

Brucellosis in South Africa: Progress and challenges

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Presentation Layout

- Legislative mandate
- Bovine Brucellosis Scheme
- Current Situation
- Progress on Brucellosis controls
- Challenges
- Way Forward



Legislative mandate

- Brucellosis is a controlled animal disease listed under Animal Diseases Act (Act. 35 of 1984) and related regulations.
- Brucellosis caused by *Brucella abortus*, *B. mellitensis*, *B. Canis* and *B. suis*.
- Regulations(Act. 35 of 1984) prescribes veterinary control acts in respect of Brucellosis such as:
 - All heifers between the ages of 4 and 8 months in the Republic must be immunized once with a remedy by the responsible person.
 - Testing, isolation, branding and slaughter of “infected” animals
- Bovine Brucellosis Scheme established under Section 10 of Animal Disease Act.



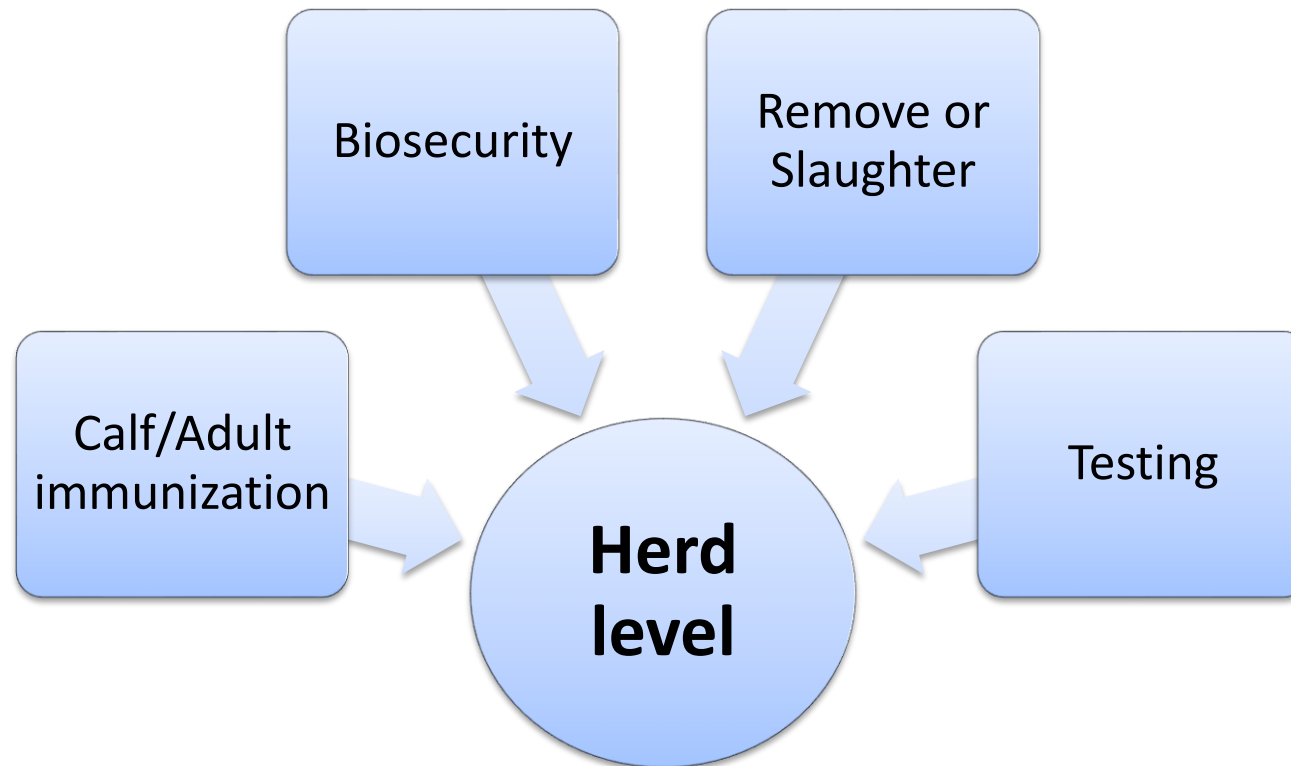
Bovine Brucellosis Scheme

- Objective of the Brucellosis Scheme:
 - Promote the eradication of bovine brucellosis for the **advancement of human and animal health.**
- Brucellosis Scheme has 7 test programmes:
 - Accreditation herd programme: **not applied.**
 - Annual diagnostic herd programme: **Mainly Dairy herd and Stud herd**
 - Diagnostic herd programme: **Commercial and communal herds**
 - Diagnostic testing programme: **Individual animals**
 - Import
 - Export
 - **Infected - Compulsory**
- 6 of the 7 programmes are **voluntary** except the Infected which is **compulsory.**
- The conditions to join any of the programmes are clearly outlined under each programme.



Brucellosis control – Fundamental Principles

- Bovine Brucellosis Control is based on providing cattle herd with effective immunity and removing infected animals timeously to prevent spread of infection and farm/or herd biosecurity.

