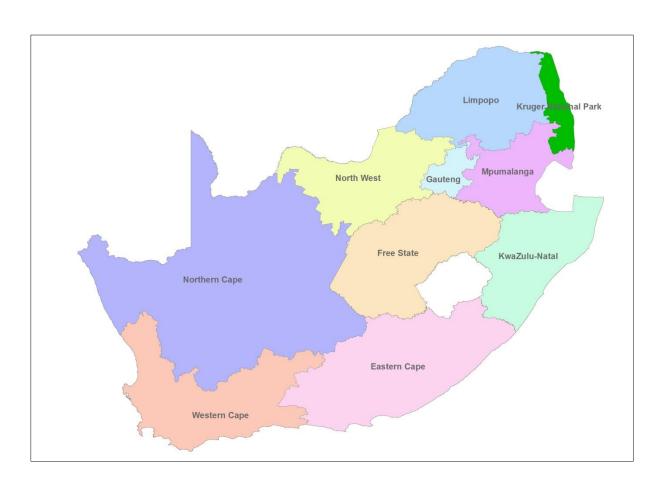
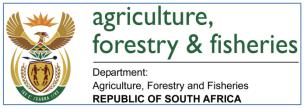
# Animal Disease Reporting for the month June 2016





Sub-Directorate Epidemiology Directorate Animal Health 30 August 2016

#### Introduction

According to the Animal Diseases Act (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
  - o Prevent spread of diseases to trading partners
- Disease control

#### **Summary Statistics of the June 2016 report**

The following summary table has been compiled using simple count statistics

| Total number of outbreak and vaccination reports (data lines) | 2981  |
|---|-------|
| Total number of outbreaks                                     | 147   |
| Total number of animals involved (cases)                      | 10919 |
| Total number of diseases involved in outbreaks                | 37    |
| Total number of State Vet Areas that reported                 | 92    |
| Total number of Local Municipalities reported from            | 158   |
| Total number of species involved in outbreaks                 | 25    |

# **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

| The following table maleates the                     |                       |            |         |                      |               |         |            |                     |                        |                       |       |
|--|-----------------------|------------|---------|----------------------|---------------|---------|------------|---------------------|------------------------|-----------------------|-------|
|  | Eastern Cape Province | Free State | Gauteng | Kruger National Park | KwaZulu-Natal | Limpopo | Mpumalanga | North West Province | Northern Cape Province | Western Cape Province | Total |
| African Horse Sickness                               | 0                     | 0          | 9       | 0                    | 2             | 0       | 0          | 2                   | 0                      | 0                     | 13    |
| African Swine Fever                                  | 0                     | 4          | 0       | 0                    | 0             | 0       | 0          | 0                   | 0                      | 0                     | 4     |
| Anthrax  | 0                     | 0          | 0       | 7                    | 0             | 0       | 0          | 0                   | 0                      | 0                     | 7     |
| Avian Influenza: H6                                  | 0                     | 0          | 1       | 0                    | 0             | 0       | 0          | 0                   | 0                      | 0                     | 1     |
| Avian Influenza: Low Pathogenic:<br>H5 or H7         | 2                     | 0          | 0       | 0                    | 0             | 0       | 0          | 0                   | 0                      | 0                     | 2     |
| Avian Influenza: Non-Pathogenic                      | 1                     | 0          | 0       | 0                    | 0             | 0       | 0          | 0                   | 0                      | 0                     | 1     |
| Bovine Brucellosis (Brucella abortus )               | 0                     | 9          | 1       | 0                    | 0             | 0       | 0          | 5                   | 0                      | 0                     | 15    |
| Bovine Tuberculosis (Mycobacterium bovis)            | 0                     | 0          | 0       | 2                    | 0             | 0       | 1          | 0                   | 0                      | 0                     | 3     |
| Brucella Ovis Infection (Ovine Epididymitis)         | 2                     | 0          | 0       | 0                    | 0             | 0       | 0          | 0                   | 0                      | 0                     | 2     |
| Caprine And Ovine Brucellosis (Brucella mellitensis) | 0                     | 0          | 0       | 0                    | 0             | 1       | 0          | 0                   | 0                      | 0                     | 1     |
| Corridor Disease                                     | 1                     | 0          | 0       | 0                    | 0             | 0       | 0          | 0                   | 0                      | 0                     | 1     |
| Dourine  | 0                     | 0          | 0       | 0                    | 0             | 0       | 1          | 0                   | 0                      | 0                     | 1     |
| Fowl Typhoid (Salmonella gallinarum)                 | 0                     | 0          | 0       | 0                    | 0             | 0       | 2          | 0                   | 0                      | 0                     | 2     |
| Newcastle Disease                                    | 3                     | 0          | 0       | 0                    | 0             | 0       | 0          | 0                   | 0                      | 0                     | 3     |
| Paratuberculosis (Johne's Disease)                   | 0                     | 0          | 0       | 0                    | 0             | 0       | 0          | 0                   | 0                      | 2                     | 2     |
| Psittacosis And Ornithosis<br>(Chlamydiosis)         | 0                     | 0          | 1       | 0                    | 0             | 0       | 0          | 0                   | 0                      | 0                     | 1     |
| Rabies   | 6                     | 2          | 10      | 0                    | 7             | 2       | 0          | 10                  | 2                      | 0                     | 39    |
| Salmonella enteritidis                               | 0                     | 0          | 0       | 0                    | 0             | 0       | 3          | 1                   | 0                      | 3                     | 7     |
| Sheep Scab   | 3                     | 0          | 1       | 0                    | 0             | 0       | 1          | 0                   | 2                      | 0                     | 7     |
| Total  | 18                    | 15         | 23      | 9                    | 9             | 3       | 9          | 17                  | 4                      | 5                     | 112   |

