

# EpiNET.Indía

**ICAR-NIVEDI** 

Animal Disease Information e-bulletin



Vol. 3 Issue 21, July 2016

# July 2016

⇒ Top ten diseases reported and their spatial distribution in the month of **July-2016** 

Contents

- $\Rightarrow$  News
- ⇒ Epidemiology Concept
- $\Rightarrow$  Epidemiology crossword puzzle

Published by : Director ICAR-NIVEDI

#### **Contact:**

National Institute of Veterinary Epidemiology & Disease Informatics (NIVEDI), Post Box No. 6450 Ramagondanahalli, Yelahanka, Bengaluru-560064 Bengaluru-560064 Phone: 0091-80-23093110/23093111 Email: epinetnivedi@gmail.com The top ten diseases reported during July, 2016 are Haemorrhagic septicaemia, Enterotoxaemia, Black quarter, Rabies, Anthrax, Babesiosis, Foot and Mouth disease, Peste des petits ruminants, Fascioliasis, Sheep and Goat pox. The following Pie chart shows the top ten diseases reported during the month of July, 2016 (Fig 1).

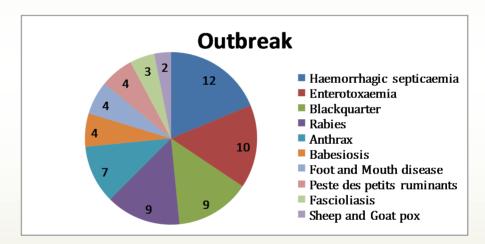


Fig. 1 Top ten diseases reported during July 2016 (Numbers in chart indicate outbreaks)

**Haemorrhagic Septicaemia disease** has been recorded from three states involving nine districts. Maximum number of outbreaks has been recorded in Madhya Pradesh state. Assam and Karnataka are the other states that reported the disease (Fig 2).

**Enterotoxaemia disease** has been recorded from three states involving six districts. Maximum number of outbreaks has been recorded in Karnataka state. Andhra Pradesh and Assam are other states that reported the disease (Fig 2).

**Black quarter disease** has been recorded from four states involving eight districts. Maximum number of outbreaks has been recorded in Karnataka state. Andhra Pradesh, Assam and Madhya Pradesh are the other states that reported the disease (Fig 2).

Rabies disease has been recorded in Kerala state involving four districts (Fig 3).

**Anthrax disease** has been recorded from two states involving six districts. Maximum number of outbreaks has been recorded in Karnataka state. Andhra Pradesh is the other state that reported the disease (Fig 2).

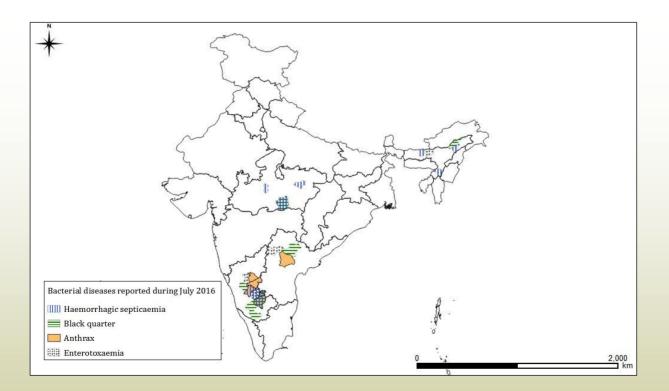
Babesiosis disease has been recorded in Puducherry Union Territory involving one district.

Foot and Mouth disease has been recorded from Kerala state involving two districts (Fig 3).

**Peste des petits ruminants disease** has been recorded from three states and involving four districts. Maximum number of outbreaks has been recorded in Karnataka state. Assam and Madhya Pradesh are the other states that reported the disease (Fig 3).

Fascioiasis disease has been recorded from Puducherry Union Territory involving one district.

**Sheep and Goat pox disease** has been recorded from two states involving two districts. Assam and Karnataka has reported equal number of outbreaks (Fig 3).