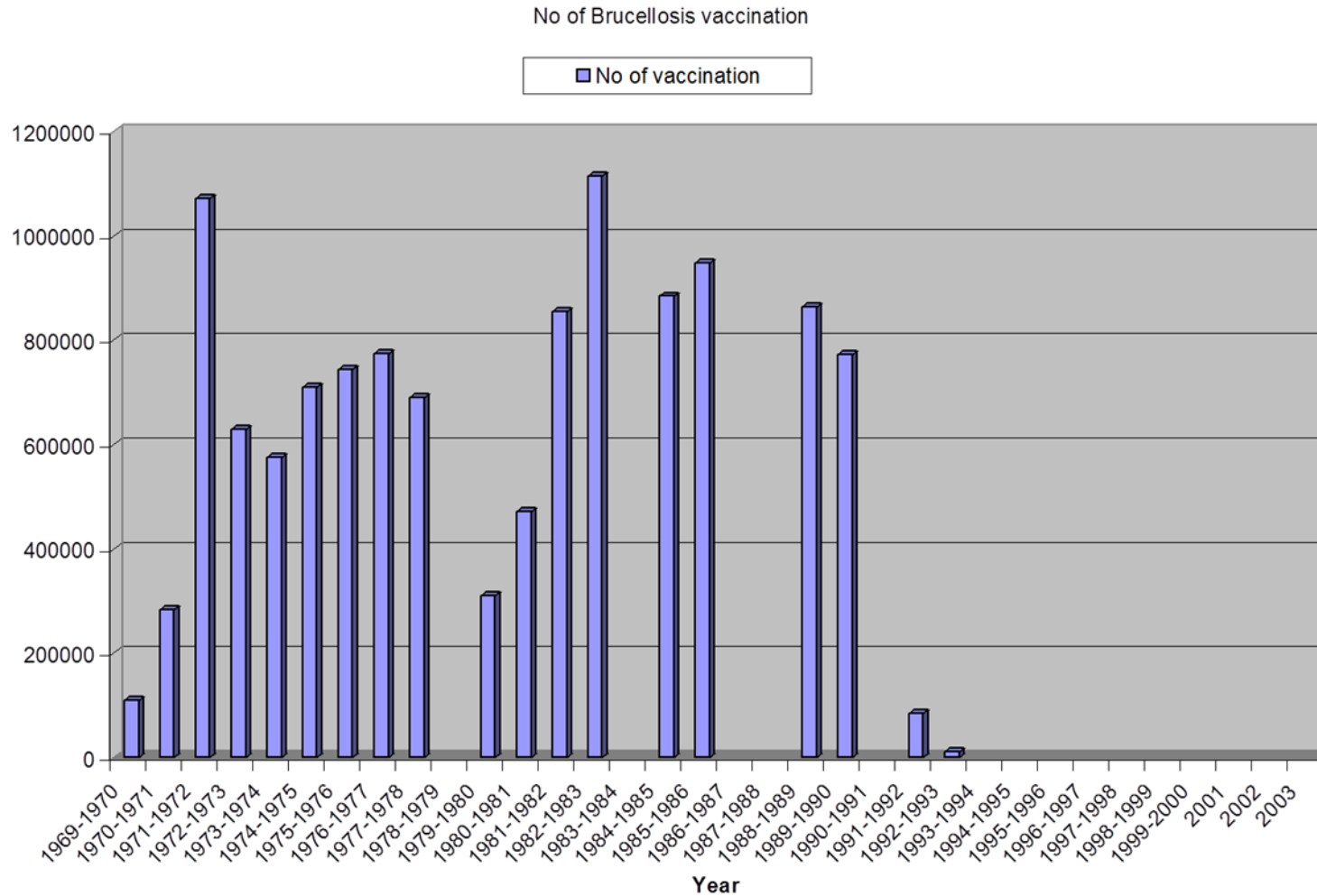


Overview of the History of Brucellosis in SA

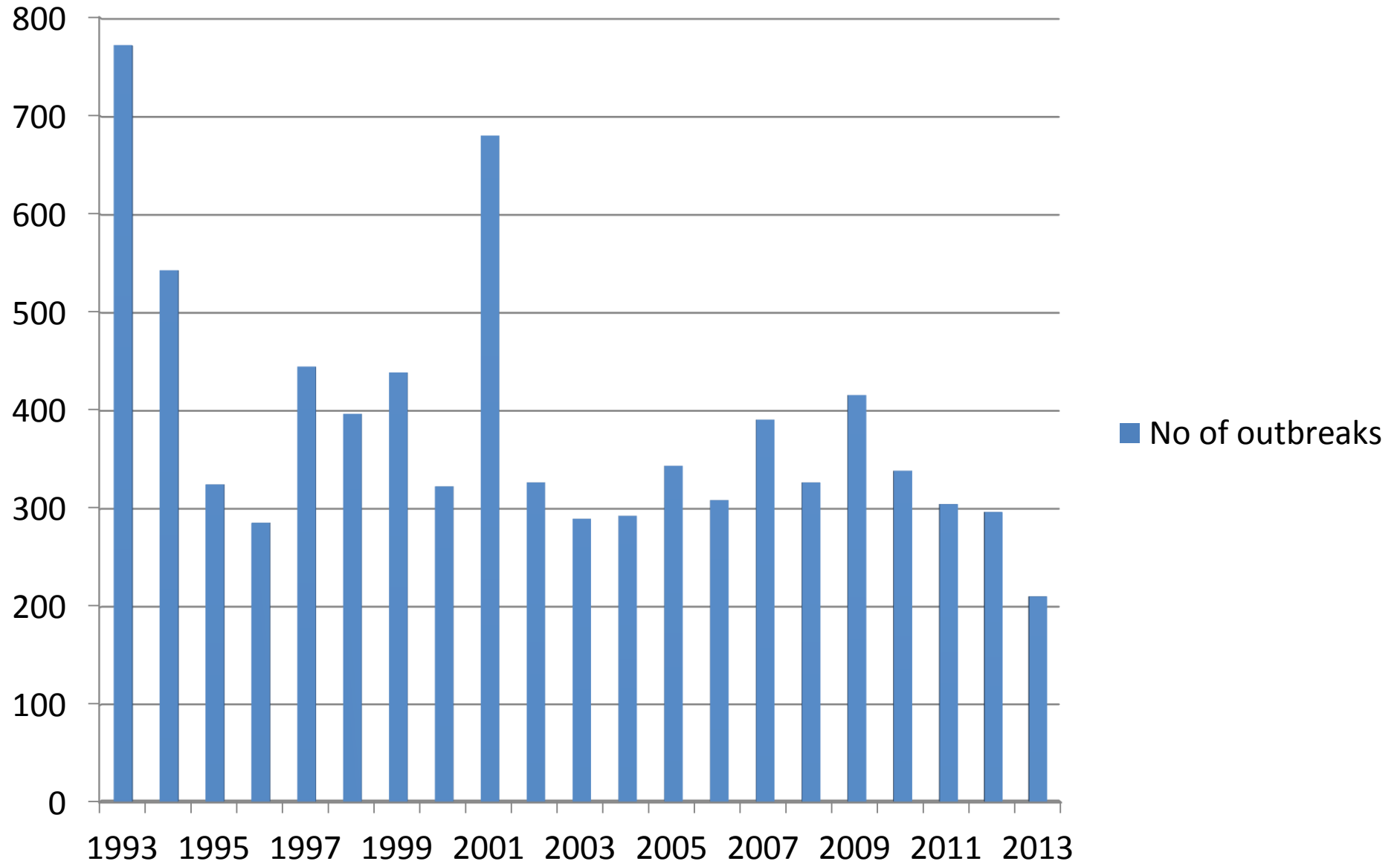
- 1969- Bovine Brucellosis eradication scheme was introduced.
- 1970 – started the use of S19 vaccination in the country.
- 1977/78 – 41.5% of cattle herds were tested and **6.6%** were positive
- 1980/81 – **22.8%** of 428 buffalo tested in KNP were positive.
- 1981/82 – S19 was supplied free of charge from the State Veterinary offices.
