

Herd health and surveillance in Danish cattle herds

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Content

- Organization of Danish cattle disease control programmes
- Control strategies
- Cattle disease and zoonoses programmes
- Other programmes
- Preparedness

Danish cattle production

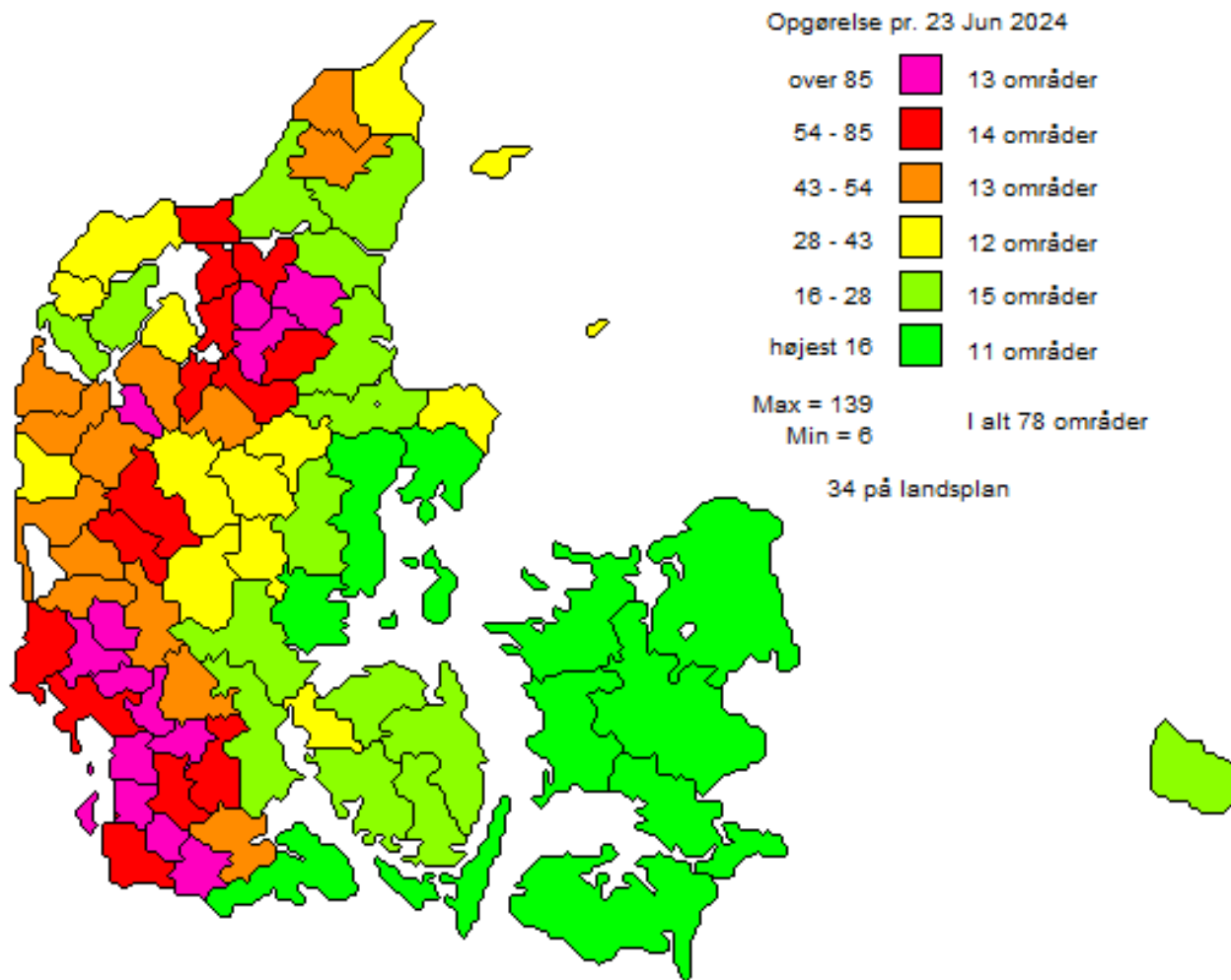
2,141 dairy herds

11,505 other types of herds (beef, slaughter calves, heifer herds)

