



Addressing transboundary animal diseases through a One Health approach Newsletter

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Responding to outbreaks

FAO Animal Health at the forefront of efforts to fight highly pathogenic avian influenza (HPAI) H5N1 in Côte d'Ivoire

Thanks to a long-running HPAI control programme that has increased active surveillance in high-risk zones, a suspected outbreak was reported on 10 August 2021 in the southeastern region of Grand-Bassam. The Food and Agriculture Organization of the United Nations (FAO), through the Emergency Centre for Transboundary Animal Diseases (ECTAD), has actively supported the Government to respond to this emergency. FAO has provided personal protective equipment for use on farms and in live bird markets, as well as during surveillance and outbreak investigation. Recent trainees of the FAO In-Service Applied Veterinary Epidemiology Training (ISAVET) programme are also supporting field activities.¹ In addition, experts from FAO and the Directorate of Veterinary Services jointly carried out two emergency missions in live poultry markets and staging areas for migratory birds from 19 to 23 August, resulting in the collection of more than 1 000 samples.² The results will be used to investigate the outbreak, draw up risk maps and conduct risk analysis.

Preparing and preventing

Capacity building in Bangladesh helps preparation of vaccination programme against lumpy skin disease

After an outbreak in March 2020, FAO supported the Department of Livestock Services (DLS) in Bangladesh to train staff, veterinary students and local volunteers to conduct a door-to-door cattle survey, which was used to prioritize target areas. It also trained vaccinators and gave recommendations on upgrading vaccine storage equipment. The DLS went on to vaccinate 70 000 cows across several of the largest milk-producing districts in Bangladesh.³ The FAO ECTAD country team has also been training Community Support Team (CST) volunteers as part of a collaborative community-based approach to tackle coronavirus disease 2019 (COVID-19). Since the initiative was launched in June last year, FAO has trained 1 432 CSTs in 129 wards across Dhaka. The teams have visited more than 1 million households and screened hundreds of thousands of suspected cases.⁴

¹ <http://www.fao.org/emergencies/fao-in-action/stories/stories-detail/en/c/1436914/>

² <https://www.fao.org/emergencies/fao-in-action/stories/stories-detail/en/c/1438364/>

³ <http://www.fao.org/emergencies/fao-in-action/stories/stories-detail/en/c/1410732/>

⁴ <http://www.fao.org/emergencies/fao-in-action/stories/stories-detail/en/c/1398375/>

FAO strengthens early warning capacities for animal disease in the United Republic of Tanzania through the Event Mobile Application (EMA-i)

The FAO EMA-i reporting tool allows data collection and real-time reporting of georeferenced information on animal diseases.⁵ It has been rolled out so far to more than 60 percent of districts across the country. FAO, through the ECTAD country team, aims to augment its use to 80 percent of districts. Over the past year, FAO has worked with the Government to deliver virtual trainings for field officers during the COVID-19 pandemic, and has secured more than 100 internet-connected smartphones for trainees to allow them to use the app, even in remote areas.⁶ Since EMA-i was first piloted in the United Republic of Tanzania in 2017, the number of disease events reported has significantly increased – totalling 9 273 events reported between June 2017 and August 2021.

FAO Animal Health in Asia and the Pacific builds capacity across the region in value chain analysis for disease control

Through its recently established Virtual Learning Centre, FAO delivered a two-week online training from 17 to 31 August 2021 for more than 60 participants from eight countries, using African swine fever (ASF) as a model.⁷ Separately, FAO ECTAD continues to train animal health officers across the region in ASF detection and response, delivering its latest course in Cambodia on 22 September.⁸ More than 360 animal health officers throughout Asia and the Pacific have been trained to date.

FAO continues to help build Geographic Information System (GIS) expertise in West and Central Africa

FAO's third online GIS training for veterinary services staff was held in June 2021 and paved the way for more advanced trainings. An intermediate-level training is currently being developed and will likely be conducted in the final quarter of 2021. More than 40 epidemiologists from 12 countries have benefitted so far from the training, which helps veterinary services to map diseases and risk factors to better understand the dynamics of disease outbreaks and how to respond to them effectively.⁹

Trainees of the ISAVET programme in Burkina Faso present research results

The FAO ECTAD country team in Burkina Faso organized a semi-virtual, interactive workshop on 2 to 3 August 2021 to discuss ISAVET trainee research reports and provide feedback. The workshop also gave trainees an opportunity to connect with the network of ISAVET

graduates in Burkina Faso, as well as regional and global ISAVET coordinators.¹⁰

FAO delivers hands-on training on laboratory sampling techniques to animal health field officers in Sierra Leone

On 9 to 13 August 2021, the FAO ECTAD country team in Sierra Leone, in collaboration with the Ministry of Agriculture, trained 25 livestock and veterinary personnel on sample collection, handling and submission to improve the diagnosis and treatment of animal diseases.¹¹

One Health in action

FAO works to protect humans and animals from rabies

Marking World Rabies Day on 28 September 2021, FAO and its partners highlighted that preventing disease in animals is also an effective measure to protect human health. On the theme "Rabies: Facts, not Fear," FAO Animal Health teams in several countries supported campaigns to share information on defeating the disease. Highlights included engaging one of Indonesia's most popular influencers to raise awareness of rabies in rural areas,¹² as well as successful animal vaccination campaigns in Ghana, Guinea, Kenya, Liberia, Mali, Sierra Leone and Uganda that saw thousands of dogs and cats immunized.¹³ Governments across Asia and Africa used the occasion to reaffirm their commitment to the global goal of eliminating human deaths from canine rabies by 2030, using a One Health approach.

