

## India free from AVIAN INFLUENZA

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India had reported outbreaks of Highly Pathogenic Avian Influenza (H5N1 and H5N8) at various places like Gwalior (Madhya Pradesh), Rajpura (Punjab), Hissar (Haryana), Bellary (Karnataka), Allappuzha and Kottayam (Kerala) and Ahmedabad (Gujarat) during October 2016 to February 2017.

All the outbreaks of Avian Influenza (HPAI) mentioned above were notified to World Organisation for Animal Health (OIE), is an intergovernmental organization coordinating, supporting and promoting animal disease control, and the control and containment operations were carried out as per the Action Plan on Preparedness, Control and Containment of Avian Influenza. Surveillance was carried out throughout the country and around the areas of the outbreaks since completion of the operation (including culling, disinfection and clean-up) and surveillance in the states showed no evidence of presence of Avian Influenza Virus.

India is now free from highly contagious Avian Influenza (H5N1) or bird flu. Department of Animal Husbandry, Dairying and Fisheries in the Union Ministry of Agriculture and Farmers Welfare made this announcement as no outbreak of Avian Influenza (H5N1) was reported in the country after the last notified outbreak at Humnabad, Bidar district, Karnataka in June 2016.

According to the statement given by Union agriculture ministry, "India has declared itself free from Avian Influenza (H5N8 and H5N1) from June 6, 2017 and notified the same to the World Organisation for Animal Health (OIE)."

The statement also says, "Various control measures like stamping out of entire poultry population including destruction of eggs, litter, feed and other infected materials were adopted."

## About Avian Influenza (AI)

Al or bird flu is an infectious viral disease of birds which can sometimes spread to domestic poultry and cause large-scale outbreaks of serious disease.

Based on their ability to cause disease in poultry, this viruses are divided into two groups: (i) high pathogenicity (viruses result in high death rates up to 100% mortality within 48 hours in some poultry species (ii) Low pathogenicity (viruses are not generally associated with severe disease but causes outbreaks in poultry.

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First outbreak of highly pathogenic Avian Influenza (H5N1) was experienced by India in the state of Maharashtra; Gujarat on 18th February, 2005 followed by second outbreak in Madhya Pradesh during March to April, 2006 and regained freedom from the disease in August 2006.

Third outbreak occurred during July 2007 in a small poultry farm of Manipur and regained freedom from the disease in November, 2007. Fourth outbreak was confirmed in West Bengal on January 2008 and fifth outbreak was reported in Tripura on 7th April, 2008. After this outbreak, India declared itself free from the disease on 4th November, 2008. Sixth episode was confirmed on 27th November 2008 in Assam. This was followed by the seventh outbreak on 15th December, 2008 in West Bengal. Till date approximately 25 episodes of this disease in 15 states has been experienced by India.

## Action taken for prevention, control and containment

All the outbreaks of this influenza are handled as per the guidelines in Action Plan on "Preparedness, Control and Containment of Avian Influenza". Notification of outbreak to states, demarcation of surveillance areas as per action plan, launch of control and containment operations by Rapid Response teams (RRTs), absolute ban on movement of poultry and products from the surveillance zones, disposal of dead birds, clean-up and disinfection, declaration of freedom from disease are some of the major activities undertaken for control and containment of the disease.

In order to prevent the ingress of disease to human beings, Ministry of Health was also involved in some of the control and containment operations along with the department of husbandry.

Dr Sushil Shah, Chairman and Founder, Metropolis Healthcare Ltd said, "It is great news for the Animal Husbandry department. Bird flu is highly contagious and spreads from infected birds to other winged creatures through contact with nasal and respiratory secretions and also due to contamination of feed and water."

According to the ministry, "Restriction on movement of poultry and poultry products from area of outbreak. Cleaning up and disinfection of infected premises and the Post Operation Surveillance Plan (POSP). Surveillance was carried out throughout the country around the areas of the outbreaks since completion of the operation."

Various factors made India vulnerable to primary incursion of Avian Influenza in the past. These include high density of poultry population, illegal movement of poultry and poultry products from infected areas into the country and mixed rearing of chicken and ducks.

Dr Rajinder Kumar Singal, Principal Consultant and Director (Internal Medicine), BLK Super Specialty Hospital said, "Government reports such studies to World Organisation for Animal Health (OIE) so as to have the best trade practices throughout the world by all exporters in order to make healthier choices for people from importing countries. India as the largest egg producer and 18th largest producer of broilers is badly affected by such notification, which is expected to be declared safer by world community by this government of India (GOI) notification."

Non-availability of adequate laboratory infrastructure to handle samples for testing of Avian Influenza were also some of the serious constraint faced by India in the past. In order to overcome the same, the department of husbandry had taken up the task of systemic strengthening of laboratory infrastructure under a World Bank assisted projects:

1) Establishment of four pre-fabricated bio-safety level-III (BSL-III) laboratories at Jalandhar, Kolkata, Bangalore and Bareilly. In addition, a mobile BSL-III laboratory was also gifted by Japan which is installed at NERDDL, Guwahati 2) Funding by the department to National Institute of High Security Animal Diseases, Bhopal for testing of the virus

3) Selection of 21 state disease diagnostic laboratories for upgradation to BSL-II level "Post the surveillance has shown no evidence of presence of Avian Influenza. However, Union Government has emphasized that their need for continued surveillance especially in areas visited by migratory birds and vulnerable areas bordering infected countries," ministry added.

## Conclusion

Although strict surveillance including culling, disinfection and clean-up has worked remarkably in achieving this goal, specified actions formulated by the ministry still needs to be taken regularly.