Ukraine

Confidence Building Measure Return covering 2022

Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction

Revised forms for the submission of the Confidence-Building Measures

At the Third Review Conference it was agreed that all States Parties present the following declaration, later amended by the Seventh Review Conference:

Declaration form on Nothing to Declare or Nothing New to Declare for use in the information exchange

Measure	Nothing to declare	Nothing new to declare	Year of last declaration if nothing new to declare
A, part 1			**2021**
A, part 2 (i)	**x**		**2021**
A, part 2 (ii)	**x**		**2021**
A, part 2 (iii)	**x**		**2021**
B		**x**	**2021**
C			**2021**
E		**x**	**2021**
F	**x**		**2021**
G		**x**	**2021**

(Please mark the appropriate box(es) for each measure with a tick, and fill in the year of last declaration in the last column where applicable.)

Date: **30 March 2023**

State Party to the Convention: **Ukraine**

Date of ratification/accession to the Convention: **__21 February 1975**_____

National point of contact: **__MFA of Ukraine**_____

Active promotion of contacts

The Third Review Conference agreed that States parties continue to implement the following:

"Active promotion of contacts between scientists, other experts and facilities engaged in biological research directly related to the Convention, including exchanges and visits for joint research on a mutually agreed basis."

In order to actively promote professional contacts between scientists, joint research projects and other activities aimed at preventing or reducing the occurrence of ambiguities, doubts and suspicions and at improving international cooperation in the field of peaceful bacteriological (biological) activities, the Seventh Review Conference encouraged States parties to share forward looking information, to the extent possible,

- on planned international conferences, seminars, symposia and similar events dealing with biological research directly related to the Convention, and

- on other opportunities for exchange of scientists, joint research or other measures to promote contacts between scientists engaged in biological research directly related to the Convention,

including through the Implementation Support Unit (ISU) within the United Nations Office for Disarmament Affairs.

Confidence-Building Measure "A"

Part 1 Exchange of data on research centres and laboratories

At the Third Review Conference it was agreed that States Parties continue to implement the following:

"Exchange of data, including name, location, scope and general description of activities, on research centres and laboratories that meet very high national or international safety standards established for handling, for permitted purposes, biological materials that pose a high individual and community risk or specialize in permitted biological activities directly related to the Convention."

Modalities

The Third Review Conference agreed on the following, later amended by the Seventh Review Conference:

Data should be provided by States Parties on each facility, within their territory or under their jurisdiction or control anywhere, which has any maximum containment laboratories meeting those criteria for such maximum containment laboratories as specified in the latest edition of the WHO[1] Laboratory Biosafety Manual and/or OIE[2] Terrestrial Manual or other equivalent guidelines adopted by relevant international organisations, such as those designated as biosafety level 4 (BL4, BSL4 or P4) or equivalent standards.

States Parties that do not possess a facility meeting criteria for such maximum containment should continue to Form A, part 1 (ii).

Form A, part 1 (i)

Exchange of data on research centres and laboratories[3]

1. Name(s) of facility[4] **State Scientific Control Institute of Biotechnology and Strains of Microorganisms (SSCIBSM)**

2. Responsible public or private organization or company **State Service of Ukraine on Food Safety and Consumers Protection (SSUFSCP)**

3. Location and postal address **30, Donetska st., Kyiv, 03151, Ukraine**

[1] World Health Organization

[2] World Organization for Animal Health

[3] The containment units which are fixed patient treatment modules, integrated with laboratories, should be identified separately.

[4] For facilities with maximum containment units participating in the national biological defence research and development programme, please fill in name of facility and mark "Declared in accordance with Form A, part 2 (iii)".

4. Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence

STATE SERVICE OF UKRAINE ON FOOD SAFETY AND CONSUMERS PROTECTION, self-supporting activity, contractual, not funded by the Ministry of Defense

5. Number of maximum containment units[5] within the research centre and/or laboratory, with an indication of their respective size (m^2)

4 (1374,5 м ^{2})

6. Scope and general description of activities, including type(s) of micro-organisms and/or toxins as appropriate

The main activities of the Institute are: - scientific development of new and improvement of existing technologies for the production and control of veterinary immunobiological preparats (VIP); - scientific development of methods for standardization, certification and quality control, efficiency and safety of VIP; - deposition, maintenance, storage, study and selection of strains of microorganisms and other biological material used for the manufacture and control of VIP and providing them (biological standards, reference samples, standard samples) to biological industry enterprises, research institutions, laboratories of veterinary medicine and institutions of higher education; - implementation state control over the quality, turnover, transportation, storage, production of VIP in Ukraine - creation, by order of the Authorized Management Body of reference centers in certain areas of research - methodological support for biological factories, scientific institutions and enterprises of all forms of ownership - professional development of veterinary medicine specialists in the field biotechnology and quality control VIP - scientific and pedagogical activity. The National Center for Microorganism Strains operates on the basis of the State Scientific and Research Institute for Microorganisms - an object that is the National Treasure of Ukraine.