National One Health platforms across Africa share experiences with the Joint Risk Assessment (JRA) tool

The JRA tool provides a means to develop an integrated understanding of disease threats at the animal–human–environmental interface. Across the continent, several countries have expressed interest in facilitating training on the tool before the end of 2021. To this end, from 8 to 9 July 2021, the One Health platforms of Cameroon, Ethiopia, Kenya, Liberia, Senegal and the United Republic of Tanzania participated in a virtual meeting to discuss lessons learned from their experiences operationalizing the JRA tool, as well as to explore the way forward.¹⁴ In addition, Egypt and Sierra Leone, two of a total of 18 African countries that have received training on the tool so far, each held follow-up workshops for health experts in July 2021, enabling them to utilize the JRA approach for respective sets of priority zoonotic diseases (PZDs).¹⁵

⁵ <http://www.fao.org/3/CA1078EN/ca1078en.pdf>

⁶ <https://www.fao.org/emergencies/fao-in-action/stories/stories-detail/en/c/1442941/>

⁷ <http://www.fao.org/asiapacific/events/detail-events/en/c/1778/>

⁸ <https://twitter.com/FAOAsiaPacific/status/1440649711191412738?s=20>

⁹ <http://www.fao.org/emergencies/fao-in-action/stories/stories-detail/en/c/1419518/>

¹⁰ <http://www.fao.org/africa/news/detail-news/en/c/1419359/>

¹¹ <https://twitter.com/FAOSierraLeone/status/1428312615491674112?s=20>

¹² <http://www.fao.org/emergencies/fao-in-action/stories/stories-detail/en/c/1418052/>

¹³ <https://www.fao.org/indonesia/news/detail-events/en/c/1441388/>

¹⁴ <https://www.fao.org/emergencies/fao-in-action/stories/stories-detail/en/c/1445208/>

¹⁵ <http://www.fao.org/africa/news/detail-news/en/c/1430088/>
<http://www.fao.org/egypt/news/detail-events/en/c/1417498/>

FEEDBACK FROM THE FIELD

'Our laboratories are able to diagnose threats quickly and efficiently': Strengthening local expertise in Guinea's veterinary laboratories

The first Ebola outbreak in Guinea highlighted the vulnerability of the country's overall health system. To reduce the threat of other potentially epidemic zoonotic diseases emerging, since 2017 FAO ECTAD has been helping Guinea to modernize its veterinary laboratories by providing advanced equipment and training.¹⁶ The initiative has benefited several national laboratories and their technicians, including the Central Veterinary Diagnostic Laboratory (LCVD) in Conakry.

"At the LCVD, we have succeeded in detecting certain diseases at an early stage while respecting the biosafety/biosecurity measures, preventing the spread of pathogenic germs," says Dr Chérif Mohamed Lamine Diallo, head of quality assurance and biosafety/biosecurity. "As a result, our laboratories are able to diagnose threats quickly and efficiently, making the health system more efficient."

Today, the LCVD has the tools to analyse large numbers of samples in record time. The laboratory serves as an early warning tool for the veterinary services of new zoonotic diseases with epidemic potential.

"FAO contributes effectively to the establishment and improvement of the application of appropriate measures to carry out the diagnosis of infectious animal diseases under satisfactory safety conditions for the handler and the environment," Dr Diallo says.



Rabies screening at the Central Veterinary Diagnostic Laboratory, Conakry, Guinea.

Egypt mobilizes animal and human health experts in the fight against zoonotic diseases

On 2 September 2021, FAO Animal Health in Egypt, through ECTAD, conducted this year's second meeting of the national One Health Technical Advisory Group, in cooperation with the World Health Organization (WHO). More than 40 experts from the public health, animal health and environmental sectors discussed ongoing efforts on PZDs, including COVID-19, avian influenza and rabies, and identified key actions to effectively address them.¹⁷ The FAO ECTAD country team is also involved in engaging the private sector in Egypt, and facilitated a dialogue in June 2021 between the Government and poultry businesses on how to cooperate better to implement biosecurity practices that reduce public health threats.¹⁸ FAO and its partners are working directly with poultry farmers to share advice on how to prevent and contain avian influenza. They recently developed an animated video on good husbandry practices, which is primarily aimed at women in rural Egypt.¹⁹ After it received millions of views online, work is underway on another video about biosecurity at poultry farms.

RECENT PUBLICATIONS

- **Driving preparedness and anticipatory actions through innovation: A web-based Rift Valley fever Early Warning Decision Support Tool** September 2021.
Available at: <http://www.fao.org/3/cb5875en/cb5875en.pdf>
- **Africa Sustainable Livestock 2050: Co-creating solutions for biosecurity and broiler business: Insights from Kiambu and Nairobi city counties in Kenya** August 2021.
Available at: <http://www.fao.org/3/cb5941en/cb5941en.pdf>
- **Managing diseases in animals to prevent health crisis in humans: FAO supports Egypt to fight zoonotic disease and antimicrobial resistance threats** October 2021.
Available at: <https://www.fao.org/3/cb6593en/cb6593en.pdf>



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¹⁶ <https://www.fao.org/emergencies/fao-in-action/stories/stories-detail/en/c/1443517/>

¹⁷ <http://www.fao.org/egypt/news/detail-events/en/c/1438412/>

¹⁸ <http://www.fao.org/egypt/news/detail-events/en/c/1413688/>

¹⁹ <http://www.fao.org/fao-stories/article/en/c/1412107/>



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