

# OIE Reference Laboratory Reports Activities

## *Activities in 2020*

**This report has been submitted : 2021-01-20 13:35:02**

<b>Name of disease (or topic) for which you are a designated OIE Reference Laboratory:</b>	Newcastle disease
<b>Address of laboratory:</b>	Federal State-Financed Institution "Federal Centre for Animal Health" (FGBI "ARRIAH") Yur'evets Vladimir 600901 RUSSIA
<b>Tel.:</b>	+7-4922 26 18 67
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<b>Name (including Title) of Head of Laboratory (Responsible Official):</b>	Peter I. Kosyrev, Director of FGBI "ARRIAH" (National reference OIE laboratory for HPAI, LPAI and ND)
<b>Name (including Title and Position) of OIE Reference Expert:</b>	Viktor N. Irza, ARRIAH chief expert, doctor of science (vet)
<b>Which of the following defines your laboratory? Check all that apply:</b>	Governmental

**ToR 1: To use, promote and disseminate diagnostic methods validated according to OIE Standards**

1. Did your laboratory perform diagnostic tests for the specified disease/topic for purposes such as disease diagnosis, screening of animals for export, surveillance, etc.? (Not for quality control, proficiency testing or staff training)

Yes

Diagnostic Test	Indicated in OIE Manual (Yes/No)	Total number of test performed last year	
		Nationally	Internationally
Indirect diagnostic tests		Nationally	Internationally
ELISA	Yes	24221	0
HI	Yes	9830	20
Direct diagnostic tests		Nationally	Internationally
Virus isolation, eggs	Yes	60	0
real time RT-PCR	Yes	6300	4
nucleotide sequencing	Yes	201	0

**ToR 2: To develop reference material in accordance with OIE requirements, and implement and promote the application of OIE Standards.  
To store and distribute to national laboratories biological reference products and any other reagents used in the diagnosis and control of the designated pathogens or disease.**

2. Did your laboratory produce or supply imported standard reference reagents officially recognised by the OIE?

No

3. Did your laboratory supply standard reference reagents (non OIE-approved) and/or other diagnostic reagents to OIE Member Countries?

Yes

Type of reagent available	Related diagnostic test	Produced/ provide	Amount supplied nationally (ml, mg)	Amount supplied internationally (ml, mg)	No. of recipient OIE Member Countries	Region of recipients
Kit for detection of Newcastle disease virus antibodies in HI test	HI	Produced	2524 kits	6	2	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
Kit for detection of Newcastle disease virus antibodies in one dilution immunoassay test	ELISA	Produced	176 kits	2	2	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East

4. Did your laboratory produce vaccines?

Yes

5. Did your laboratory supply vaccines to OIE Member Countries?

Yes

Vaccine name	Amount supplied nationally (ml, mg) (including for own use)	Amount supplied to other countries (ml, mg)	Name of recipient OIE Member Countries
ND La Sota Live dry vaccine	Contract	Contract	AFGHANISTAN BANGLADESH EGYPT KAZAKHSTAN PAKISTAN RUSSIA UZBEKISTAN
ND La Sota+IB H120 Live dry vaccine	Contract	Contract	AFGHANISTAN BANGLADESH EGYPT KAZAKHSTAN RUSSIA UZBEKISTAN
Mono and associated killed oil-based vaccines containing NDV antigen	Contract	Contract	KAZAKHSTAN RUSSIA UZBEKISTAN

**ToR 3: To develop, standardise and validate, according to OIE Standards, new procedures for diagnosis and control of the designated pathogens or diseases**

6. Did your laboratory develop new diagnostic methods validated according to OIE Standards for the designated pathogen or disease?

No

7. Did your laboratory develop new vaccines according to OIE Standards for the designated pathogen or disease?

No

**ToR 4: To provide diagnostic testing facilities, and, where appropriate, scientific and technical advice on disease control measures to OIE Member Countries**

8. Did your laboratory carry out diagnostic testing for other OIE Member Countries?

Yes

Name of OIE Member Country seeking assistance	Date (month)	No. samples received for provision of diagnostic support	No. samples received for provision of confirmatory diagnoses
TAJKISTAN	December	20	0
UZBEKISTAN	November	4	0

9. Did your laboratory provide expert advice in technical consultancies on the request of an OIE Member Country?

No

**ToR 5: To carry out and/or coordinate scientific and technical studies in collaboration with other laboratories, centres or organisations**

10. Did your laboratory participate in international scientific studies in collaboration with OIE Member Countries other than the own?