National stock Dec. 31st 2023

Cattle in total	1,434,872
Milking cows	546,830
Beef cows	66,155

Cattle density in Denmark: Cattle per km²



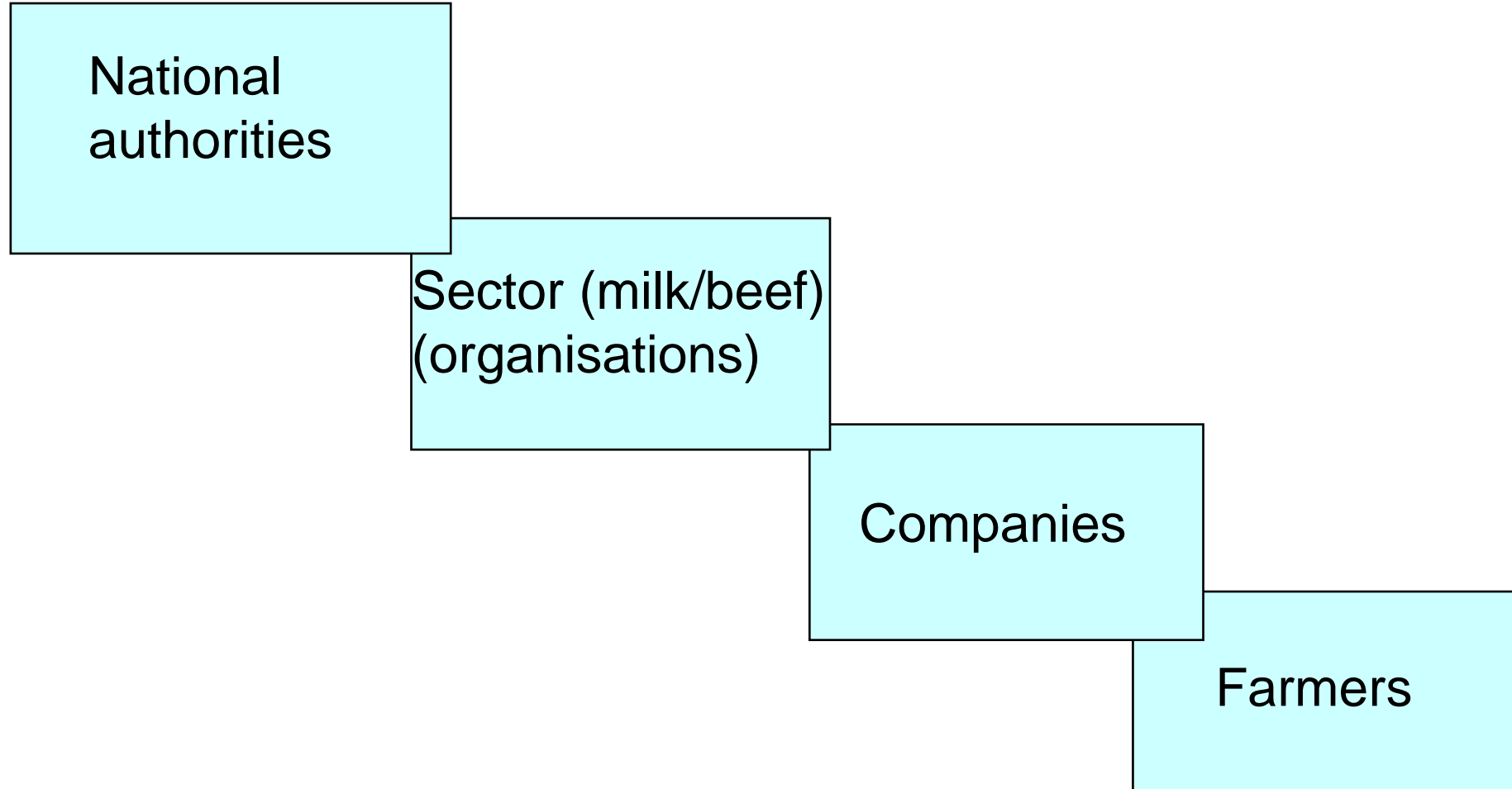
General objectives of disease control and surveillance

