International co-operation with Ukraine in the framework of the German biosecurity program of foreign countries

Project:

Strengthening of biosecurity in the environment with proliferation-critical animal husbandry in Ukraine (current reporting period 2020-2022)





national partner countries in miniature biological management (hcwaffen-node/biosicherheit). The program is part of the precautionary security policy of the Bundesregierung. The potential misfortune of highly pathogenic bacteria and viruses can be found in different states, but also in different regions. There are no breakaway ridges. A global security and partnership cooperation reduces this global security risk.

The Friedrich-Loeffler Institute (FLI), the Bernhard-Nocht-Institut für Tropenmedizin, the

The Friedrich-Loeffler Institute (FLI), the Bernhard-Nocht-Institut für Tropenmedizin, the Institut für Microbiologie der Bundeswehr and the German Society for International Cooperation (GIZ) GmbH were established by the project through Ukraine. The activities based on activities include training in sensing, surveillance, capacity building, biosafety and biosecurity, detection and diagnostics and accident monitoring.

The FLI role in the German biosecurity program

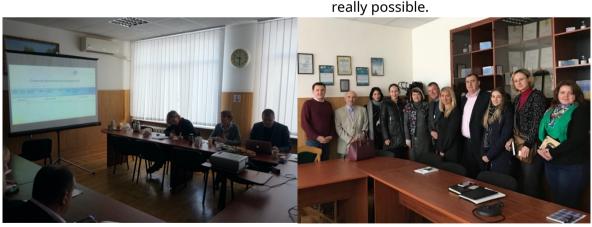
At the Institute for New and New Archaeological Research (INNT) of the FLI, it is open from the beginning of 2013, according to the Auschwitz Hosts. Highlights of the sub-Saharan Africa region as well as Ukraine. On the basis of a very comprehensive cooperation, in addition to the acquisition of diagnostic capacities, the sensitization and cooperation of the cooperation partner as well as the income of a new knowledgeable expertise, it is necessary to provide for the project.

The Ukraine project of INNT

The INNT coordinates the Ukraine project with three thematic projects, and also two other FLI-Institute works (IVD for African Switzerland, IBIZ for Brussels / Milzbrand). The Ukraine-part project of the INNT is focused on the research of the Crimean-Congo-Hemorrhoids-Fever-Virus (CCHFV) and on a scale of measures for the protection of biosecurity. In this case, the INNT with its two partner institutes in Kiev:

- of the State Scientific and Research Institute of Laboratory Diagnostics and Veterinary and Sanitary Expertise (SSRILDVSE)
 Ds SSRILDVSE ist in Bezug auf die whrgenommenen Aufgaben das ukrainische Schwesterinstitut zum FLI. It is possible for the transfer of animal diseases in Ukraine, laboratory diagnostics and identification of animal diseases and methodological support and control of regional veterinary laboratories. It is also included in the veterinary controls of animal products and feed products.
- The State Scientific Control Institute of Biotechnology and Strains of Microorganisms
 (SSCIBSM) The SSCIBSM provides a scientific research on the development and
 development of immunological immunological agents (including immunoassay, serum,
 anticonvulsive agent). There is also a national center for the production of production,
 standard and feldspars of microorganisms (viruses, bacteria, pollen and other biological
 material).

Special activities of the FLI are supported by a GIZ service package. In many ways, specialized labor training courses at FLI can be used as a source of information for two Ukrainian jobseekers *. There are also important FLI workshops and trainings for biosafety and diagnostic capacity in the Kiewer Institution. The co-operation with the Ukrainian colleges should be discussed in the framework of the annual coordination framework. The GIZ website is open to the public with a wide range of language, management and presentation trainings. Inspecting the most important parts of the world before learning English courses have become extremely popular.



Impressions of coordination in Ukraine



The Ukrainian Science Fellows * take part in international events, including the annual EPIZONE Meeting (links) as well as the International Symposium of the National Research Platform for Zoo in the Autumn 2019 in Berlin (right).

