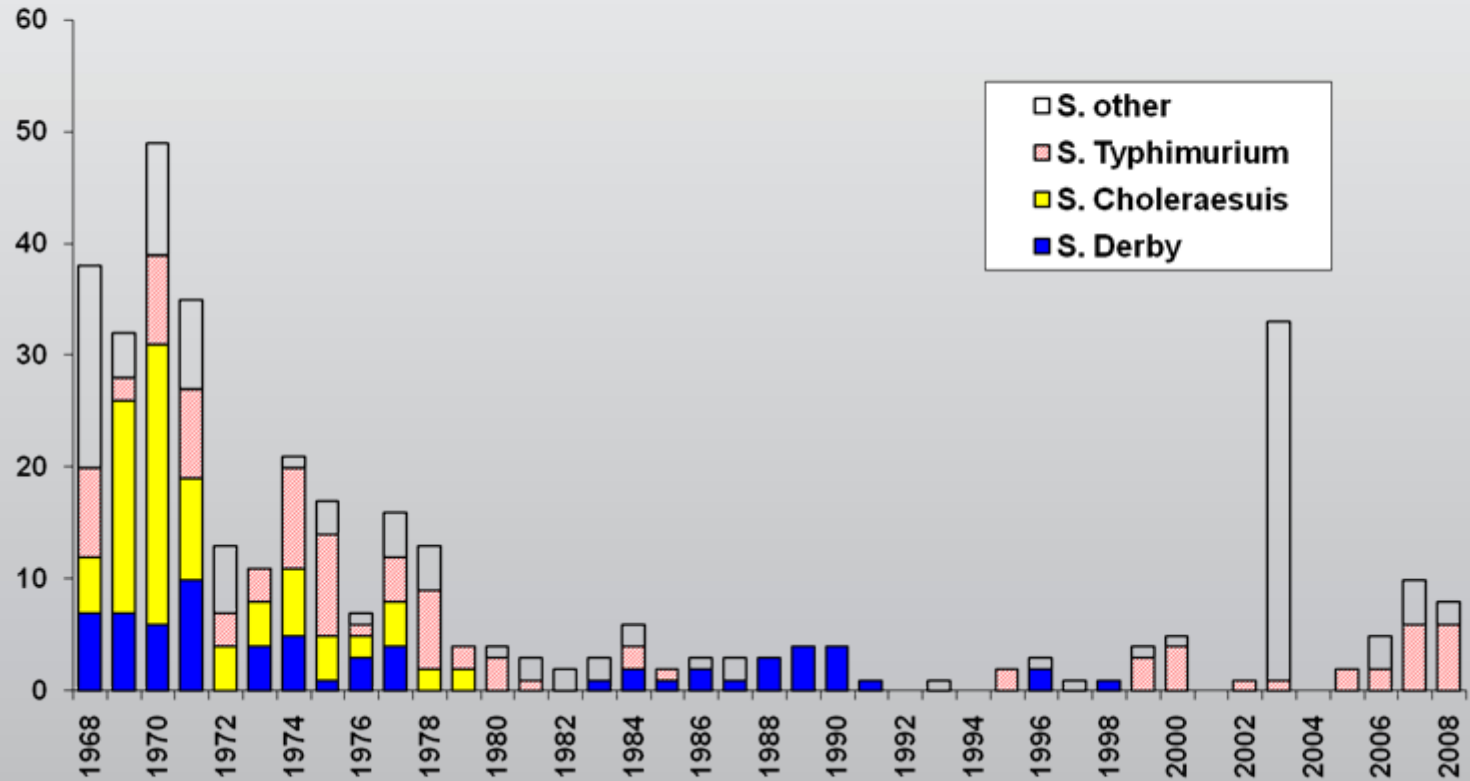
- Very large herds with a high turnover rate
- Herds with only 1 or 2 positive animals



# Highlight importance of:

- feed control (HACCP)-prevent efficient spread
- feed control raw materials-detect source
- immediate action-prevent spread and contamination environment
- Salmonella free top of breeding pyramide- prevent efficient spread

Fig. 1.3. Incidence of pig herds infected with *Salmonella* during 1968-2008



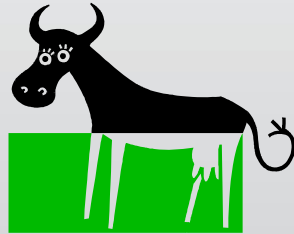
2003: S other: 30 of 32 herds infected by *S. Cubana* in outbreak related to contaminated feed