The National Center for Strains Microorganisms Pathogenic to Animals - NCSM SSCIBSM, performs the cultivation and storage of industrial, control, standard, strains of microorganisms, epizootic isolates, cell cultures, a total of 805 strains (bacteria, viruses, microscopic fungi, mycoplasmas). In particular, work is carried out with strains of pathogens of bacterial infections (anthrax, anaerobic infections, leptospirosis, listeria, salmonella, E. coli, staphylococci, streptococci, erysipelas, etc.), as well as viral infections (classical swine fever, enzootic bovine leukemia, rabies, Newcastle disease, infectious bursal disease of birds, influenza, infectious bronchitis of chickens, Aujeszky's disease, enteroviruses, bovine diarrhea virus, porcine reproductive and respiratory syndrome, animal coronaviruses, etc.).

Physical security of the **State Scientific Control Institute of Biotechnology and Strains of Microorganisms (SSCIBSM)** facility, 24-hour security, video surveillance, second-class biosafety cabinets, autoclaves, disinfectants, personal protective equipment, limited access of personnel responsible for access and cultivation of strains, responsible for access to the collection of strains of microorganisms, control over the movement of biomaterial, decontamination of spent biomaterial (disposal). Work with strains of microorganisms (production, control, reference, standard, including genetic material), with biological sensitive systems: cell cultures, chicken embryos, animals, poultry.

7. Name(s) of facility[6] **State University "Institute of Epidemiology and Infectious Diseases named after L.V. Gromashevsky National Academy of Sciences of Ukraine"**

[5] In accordance with the latest edition of the WHO Laboratory Biosafety Manual, or equivalent.

[6] For facilities with maximum containment units participating in the national biological defence

8. Responsible public or private organization or company **National Academy of Sciences of Ukraine**

9. Location and postal address **Ukraine, 03038, Kyiv, str. Mykoly Amosova, 5**

10. Source(s) of financing of the reported activity, including indication if the activity is wholly or partly financed by the Ministry of Defence

National Academy of Sciences of Ukraine

11. Number of maximum containment units[7] within the research centre and/or laboratory, with an indication of their respective size (m^2)

- laboratory of molecular virology and medical microbiology with a museum of microorganisms pathogenic to humans **(752.9 m^2)**

- laboratory of epidemiology of parenteral viral hepatitis and HIV infection **(279.5 m^2)**

- department of Epidemiological Analysis and Vaccine Prevention **(363.2 m^2)**

- department of respiratory and other viral infections **(296.7 m^2)**

- laboratory of experimental chemotherapy of viral infections **(179.0 m^2)**

- department of diagnostics of infectious and parasitic diseases **(263.9 m^2)**

12. Scope and general description of activities, including type(s) of micro-organisms and/or toxins as appropriate

The State University "Institute of Epidemiology and Infectious Diseases named after L.V. Gromashevsky National Academy of Sciences of Ukraine" works with biological agents of I-II groups according to WHO classification of pathogenicity of microorganisms in laboratories where conditions have been created to ensure safe work and storage of strains. The work is organized in accordance with the current regulatory and instructional documents (Orders of the Ministry of Health of Ukraine No. 183 dated 14.12.1992; No. 167 dated 30.05.1997; No. 552 dated 11.08.2014; DSP 9.9.5-064-2000; DSP 9.9.5.035.- 99, DSP 9.9.5-080-02; DSP 9.9.5-153-2008; No. 751 dated 09.28.2012; No. 1422 dated 04.28.2017.

The Institute operates a regime commission that monitors the fulfillment of biological safety requirements during work with microorganisms of I-II groups according to WHO classification of pathogenicity of microorganisms. Each division has developed work regulations (outlined in the Standard Operating Procedures - SOP), which provide for the destruction of microorganisms (use of disinfectants, autoclaving, etc.).

