Animal Disease Surveillance
DEFINITIONS

• Surveillance means the systematic ongoing collection, collation and analysis of information related to animal health and the timely dissemination of information so that action can be taken (OIE TAHC 2013)

• All regular activities aimed at ascertaining the health status of a given population with the aim of early detection and control of animal diseases of importance to national economies, food security and trade (FAO 1999)
DEFINITIONS (2)

• Monitoring means the intermittent performance and analysis of routine measurements and observations, aimed at detecting changes in the environment or health status of a population (OIE 2013)

• This means targeted data collection that is usually aimed at detecting changes in the epidemiological parameters of a specified disease
WHY DO SURVEILLANCE?

• To permit early detection of diseases that may have devastating effects on the livelihoods of livestock producers and on local trade
• To protect consumers of livestock products and owners of companion animals from zoonotic diseases
• To support trade in livestock and livestock products and enable reliable certification
Chapter 1.4 Animal health surveillance
- Excellent coverage of animal health surveillance as required for providing assurances for trade
- Focuses on surveys but emphasises the importance of non-survey data

Chapter 1.5 Surveillance for arthropod vectors of animal diseases
- Distribution and population dynamics of arthropod vectors affected by environmental and socioeconomic changes
- Several TADs are vector-borne (BT, RVF, AHS, ASF)
- Surveillance in SA for Culicoides and Ornithodoros moubata complex ticks around AHS and ASF free areas
DISEASE DETECTION
WHO SHOULD PARTICIPATE?

- State veterinary services
  - Border post personnel – frontline defence
- Private veterinarians
- State and private veterinary laboratories
- Animal health training facilities
- Agricultural extension officers
- Abattoirs, butchers
- Animal owners
- Ideally – a network of surveillance involving all actors
PEOPLE WHO CONTRIBUTE

Animal Health Service Providers

Field veterinary services

Border post officials

Extension officers

Diagnosis

State and private veterinarians

Laboratories
PEOPLE WHO CONTRIBUTE
Supply/Value Chain Role Players

Animal owners
Live animal sellers
Retailers

Meat processors

Abattoir personnel
COMPONENTS OF SURVEILLANCE

• Clinical examination of live animals
• Post mortem examination of dead animals
• Ante- and post mortal inspection at abattoirs
• Sampling for laboratory examination
  – Routine sampling
  – Sampling to determine cause of abnormalities
• Listening and watching!
• Reporting anything of concern
A meat inspector at a small abattoir in Gauteng was concerned about having 7 ‘septicaemic’ pig carcasses on the line and phoned a state vet, leading to the diagnosis of the first outbreak of African swine fever outside the control area in more than 60 years.
EXAMPLE

• An off-duty vet attending a wedding in Ghana overheard talk about unusual pig mortalities several months previously and after investigation was able to pinpoint the start of the first introduction of ASF into Ghana
Hunters in Lithuania on the Belarus border found many dead wild boars and suspected ASF.

At first the authorities were sceptical.

The hunters insisted and samples were taken.

Now it’s official – ASF has reached the EU!
THANK YOU