## **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 |
|---|-----------------------|------------|---------|----------------------|---------------|---------|------------|---------------------|------------------------|-----------------------|-------|
| Bovine Malignant Catarrhal fever        | 2                     | 1          | 0       | 0                    | 0             | 2       | 0          | 6                   | 0                      | 1                     | 12    |
| Lumpy Skin Disease                      | 0                     | 0          | 0       | 0                    | 0             | 0       | 0          | 0                   | 0                      | 1                     | 1     |
| Swine Erysipelas / Diamond skin disease | 0                     | 0          | 0       | 0                    | 1             | 0       | 0          | 0                   | 0                      | 0                     | 1     |
| Total                                   | 2                     | 1          | 0       | 0                    | 1             | 2       | 0          | 6                   | 0                      | 2                     | 14    |

## **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 | Гітроро | Mpumalanga | North West Province | Northern Cape Province | Western Cape Province | Total |
|--------------------------|-----------------------|------------|---------|----------------------|---------------|---------|------------|---------------------|------------------------|-----------------------|-------|
| Anaplasmosis             | 2                     | 0          | 0       | 0                    | 0             | 0       | 0          | 0                   | 0                      | 0                     | 2     |
| Babesiosis (Redwater)    | 2                     | 0          | 0       | 0                    | 0             | 0       | 0          | 0                   | 0                      | 0                     | 2     |
| Canine Babesioses        | 1                     | 0          | 0       | 0                    | 0             | 0       | 0          | 0                   | 0                      | 0                     | 1     |
| Canine Distemper         | 2                     | 0          | 0       | 0                    | 0             | 0       | 0          | 0                   | 4                      | 0                     | 6     |
| Enterotoxaemia           | 0                     | 0          | 0       | 0                    | 0             | 0       | 0          | 0                   | 0                      | 1                     | 1     |
| Enzootic Bovine Leukosis | 0                     | 0          | 0       | 0                    | 0             | 0       | 0          | 1                   | 0                      | 0                     | 1     |
| Foot-Rot                 | 0                     | 0          | 0       | 0                    | 0             | 0       | 0          | 0                   | 0                      | 1                     | 1     |
| Heartwater               | 5                     | 0          | 0       | 0                    | 0             | 2       | 0          | 0                   | 0                      | 0                     | 7     |
| Total                    | 12                    | 0          | 0       | 0                    | 0             | 2       | 0          | 1                   | 4                      | 2                     | 21    |

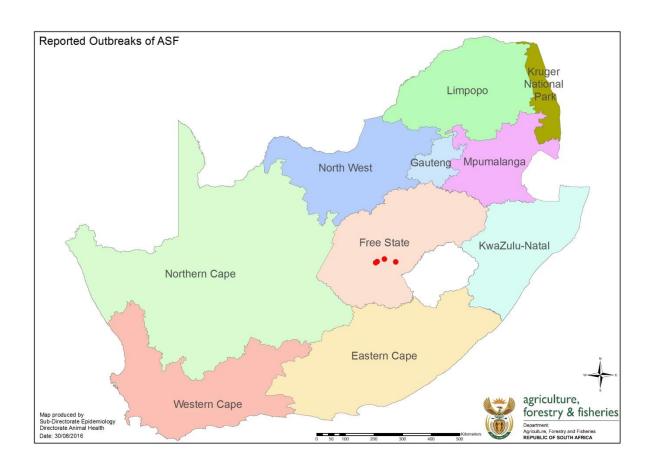
# **Information and maps of Specific Diseases**

#### **African Swine Fever**

An outbreak of African Swine Fever (ASF) outside South Africa's ASF zone was detected in the Free State Province