The premises of the laboratory units of the subdivisions, in which work with microorganisms of III-IV pathogenicity groups is carried out, have corresponding doors with code locks, strictly zoned; the sequence of transfer of material from room to room is provided. Samples of biological material that must be stored in the laboratory are located in separate freezers (with locks). Recommended disinfectants and instructional materials on their use are available at employees' workplaces.

During hostilities, museum strains of microorganisms are unavailable.

Conducting fundamental and applied research on the problems of epidemiology, microbiology, virology, immunology and parasitology, as well as research on the spread and study of the biological characteristics of the causative agents of human infectious diseases (viruses, bacteria, fungi, helminths, toxins of I-II

research and development programme, please fill in name of facility and mark "Declared in accordance with Form A, part 2 (iii)".

[7] In accordance with the latest edition of the WHO Laboratory Biosafety Manual, or equivalent.

groups according to WHO classification of pathogenicity of microorganisms), diagnosis of HIV infection, COVID-19, enterovirus infections, salmonellosis, helminthiasis, etc.

Form A, part 1 (ii)

If no BSL4 facility is declared in Form A, part 1 (i), indicate the highest biosafety level implemented in facilities handling biological agents[8] on a State Party's territory:

Biosafety level 3[9]	**YES** / no
Biosafety level 2[10] (if applicable)	**YES** / no

Any additional relevant information as appropriate:

1.Name of facility: **SE "Public Health Center of the Ministry of Health of Ukraine".**

Responsible public or private organization or company: **Ministry of Health of Ukraine.**

Location and postal address: **41 Yaroslavska Str., 04071, Kyiv city.**

Source of financing: **Ministry of Health of Ukraine.**

Number of maximum containment units (according to the WHO 1983 classification) within the research centre and/or laboratory, with an indication of their respective size (m^2):
- BSL3 Reference Laboratory for Especially Dangerous Pathogens – 280 m^2;
- BSL2 Virology Reference Laboratory – 443 m^2;

- BSL2 Microbiology and Parasitology Reference Laboratory – 328 m^2;
- BSL2 HIV/AIDS Diagnostic Reference Laboratory –189 m^2.

Scope and general description of activities, including type(s) of micro-organisms and/or toxins:

Activities in the field of public health: diagnostic studies, identification, confirmation of strains of infectious agents isolated on the territory of Ukraine, diagnostic and reference studies for COVID-19, determination of HIV mutations associated with resistance to antiretroviral drugs, organization and implementation of national programs for external evaluation of the quality of laboratory HIV testing. Keeping and maintenance of the national collection of pathogens of zoonotic infections (anthrax, tularemia, listeriosis), diphtheria, polio and other non-polio enteroviruses, influenza viruses. Diagnostics and monitoring of treatment of HIV-infected people.

[8] Microorganisms pathogenic to humans and/or animals
[9] In accordance with the latest edition of the WHO Laboratory Biosafety Manual and/or the OIE Terrestrial Manual or other equivalent internationally accepted guidelines.

2. Name of facility: **Branch of SE "Public Health Center of the Ministry of Health of Ukraine" Ukrainian I.I. Mechnikov Research Anti-Plague Institute.**

Responsible public or private organization or company: **Ministry of Health of Ukraine.**

Location and postal address: **2/4 Tserkovna Str., 65003, Odesa.**

Source of financing: **Ministry of Health of Ukraine.**

Number of maximum containment units (according to the WHO 1983 classification) within the research centre and/or laboratory, with an indication of their respective size (m^2):
- Laboratory for Especially Dangerous Biological Pathogens Indication (the major activity is virological research), BSL3 – 119.3 m^2, BSL2 – 221.2 m^2
- Laboratory for Especially Dangerous Bacterial Pathogens Indication (the major activity is bacteriological research), BSL3 – 299.97 m^2; BSL2 – 174.68 m^2

Scope and general description of activities, including type(s) of micro-organisms and/or toxins:
Activities in the field of public health: Monitoring of natural foci of tularemia in the southern region of Ukraine. Practical assistance to laboratory centers of the Ministry of Health of Ukraine.

3. A network of microbiological laboratories (bacteriological, virological, especially dangerous infections, parasitological) operates in the structure of state institutions of the laboratory centers of the Ministry of Health of Ukraine. The total number of laboratories of regional and Kyiv city laboratory centers is 95 BSL2 units.
Activities in the field of public health: diagnostic studies, monitoring of environmental objects.