- 1985/87 – National prevalence dropped to **1.5%**.
- 1987/88 – Privatization of Brucellosis testing and vaccinations.
- 1988 – Bovine Brucellosis Schemes – promulgated.
 - Privatization of brucellosis testing
- 1991/92 - S19 became commercially available.
 - Challenge to obtain statistics of vaccinations.



History of Brucellosis in SA: Cont.



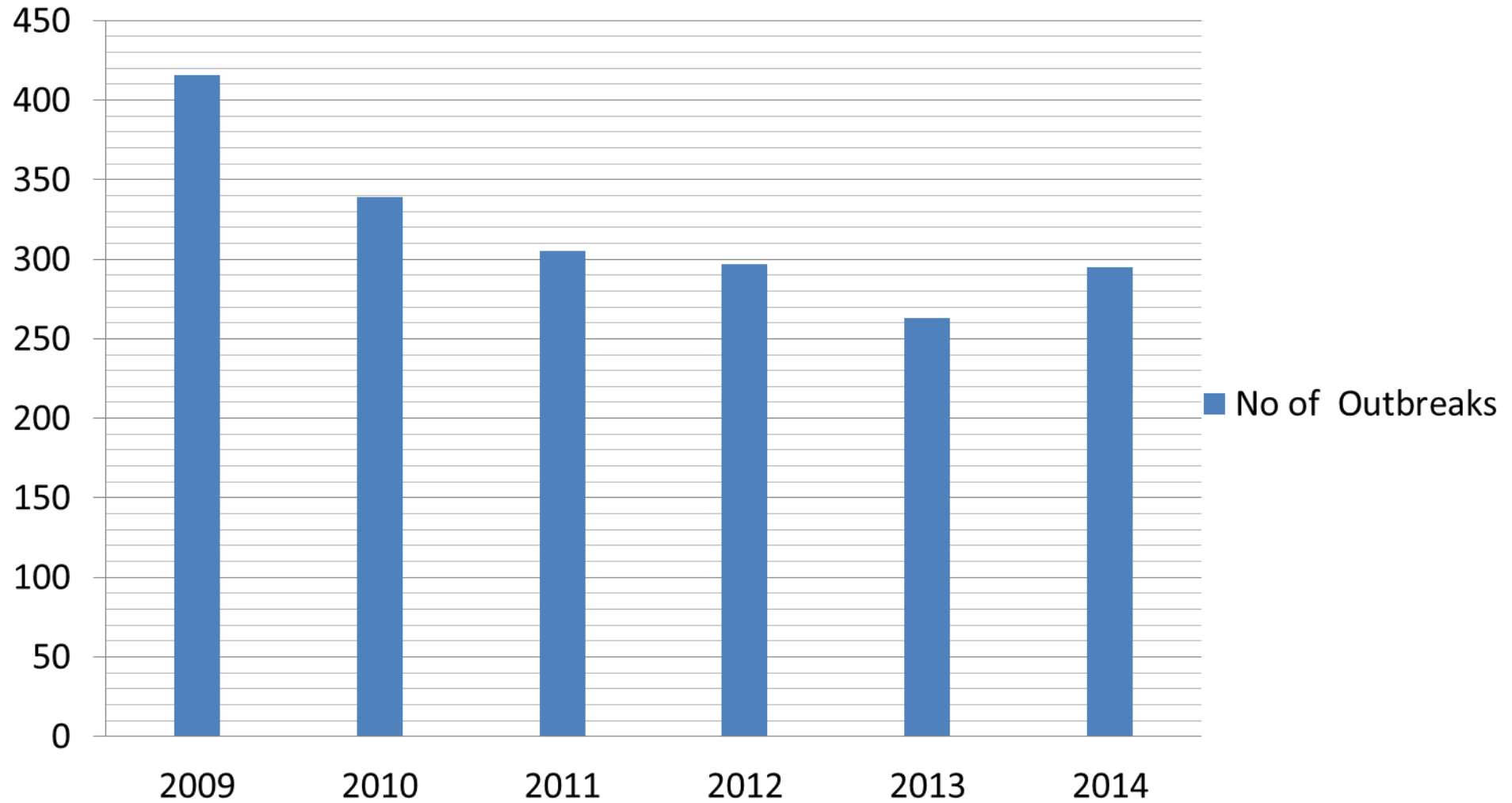
No of Brucellosis outbreaks within South Africa



