



Modernization of Biosafety in Azerbaijan

Dr. Shair Gurbanov, M.D.

Republican Anti-Plague Station (APS), Ministry of Health

The Republican Anti-plague Station Remodeling and Renovations

Laboratories have been equipped with engineered safety features including biosafety cabinets (BSL2) and equipment for molecular diagnosis (PCR), etc.



Laboratories have all the necessary personal protection equipments (disposable lab coats, masks, gloves, etc.)



Basic Functions of the Republican Anti-Plague Station

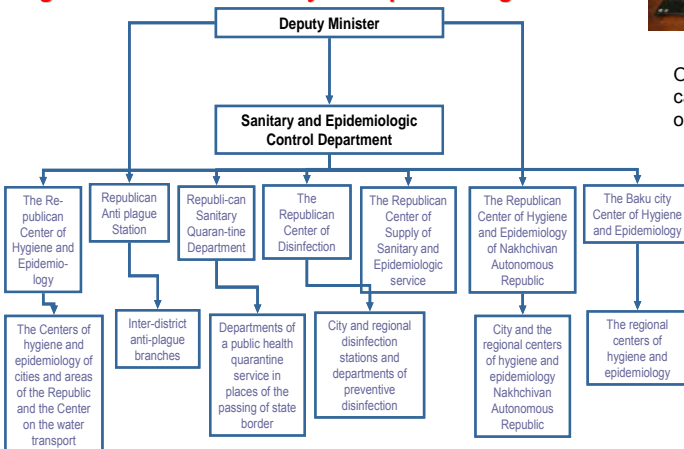
- Epizootic control over natural focus of plague and tularemia; over all quarantine and especially dangerous infections
- Localizing and liquidating of natural focus of infections after the cases are found
- Development of manuals for the Regional Centers of Hygiene and Epidemiology
- Conducting training courses in collaboration with the experts from the general medical network
- Providing Sanitary education of population

Infectious diseases - Epidemiologic surveillance by the APS

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| <ul style="list-style-type: none"> - Plague - Tularemia - Cholera - Anthrax - Brucella - Rabies - Tick-Borne Encephalitis | <ul style="list-style-type: none"> - Foot-and-mouth Disease - Yellow fever - Glanders - Melioidosis - Viral Hemorrhagic Fevers - Acute Respiratory Syndrome (HARS) - Avian Influenza |
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Biosafety Institutes:

Organization of the Sanitary and Epidemiologic Service



Over 85 modern twenty-four-hour surveillance cameras have been installed from the inside and outside of the laboratories



Over fifty wooden doors have been replaced by metal ones with electronic locks



A 24-hour "Access Control" Central System has been established

- Magnetic access cards are used to enter the facility (records the time and checks the photo)
- Magnetic access cards are used to enter the laboratories



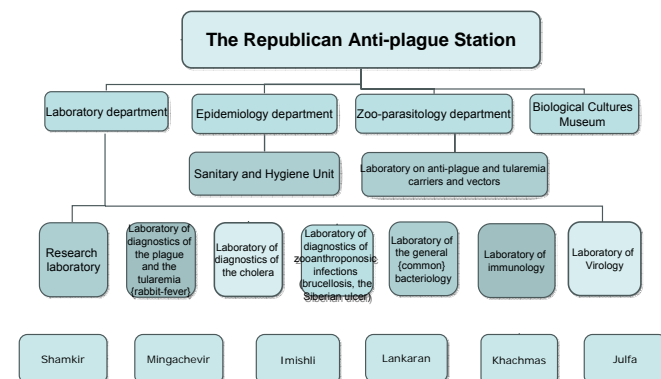
A new fence with automatic gates and guard posts has been erected



The Process of Laboratory Modernization

- 1979 Biosafety Guidelines of the USSR gave priority to Personal Protection Equipment for biosafety; focused on Pathogenicity of microorganisms
- Agreement of Cooperation on Biosafety between Azerbaijan and the U.S. was signed in 2005
- Since the agreements, DTRA has performed the following activities:
 - Completed design of the Baku Central Reference Laboratory (CRL); construction to start soon.
 - Developed New Biosafety Guidelines:
 - 1.Created a working group at MOH to help develop new guidelines.
 - 2.Used "Biosafety in Microbiological and Biomedical Laboratories" (Washington, 1999) and "Practical Guidance on Biological Safety in Laboratory Environment" (Geneva, 2004) as a basis for the new guidelines.
 - 3.Gave priority to the engineered safety features to ensure biosafety.
 - 4.Ensured that the biosafety level will be determined for separate each procedure during laboratory research activities.
 - 5.Placed high emphasis on the amount of microorganism, presence of vaccines against these microorganisms and sensitivity to antibiotics.

Organization of the Republican Anti-Plague Station



Biosafety training courses have been organized for the laboratory personnel

2006 – attending the training course on biosafety held in Durham city (USA);
 2006 – attending 49th Annual Conference of ABSA in Boston (USA)
 2007 – attending the trainings on biosafety held in Chicago and Baku (conducted by ABSA experts).



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