#### Fig. 2 Spatial distribution of bacterial diseases reported during July 2016

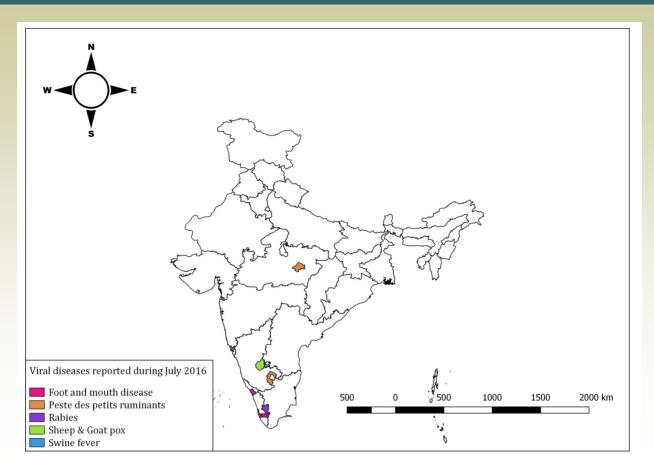


Fig. 3 Spatial distribution of viral diseases reported during July 2016

State	Diseases Reported
Andhra Pradesh	Anthrax (Sheep); Blackquarter (Cattle); Enterotoxaemia (Sheep, Deer)
Assam	Black quarter (Cattle); Enterotoxaemia (Goat); Haemorrhagic septicaemia (Cattle); Peste des petits ruminants (Goat); Sheep & Goat pox (Goat)
Goa	Swine Fever (Pig)
Karnataka	Anthrax (Sheep, Cattle); Black quarter (Cattle, Buffalo); Enterotoxaemia (Sheep, Goat); Haemorrhagic septicaemia (Sheep, Goat, Cattle); Peste des petits ruminants (Sheep)
Kerala	Foot and mouth disease (Cattle); Rabies (Cattle, Canine)
Madhya Pradesh	Black quarter (Cattle); Haemorrhagic septicaemia (Cattle, Buffalo); Peste des petits ruminants(Goat)
Puducherry	Babesiosis (Cattle); Fascioliasis (Goat)

**Note: \*** The livestock species in the bracket indicates the occurrence of the disease in those species of livestock during the reporting month in respective states

### News

#### 4 July 2016: Six fold increase in cases of leptospirosis in Mumbai

According to the Out Break News Today , 30 cases of leptospirosis through June have been reported while the number was only five during the corresponding period last year in Mumbai in state of Maharashtra. As the cases are reported from scattered areas therefore this matter is not very alarming. They have killed more than 100,000 rats in an attempt to control the disease. (ECTAD\*, Vol. 05, No. 27, 7 July 2016).

#### 26 July 2016: Mysterious' disease is killing buffaloes in Haryana

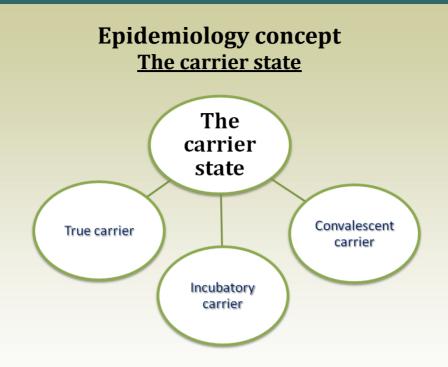
The Haryana government sent a team comprising of scientists from Lala Lajpat Rai University of Veterinary and Animal Sciences (LUVAS) to Nidana village of Jind district to identify the "mysterious" disease which has claimed 15 buffaloes. Round-the-clock vigil was being maintained to apprise the government. (ECTAD\*, Vol. 05, No. 30, 28 July 2016).

#### 15 July 2016: PRRS has claimed 3,613 pigs since April in Mizoram

As reported in our earlier issue dated 29 June 2016, the Animal Husbandry and Veterinary department of Mizoram have confirmed that about 3,613 pigs have died of Porcine Reproductive and Respiratory Syndrome (PRRS) disease in six districts including Champhai, Serchhip, Lunglei, Lawngtlai, Saiha and Aizawl of Mizoram since early April this year. A proposal on an Action Plan for Control and Containment of PRRS to the Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture and Farmer Welfare in Delhi has been submitted that included establishment of quarantine camps in the state and recruitment of additional para-veterinarians. (ECTAD\*, Vol. 05, No. 29, 21 July 2016).