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No of Brucellosis outbreaks reported – Past 5 yrs.

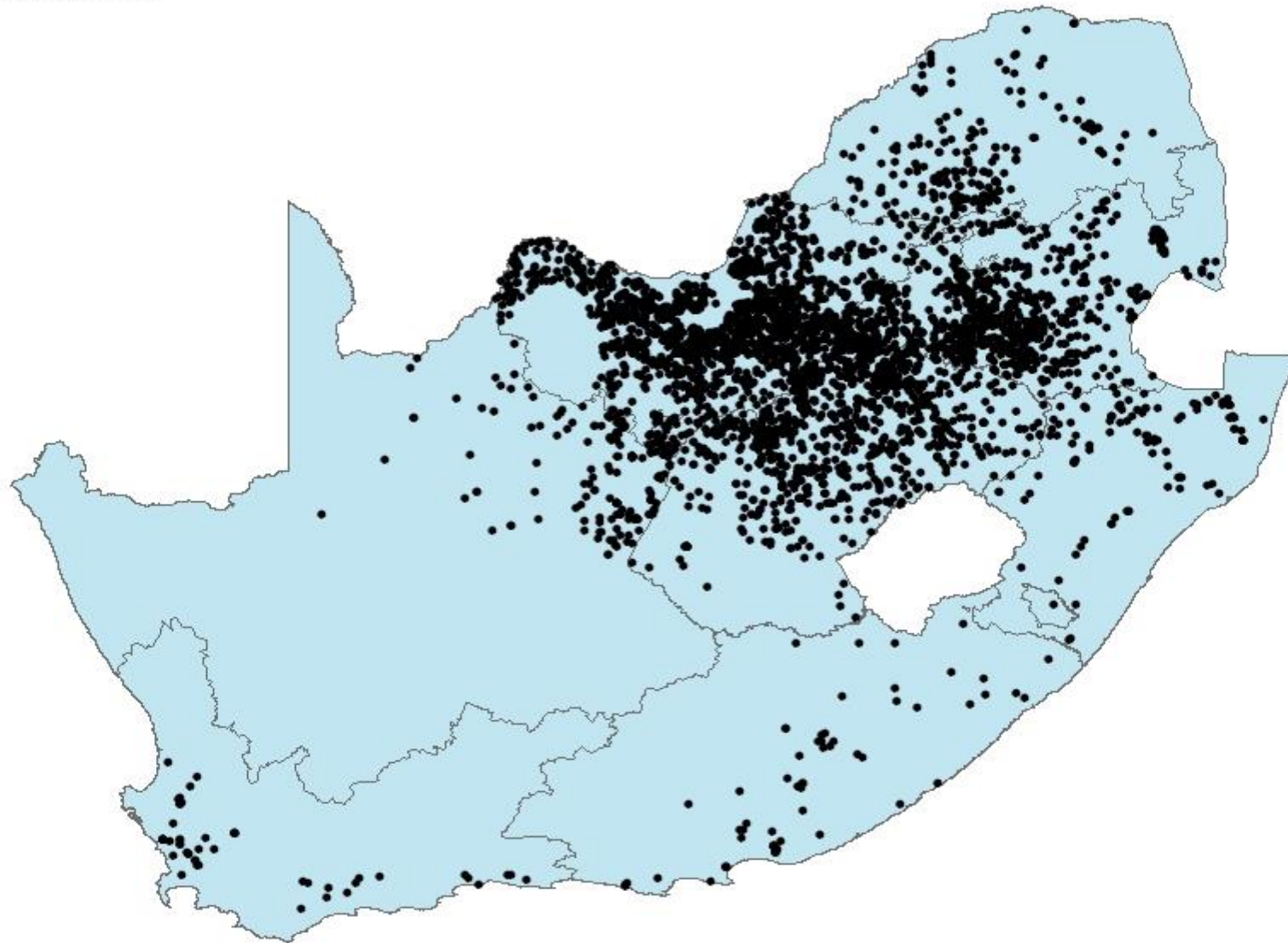


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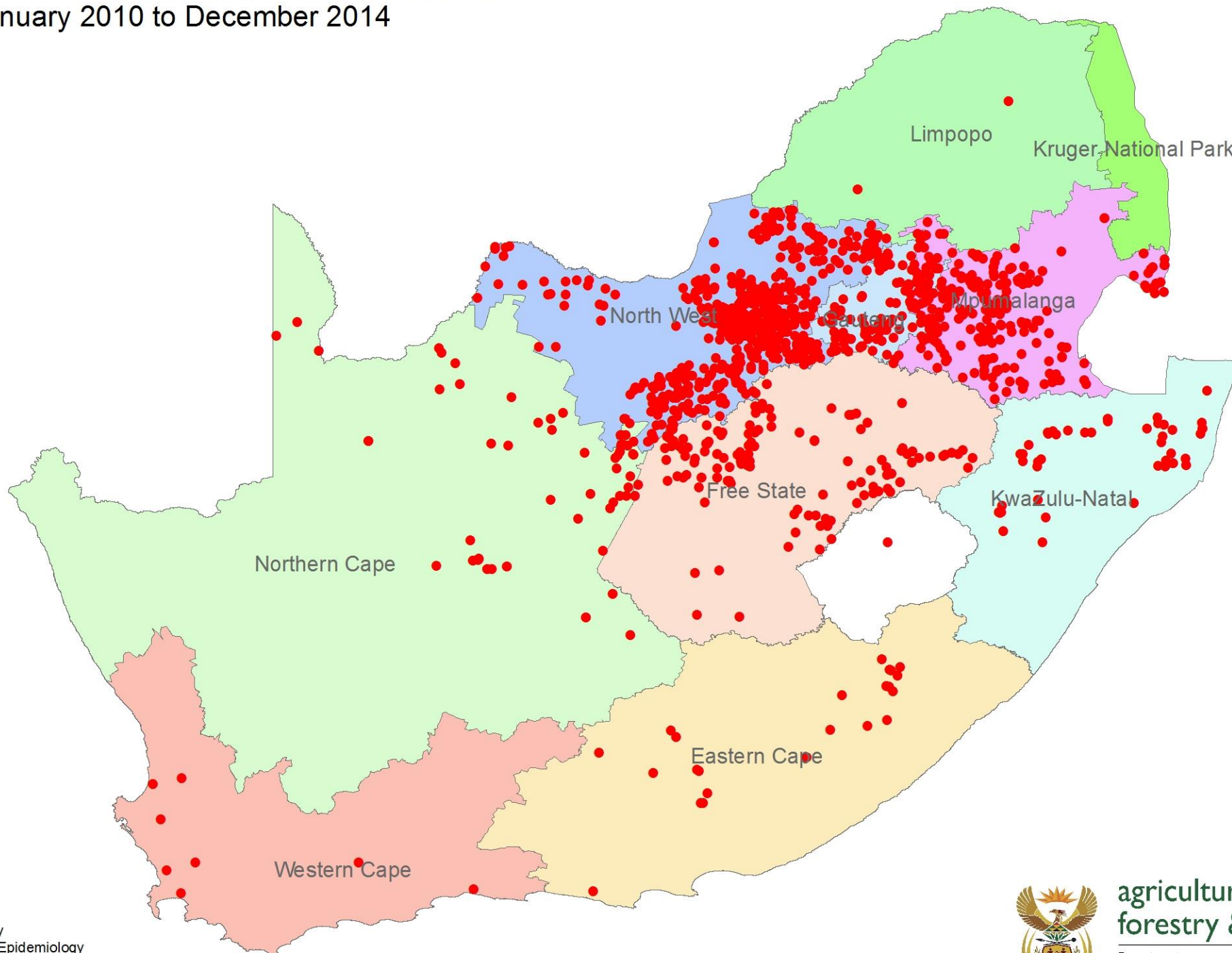
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Reported Disease Outbreaks (1993 to 2004)

Bovine Brucellosis



Reported Bovine Brucellosis outbreaks in cattle From January 2010 to December 2014

