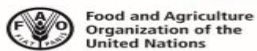


# ZERO BY 30

THE GLOBAL STRATEGIC PLAN



TO END  
HUMAN DEATHS  
FROM DOG-MEDIATED  
RABIES BY 2030



REPUBLIC OF KENYA  
Ministry of Health and  
Ministry of Agriculture, Livestock and Fisheries



Strategic Plan  
for the Elimination of  
Human Rabies in Kenya  
2014 - 2030



United Against Rabies Meeting

23 – 25 September 2024

Cape Town, South Africa

A decorative graphic consisting of a vertical line of red dots on the left side of the slide, with a few dots curving to the right.

# Rabies Surveillance, Data sharing and Data reporting, Kenya Situation and Opportunities

Dr. Kanana Kimonye

National Public Health Institute

# Strategies for Rabies Elimination in Kenya anchored in 4 pillars

- ❖ Pillar 1: Mass Dog Vaccinations
- ❖ Pillar 2: Provision of PEP
- ❖ Pillar 3: Rabies Education & Awareness
- ❖ Pillar 4: Rabies Surveillance & Operational Research



# Pillar4: Rabies Surveillance/Operational research



Dog Cohort and Ecology Studies

The form features the Kenyan coat of arms at the top center. Below it, a green header contains the text "Siaya County Anti-Rabies Vaccine Register". The form includes five input fields with green outlines and labels: "County:", "Sub-County:", "Health Facility Name:", "MFL Code:", and "W.E.F:". Each field is connected to a green line that extends to the right edge of the form.

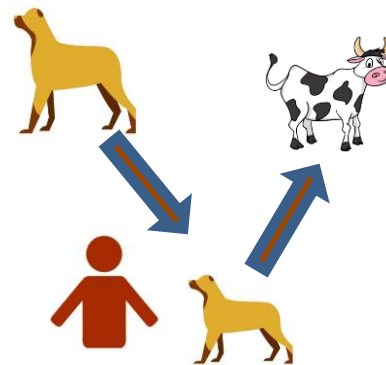
Hospital Based Surveillance  
DHIS2 surveillance

The poster features logos for the Republic of Kenya, Zoonotic Disease Unit (ZDU), and the Ministry of Health. It includes a cartoon illustration of a person being bitten by a dog and a close-up of a hand being bitten. The text in Swahili reads: "Wakwayi ni ka guok/paka okayi kata ogwari, yie itudri gi migao mar thieth e namba ni maonge chudo:". Below this is a phone icon and the number "0800-723-175". Logos for Gavi, World Health Organization, Wellcome Trust, and Washington State University are at the bottom.

Toll-Free phone  
rabies Surveillance



Community  
Surveillance



Contact  
Tracing



Sample Collection and  
Diagnosis





# Rabies Surveillance

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## Objectives of rabies surveillance

- To identify potentially exposed persons and provide timely access to post-exposure prophylaxis
- To identify potentially rabid animals to facilitate capture, confinement and diagnosis
- To estimate disease burden
- To identify high risk areas of rabies transmission
- To monitor vaccine demand and use within an area
- To monitor the impact of elimination efforts



