ANIMAL HEALTH DATA: THE DVS PERSPECTIVE

Dr. Joseph G. Monda
Veterinary Epidemiology and Economics Unit
Department of Veterinary Services

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Veterinary Epidemiology and Economics unit is charged with:

- Coordinating surveillance - both passive and active
- Collecting, collating, analyzing and interpreting of animal health data
- Communicating information to stakeholders
- Carrying out socio-economic surveys of priority diseases

Cap 364: (Animal Diseases Act) disease reporting is mandatory.
Uses of Animal Health Data

Information collected is used for:

• Prediction of the **source** and **progression** of the disease outbreaks

• Planning and **monitoring** of disease control programs; provision of sound animal health **advice** to **farmers**

• **Emergency preparedness** (*Early Warning systems*). It enables the rapid detection of incursion or sudden surge in, the incidence of priority livestock diseases
Uses of Animal Health Data...2

• Trade

– Certification of livestock and livestock products for export

– Facilitation of risk assessment by international trading partners who wish to carry out trade in livestock and livestock products and require regular credible reports on a country’s disease status.

– International reporting and providing proof of freedom from diseases for accreditation by the OIE.
1. **Narrative monthly reports** - these leave out important epidemiological information

2. **Notifiable Disease reporting forms (ND1)** - are detailed, includes important epidemiological information including Geo-location.

3. **Cell-phones**: phone calls especially during emergencies
4. Rumour registers:

Maintained at the Sub-County/Ward level.

- Forms a record of the reports received by the office from livestock keepers, front line personnel, other stakeholders

- Record of action taken and time for response.

- Gives the conclusive findings of the investigation.
5. Zero reporting forms: for specific diseases (Rinderpest, HPAI, Rift Valley fever, PPR, FMD)

Field personnel carry out inspection of animals at market places, stock routes, poultry farms, border points etc. for clinical evidence of disease and file a zero report if absent
6. **Abattoir surveillance PP1 forms**

Meat inspectors report on notifiable diseases and any other disease/conditions that occur above threshold levels.

Done at ante- and post-mortem inspection of livestock by filling **PP1 forms**.
Other reporting forms

7. LB1
   – filled when samples of suspected notifiable are collected for laboratory diagnosis.

8. FMD
   – filled when samples of suspected FMD are collected for laboratory diagnosis (Embakasi).

Accompanying forms for ND1 and PP1

9. Loose forms
   • Outbreak investigation forms – for RP, HPAI, RVF
   • Individual animal forms
10. **Digital Pen Technology**

- Forms processing technology for rapid collection, transmission and processing of data: (ZR, LM, ND1)
  - Pilot in 5 districts
  - Expansion in 29 district – FAO
  - Expansion in 44 districts & 6 RVILs – DVS

11. **Mobile Phone Technology**

- Pilot-MPT using Epicollect

12. **ARIS II**

- Web based information system
Processing of disease reports

• Hard-copy disease data should be submitted by Sub-counties to County headquarters by the 15th of the succeeding month.

• Counties enter the data in Excel worksheets and transmit it to VEEU via email.

• VEEU collates and analyzes the data from the whole country and prepares reports for DVS and feedback for submitters.
Processing of disease reports

- Digital data reports are supposed to be submitted in real-time. E.g. DPT, MPT, ARIS II

- Active surveillance data is submitted to VEEU immediately for data entry, analysis and final report compilation

- DVS reports to neighbouring countries, AU/IBAR and OIE
Challenges of animal health information management

1. The DVS has accumulated a lot of data over time but data is not effectively used for planning and decision making.
   - Data is scattered and not uniform.
   - Some of the data is collected in soft copy (DPT, Excel Spreadsheets) while the other is in hard copy (Lab Data and Data collected in the DD&VC).
   - Some of the reports are narrative (subjective) while others are in templates (objective and specific).

2. Staff shortage: At the Sub-County level often one veterinary officer with few staff is in charge of all DVS functions and operations.
3. Lack of law enforcement - *Cap 364* on reporting of notifiable diseases is poorly enforced. This is partly due to inadequate staff and lack of appropriate infrastructure such as transport.

4. Weak Public-Private partnership thus low reporting rate.
   - Focus of private vets - business
   - Reporting tools are not adequately distributed/picked
   - Feedback is weak to the private veterinarian.
5. Low diagnostic capacity and delayed laboratory confirmation samples.

- Weak sample referral system. No clear budget for sample transportation and dissemination of results from the laboratory.

- Lack of a laboratory information system

6. Too many data collection tools in use. E.g. ND1 forms and all zero report forms during farm visits.

7. Data quality: Incomplete, Inconsistent, Under-reporting, Validity, Timeliness - late reporting
RECOMMENDATIONS

1. Establish an interoperable web based AHIS in which all data for MoLD is captured.
   - The information generated in this system should be accessible to all stakeholders (MoLD, MOPHS, KWS, Private veterinarians, International Organizations) with scalable access.

2. The DVS should adopt a more integrated approach to disease surveillance and response.

3. Enhance public-private-partnerships between the private and government veterinarians to allow sharing of information.
4. Increase funding of surveillance activities across all the levels in the DVS.

5. Well trained and skilled personnel – ICT, Data management and disease surveillance and reporting for frontline officers

6. Strengthen the diagnostic capacity of RVILs and avail funds for sample referral.

7. Infrastructure enhancement: Computers and accessories, other Data capture tools and instruments, LAN and WAN linkages

8. Surveillance should be incorporated within individual work-plans (no of markets visited, samples collected etc) i.e. as a performance target
Thank you!
The End