

# WOAH Reference Laboratory Reports Activities 2025

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## LABORATORY INFORMATION

<b>*Name of disease (or topic) for which you are a designated WOA 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) 26-06-14
<b>*E-mail address:</b>	arriah@fsvps.gov.ru; irza@arriah.ru
<b>Website:</b>	www.arriah.ru
<b>*Name (including Title) of Head of Laboratory (Responsible Official):</b>	Hasan M. Likhov, Director of FGBI "ARRIAH" (National reference OIE laboratory for HPAI, LPAI and ND)
<b>*Name (including Title and Position) of WOA 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

## TOR1: DIAGNOSTIC METHODS

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 WOA Manual (Yes/No)	Total number of test performed last year	
		Nationally	Internationally
<b>Indirect diagnostic tests</b>			
ELISA	Yes	51267	100
HI	Yes	52481	151
<b>Direct diagnostic tests</b>			
Virus isolation, eggs	Yes	219	0
Real time RT-PCR	Yes	14117	6
Nucleotide sequencing	Yes	154	0

## TOR2: REFERENCE MATERIAL

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

No

3. Did your laboratory supply standard reference reagents (nonWOAH-approved) and/or other diagnostic reagents to WOA Members?

Yes

Type of reagent available	Related diagnostic test	Produced/ provide	Amount supplied nationally (ml, mg)	Amount supplied internationally (ml, mg)	No. of recipient WOA Member Countries	Country of recipients
Kit for detection of Newcastle disease virus	HI	Produced	2172 kits	63 kits	4	ARMENIA, BELARUS, KAZAKHSTAN, RUSSIA,

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antibodies in HI test						
Kit for detection of Newcastle disease virus antibodies in one dilution immunoassay test	ELISA	Produced	214 kits	1	2	BELARUS, RUSSIA,

4. Did your laboratory produce vaccines?

Yes

5. Did your laboratory supply vaccines to WOAHA Members?

Yes

Vaccine name	Amount supplied nationally (ml, mg)	Amount supplied nationally (ml, mg)	Name of recipient WOAHA Members
ND La Sota Live dry vaccine	contract	contract	AFGHANISTAN BANGLADESH EGYPT IRAN KAZAKHSTAN RUSSIA TAJIKISTAN
ND La Sota + IB H120 associated Live dry vaccine	contract	contract	AFGHANISTAN BANGLADESH EGYPT KAZAKHSTAN KUWAIT RUSSIA TAJIKISTAN
ND-En live dry vaccine	contract	contract	RUSSIA
Mono and associated killed oilbased vaccines containing NDV antigen	contract	contract	AZERBAIJAN KAZAKHSTAN RUSSIA TAJIKISTAN UZBEKISTAN

## TOR3: NEW PROCEDURES

6. Did your laboratory develop new diagnostic methods for the designated pathogen or disease?

No

7. Did your laboratory validate diagnostic methods according to WOAHA Standards for the designated pathogen or disease?

No

8. Did your laboratory develop new vaccines for the designated pathogen or disease?

No

9. Did your laboratory validate vaccines according to WOAHA Standards for the designated pathogen or disease?

No

## TOR4: DIAGNOSTIC TESTING FACILITIES

10. Did your laboratory carry out diagnostic testing for other WOAHA Members?

Yes

Name of WOAHA Member Country seeking assistance	Date	Which diagnostic test used	No. samples received for provision of diagnostic support	No. samples received for provision of confirmatory diagnoses
BELARUS	2025-10-26	qPCR	2	0
BELARUS	2025-10-30	ELISA	100	0
KAZAKHSTAN	2025-01-30	qPCR	2	0
KAZAKHSTAN	2025-04-23	HI	71	0
KAZAKHSTAN	2025-05-12	HI	80	0
KAZAKHSTAN	2025-10-20	qPCR	2	0

11. Did your laboratory provide expert advice in technical consultancies on the request of an WOAHA Member?

No

## TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

12. Did your laboratory participate in international scientific studies in collaboration with WOAHA Members other than the own?