# Surveillance case definitions

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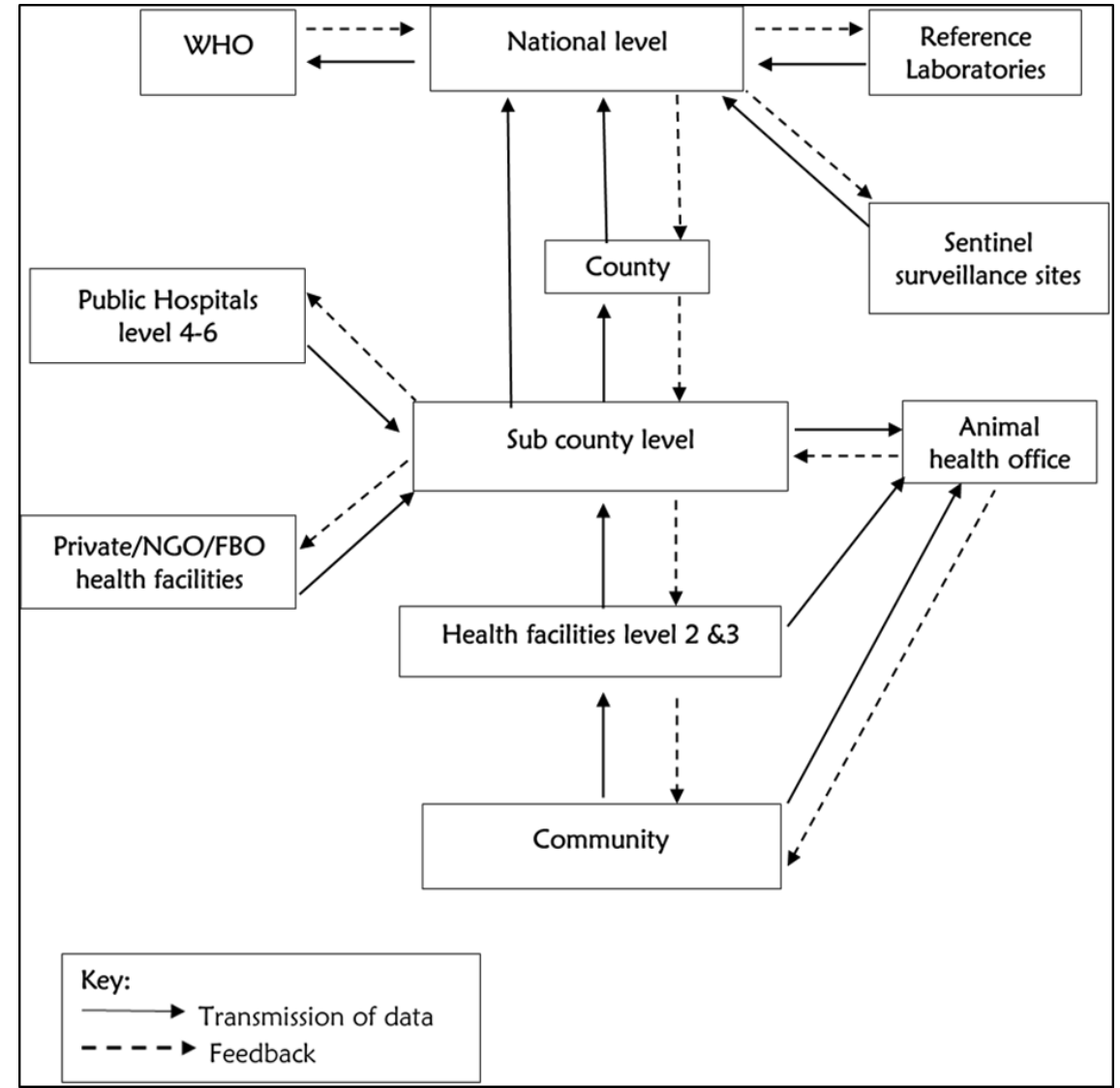
- ❖ **Suspected rabies case:** a person with one or more of the following: headache, neck pain, nausea, fever, fear of water, anxiety, agitation, abnormal tingling sensation or pain at the wound site, when exposure to a rabid animal is suspected or any person in whom the clinician suspects rabies.
- ❖ **Confirmed rabies case:** A suspected case that is laboratory-confirmed.



# Rabies Reporting

- Weekly and monthly basis
  - Weekly – IDSR MOH 505
  - Monthly- MOH 705 A and B.
- A case based form (MOH 502 B)- retained for 28 days
- All cases of animal bites **MUST** be notified to the veterinary department

## Community Based Surveillance (CBS)





# Rabies CIF



MINISTRY OF HEALTH

## Surveillance of Human Rabies Case Investigation form



County: \_\_\_\_\_ Sub county: \_\_\_\_\_ Health Facility: \_\_\_\_\_ Ward: \_\_\_\_\_  
 Unique ID: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
 Case No. \_\_\_\_\_

### Patient Details

Surname: \_\_\_\_\_ First name: \_\_\_\_\_ Other Names: \_\_\_\_\_  
 Sex:  Female  Male  
 Date of birth: dd/mm/yy or Age in years: \_\_\_\_\_ or Age in months (if <12 months)  
 Residential address: Village: \_\_\_\_\_ Ward: \_\_\_\_\_ Telephone of patient: \_\_\_\_\_  
 Sub county: \_\_\_\_\_ County: \_\_\_\_\_  
 Name of guardian/Mother/Father: \_\_\_\_\_ Telephone: \_\_\_\_\_  
 Base coordinates: Longitude \_\_\_\_\_ Latitude: \_\_\_\_\_  
 Was patient referred to another Hospital  Yes  No  Don't know  
 Yes, specify name of hospital: \_\_\_\_\_