- Ensure healthy and clean foods
- Ensure a healthy and sustainable livestock production in terms of good animal welfare
- Maintain the high Danish veterinary level

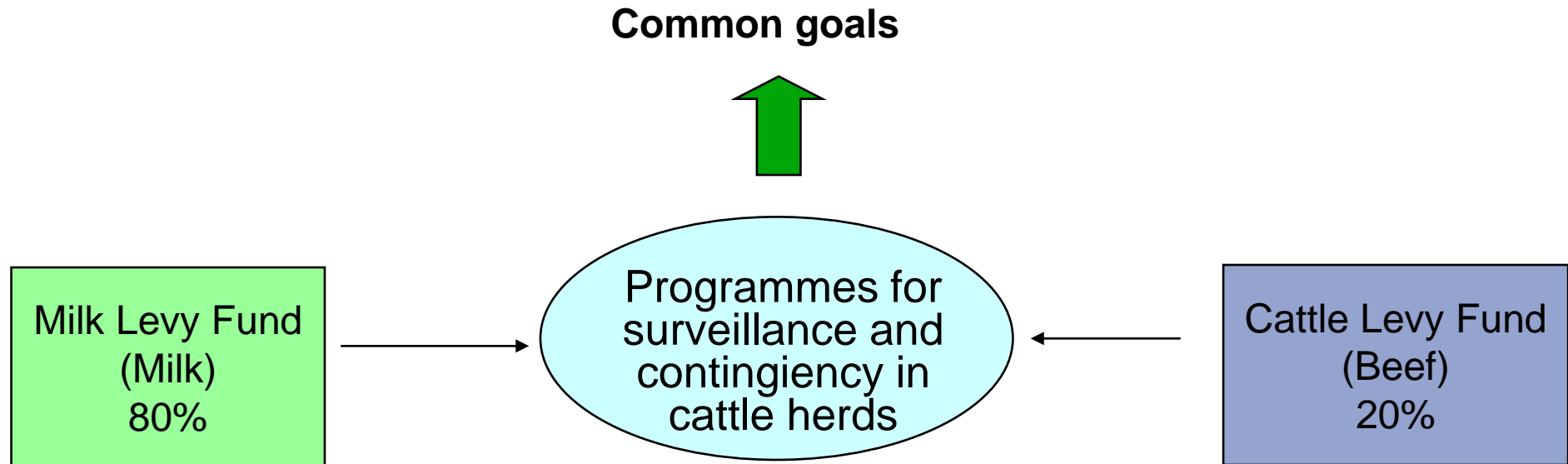
Purpose

- To carry out the surveillance for 'infectious bovine rhinotracheitis' (IBR), 'bovine virus diarrhoea' (BVD), Salmonella Dublin and Streptococcus agalactiae according to the Danish legislation
- Assure early detection of outbreaks of 'exotic' infectious cattle diseases
- Take care of the cattle industrys veterinary preparedness
- Take care of the cattle industrys reparedness concerning zoonoses