Part 2 Exchange of information on national biological defence research and development programmes

At the Third Review Conference it was agreed that States Parties are to implement the following:

In the interest of increasing the transparency of national research and development programmes on biological defence, the States Parties will declare whether or not they conduct such programmes. States Parties agreed to provide, annually, detailed information on their biological defence research and development programmes including summaries of the objectives and costs of effort performed by contractors and in other facilities. If no biological defence research and development programme is being conducted, a null report will be provided.

States Parties will make declarations in accordance with the attached forms, which require the following information:

(1) The objective and summary of the research and development activities under way indicating whether work is conducted in the following areas: prophylaxis, studies on pathogenicity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxinology, physical protection, decontamination and other related research;

(2) Whether contractor or other non-defence facilities are utilized and the total funding provided to that portion of the programme;

(3) The organizational structure of the programme and its reporting relationships; and

[10] In accordance with the latest edition of the WHO Laboratory Biosafety Manual and/or the OIE Terrestrial Manual or other equivalent internationally accepted guidelines.

(4) The following information concerning the defence and other governmental facilities in which the biological defence research and development programme is concentrated;

(a) location;

(b) the floor areas (sqM) of the facilities including that dedicated to each of BL2, BL3 and BL4 level laboratories;

(c) the total number of staff employed, including those contracted full time for more than six months;

(d) numbers of staff reported in (c) by the following categories: civilian, military, scientists, technicians, engineers, support and administrative staff;

(e) a list of the scientific disciplines of the scientific/engineering staff;

(f) the source and funding levels in the following three areas: research, development, and test and evaluation; and

(g) the policy regarding publication and a list of publicly-available papers and reports.

Publications and reports are reviewed and evaluated by the State University "Institute of Epidemiology and Infectious Diseases named after L.V. Gromashevsky National Academy of Sciences of Ukraine" expert commission in order to determine the possibility of publication in mass media; confirmation that the work does not contain information constituting a state secret, in accordance with the "Compendium of information constituting a state secret", approved by the Order of the Security Council of Ukraine dated August 12, 2005. No. 440.

Form A, part 2 (i)

National biological defence research and development programmes Declaration

Are there any national programmes to conduct biological defence research and development within the territory of the State Party, under its jurisdiction or control anywhere? Activities of such programmes would include prophylaxis, studies on pathogenicity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxinology, physical protection, decontamination and other related research.

Yes/**No**

If the answer is Yes, complete Form A, part 2 (ii) which will provide a description of each programme.

Form A, part 2 (ii)

National biological defence research and development programmes

Description

1. State the objectives and funding of each programme and summarize the principal research and development activities conducted in the programme. Areas to be addressed shall include: prophylaxis, studies on pathogenicity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxinology, physical protection, decontamination and other related research.

2. State the total funding for each programme and its source.

3. Are aspects of these programmes conducted under contract with industry, academic institutions, or in other non-defence facilities?

Yes/**No**

4. If yes, what proportion of the total funds for each programme is expended in these contracted or other facilities?

5. Summarize the objectives and research areas of each programme performed by contractors and in other facilities with the funds identified under paragraph 4.

6. Provide a diagram of the organizational structure of each programme and the reporting relationships (include individual facilities participating in the programme).

7. Provide a declaration in accordance with Form A, part 2 (iii) for each facility, both governmental and non-governmental, which has a substantial proportion of its resources devoted to each national biological defence research and development programme, within the territory of the reporting State, or under its jurisdiction or control anywhere.

Form A, part 2 (iii)

National biological defence research and development programmes

Facilities

Complete a form for each facility declared in accordance with paragraph 7 in Form A, part 2 (ii).

In shared facilities, provide the following information for the biological defence research and development portion only.

1. What is the name of the facility?

2. Where is it located (include both address and geographical location)?

3. Floor area of laboratory areas by containment level:

BL2 _____ (sqM)

BL3 _____ (sqM)

BL4 _____ (sqM)

Total laboratory floor area _____ (sqM)

4. The organizational structure of each facility.

(i) Total number of personnel _____

(ii) Division of personnel:

Military _____

Civilian _____

(iii) Division of personnel by category:

Scientists _____

Engineers _____

Technicians _____

Administrative and support staff _____

(iv) List the scientific disciplines represented in the scientific/engineering staff.

(v) Are contractor staff working in the facility? If so, provide an approximate number.

(vi) What is (are) the source(s) of funding for the work conducted in the facility, including indication if activity is wholly or partly financed by the Ministry of Defence?