Yes

Title of the study	Duration	Purpose of the study	Partners (Institutions)	WOAHA Member Countries involved other than your country

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Updated Programme of joint actions of CIS countries to prevent HPAI and Newcastle Disease	2018-2025	Avian Influenza and Newcastle Disease Surveillance and Control	Institutions and laboratories subordinated to veterinary authorities of the countries	ARMENIA AZERBAIJAN BELARUS KAZAKHSTAN KYRGYZSTAN MOLDOVA TAJIKISTAN UZBEKISTAN
Characteristics of newcastle disease virus isolates and avian paramyxovirus isolates of different serotypes	2023-2025	The study of genetic features and pathogenicity of newcastle disease virus isolates and avian paramyxovirus isolates of different serotypes	Department of Preventive Veterinary Medicine, Ministry of Education, College of Veterinary Medicine, Jilin University	CHINA (PEOPLE'S REP. OF)

13. In exercising your activities, have you identified any regulatory research needs\* relevant for WOA?H?

No

## TOR6: EPIZOOLOGICAL DATA

14. Did your Laboratory collect epidemiological 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 site of FSVPS, [www.fsvps.ru](http://www.fsvps.ru). The laboratory provides notifications and reporting to WOA?H on behalf of WOA?H Delegate from

15. Did your laboratory disseminate epidemiological data that had been processed and analysed?

Yes

If the answer is yes, please provide details of the data collected:

Epidemiological data had been sent to FSVPS and disseminated via publications, conferences, seminars and other informational resources

16. What method of dissemination of information is most often used by your laboratory? (Indicate in the appropriate box the number by category and list the details in the box)

a) Articles published in peer-reviewed journals:

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1. N.A. Guseva, S.N. Kolosov, N.G. Zinyakov, L.O. Shcherbakova, A.A. Kozlov, Ir.A. Chvala, A.V. Andriyosov, R. Yin, D.B. Andreychuk, I.L.A. Chvala. *Subgenotype VII.1.1 Newcastle Disease Virus Evolution and Spread in the Russian Federation in 2019–2023*. *Viruses*. 2025, Vol. 17(10). - p. 1319 doi: 10.3390/v17101319.
2. W. Yan, X. Liu, S. Jiang, H. Li, W. Chi, R. Luo, J.Hui, Z. Peng, F. Jiang, H. Li, T. Stoeger, A. Wajid, A. Dodovski, C. Gao, C. N. Mingala, D.B. Andreychuk, R. Yin. *Emergence and characterization of historically extinct virulent genotype IV Newcastle disease virus in wild and domestic birds: genetic insights, pathogenicity, and vaccine efficacy*. *Journal of Virology*, 2025, v.13:e0164625. doi: 10.1128/jvi.01646-25.
3. M.A. Volkova, I.A. Chvala, P.S. Yaroslavtseva, M.A. Kulagina, O.S. Osipova, N.A. Guseva, D.B. Andreychuk. *Serological monitoring of Newcastle disease in the Russian Federation in 2023-2024*. *Veterinary Science Today*. 2025. - vol. 14(4). <https://doi.org/10.29326/2304-196X-2025-14-4-391-400>
4. M.A. Vershinina, N.V. Moroz, S.V. Frolov, D.L. Dolgov, E.V. Kurnenkova, L.O. Scherbakova. *Investigating the infectious process in chickens infected with Newcastle disease virus genotype VII via different routes*. *Veterinary Science Today*. 2025, Vol. 14 (4). <https://doi.org/10.29326/2304-196X-2025-14-4-401-409>

b) International conferences:

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1. *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, 26-27 February 2025.*
2. *4th Online (Zoom) Meeting of the WOA?H avian disease network in East Asia, May 19, 2025;*
3. *XII Kazakhstan International Poultry Forum, Astana, June 25, 2025. A.Varkentin: HPAI and ND : Prevention and Control (oral presentation);*
4. *International Scientific and Practical Conference "Current trends in Veterinary Science and Practice", Minsk, October 24, 2025. N. Moroz: Current challenges for poultry. Avian Influenza and Newcastle Disease(oral presentation) ;*

5. 47th meeting of the Intergovernmental Council for Cooperation in the Field of Veterinary Medicine (CIS). Dushanbe, Tajikistan, 22-23 October, 2025. I.A. Chvala (oral presentations) :

- information on the epizootic situation in the CIS member States

- implementation of a set of joint measures of the CIS member states for the prevention and control of Avian Influenza and Newcastle Disease;

6. XII International Scientific and Practical Conference "Molecular Diagnostics – 2025", Moscow, 2025. Characteristics of Newcastle disease virus isolates of subgenotype VII 1.1. (VILL) identified in 2019-2023 on the territory of the Russian Federation. Andreychuk D.B., Guseva N.A., Zinyakov N.G. et al, Proceedings of the Conference.– p. 313;