### Clinical and Exposure

Date of onset of symptoms: dd/mm/yy Date first seen at health facility: dd/mm/yy  
 Health facility where first seen: \_\_\_\_\_ Date of admission: \_\_\_\_\_  
 Patient status:  Recovered  Died  Still on admission  Self discharge  Abscondment

### Clinical of Exposure

#### Symptoms

- Fever  Insomnia  headache  Difficulty breathing  Behavior change
- Aerophobia  Paralysis  Hydrophobia  Difficulty swallowing
- Encephalitis  Hallucinations  Anxiety  Others (Specify)

#### Date of exposure

- Date (dd/mm/yy)  Not Known

#### Nature of exposure

- Bite  Scratch  Lick  Others (specify)

#### Nature of injury

- Superficial injury/s without bleeding  Superficial injury/s with bleeding
- Contamination of mucous membranes with saliva  Deep injury/s
- Contamination of open wounds with saliva  Unknown  Others (specify)

#### Site of injury

- Head/Face/Neck  Upper arms/tips of fingers/palms  Chest (front or back)
- Genitalia  Toes  Arms/Legs  Not known  Others (specify)

### Source of infection

#### Transmitting animal

- Dog  Cat  Wild Animal  Others (specify)  Unknown





# Laboratory diagnosis

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## Antemortem- not yet fully optimised in Kenya