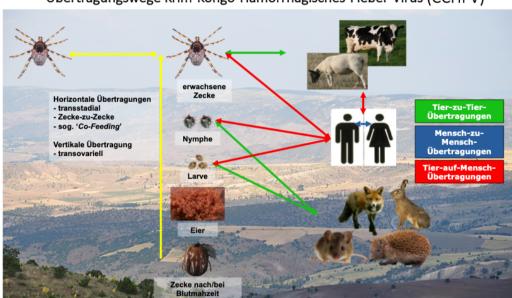
Special measures should be taken to establish institutional security and bioscientific work. Nebh mehreren Workshops zu diesen Thematiken, werden Inhalte zum Thema Biosicherheit auch online durch die Nutzung der GO4BSB-Platform (https://www.go4bsb.de/start/) vermittelt. Gleichzeitig hat sich auch die Ausstattung der Labore in Kiew stetig weiterentwickelt, sodass die Methoden zur serologischen und molecularbiologischen Diagnostik der biologischen Agencijen mehr und mehr etabliert werden konnten. In the case of the most recently approved labor test, you can be sure that the German government will be able to do so. Allergies are not molecular biological methods for diagnosing the diagnosis of biological agencies.

The Crimean-Congo-humorous fever virus

In the years of 1944, the Soviet Wishers identified a humorous disease in the Crimea, the most common of which was a virus. You can never isolate the opportunity to find the opportunity to do so. In February 1956, the Congo discovered and isolated a virus in the Congo, which, in addition to being a human being, had a similar caricature. If you want to know how to get rid of them and get a better idea of the strength of the CCHFV (Crimean Congo Hemorrhagic Fever Virus). Vorkommen von CCHFV, einem hochpathogenen Erreger, der beim Menschen ein tödliches humorhagisches Fieber auslösen kann, wird sowohl in Süd (ost) -Europa als auch in Asien und Afrika beschrieben.

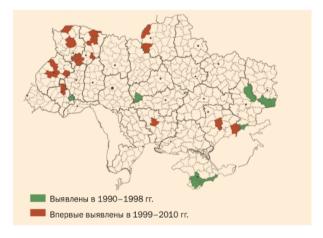
The humorous Crimean Congo-Fieber will be transferred to the police. CCHF is located in Osteuropa, in the Middle East, in the Northwest China, in Central Asia, South Europe, Africa, in the East and on the Indian subcontinent. The images, which contain the Hyalomma Gattung, are a reservoir as well as a vector for the CCHF virus. The number of wild and domestic animals such as beehives, dairies, cupboards and hawks are served as amplification plants. The translation on the menu is completed by pickpockets or by contact with infectious blood or body fluids. The fatality at

hospitalized patients receive between 9% and 50%. Animal husbandry, nursery and laborer in endemic areas as well as staff house staff, etc. you are in the middle of the infection. CCHFV infections in animals and men are considered to be modern molecular diagnostic tests (qPCR, NGS, etc.) and serologically (ELISA, IFA, SNT) diagnosed.



Übertragungswege Krim-Kongo-Hämorrhagisches-Fieber-Virus (CCHFV)

The first description of the Crimean region is illustrated by the fact that the CCHFV in Ukraine is the most important in the United States, so that the state of war is still very important. In the last years the human CCHF falls in Ukraine but sporadically celebrated.



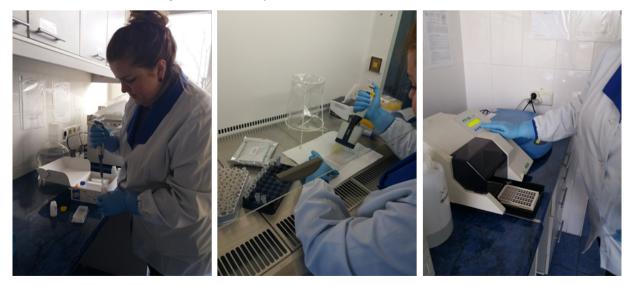
Acquisitions from CCHF-Fällen bei Menschen in den Jahren 1990-1998 und 1999-2010 in Ukraine (by Nebogatkin I & Beletskaya G. 2011 Enzootic areas with specific infections (Russian)).

In the framework of the Ukrainian part-projects of the INNT, with the help of experts (molecular biology and serology) we will be able to understand the worries and the distribution of the CCHF virus in Ukraine. A possible picture of the virus can be found in a possible, well-informed way, as well as virus samples as well as serum samples tested again. The assembled trial should be concluded on the basis of the CCHFV Erregers or. CCHFV-specific anti-corrosion analyzer analyzed.

Although this is not the case, in the past in Ukraine there are other, highly pathogenic orthodox animals circulating, and the zoonotic potential is still unencumbered. Medium molecular methods can also be used in addition to the available resources.



Test of zecken at rindern by the Ukrainian partner.



The first serological studies of the re-testing of tests on the CCHFV-specific anti-corrosion agents.