# Highlight importance of:

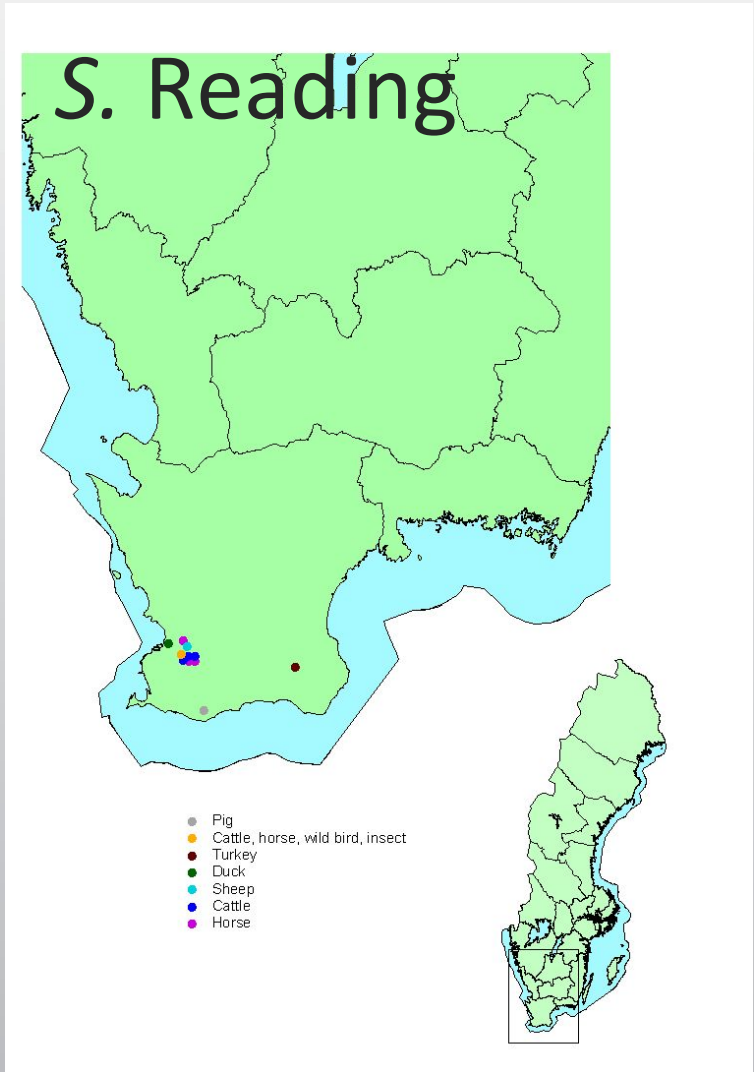
- feed control (HACCP)-prevent efficient spread
- feed control raw materials-detect source
- immediate action-prevent spread and contamination environment
- Salmonella free top of breeding pyramide- prevent efficient spread