7. International Scientific and Practical Conference "Biological safety in conditions of global threats: scientific and technological approaches to counteraction", Astana, 2025. Serological monitoring of Newcastle disease and avian influenza in the Russian Federation in 2024 using domestic kits. Chvala I.A., Volkova M.A., Yaroslavtseva P.S., et al. Proceedings of the conference. p. 48.

c) National conferences:

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Off-line, online and hybrid conferences and workshops at the national level including webinar series for specialists of state veterinary services and poultry farms

d) Other (Provide website address or link to appropriate information):

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Forecast for Newcastle Disease in the Russian Federation for 2025 [Text]: scientific publication / M.S. Volkov, V.N. Irza, A.V. Varkentin,

A.K. Karaulov, et al. // Forecasts of infectious animal disease occurrence in the Russian Federation for 2025. - Vladimir, 2025.

<http://www.fsvps.ru/fsvps/iac>

## TOR7: SCIENTIFIC AND TECHNICAL TRAINING

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOAHA Members?

No

## TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
ISO 17025-2009	accreditation certificate RA.RU.21AO46 (10.01.2017) <a href="https://pub.fsa.gov.ru/ral/view/1238/accredited-entity">https://pub.fsa.gov.ru/ral/view/1238/accredited-entity</a>	аттестат_ЛДЦ.pdf
ISO 9001-2015	accreditation certificate RA.RU.13HA95 (22.04.2024) <a href="https://pub.fsa.gov.ru/rss/certificate">https://pub.fsa.gov.ru/rss/certificate</a>	24г Сертиф ИСО 9001 англ. яз _pdf.pdf
ISO 17043-2013	accreditation certificate RA.RU.430258 (16.03.2018) <a href="https://pub.fsa.gov.ru/ral/view/32230/accredited-entity">https://pub.fsa.gov.ru/ral/view/32230/accredited-entity</a>	Область итог.pdf

19. 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)

20. Does your laboratory maintain a "biorisk management system" for the pathogen and the disease concerned?

Yes

The laboratory supports a biorisk management system when working with a pathogen corresponding to the BSL-3 biosafety level.

## TOR9: SCIENTIFIC MEETINGS

21. Did your laboratory organise scientific meetings related to the pathogen in question on behalf of WOAHP?

No

22. Did your laboratory participate in scientific meetings related to the pathogen in question on behalf of WOAHP?

Yes

Title of event	Date	location	Role (speaker, presenting poster, short communications)	Title of the work presented
2. 4th Online (Zoom) Meeting of the WOAHP avian disease network in East Asia	2025-05-18	WOAHP Regional Representative for Asia and the Pacific, Tokyo, Japan	participant	no work presented

## TOR10: NETWORK WITH WOAHP REFERENCE LABORATORIES

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

Yes

24. Are you a member of a network of WOAHP Reference Laboratories designated for the same pathogen?

No

25. Did you organise or participate in inter-laboratory proficiency tests with WOAHP Reference Laboratories designated for the same pathogen during the past 2 years?

No

*FGBI ARRIAH did not participate in proficiency tests with WOAHP Reference Laboratories during the past 3 years as collaboration with these labs-organizers is still suspended although MoUs are automatically prolonged*

26. Did your laboratory collaborate with other WOAHP 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 WOAHP 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)

## TOR11: OTHER INTERLABORATORY PROFICIENCY TESTING

27. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than WOAHP Reference Laboratories for the same pathogen during the past 2 years?

Yes

Purpose for inter-laboratory test comparisons <sup>1</sup>	Role of your reference laboratory (organizer/participant)	No. participating laboratories	Name of the test	WOAHP Member Countries
Validation of diagnostic methodology	organizer: FGBI ARRIAH	27	Detection ND virus antibodies (HI, ELISA)	BELARUS, KAZAKHSTAN, RUSSIA,

## TOR12: EXPERT CONSULTANTS

28. Did your laboratory place expert consultants at the disposal of WOAHP?

No

29. Additional comments regarding your report:

Yes

*Collaboration with EURL, APHA laboratories indicated in ToR 10 still remained suspended in 2025. FGBI ARRIAH could not participate in the inter-laboratory proficiency tests organized by WOAHP Reference Laboratories*