Chain of commitment for successful veterinary programmes



Financing common veterinary issues



Eradication of infectious diseases in Danish cattle – approach

1

- Screening
- Voluntary actions

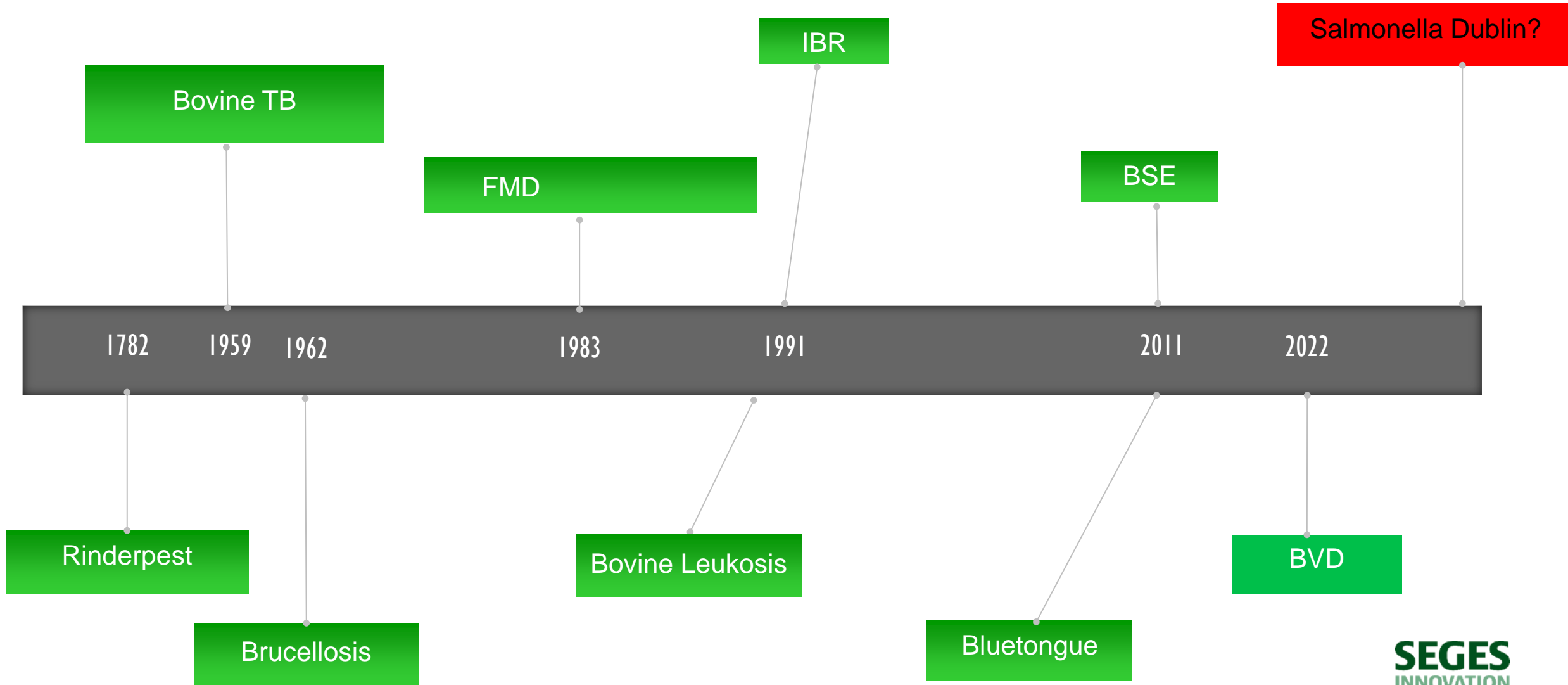
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- Eradication
- Compulsory actions