# S. Typhimurium DT126

Sept



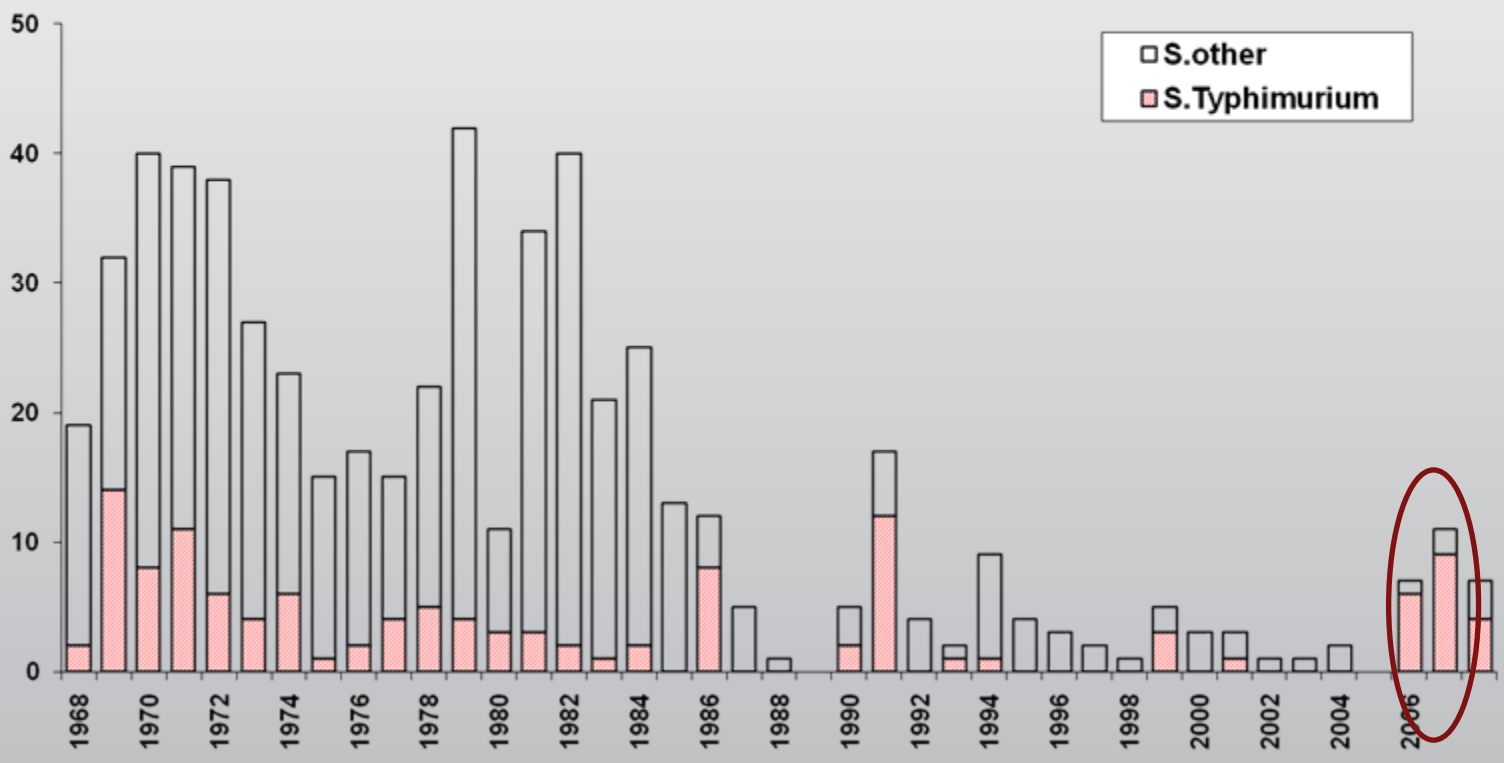
Nov



# Highlight importance of:

- feed control (HACCP)-prevent efficient spread
- feed control raw materials-detect source
- immediate action-prevent spread and contamination environment
- **Salmonella free top of breeding pyramide- prevent efficient spread**

**Fig. 1.1 Incidence of broiler flocks infected with *Salmonella* during 1968-2008, GP and P flocks included**



2006-07: outbreak of *S. Typhimurium*

Could **serology** be used as  
**a complement**  
in the Swedish *Salmonella* control  
programme in pigs?

- At present the ELISA is not sufficiently evaluated for use in ***low prevalence countries***

(The EFSA journal (2006), 341, 1-131)



### VETSIGN TM

	neg	pos	susp	Total
Salmotype® neg	326	0	9	335
Pos	10	2	1	13
susp	39	1	4	44
Total	375	3	14	392

Salmotype®

13

### Salmotype

Herd Check

	neg	pos	susp	Total
neg	325	8	39	372
pos	1	4	0	5
susp	9	1	5	15
Total	335	13	44	392

