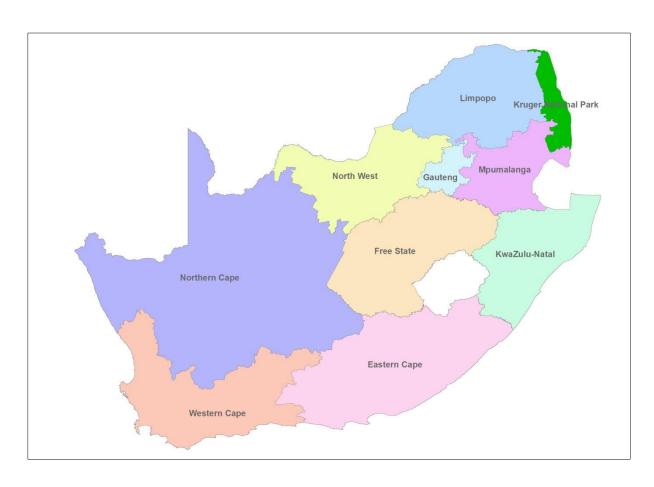
Animal Disease Reporting for the month February 2017





Sub-Directorate Epidemiology Directorate Animal Health 26 May 2017

Introduction

According to the Animal Diseases Act, 1984 (Act 35 of 1984) Controlled and Notifiable Diseases must be reported to the local State Veterinarian. The local State Veterinarian compiles a monthly report on diseases that occurred in his/her State Vet Area and submits this report to the Provincial Director of Veterinary Services. At a Provincial level, all these reports are combined to compile a disease report for the province and this report is submitted to the Sub-Directorate Epidemiology in the Directorate Animal Health at the Department of Agriculture, Forestry and Fisheries. All the provincial reports are combined to compile a national disease report.

Purpose of disease reporting

Reasons for disease reporting are:

- Proof of freedom
- Detection of outbreaks of important diseases
 - o Prevent the spread of the disease
 - o Institute control programs
 - Eradication of a disease
 - Warn neighbouring farmers/trade partners/neighbouring countries
 - Prevent the spread/occurrence of a disease in humans, e.g. rabies
 - o Decrease the economic impact of a disease
 - Prevent spread of diseases to trading partners
- Disease control

Summary Statistics of the February 2017 report

The following summary table has been compiled using simple count statistics

| Total number of outbreak and vaccination reports (data lines) | 2352 |
|---|------|
| Total number of outbreaks | 170 |
| Total number of animals involved (cases) | 1914 |
| Total number of diseases involved in outbreaks | 42 |
| Total number of State Vet Areas that reported | 99 |
| Total number of Local Municipalities reported from | 172 |
| Total number of species involved in outbreaks | 13 |

Reported Disease Outbreaks

The following tables indicate the disease outbreaks reported by the Provincial Veterinary Services.

Controlled Diseases

The following table indicates the reports of Controlled Diseases

| | Eastern Cape Province | Free State | Gauteng | Kruger National Park | KwaZulu-Natal | гітроро | Mpumalanga | North West Province | Northern Cape Province | Western Cape Province | Total |
|--|-----------------------|------------|---------|----------------------|---------------|---------|------------|---------------------|------------------------|-----------------------|--------------|
| African Horse Sickness | 0 | 0 | 9 | 0 | 3 | 0 | 1 | 2 | 0 | 0 | 15 |
| African Swine Fever | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Avian Influenza: H6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Avian Influenza: Low Pathogenic : Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Avian Influenza: Low Pathogenic: H5 or H7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Bovine Brucellosis (Brucella abortus) | 2 | 2 | 1 | 0 | 0 | 0 | 1 | 4 | 0 | 0 | 10 |
| Bovine Tuberculosis (Mycobacterium bovis) | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Fowl Typhoid (Salmonella gallinarum) | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| Newcastle Disease | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 4 |
| Paratuberculosis (Johne's Disease) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| Psittacosis And Ornithosis (Chlamydiosis) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Rabies | 2 | 0 | 0 | 0 | 10 | 2 | 5 | 10 | 1 | 1 | 31 |
| Salmonella enteritidis | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 |
| Total | 4 | 2 | 13 | 1 | 14 | 2 | 7 | 18 | 2 | 14 | 77 |