Yes

Title of the study	Duration	Purpose of the study	Partners (Institutions)	OIE Member Countries involved other than your country
Updated Programme of joint actions of CIS countries to prevent HPAI and Newcastle Disease	2018-2025	Surveillance and control of Avian Influenza and Newcastle Diseases in CIS countries	Institutions and laboratories subordinated to veterinary authorities of CIS countries	ARMENIA AZERBAIJAN BELARUS KAZAKHSTAN KYRGYZSTAN MOLDOVA TAJKISTAN UZBEKISTAN
Exchange of virulent strains of Newcastle disease virus and study of their genetic properties.	2018-2021	Sequencing and analysis of genomes of Newcastle disease virus genotype VII isolates	Instituto Zooprofilattico Sperimentale delle Venezie (IZSVe)	ITALY
Exchange of data of genome sequences of virulent strains of Newcastle disease virus and analysis of their genetic properties.	since 2016	Analysis of the genome fragments of highly virulent isolates of Newcastle disease virus genotype VII	Animal and Plant Health Agency (APHA)	UNITED KINGDOM

***ToR 6: To collect, process, analyse, publish and disseminate epizootiological data relevant to the designated pathogens or diseases***

11. Did your Laboratory collect epizootiological data relevant to international disease control?

Yes

If the answer is yes, please provide details of the data collected:
All collected data relevant to international disease control are posted on the website of FSVPS, <a href="http://www.fsvps.ru">www.fsvps.ru</a> . The laboratory provides notifications and reporting to OIE on behalf of OIE Delegate from Russia.

12. Did your laboratory disseminate epizootiological data that had been processed and analysed?

Yes

If the answer is yes, please provide details of the data collected:
Epizootiological data had been sent to FSVPS and disseminated via publications, conferences, seminars and other informational resources

**13. What method of dissemination of information is most often used by your laboratory?**

**(Indicate in the appropriate box the number by category)**

a) Articles published in peer-reviewed journals: 1

1. Volkova M. A., Ir. A. Chvala, O. S. Osipova, M. A. Kulagina, D. B. Andreychuk, I. A. Chvala /Serological monitoring of avian influenza and Newcastle disease in the Russian Federation in 2019 // Veterinary today. - 2020. - № 2 (33). - Pp. 76-82.

b) International conferences: 2

1. 26th Annual Meeting of the National Reference Laboratories for Avian Influenza and Newcastle Disease of European Union Member States, Padova, Italy, September 23-24, 2020 (webinar). I. Chvala: 2020 Update on Newcastle Disease situation in the Russian Federation (oral presentation),

<https://www.izsvenezie.com/reference-laboratories/avian-influenza-newcastle-disease/workshops/>

2. International scientific and practical conference of the Russian Federation and CIS countries poultry veterinarians "Current issues of diagnostics and prevention of infectious diseases of birds in industrial poultry farming", organized by ARRIAH, Suzdal, RF, February 13-14, 2020. V. Irza: Viral diseases epizootic situation in poultry. Analysis and prognosis; A. Andreychuk: Molecular diagnosis of infections important for commercial poultry (oral presentations).

c) National conferences: 5

1. V. Irza. Current HPAI and ND situation and control measures. Scientific-practical seminar (webinar) organized by "Rosptitsoyuz", Moscow, 15.09.2020.

2. M. Volkov, A.Varkentin, V.Irza, D.Andreychuk, A. Andriyasov. Avian Influenza and Newcastle Disease: Surveillance, diagnostics, prevention and control. Webinars for veterinary services and poultry veterinarians of Territories of Russia. ARRIAH, Vladimir, every quarter of the year 2020 (4 in total).

d) Other:

(Provide website address or link to appropriate information) 1

1. Forecast for Newcastle Disease in the Russian Federation for 2020 [Text]: scientific publication / V.N. Irza, M.S. Volkov, A.V. Varkentin, A.K. Karaulov, et al. // Forecasts of infectious animal disease occurrence in the Russian Federation for 2020. - Vladimir, 2019.-P. 272-301. <http://www.fsvps.ru/fsvps/iac>

**ToR 7: To provide scientific and technical training for personnel from OIE Member Countries****To recommend the prescribed and alternative tests or vaccines as OIE Standards**

14. Did your laboratory provide scientific and technical training to laboratory personnel from other OIE Member Countries?