5

om o märk ut de officiellt rapporterade proven

### Herd Check

VETSIGN TM

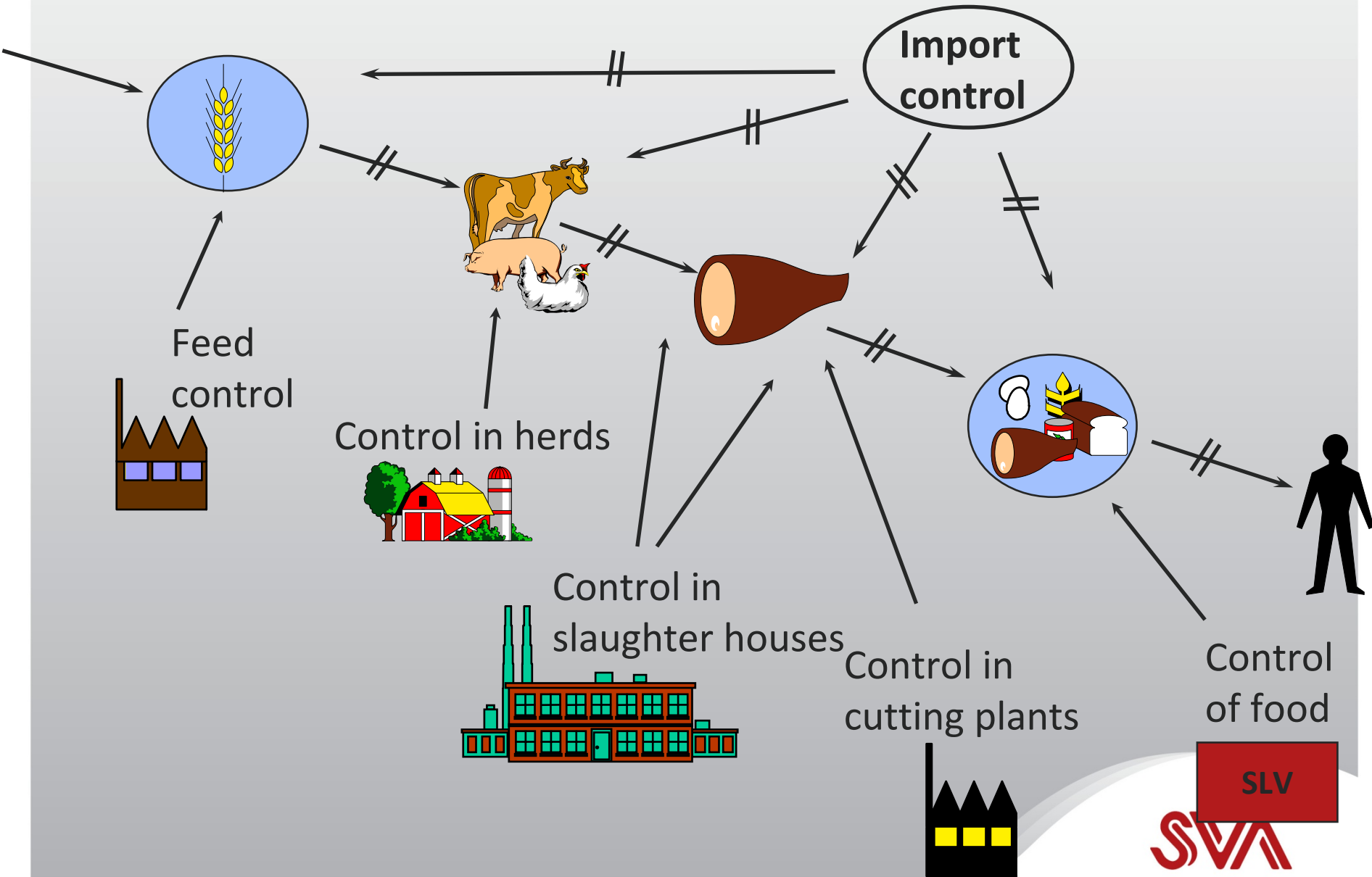
	neg	pos	susp	Total
neg	361	3	11	375
pos	1	2	0	3
susp	10	0	4	14
Total	372	5	15	392