(vii) What are the funding levels for the following programme areas:

Research _____

Development _____

Test and evaluation _____

(viii) Briefly describe the publication policy of the facility:

(ix) Provide a list of publicly-available papers and reports resulting from the work published during the previous 12 months. (To include authors, titles and full references.)

5. Briefly describe the biological defence work carried out at the facility, including type(s) of micro-organisms[11] and/or toxins studied, as well as outdoor studies of biological aerosols.

Nothing to declare

[11] Including viruses and prions.

Confidence-Building Measure "B"

Exchange of information on outbreaks of infectious diseases and similar occurrences caused by toxins

At the Third Review Conference it was agreed that States Parties continue to implement the following:

> Exchange of information on outbreaks of infectious diseases and similar occurrences caused by toxins, and on all such events that seem to deviate from the normal pattern as regards type, development, place, or time of occurrence. The information provided on events that deviate from the norm will include, as soon as it is available, data on the type of disease, approximate area affected, and number of cases.

The Seventh Review Conference agreed the following:

> No universal standards exist for what might constitute a deviation from the normal pattern.

Modalities

The Third Review Conference agreed on the following, later amended by the Seventh Review Conference:

1. Exchange of data on outbreaks that seem to deviate from the normal pattern is considered particularly important in the following cases:

- When the cause of the outbreak cannot be readily determined or the causative agent[12] is difficult to diagnose,
- When the disease may be caused by organisms which meet the criteria for risk groups III or IV, according to the classification in the latest edition of the WHO Laboratory Biosafety Manual,
- When the causative agent is exotic to a given geographical region,
- When the disease follows an unusual pattern of development,
- When the disease occurs in the vicinity of research centres and laboratories subject to exchange of data under item A,
- When suspicions arise of the possible occurrence of a new disease.

2. In order to enhance confidence, an initial report of an outbreak of an infectious disease or a similar occurrence that seems to deviate from the normal pattern should be given promptly after cognizance of the outbreak and should be followed up by annual reports. To enable States Parties to follow a standardized procedure, the Conference has agreed that Form B should be used, to the extent information is known and/or applicable, for the exchange of annual information.

3. The declaration of electronic links to national websites or to websites of international, regional or other organizations which provide information on disease outbreaks (notably outbreaks of infectious diseases and similar occurrences caused by

[12] It is understood that this may include organisms made pathogenic by molecular biology techniques, such as genetic engineering.

toxins that seem to deviate from the normal pattern) may also satisfy the declaration requirement under Form B.

4. In order to improve international cooperation in the field of peaceful bacteriological (biological) activities and in order to prevent or reduce the occurrence of ambiguities, doubts and suspicions, States Parties are encouraged to invite experts from other States Parties to assist in the handling of an outbreak, and to respond favourably to such invitations, respecting applicable national legislation and relevant international instruments.

NOTHING TO ANNOUNCE

Form B

Information on outbreaks of infectious diseases and similar occurrences, that seem to deviate from the normal pattern[13]

1.	Time of cognizance of the outbreak	nothing to announce
2.	Location and approximate area affected	nothing to announce
3.	Type of disease/intoxication	nothing to announce
4.	Suspected source of disease/intoxication	nothing to announce
5.	Possible causative agent(s)	nothing to announce
6.	Main characteristics of systems	nothing to announce
7.	Detailed symptoms, when applicable	nothing to announce
-	respiratory	nothing to announce
-	circulatory	nothing to announce
-	neurological/behavioural	nothing to announce
-	intestinal	nothing to announce
-	dermatological	nothing to announce
-	nephrological	nothing to announce
-	other	nothing to announce
8.	Deviation(s) from the normal pattern as regards	
-	type	nothing to announce
-	development	nothing to announce
-	place of occurrence	nothing to announce
-	time of occurrence	nothing to announce
-	symptoms	nothing to announce
-	virulence pattern	nothing to announce
-	drug resistance pattern	nothing to announce
-	agent(s) difficult to diagnose	nothing to announce
-	presence of unusual vectors	nothing to announce
-	other	nothing to announce
9.	Approximate number of primary cases	nothing to announce
10.	Approximate number of total cases	nothing to announce
11.	Number of deaths	nothing to announce
12.	Development of the outbreak	nothing to announce
13.	Measures taken	nothing to announce

[13] See paragraph 2 of the chapeau to Confidence-Building Measure B.

Confidence-Building Measure "C"

Encouragement of publication of results and promotion of use of knowledge

At the Third Review Conference it was agreed that States parties continue to implement the following:

> Encouragement of publication of results of biological research directly related to the Convention, in scientific journals generally available to States parties, as well as promotion of use for permitted purposes of knowledge gained in this research.