Notifiable diseases

The following table indicates the reports of Notifiable diseases

| | Eastern Cape Province | Free State | Gauteng | Kruger National Park | KwaZulu-Natal | Limpopo | Mpumalanga | North West Province | Northern Cape Province | Western Cape Province | Total |
|---|-----------------------|------------|---------|----------------------|---------------|---------|------------|---------------------|------------------------|-----------------------|-------|
| Bluetongue | 0 | 1 | 5 | 0 | 0 | 0 | 1 | 2 | 0 | 2 | 11 |
| Lumpy Skin Disease | 1 | 2 | 8 | 0 | 2 | 2 | 16 | 10 | 0 | 0 | 41 |
| Swine Erysipelas / Diamond skin disease | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 3 |
| Total | 1 | 3 | 14 | 0 | 2 | 3 | 17 | 12 | 0 | 3 | 55 |

Other diseases

The following table indicates the reports of diseases that are not Controlled or Notifiable. Reporting of these diseases are not compulsory.

| | Eastern Cape Province | Free State | Gauteng | Kruger National Park | KwaZulu-Natal | Limpopo | Mpumalanga | North West Province | Northern Cape Province | Western Cape Province | Total |
|-----------------------------------|-----------------------|------------|---------|----------------------|---------------|----------------|------------|---------------------|------------------------|-----------------------|-------|
| Anaplasmosis | 0 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 5 |
| Babesiosis (Redwater) | 5 | 5 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 11 |
| Blackleg (Sponssiekte) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| Botulism | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Canine Babesioses | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Canine Distemper | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 2 |
| Caseous Lymphadenitis | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Coccidiosis | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Cysticercosis (Cysticercus bovis) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| Foot-Rot | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
| Fowl Pox | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Heartwater | 1 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 5 |
| Other Clostridial Infections | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Pigeon Paramixo Virus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Total | 7 | 12 | 0 | 0 | 0 | 10 | 0 | 6 | 0 | 3 | 38 |

Information and maps of Specific Diseases

African swine fever (ASF)

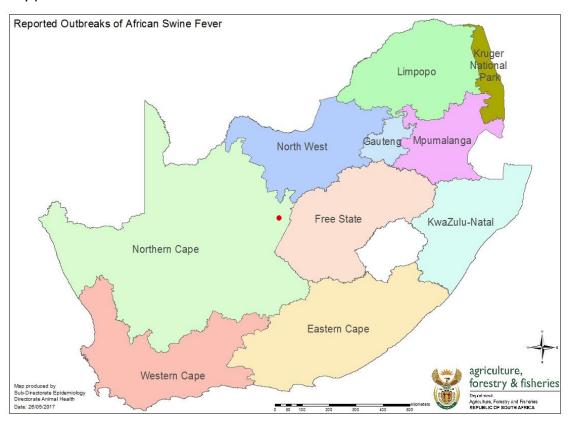
The following table indicates the number of reported ASF outbreaks per province

| Province | Number of reported outbreaks |
|------------------------|------------------------------|
| Northern Cape Province | 1 |

An outbreak was reported from the Pniel Communal Estate in the Frances Baard District of Kimberley in the Northern Cape Province. This area falls outside of the ASF Controlled Areas.

On 22 February 2017 the local councillor for the area reported high mortalities in pigs to the Veterinary Services of the Northern Cape Province. A dead pig was collected by the Animal Health Technician and a post mortem performed which found signs consistent with African Swine Fever (subcut oedema, haemorrhages of the liver, kidney and stomach and an enlarged spleen). The Kimberley Veterinary Laboratory then sent samples to the OVI, which tested positive on PCR on 24 February 2017. Out of a population of 100 free ranging pigs, 91 died and 9 were culled.