- Saliva
- Skin biopsies
- Hair follicles

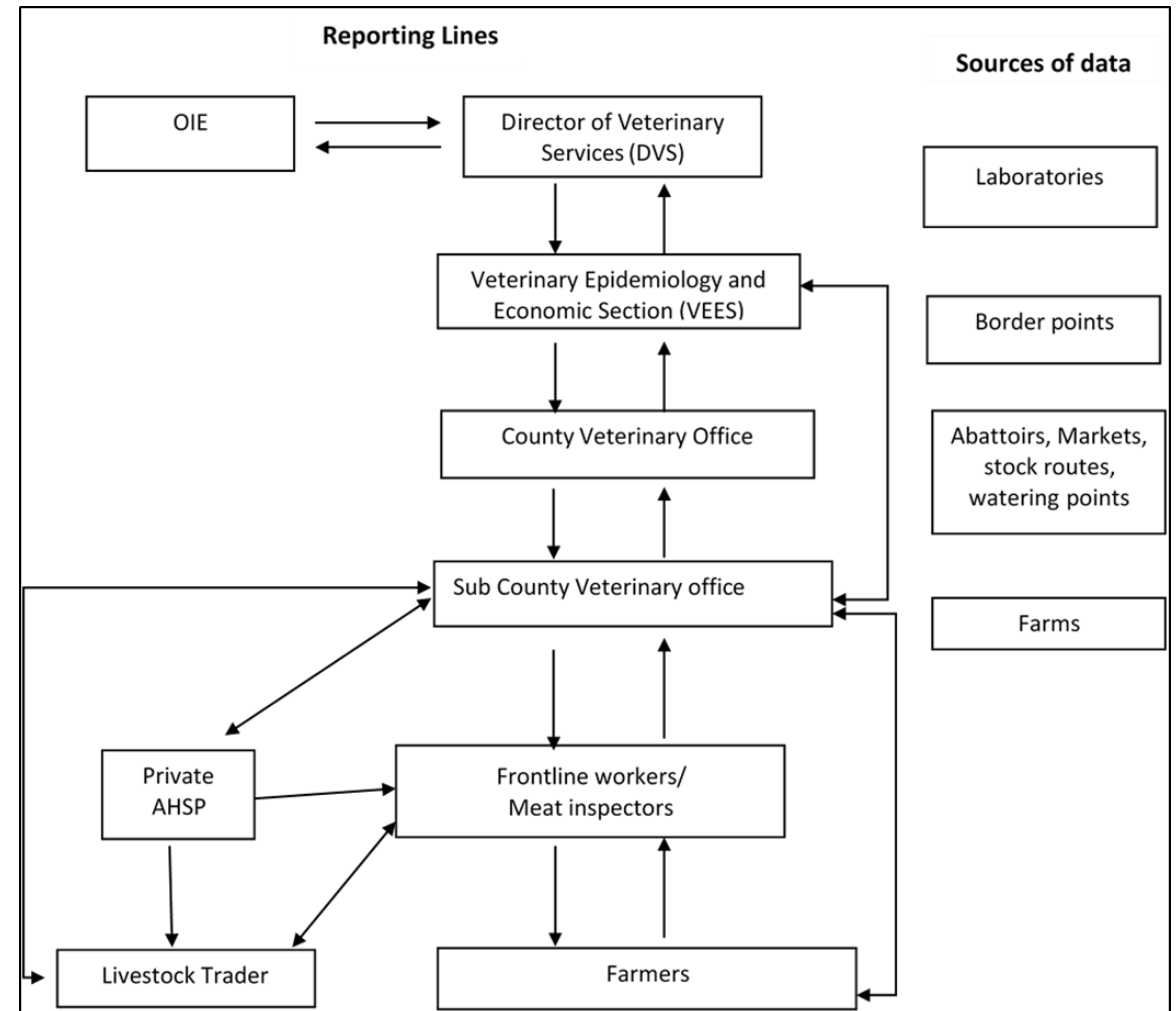
## Post-mortem

- Brain tissue not more than 6 hours after the death
- brain stem and cerebellum
- Tests- dRIT, PCR and FAT
- MOH, NPHLS has molecular capacity

# Surveillance in animals

## Reporting

- Bite cases
- Suspect rabies cases
- Death cases due to rabies





# Kenya Animal Bio-Surveillance System (KABS)

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- Mobile phone based application
- Accessed by both public and private practitioners

## **Variables collected per syndrome**

- GPS coordinates where the cases occurred
- Date of report and date when case started
- Species and number of animals affected
- List of clinical signs observed
- Tentative diagnosis provided by the surveillance officer



# Lab Diagnosis in animals

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- ⌘ Well established network for diagnosis of rabies
- ⌘ Direct Rapid Immuno histochemistry test (dRit), Flourescent Antibody Test (FAT) and Polymerase Chain Reaction (PCR) used
- ⌘ Four veterinary labs have rabies dx capacity in Kenya: NVRL, RVIL Nakuru, Eldoret, Mariakani

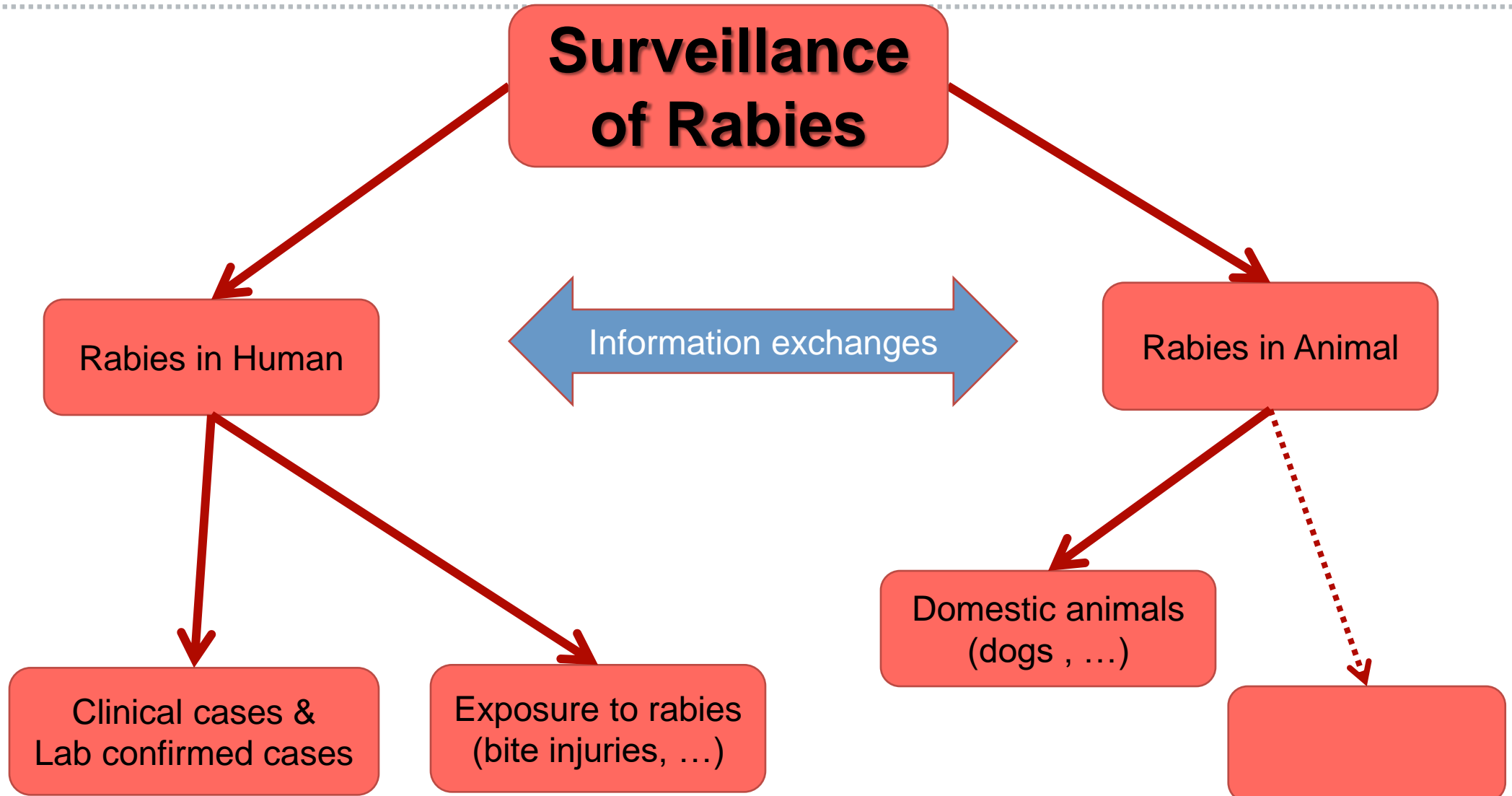


# Linkages between Human and Animal Surveillance

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- ⌘ All human bite and clinical cases should be notified to the veterinary department.
- ⌘ Veterinary practitioners should notify all suspect rabid animals to sub-county surveillance officers.
- ⌘ The Emergency Operation Center (EOC) phone number (0732353535, 0729471414) can be used for notification.

# WHOI-OIE RECOMMENDED DATA SHARING

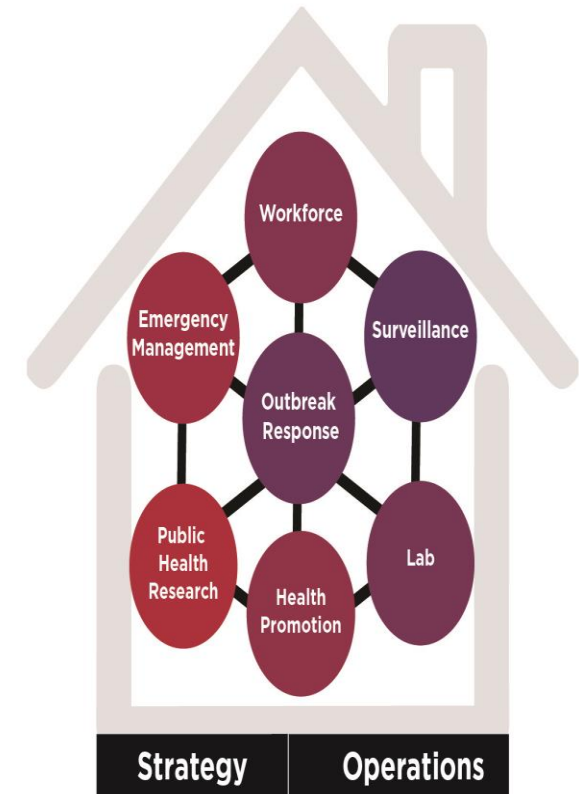




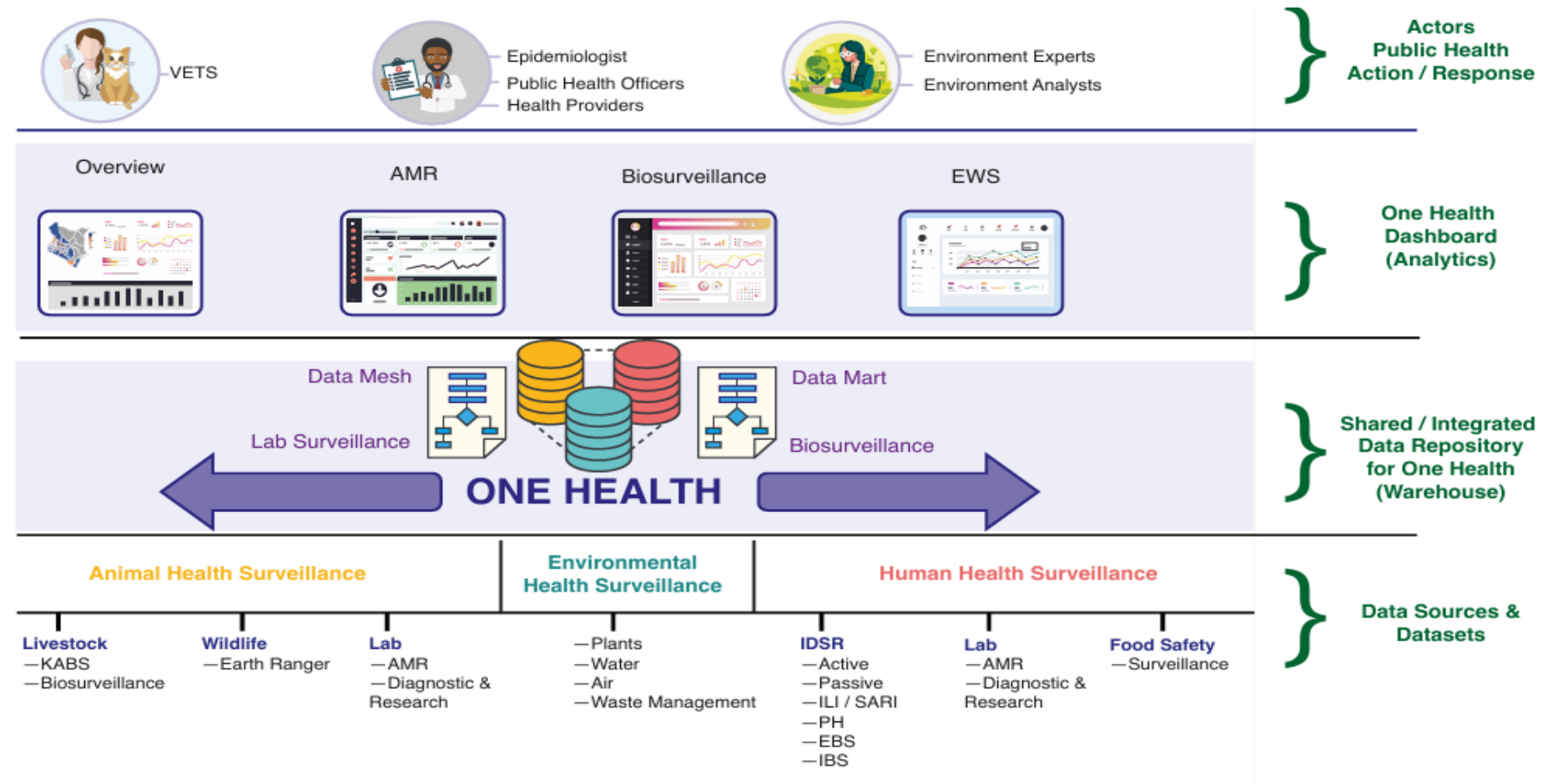


# Opportunities for Improved Surveillance

- ❖ Establishment of the National Public Health Institute (NPHI)
- ❖ Rabies is one of the **36** priority diseases under Kenya's (MOH) integrated disease surveillance system.
- ❖ The NPHI is mandated to coordinate all relevant sectors involved in health security
- ❖ Integrate ZDU activities



# Envisioned One Health Functional Architecture





AHSANTE