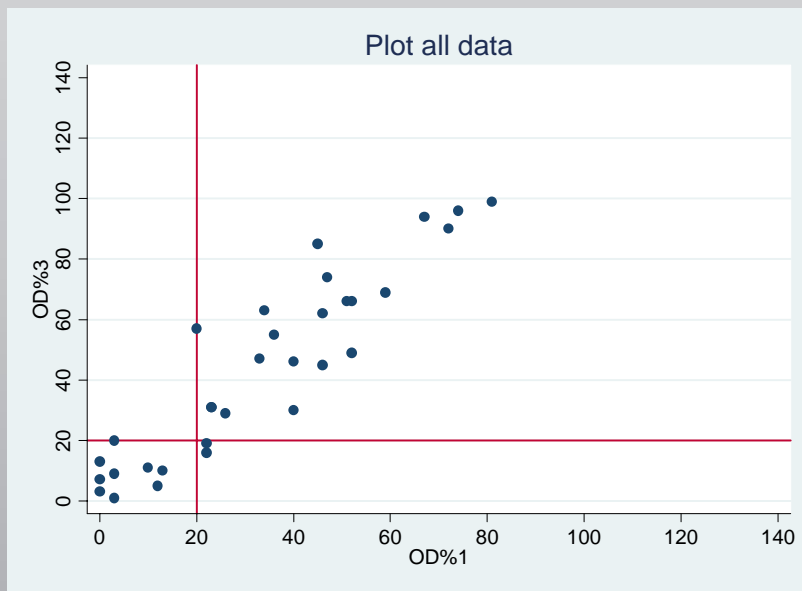
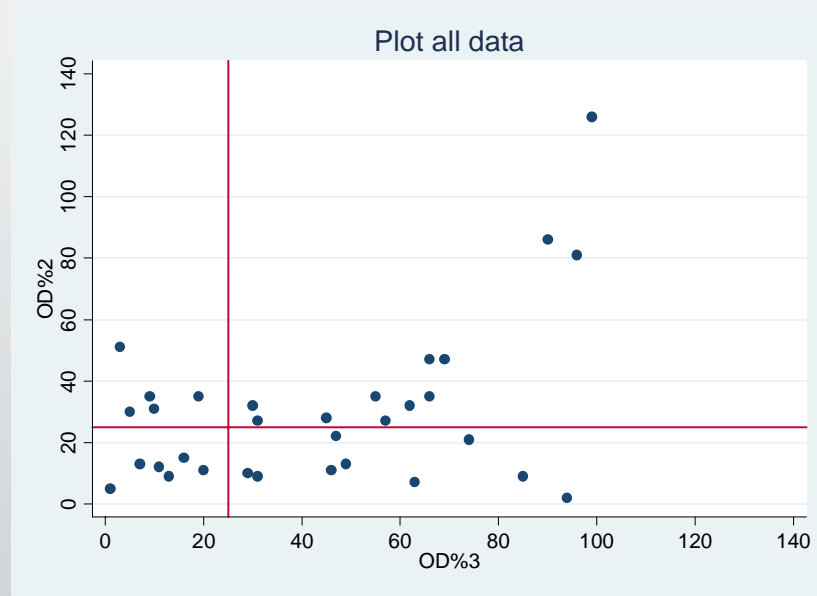
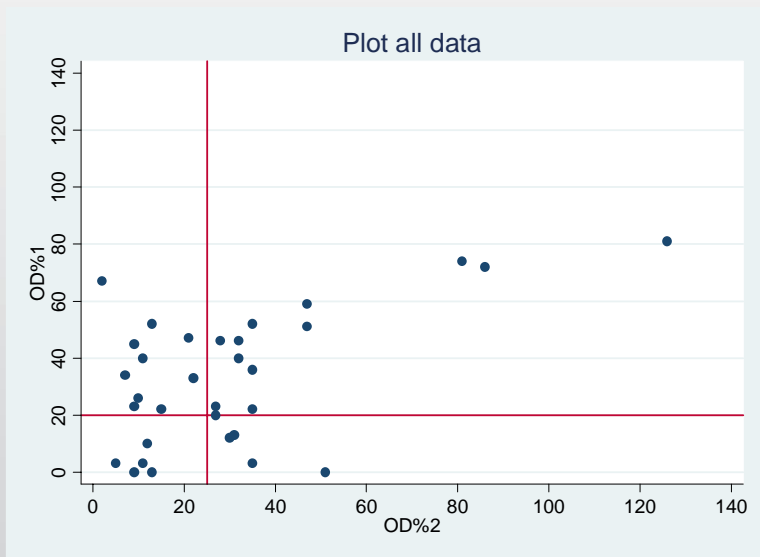
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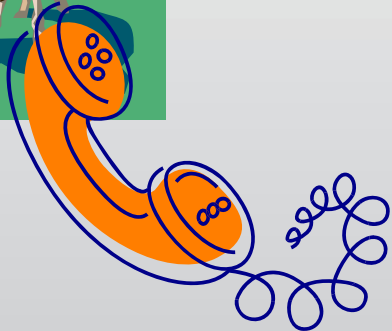
# Salmonella

Strategy





# සෞඛ්‍ය



SVA

- At present the ELISA is not sufficiently evaluated for use in *low prevalence countries*
- In low prevalence countries..major infection incidents may occur...immunology will have the drawback of *not identifying such changes rapidly*
- Immunological assessment was reliable mainly at herd level and was especially well suited for identifying *high-prevalence herds*
- ..bacteriological and immunological results will often not *correspond* at either herd or individual level..

(The EFSA journal (2006), 341, 1-131)