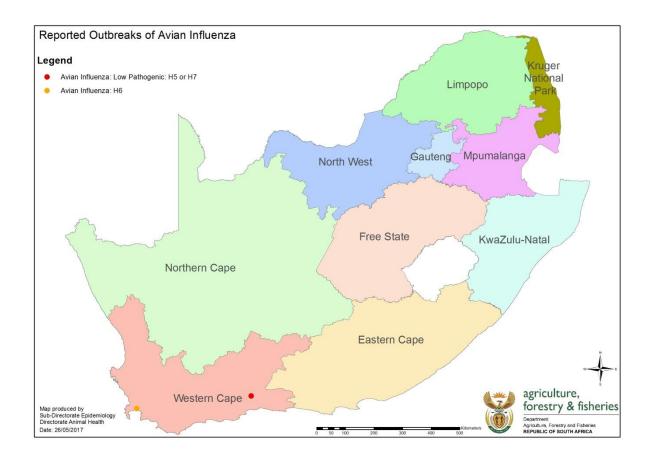
The investigation to determine the source of infection is ongoing, with backward and forward tracing also being conducted. Intensive surveillance will be carried out on all nearby premises.



Avian Influenza

The following table indicates the number of reported Avian Influenza outbreaks per province

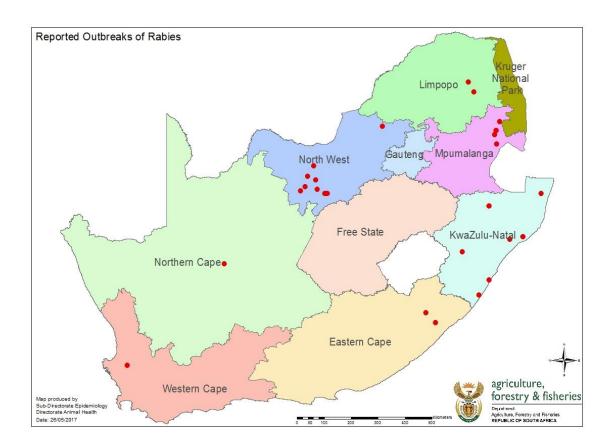
| Province | Avian Influenza Strain | Number of reported outbreaks |
|--------------------------|---|------------------------------|
| Western Cape Province | Avian Influenza: H6 | 1 |
| Western Cape Province | Avian Influenza: Low Pathogenic: H5 or H7 | 1 |



Rabies

The following table indicates the number of reported rabies outbreaks per province

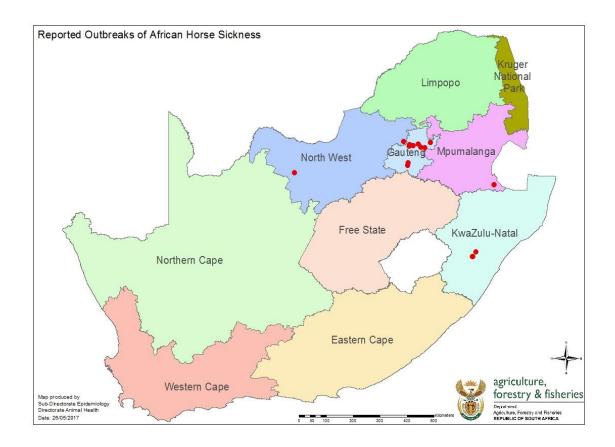
| Province | Number of reported outbreaks |
|------------------------|------------------------------|
| Eastern Cape Province | 2 |
| KwaZulu-Natal | 10 |
| Limpopo | 2 |
| Mpumalanga | 5 |
| North West Province | 10 |
| Northern Cape Province | 1 |
| Western Cape Province | 1 |