The following table indicates the number of reported African Swine Fever outbreaks per province

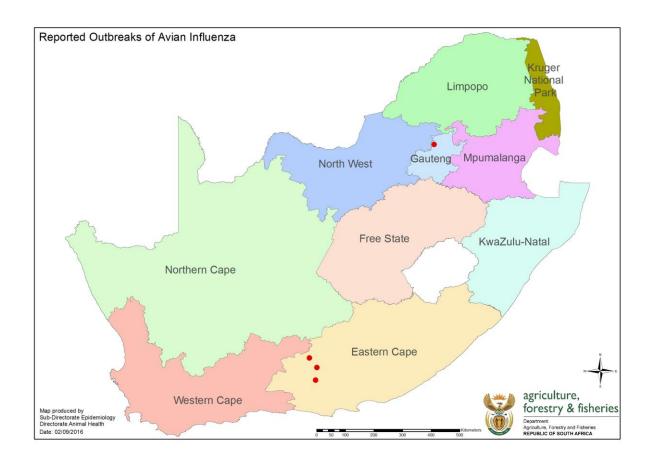
| Province   | Number of reported outbreaks |
|------------|------------------------------|
| Free State | 4                            |



#### **Avian Influenza**

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

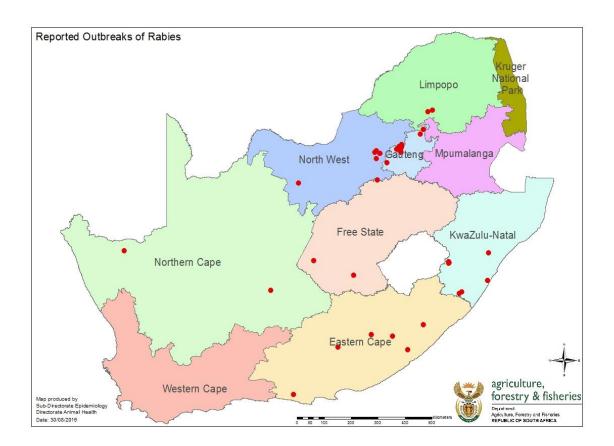
| Province     | Avian Influenza Strain                 | Number of reported outbreaks |
|--------------|--|------------------------------|
| Gauteng      | Avian Influenza: H6                    | 1                            |
| Eastern Cape | Avian Influenza: Low Pathogenic: H5 or | 2                            |
| Province     | H7                                     | 2                            |
| Eastern Cape | Avian Influenza: Non-Pathogenic        | 1                            |
| Province     | Avian innuenza. Non-Pathogenic         | 1                            |



Rabies

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

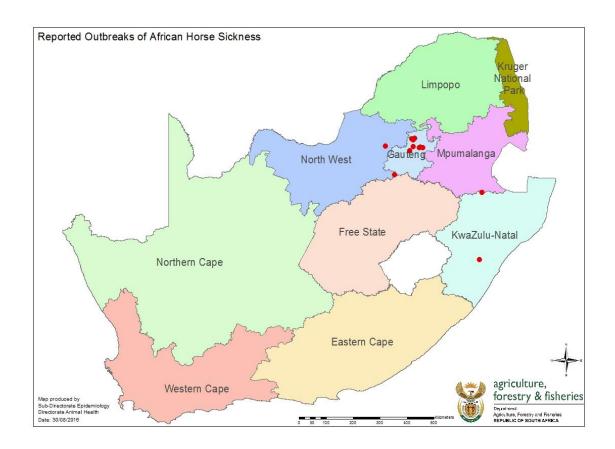
| Province               | Number of reported outbreaks |
|------------------------|------------------------------|
| Eastern Cape Province  | 6                            |
| Free State             | 2                            |
| Gauteng                | 10                           |
| KwaZulu-Natal          | 7                            |
| Limpopo                | 2                            |
| North West Province    | 10                           |
| Northern Cape Province | 2                            |



#### **African Horse Sickness**

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

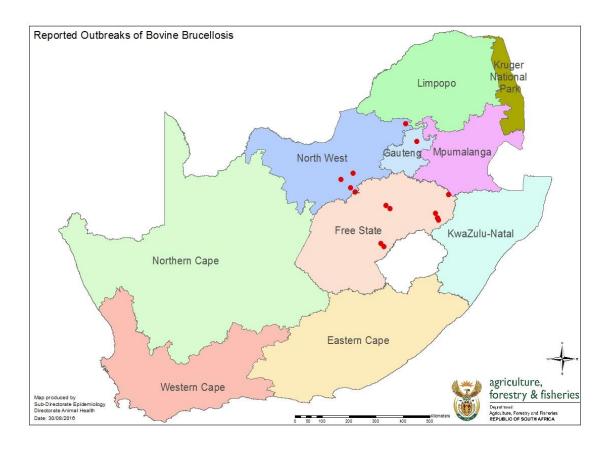
| Province            | Number of reported outbreaks |
|---------------------|------------------------------|
| Gauteng             | 9                            |
| KwaZulu-Natal       | 2                            |
| North West Province | 2                            |