Yes

a) Technical visits: 0

b) Seminars: 1

c) Hands-on training courses: 0

d) Internships (&gt;1 month): 1

Type of technical training provided (a, b, c or d)	Country of origin of the expert(s) provided with training	No. participants from the corresponding country
d	Kazakhstan	1

**ToR 8: To maintain a system of quality assurance, biosafety and biosecurity relevant for the pathogen and the disease concerned**

15. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)
ISO 17025-2019	аттестат_ЛДЦ.pdf
ISO 17043-2013	Область итог.pdf

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
AI and ND virus isolation in chicken embryos	Federal Service for Accreditation (fgis@fsa.gov.ru)
Detection RNA of NDV and differentiation of virulent NDV isolates by real time RT-PCR	Federal Service for Accreditation (fgis@fsa.gov.ru)
Detection NDV antibodies in one dilution immunoassay test (ELISA)	Federal Service for Accreditation (fgis@fsa.gov.ru)
Identification of AI and ND viruses in HI test	Federal Service for Accreditation (fgis@fsa.gov.ru)
Detection NDV antibodies in HI test	Federal Service for Accreditation (fgis@fsa.gov.ru)

17. Does your laboratory maintain a “biorisk management system” for the pathogen and the disease concerned?

Yes

*(See Manual of Diagnostic Tests and Vaccines for Terrestrial Animals, Chapter 1.1.4)*

**ToR 9: To organise and participate in scientific meetings on behalf of the OIE**

18. Did your laboratory organise scientific meetings on behalf of the OIE?

No

19. Did your laboratory participate in scientific meetings on behalf of the OIE?

Yes

Title of event	Date (mm/yy)	Location	Role (speaker, presenting poster, short communications)	Title of the work presented
GFTADs Regional Expert Meeting and workshop for Diseases of poultry in Asia and the Pacific(webinar)	1-2 December	Tokyo,OIE Regional Representative for Asia and the Pacific	short communication	no presentation

**ToR 10: To establish and maintain a network with other OIE Reference Laboratories designated for the same pathogen or disease and organise regular inter-laboratory proficiency testing to ensure comparability of results**

20. Did your laboratory exchange information with other OIE Reference Laboratories designated for the same pathogen or disease?

Yes

21. Was your laboratory involved in maintaining a network with OIE Reference Laboratories designated for the same pathogen or disease by organising or participating in proficiency tests?

Yes

Purpose of the proficiency tests: <sup>1</sup>	Role of your Reference Laboratory (organiser/ participant)	No. participants	Participating OIE Ref. Labs/ organising OIE Ref. Lab.
Validation of diagnostic methods	participant	36	AI-ND EURL IZSVe, Padova, Italy

<sup>1</sup> validation of a diagnostic protocol: specify the test; quality control of vaccines: specify the vaccine type, etc.

22. Did your laboratory collaborate with other OIE Reference Laboratories for the same disease on scientific research projects for the diagnosis or control of the pathogen of interest?

Yes



Title of the project or contract	Scope	Name(s) of relevant OIE Reference Laboratories
Memorandum of understanding of material transfer (29.12.2018)	Multiple shipments of HPAI and ND viruses isolates from poultry farms at the level of initial and significant epidemiological events for comparative research studies	Instituto Zooprofilattico Sperimentale delle Venezie (IZSVE)
Memorandum of understanding of material transfer (19.09.2016)	Multiple shipments of HPAI and ND viruses isolates from poultry farms at the level of initial and significant epidemiological events for comparative research studies	Animal and Plant Health Agency (APHA)

**ToR 11: To organise inter-laboratory proficiency testing with laboratories other than OIE Reference Laboratories for the same pathogens and diseases to ensure equivalence of results**

23. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than OIE Reference Laboratories for the same disease?

Yes

Note: See Interlaboratory test comparisons in: Laboratory Proficiency Testing at: <http://www.oie.int/en/our-scientific-expertise/reference-laboratories/proficiency-testing> see point 1.3

Purpose for inter-laboratory test comparisons <sup>1</sup>	No. participating laboratories	Region(s) of participating OIE Member Countries
Validation of diagnostic methodology; participant; organizer GD Deventer	36	<input checked="" type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input checked="" type="checkbox"/> Middle East
Validation of diagnostic methodology; organizer FGBI ARRIAH;	11 Interregional veterinary laboratories of the Russian Federation, Kyrgyzstan	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East

**ToR 12: To place expert consultants at the disposal of the OIE**

24. Did your laboratory place expert consultants at the disposal of the OIE?

No

25. Additional comments regarding your report: