



**16TH CONFERENCE OF  
THE OIE REGIONAL COMMISSION  
FOR THE MIDDLE EAST**

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# Rift Valley Fever in KSA

**Dr. Sanad Al Harbi**

**The delegate of Saudi Arabia**



## History

- The Rift Valley Fever disease was firstly recorded in Saudi Arabia in August 2000 in the south region at Jazan, Asir, AlQunfuhah, AlBaha and Makkah.
- Studies indicated that the virus isolated from the Kingdom was genetically related to that detected in Kenya and other African countries (1997-1998).
- On 10 September 2000, suspected cases among human and animals in Jazan was reported.
- On 15 September 2000, the diagnosis of the disease was confirmed in the laboratories of CDC, USA.
- On 16 September 2000, the first case of disease was diagnosed among animals in Al-Ardah, Jazan region, which considered the first recorded outbreak of infection.





## Continuous

- The distribution of outbreaks of RVF infection in KSA.

Region	Foci of infection	First Infection	Last infection	Number of infected animals
Jazan	9	16 <sup>th</sup> September 2000	22 April 2001	358
Asir	7	19 <sup>th</sup> October 2000	28 March 2001	147
Makkah	1	4 <sup>th</sup> October 2000	28 March 2001	41

- The last diagnostic case of RVF in animals in KSA was in April, 2001



## Surveillance and control measures

- Surveillance of RVF in KSA.
- Providing the outbreak zones with 182 professional teams to examine the susceptible animals, recorded the number of dead and aborted animals, collected samples and vaccinated livestock.
- Establishing two advanced laboratories in Jazan for diagnoses of RVF.
- Providing 11 groups of sentinel herds of sheep and goats at the control areas.



## Continuous

- Establishing an **Early warning system:**

- 1- Serological investigation of RVF IgM and IgG antibodies.
- 2- Passive and active surveillance of RVF.
- 3- Monitoring the environmental and climatic changes.
- 4- Regular isolation of the viral causative agents vector-borne diseases.
- 5- Recording clinical infections in human.



## Continuous

- Control measures of RVF in KSA
- Establishing a national strategic and contingency plan.
- Apply animal vaccination using live attenuated vaccine ('Smith Burns') at south regions of the kingdom (1.2 million head annually).
- Internal control movement of livestock from/to the southern regions of the Kingdom.
- Movement control between the countries.
- Active surveillance was carried out in all regions of the Kingdom during (2017 and 2019). it was not proven any viral activity at all after examining > 10,000 serum sample .
- Vector control.



## The Socio-economic effects of rift valley fever in the kingdom of Saudi Arabia

1. The outbreaks of Rift valley fever in the kingdom in 2000 posed a significant economic impacts on livestock farmers due to abortion of a large number of pregnant animals and deaths of newborns.
2. Significant economic losses of control program costs (vaccination, applying quarantine measures, establishment of surveillances, epidemiological studies, animal disposal, sentinel herds, vector control, vehicles, equipment, and others).
3. Livestock traders had been significantly affected by the closure of livestock markets and the restriction of animal movement in affected regions.
4. Trade exchange with foreign countries has been affected by restrictions on the export of animal products from the kingdom.
5. Public health impacts and psychological panic among humans.
6. Pollution of the environment due to insecticides.



# Challenges

- **Importing Livestock:**

- ✓ There is an additional risk of recent recording of the disease in some related countries from which animals are imported to the KSA.

- **Controlling movement**

- ✓ Illegal entry of livestock across the border to the Kingdom

- **Climate change:**

- ✓ Recent increase in rainfall rates.

- ✓ **Applying veterinary service :**

- ✓ Difficulties of applying veterinary services proficiently at the southern parts of the kingdom.





***Thank you all for listening...***

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