#### 18 July 2016: Chandipura Virus detected in Children in Bihar for the first time

The Indian Council of Medical Research (ICMR), Pune, and Rajendra Memorial Research Institute of Medical Sciences, Patna, has identified a new virus in 4 children as Chandipura which was named after Chandipura village in Maharashtra, where it was first detected. Of the four children affected by Chandipura virus, two have died and the other two are battling for life. This is the first time that Chandipura virus has been detected in Bihar. (ECTAD\*, Vol. 05, No. 29, 21 July 2016).



Carrier is an individual that is infected by a disease agent and is capable of disseminating that disease agent but shows no sign of clinical disease.

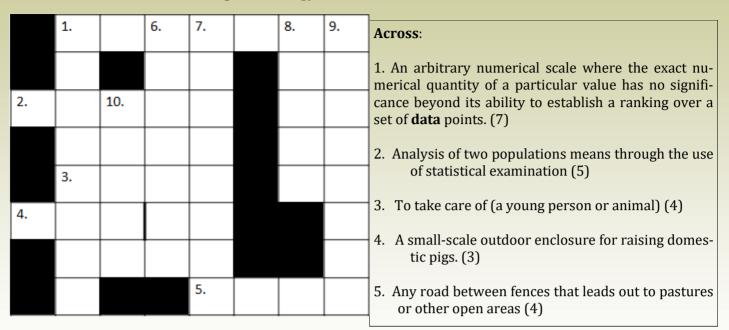
There are 3 types of Carriers

- $\Rightarrow$  <u>True carrier</u>: an infected individual capable of disseminating the infectious agent but which never exhibits clinical signs of disease.
- $\Rightarrow$  <u>Incubatory carrier</u>: an infected individual capable of disseminating the infectious agent while the disease is still in the incubatory stage.
- ⇒ <u>Convalescent carrier</u>: an individual that continues to disseminate the infectious agent after the clinical signs of the disease have disappeared.

## Answers for Crossword mentioned in Vol. 3 Issue 20, June 2016

#### Across:

 Correlation; 5. Variable; 6. Dot plot; 7. Census; 8. Agent; 11. Trait *Down:* Crude rate; 2. Evaluation; 3. Arithmetic; 4. Mean; 9. Airborne; 10. Bimodal



#### **Epidemiology Cross Word Puzzle- Jul16**

#### Down:

1. The occurrence of more cases of disease, injury, or other health condition than expected in a given area or among a specific group of persons during a specific period. (8)

6. A particular abnormal condition, a disorder of a structure or function, that affects part or all of an organism. (7)

7. \_\_\_\_\_ scales are numeric scales in which we know not only the order, but also the exact differences between the values (8)

8. \_\_\_\_\_ is a collection of statistical models used to analyze the differences among group means and their associated procedures. (5)

9. To keep an animal free from disease by making it resistant through vaccination (8)

10. A set of outcomes of an experiment (a subset of the sample space) to which a probability is assigned. (5)

**Source of the data:** The data for the **EpiNET.India** was obtained from the database of National Animal Disease Referral Expert System (NADRES), ICAR-NIVEDI. Any reproduction or representation of the data from this e-bulletin should be done only with prior permission from Director, ICAR-NIVEDI.

#### **Editorial team:**

Dr. Jagadish Hiremath, Scientist, ICAR-NIVEDI Dr. Md. Mudassar Chanda, Scientist, ICAR-NIVEDI Dr. K. P. Suresh, Senior Scientist, ICAR-NIVEDI Dr. S. S. Patil, Senior Scientist, ICAR-NIVEDI Dr. D. Hemadri, Principal Scientist, ICAR-NIVEDI Dr. B. R. Shome, Principal Scientist, ICAR-NIVEDI