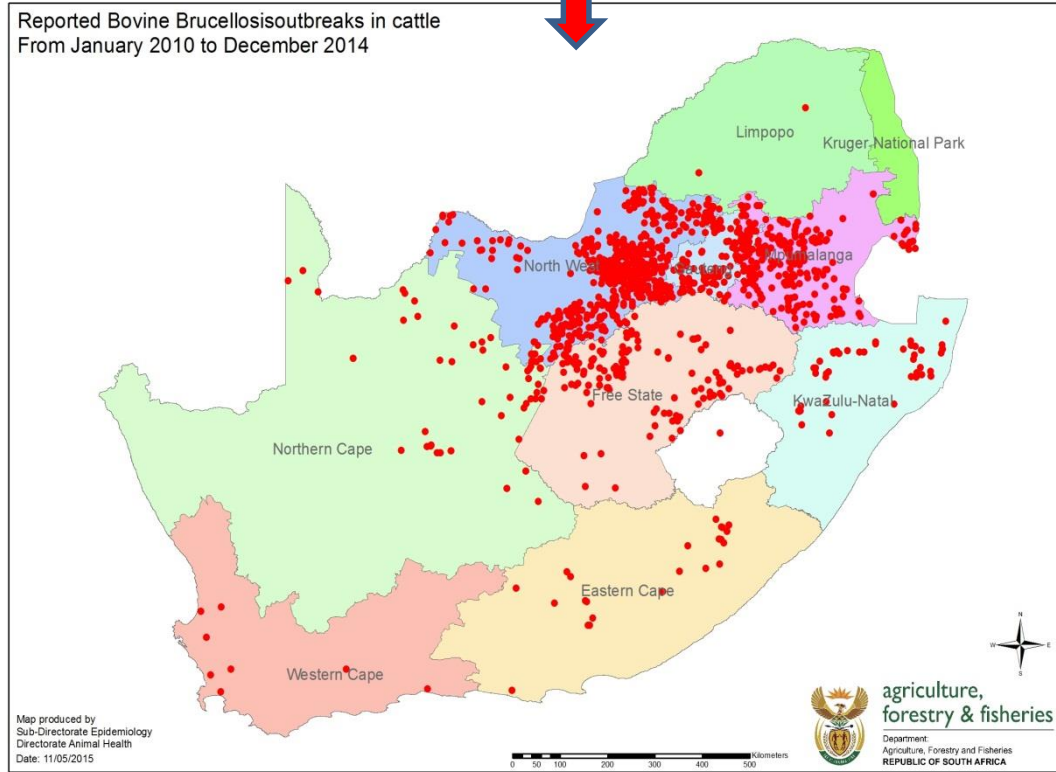
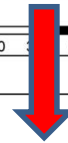
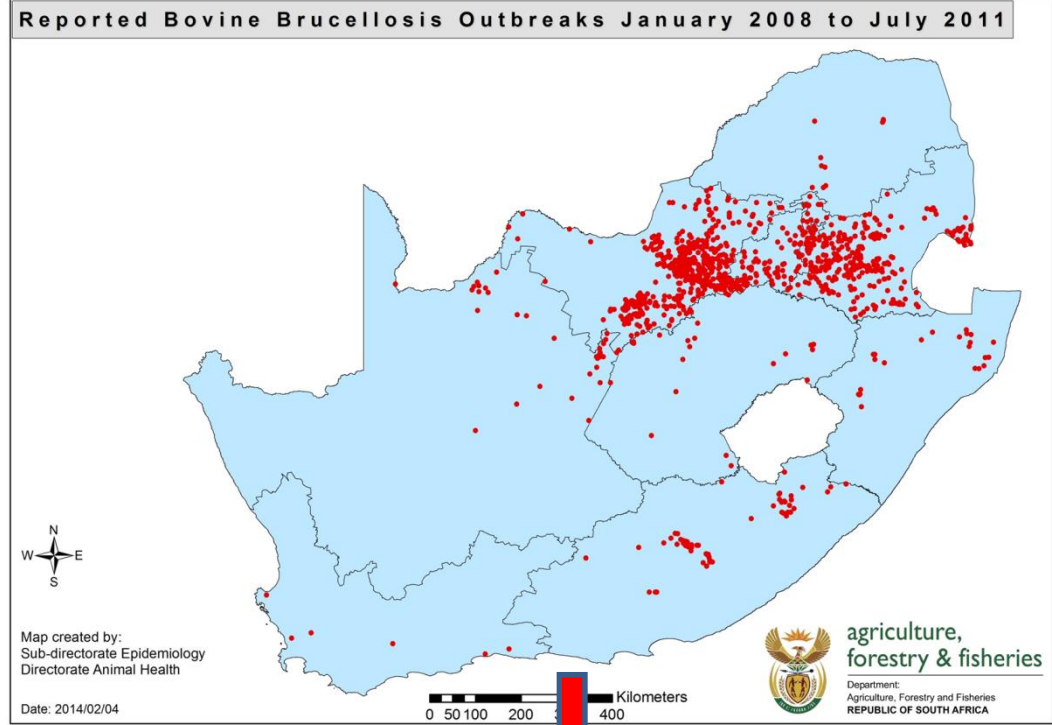
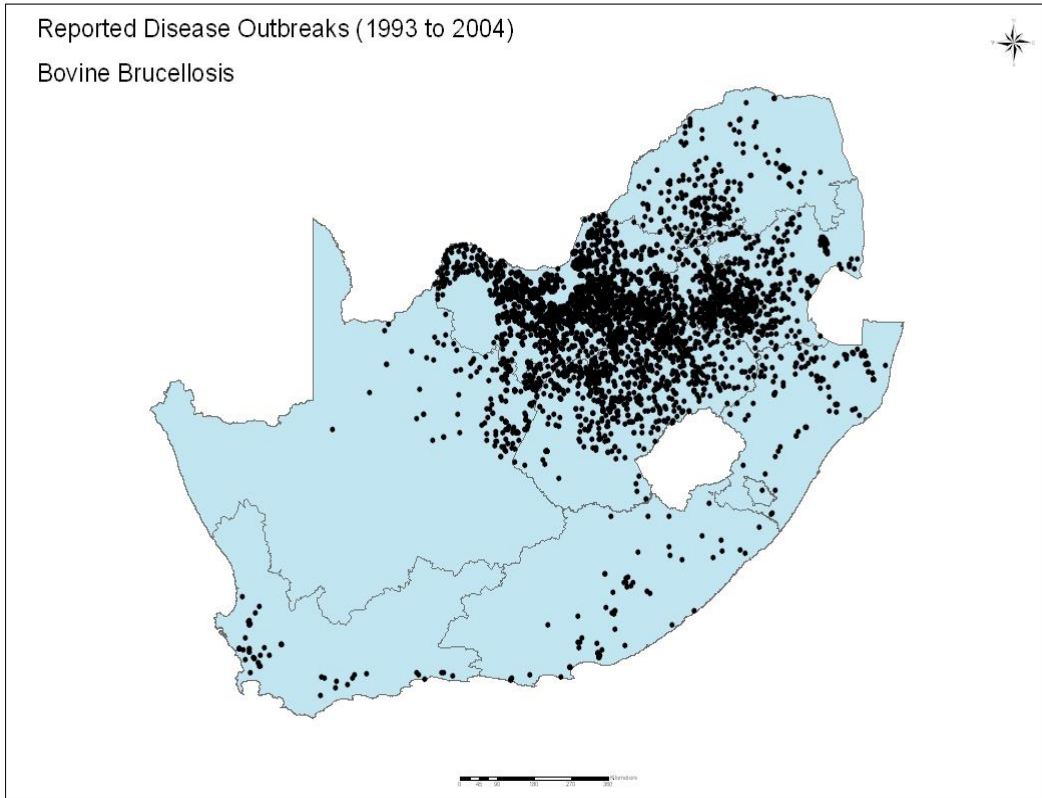