Modalities

The Third Review Conference agreed on the following:

1. It is recommended that basic research in biosciences, and particularly that directly related to the Convention should generally be unclassified and that applied research to the extent possible, without infringing on national and commercial interests, should also be unclassified.

2. States parties are encouraged to provide information on their policy as regards publication of results of biological research, indicating, *inter alia*, their policies as regards publication of results of research carried out in research centres and laboratories subject to exchange of information under item A and publication of research on outbreaks of diseases covered by item B, and to provide information on relevant scientific journals and other relevant scientific publications generally available to States parties.

3. The Third Review Conference discussed the question of cooperation and assistance as regards the safe handling of biological material covered by the Convention. It concluded that other international forums were engaged in this field and expressed its support for efforts aimed at enhancing such cooperation.

Scientific publications of the State University "Institute of Epidemiology and Infectious Diseases named after L.V. Gromashevsky National Academy of Sciences of Ukraine" for 2022

Articles in scientific journals		Articles in collections		Theses		Publications in popular scientific publications	
Compatriots	Foreign	Compatriots	Foreign	Compatriots	Foreign	Compatriots	Foreign
5	17	-	-	24	4	-	-

The results of scientific research in 2022. were presented by employees at scientific and practical conferences with international participation

Publications in the open press are carried out after the permission of the expert commission of the Institute on the possibility of publication

Participation in conferences and meetings:

1. On January 4 and 11, 2022, employees of SSCIBSM (Z. Klestova, M. Babkin, N. Pinchuk, O. Deryabin, O. Napnenko, O. Romanenko, O. Vatlitsova), with the participation of a representative of the State Production and Consumer Service (S. Sklyarenko), participated in online meetings with American

partners (Leidos STEP team – Keith Herndon, Moe Long, Jason Farlow, Edan Tulman, Greg Glass, Mario Straka, Scott. E. Yoder, Steven Geary) regarding project planning – SSCIBSM, Leidos STEP team , project planning call (Ukraine, Kyiv - SSCIBSM).

2. On April 22, 2022, the deputy director of SSCIBSM for scientific work (Professor Z.S. Klestova) took part in the "Chance for Science" conference organized by the University of Leipzig with a report: "Express detection of pathogens in water by the method of surface plasmon resonance" (Germany , Leipzig).

3. Despite the military actions and the difficult situation in Ukraine, the head of the department of bacteriological research and quality control of veterinary immunobiological agents (VIZ) of the State Scientific and Control Institute of Biotechnology and Strains of Microorganisms (DNKIBShM) of the State Service of Ukraine for Food Safety and Consumer Protection (State Consumer Protection Service) candidate of veterinary sciences, senior researcher Nataliya Pinchuk, as part of the delegation of Ukraine, from April 23 to 29, 2022, was able to participate (poster session) and represent the country worthily at the 10th International Conference on Bacillus anthracis, B. cereus and B. thuringiensis - BACT 2022 (France, Paris). DTRA supported the preparation of this research presentation and the participation of representatives from Ukraine in the mentioned conference.

4. From May 3 to 6, 2022, the Deputy Director of the National Institute for Scientific Research (Professor Z.S. Klestova), with the support of the Department of Threat Reduction, as part of the project "Against the dangers of particularly dangerous pathogens in Ukraine" and with the support of CH2M HILL, Inc. ., took part in the "2nd ABSA International Biosafety Symposium" (Minneapolis, USA).

5. From May 10 to 11, 2022, the deputy director of the National Institute of Scientific Research (Professor Z.S. Klestova) took part in the "1st International Congress of Modern Science" with a report: "New biological systems for detecting the causative agents of viral infections in animals" (Uzbekistan, Tashkent). Also, on May 10, 2022, Professor Klestova Z.S. held Section 1 (Hall 2) as the head of the Section at the said Congress.

6. From May 19 to 20, 2022, the Deputy Director of the National Institute for Scientific Research (Professor Z.S. Klestova), as part of the project "Against the Dangers of Particularly Dangerous Pathogens in Ukraine" and with the support of the CH2M HILL, Inc. Company, as part of the Ukrainian delegation , as a member of EBSA, participated in the "23rd Annual Conference of the European Biosafety Association" (Belgium, Ghent).