African Horse Sickness

The following table indicates the number of reported AHS outbreaks per province

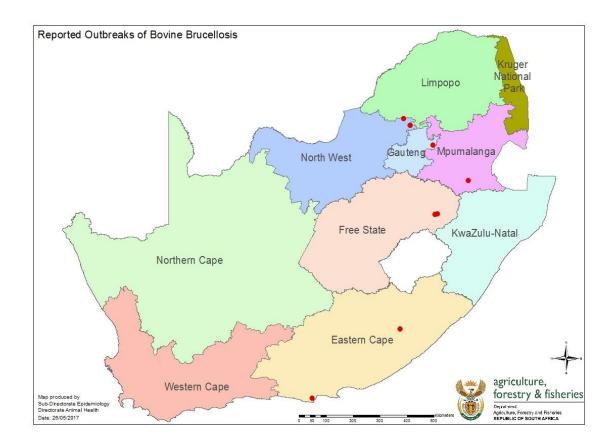
| Province | Number of reported outbreaks |
|---------------------|------------------------------|
| Gauteng | 9 |
| KwaZulu-Natal | 3 |
| Mpumalanga | 1 |
| North West Province | 2 |



Bovine Brucellosis

The following table indicates the number of reported Bovine Brucellosis outbreaks per province

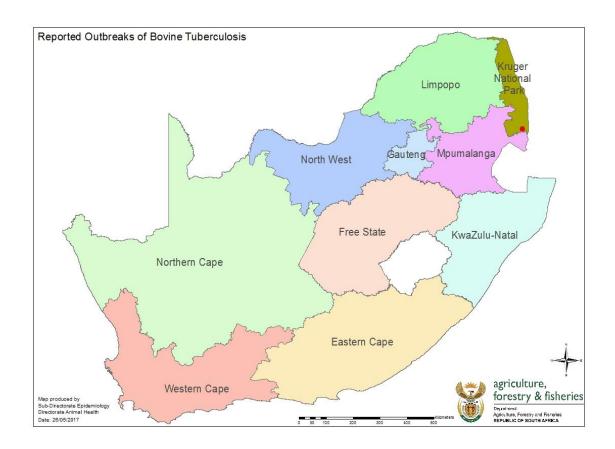
| Province | Number of reported outbreaks |
|-----------------------|------------------------------|
| Eastern Cape Province | 2 |
| Free State | 2 |
| Gauteng | 1 |
| Mpumalanga | 1 |
| North West Province | 4 |



Bovine Tuberculosis

The following table indicates the number of reported Bovine Tuberculosis outbreaks per province

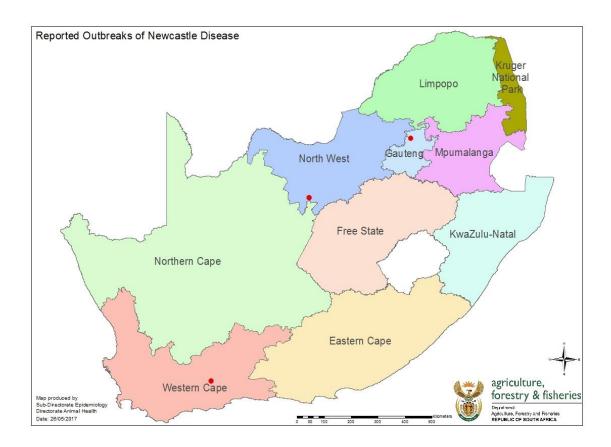
| Province | Number of reported outbreaks |
|----------------------|------------------------------|
| Kruger National Park | 1 |



Newcastle Disease

The following table indicates the number of reported Newcastle outbreaks per province

| Province | Number of reported outbreaks |
|-----------------------|------------------------------|
| Gauteng | 1 |
| North West Province | 2 |
| Western Cape Province | 1 |



Disclaimer

Please take note that this report was automatically compiled using R, R-Studio, several R packages and the South African Animal Health Information System (SAAHIS). Any errors in the data will be copied verbatim into this report.

The data in this report only reflects reports received from the Provincial Veterinary Services and the data was not collected for the purposes of research. Any interpretation of this data should be done with full consideration of the situation on the ground and South Africa's Disease Reporting System.

For further details please contact the Sub-Directorate Epidemiology, Directorate Animal Health (Epidemiology@daff.gov.za).

References

- Directorate Animal Health, 2015, 'South African Animal Health Information System'.
- Gohel, D., 2015, 'ReporteRs: Microsoft Word, Microsoft Powerpoint and HTML Documents Generation', from http://cran.r-project.org/package=ReporteRs.
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