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Decline: reporting or testing



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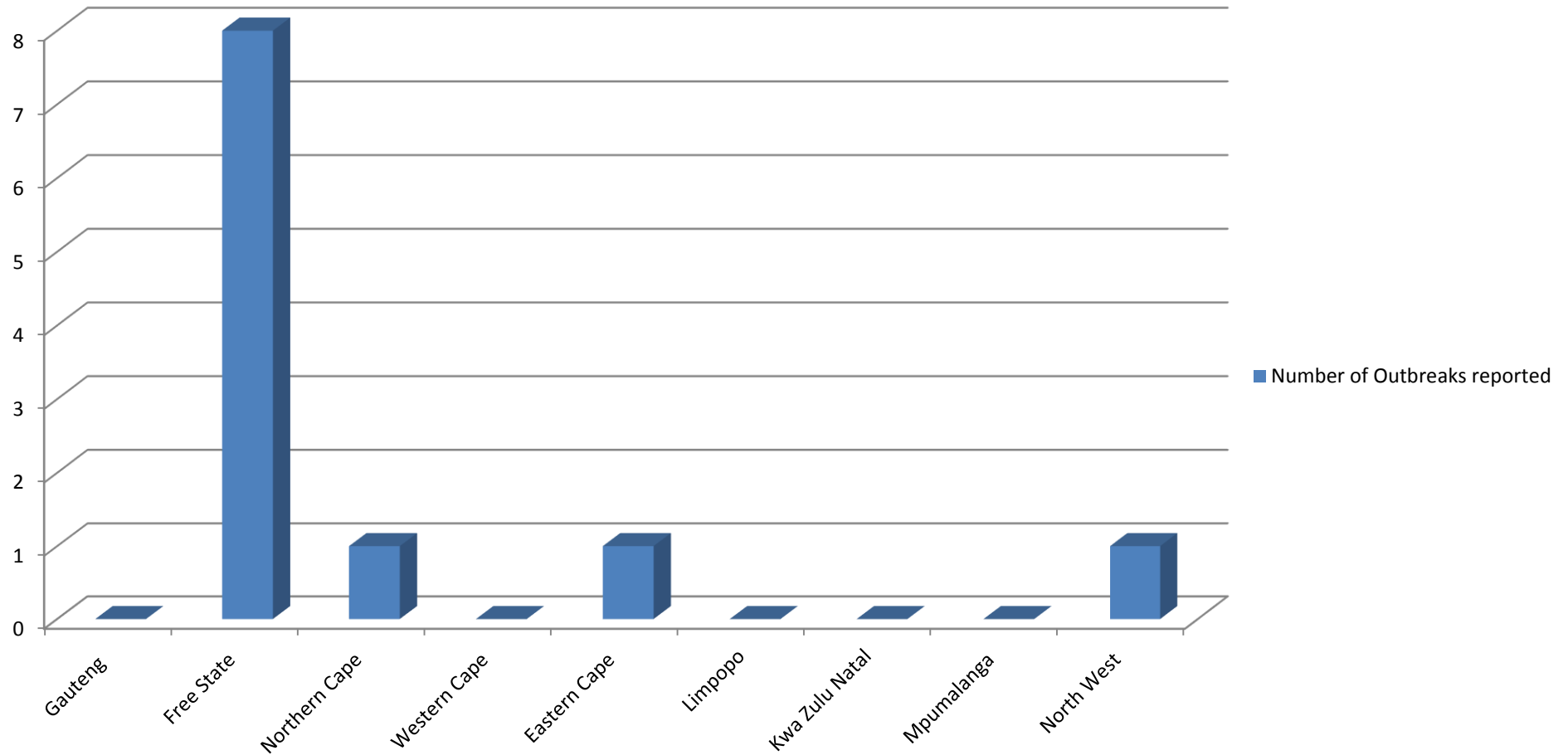


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Brucellosis in other animal species

No. of Brucellosis outbreaks wildlife farms



Progress on Brucellosis Control

- Commercial dairy herds- progressed fairly well.
 - Monthly MRT testing – **CA/Br declarations to sell milk.**
 - Serological tests
 - quarantine, isolation, branding, slaughter
- Commercial and communal beef herds – some progress.
 - Serological tests is continuing.
 - quarantine, isolation, branding, slaughter – **Serous Challenges.**
- Game farms - **challenging and complex!!!**



Challenges on Implementation of Control Measures.