7. Within the International Technical Assistance Project "Combating the Threats of Particularly Dangerous Pathogens in Ukraine" (project registration card No. 4560 dated November 3, 2020), the Program for the Training of Instructors (Coaches) has begun. From October 10 to 21, 2022, employees of SSCIBSM (N. Pinchuk, O. Napnenko, O. Romanenko), organized by CH2M HILL, Inc. (CH2M) / Jacobs Engineering Group Inc. (Jacobs), which is a partner in the implementation of the Biothreat Reduction Program (BTHR) in cooperation with the University of Washington / International Center for Health Education and Training (I-TESN) of the USA, participated online in the first Module "Methods adult education and facilitation of educational activities" (Ukraine, Kyiv - SSCIBSM).

8. From October 24 to 27, 2022, employees of SSCIBSM (N. Pinchuk, O. Romanenko), under the organization of the Company CH2M HILL, Inc., which is an integrating contractor for the implementation of the Biological Threat Reduction Program (BTRP) of the Threat Reduction Agency of the US Department of Defense (DTRA) in Ukraine, participated online in the International Symposium on Biological Threat Reduction (IBTRS 2022) (Ukraine, Kyiv - SSCIBSM).

9. From November 7 to 11, 2022, an employee of SSCIBSM (N.G. Pinchuk) took part in the training seminar: "The level of biosafety in the identification of highly pathogenic bacteria" of the German Society for International Cooperation (GIZ) GmbH - the German program of biological safety in Ukraine according to the project with the Friedrich Leffler Institute (FLI) (Germany, Jena, Friedrich Leffler Institute - Institute of Bacterial Infections and Zoonoses).

Scientific works published by employees of SSCIBSM for 2022.

Rudova, N., Buttler, J., Kovalenko, G., Sushko, M., Bolotin, V., Muzykina, L., Zinenko, O., Stegniy, B., Dunaiev, Y., Sytiuk, M., Gerilovych, A., Drown, D. M., Bortz, E., & Solodiankin, O. (2022). Genetic Diversity of Porcine Circovirus 2 in Wild Boar and Domestic Pigs in Ukraine. *Viruses*, *14*(5), 924. https://doi.org/10.3390/v14050924

Bohach, M., Bolotin, V., Bohach, D., Piven, O. T., & Pyvovarova, I. V. (2022). Influence of Natural and Climatic Conditions on the Distribution and Forms of Contagious Agalactia in Sheep in Bessarabia, Ukraine. *Journal of veterinary research*, *66*(3), 345–351. https://doi.org/10.2478/jvetres-2022-0047

EFFECTS OF FLAVONOID COMPOSITION PROTEFLAZID ON EXPRESSION OF NRF2 TRANSCRIPTION FACTOR IN SETTING OF VIRAL INFECTION** Arkhipova M., Atamaniuk V., Deryabin O., Starosyla D., Zavelevich M., Loring Salmeron A., Trokhymchuk T., Masyk M., Rybalko S. // IV International Scientific Conference* *Microbiology and Immunology the development outlook in the 21st century* (SEPTEMBER 22-23, 2022, KYIV)

HUMAN UMBILICAL CORD-DERIVEDMESENCHYMAL STEM CELLS PROMOTE REGENERATIONOF NASAL MUCOSA ATROPHY / Deryabina O, Minin Y, Karas G, Kucherenko T, Maslova O, Shuvalova N, Deriabin O, Tarasov O, Minina A, KurdiumV. // Оториноларингологія, No5 (5), 2022, с. 46-54

Molecular typing of Ukrainian anthrax strains. The 10th International Conference on *Bacillus anthracis*, *cereus* & *thuringiensis.* - Bacillus ACT 2022. Abstract Book.- Paris, April 24-28 2022. - P. 77. / A. Golovko, O. Deriabin, N. Pinchuk, T. Kyselova, Y. Bezvin, V. Chumachenko.

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TOTAL (9):
articles in specialized journals – 8
Abstracts – 1

1. Scientific and practical conference with international participation "Acute diseases of the respiratory system, clinical manifestations, complications, diagnosis, treatment", February 11-12, 2022. (online).

2. Scientific and practical conference with international participation "Acute, chronic and mixed infections during war and emergencies: modern clinical manifestations, diagnosis, treatment", 26-27.05.2022. (online).

3. Scientific and practical conference with international participation "Actual infectious diseases in a hot period of time: clinic, diagnosis, treatment", 20-21.06.2022 (online).

4. Scientific and practical conference "Modern world and infectious diseases. Travel medicine", 06.22-23.2022 (online).

5. Scientific and practical conference "Infectious diseases of traveles, modern challenges and the state of the problem in Ukraine", September 22-23, 2022. (online).