#### **Bovine Brucellosis**

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

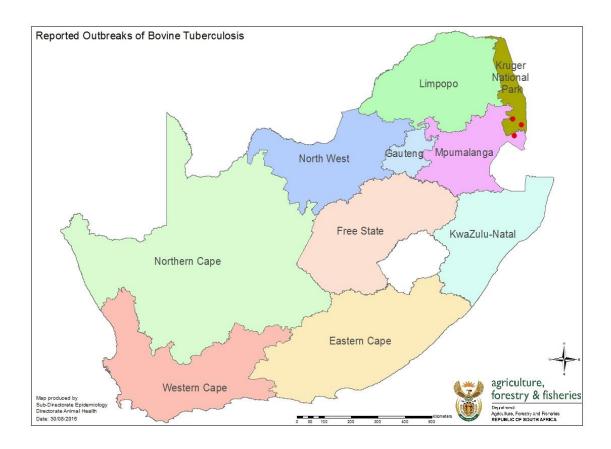
| Province            | Number of reported outbreaks |
|---------------------|------------------------------|
| Free State          | 9                            |
| Gauteng             | 1                            |
| North West Province | 5                            |



#### **Bovine Tuberculosis**

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

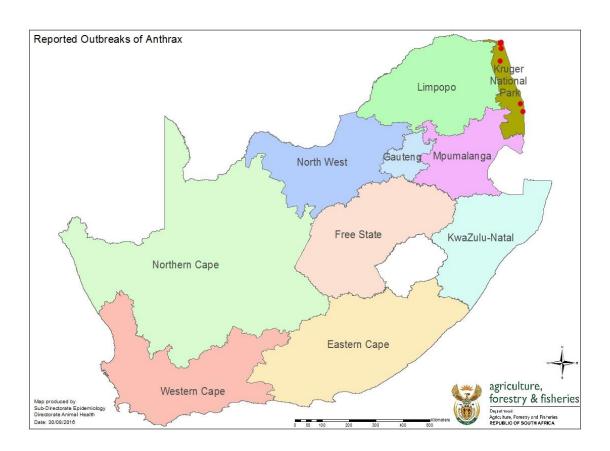
| Province             | Number of reported outbreaks |
|----------------------|------------------------------|
| Kruger National Park | 2                            |
| Mpumalanga           | 1                            |



#### **Anthrax**

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

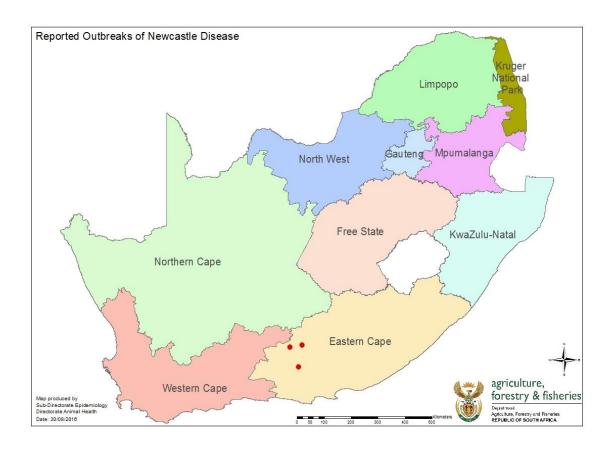
| Province             | Number of reported outbreaks |
|----------------------|------------------------------|
| Kruger National Park | 7                            |



#### **Newcastle Disease**

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

| Province              | Number of reported outbreaks |
|-----------------------|------------------------------|
| Eastern Cape Province | 3                            |



#### **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 <a href="http://cran.r-project.org/package=ReporteRs">http://cran.r-project.org/package=ReporteRs</a>.
- R Core Team, 2015, 'R: A Language and Environment for Statistical Computing', from <a href="http://www.r-project.org/">http://www.r-project.org/</a>.
- Ripley, B. & Lapsley, M., 2015, 'RODBC: ODBC Database Access', from <a href="http://cran.r-project.org/package=RODBC">http://cran.r-project.org/package=RODBC</a>.
- RStudio Team, 2015, 'RStudio: Integrated Development Environment for R', from <a href="http://www.rstudio.com/">http://www.rstudio.com/</a>.