3

- Surveillance
- Official restrictions for infected herds

Successful eradication programmes in the Danish cattle population



Basis of health and high veterinary status

Registration



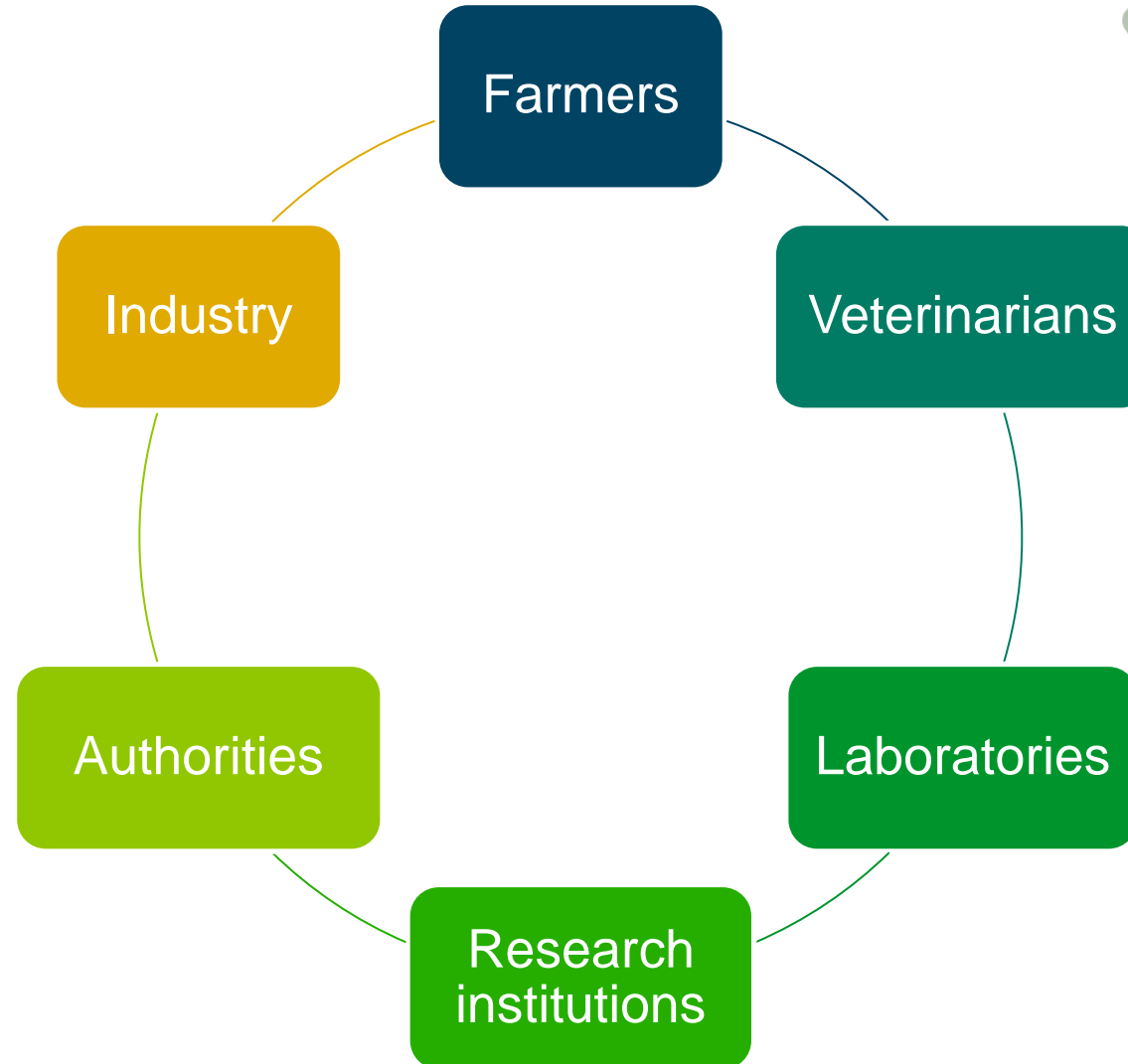
Identification

Recording of
transfers

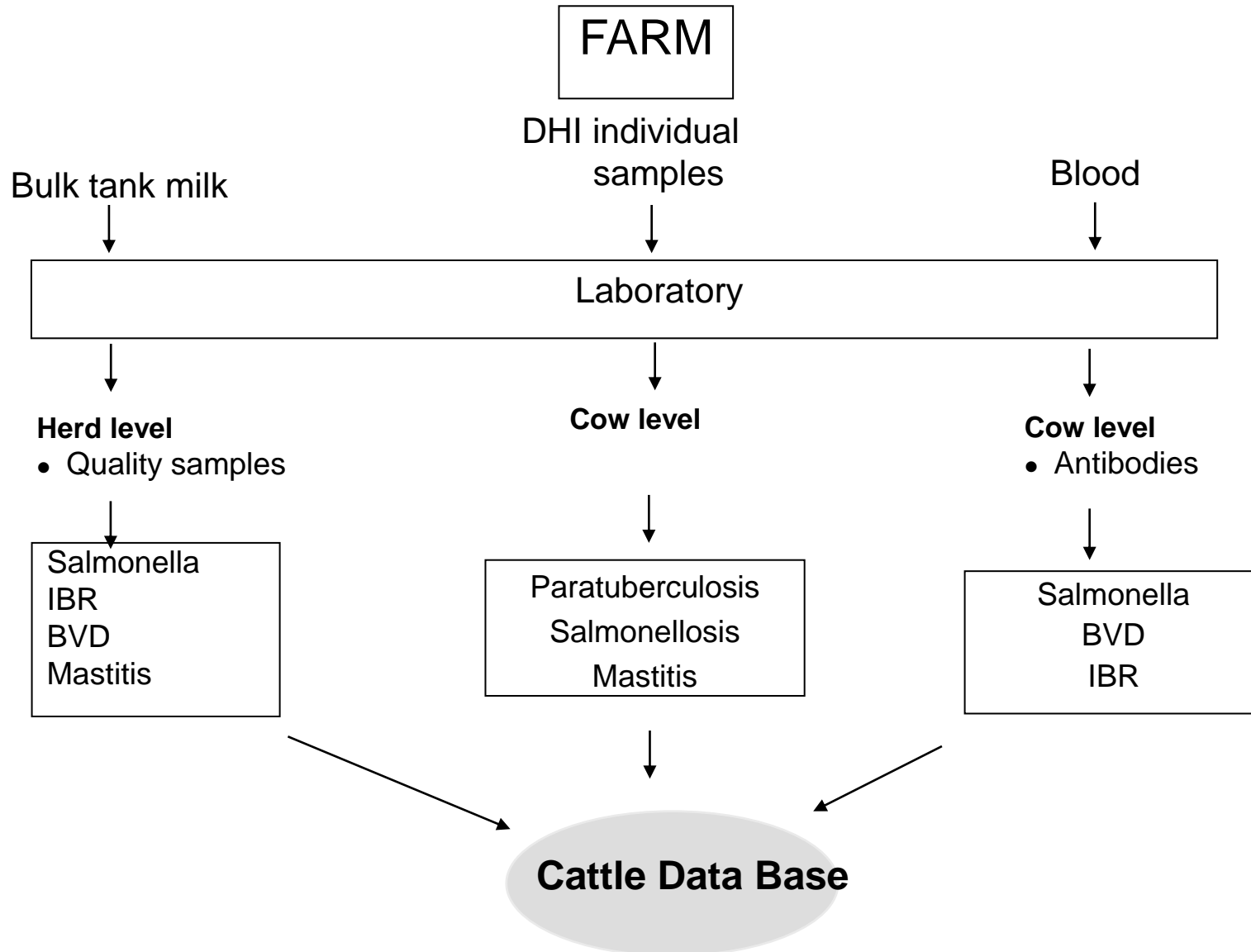
Priorities in animal disease control

- Important infections (FMD, tuberculosis)
- Food safety
- Less important infections (IBR, BVD, a.o.)
- endemic and production diseases

SEGES' partners in disease control



Surveillance - sampling scheme



Surveillance programs in Danish cattle herds

Cattle diseases

SEGES

- Infectious Bovine Rhinotracheitis (IBR)
- Bovine Virus Diarrhea (BVD)
- Salmonella Dublin
- Streptococcus agalactia

Danish Veterinary and Food Administration

- *Bluetongue*
- *BSE*
- *Bovine Tuberculosis*
- *Bovine Brucellosis*

Other types of surveillance

Other

- Mycoplasma bovis
- Antibiotic resistance: (MRSA)
- Operation Paratuberculosis (Johnes disease)
- Importing herds

Research screenings

- Bovine Respiratory Syncytial Virus
- Bovine Corona Virus
- Moraxella bovis

Other control programs in Danish cattle farms

Cattle diseases

”Operation Paratuberculosis” (Johnes Disease)

Voluntary herd control program since 2005

- 435 dairy herds – 113,000 cows participating

Certification program since 2011

Quality control and certification programmes

- "Self monitoring control" (EU-regulations)
- Dairy companies: "Arlagården" and "Gården"
- Danish Crown, slaughterhouse: "Code of Practice"

Sampling and administration of surveillance programmes

According to governmental amendments:

- All dairy herds sampled by bulk tank milk:
 - 4 times annually (BVD, Salmonella)
 - 1 time annually (IBR)
 - 2 times annually (Streptococcus agalactia)
- Non-dairy herds: IT technology automatically points out slaughtered cattle to be blood sampled for IBR, BVD and Salm. Dublin examination by disease specific periods.
- SEGES Innovation administrate all clarifications of suspected herds