6. Scientific and practical conference with international participation "Actual infectious diseases and related pathology. Algorithms of diagnosis and treatment", September 27, 2022. (online).

7. Scientific and practical conference with international participation "Infectious diseases of modern times: etiology, epidemiology, diagnosis, treatment, prevention, biological safety", timed to the 135th anniversary of the birth of Academician L.V. Gromashevskyi and annual "readings" in memory of Academician L.V. Gromashevsky, October 12, 2022. (online).

8. Scientific and practical conference with international participation "Actual infectious diseases. Modern aspects of clinic, diagnostics, treatment and prevention", November 24-25, 2022. (online).

Confidence-Building Measure "D"

(Deleted)

Confidence-Building Measure "E"

Declaration of legislation, regulations and other measures

At the Third Review Conference the States parties agreed to implement the following, later amended by the Seventh Review Conference:

As an indication of the measures which they have taken to implement the Convention, States parties shall declare whether they have legislation, regulations or other measures:

(a) To prohibit and prevent the development, production, stockpiling, acquisition or retention of the agents, toxins, weapons, equipment and means of delivery specified in Article I of the Convention, within their territory or anywhere under their jurisdiction or under their control anywhere;

(b) In relation to the export or import of micro-organisms pathogenic to man, animals and plants or of toxins in accordance with the Convention;

(c) In relation to biosafety and biosecurity.

States parties shall complete the attached form (Form E) and shall be prepared to submit copies of the legislation or regulations, or written details of other measures on request to the Implementation Support Unit (ISU) within the United Nations Office for Disarmament Affairs or to an individual State party. On an annual basis States parties shall indicate, also on the attached form, whether or not there has been any amendment to their legislation, regulations or other measures.

Form E

Declaration of legislation, regulations and other measures

Relating to	Legislation	Regulations	Other measures[14]	Amended since last year
(a) Development, production stockpiling, acquisition or retention of microbial or other biological agents, or toxins, weapons, equipment and means of delivery specified in Article I	Yes/No	Yes/No	Yes/No	Yes/No
(b) Exports of micro-organisms[15] and toxins	**Yes**/No	**Yes**/No	Yes/**No**	Yes/**No**
(c) Imports of micro-organisms[11] and toxins	**Yes**/No	**Yes**/No	Yes/**No**	Yes/**No**
(d) Biosafety[16] and biosecurity[17]	Yes/No	Yes/No	Yes/No	Yes/No

[14] Including guidelines.

[15] Micro-organisms pathogenic to man, animals and plants in accordance with the Convention.

[16] In accordance with the latest version of the WHO Laboratory Biosafety Manual or equivalent national or international guidance.

[17] In accordance with the latest version of the WHO Laboratory Biosecurity Guidance or equivalent national or international guidance.

Confidence-Building Measure "F"

Declaration of past activities in offensive and/or defensive biological research and development programmes

In the interest of increasing transparency and openness, States parties shall declare whether or not they conducted any offensive and/or defensive biological research and development programmes since 1 January 1946.

If so, States parties shall provide information on such programmes, in accordance with Form F.

Form F

Declaration of past activities in offensive and/or defensive biological research and development programmes

1. Date of entry into force of the Convention for the State Party.

2. Past offensive biological research and development programmes:

- Yes/**No**

- Period(s) of activities

- Summary of the research and development activities indicating whether work was performed concerning production, test and evaluation, weaponization, stockpiling of biological agents, the destruction programme of such agents and weapons, and other related research.

3. Past defensive biological research and development programmes:

- Yes/**No**

- Period(s) of activities

- Summary of the research and development activities indicating whether or not work was conducted in the following areas: prophylaxis, studies on pathogenicity and virulence, diagnostic techniques, aerobiology, detection, treatment, toxinology, physical protection, decontamination, and other related research, with location if possible.

Nothing to declare

Confidence-Building Measure "G"

Declaration of vaccine production facilities

To further increase the transparency of biological research and development related to the Convention and to broaden scientific and technical knowledge as agreed in Article X, each State party will declare all facilities, both governmental and non-governmental, within its territory or under its jurisdiction or control anywhere, producing vaccines licensed by the State party for the protection of humans. Information shall be provided on Form G attached.

Form G

Declaration of vaccine production facilities

1. Name of facility:

2. Location (mailing address):

3. General description of the types of diseases covered:

Nothing to announce