○ Farmers:

- The participation on the scheme by the farmers is **Voluntary** except once brucellosis is suspected or confirmed.
- Farmer cooperation once herd is infected- **Beef & communal areas**
 - quarantine, isolation, branding, slaughter .
 - Monitoring of implementation of control measures.
 - **Compensation- Fair market value !!!!**
- The enforcing of heifer vaccinations for brucellosis particularly of not free of charge.
- Livestock Movement controls – off the farms or livestock sales.



Challenges on Implementation of Control Measures: cont.

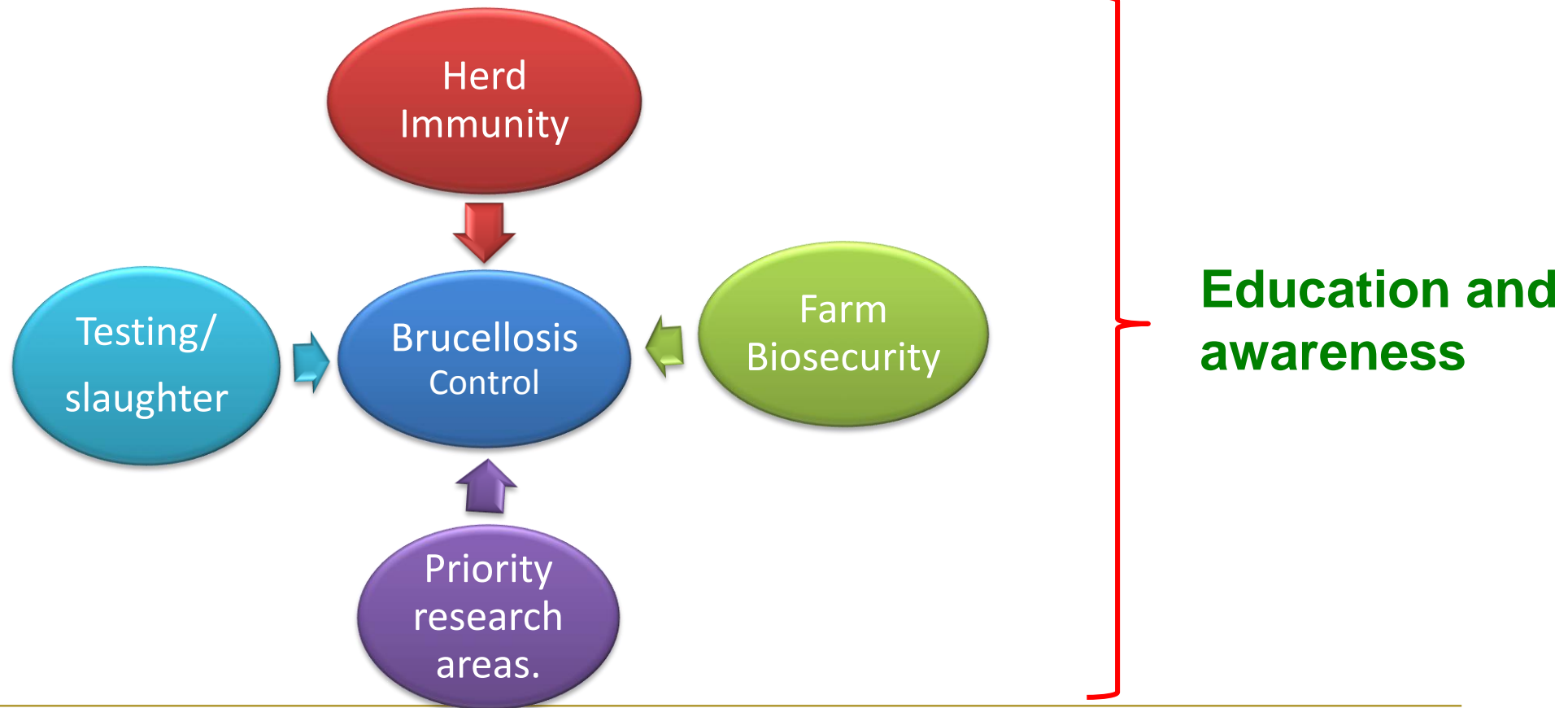
Departmental:

- Determining the true prevalence of Brucellosis in South Africa
 - All diverse livestock farming systems.
 - Based on the crude data from the provinces the prevalence seem to be increasing.
 - **Above 25% prevalence – differs per province.**
- Brucellosis Control: short to medium term objective – **reduction of prevalence or elimination.**
- Budgetary limitations or prioritizations.
- Procurement or transport challenges.
- HR insufficiency.



Way Forward

- Define tangible shared objectives on Brucellosis Control– all role player.
- Role and responsibilities (Government, Industry, DoH, Famers, research institutions)
- Areas of Cooperations and collaborations





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