Number of sampled herds 2023

Bulk tank milk

Disease	Herds
BVD	2,300
IBR	2,250
Salmonella Dublin	2,300
Str. agalactiae	2,300

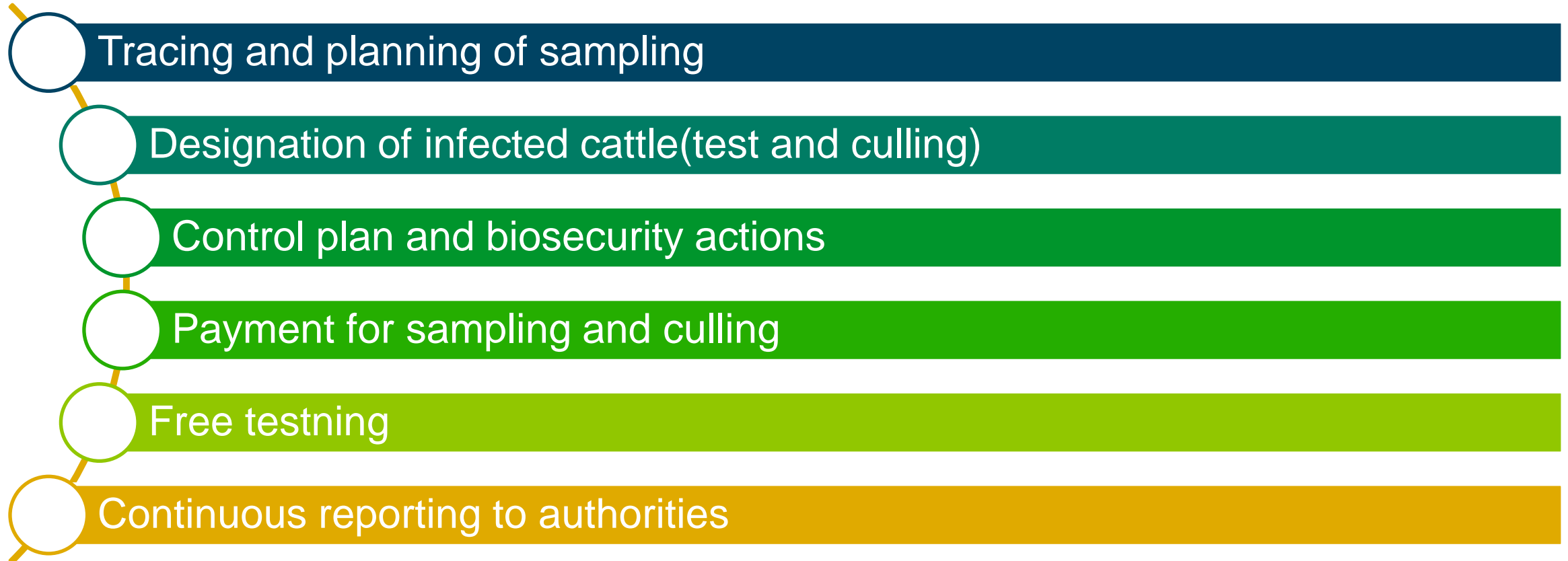
Blood samples

Disease	Herds
BVD	7,700
IBR	7,400
Salmonella Dublin	8,500

Number of analyses 2023

Disease	Analyses
BVD	
Blood at slaughter	18,000
Bulk tank milk	10,000
IBR	
Blood at slaughter	10,000
Bulk tank milk	2,300
Salmonella Dublin	
Blood at slaughter	14,000
Bulk tank milk	14,500
Str. agalactiae	
Bulk tank milk	6,700

SEGES' role in disease control



Threads of disease introduction from abroad

Import of live cattle

Indirect infection, eg:

- Hoof trimmers
- Veterinarians
- Technicians
- Semen, feed, a.s.o.
- Visitors
- Vehicles
- Everything else

Insects

- bluetongue



Import and export of live cattle

- Annual import of 100-300 cattle
- Export of
 - 50,000 calves
 - 55,000 heifers

Risk assessment countries

Low risk

Country
Finland
Iceland
Norway
Sveden

High risk

Country
Belgium
France
Holland
Ireland
Italy
Latvia
Poland
Schwizerland
Spain
UK
Germany
Hungary
Austria
Other countries

