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.
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.
  - Privatization of brucellosis testing
  - Challenge to obtain statistics of vaccinations.
History of Brucellosis in SA: Cont.
No of Brucellosis outbreaks reported – Past 5 yrs.
Reported Disease Outbreaks (1993 to 2004)
Bovine Brucellosis
Reported Bovine Brucellosis outbreaks in cattle
From January 2010 to December 2014
Decline: reporting or testing
Brucellosis in other animal species

No. of Brucellosis outbreaks wildlife farms

- Gauteng
- Free State
- Northern Cape
- Western Cape
- Eastern Cape
- Limpopo
- Kwa Zulu Natal
- Mpumalanga
- North West

Number of Outbreaks reported
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, Farmers, research institutions)
- Areas of Cooperations and collaborations