

Biosafety Implications of the National Public Health Laboratory Network

Shota Tsanava, PhD, MD
NCDC&PH, Tbilisi, Georgia

- Biological Threat Reduction Implementing Agreement (BTRIA) - 2003
- Biological Threat Reduction Program (BTRP)
 - Assistance in diagnostics and surveillance on human and animal diseases spread in Georgia by means of trainings, equipment, reconstruction and renovation of facilities is carried out.

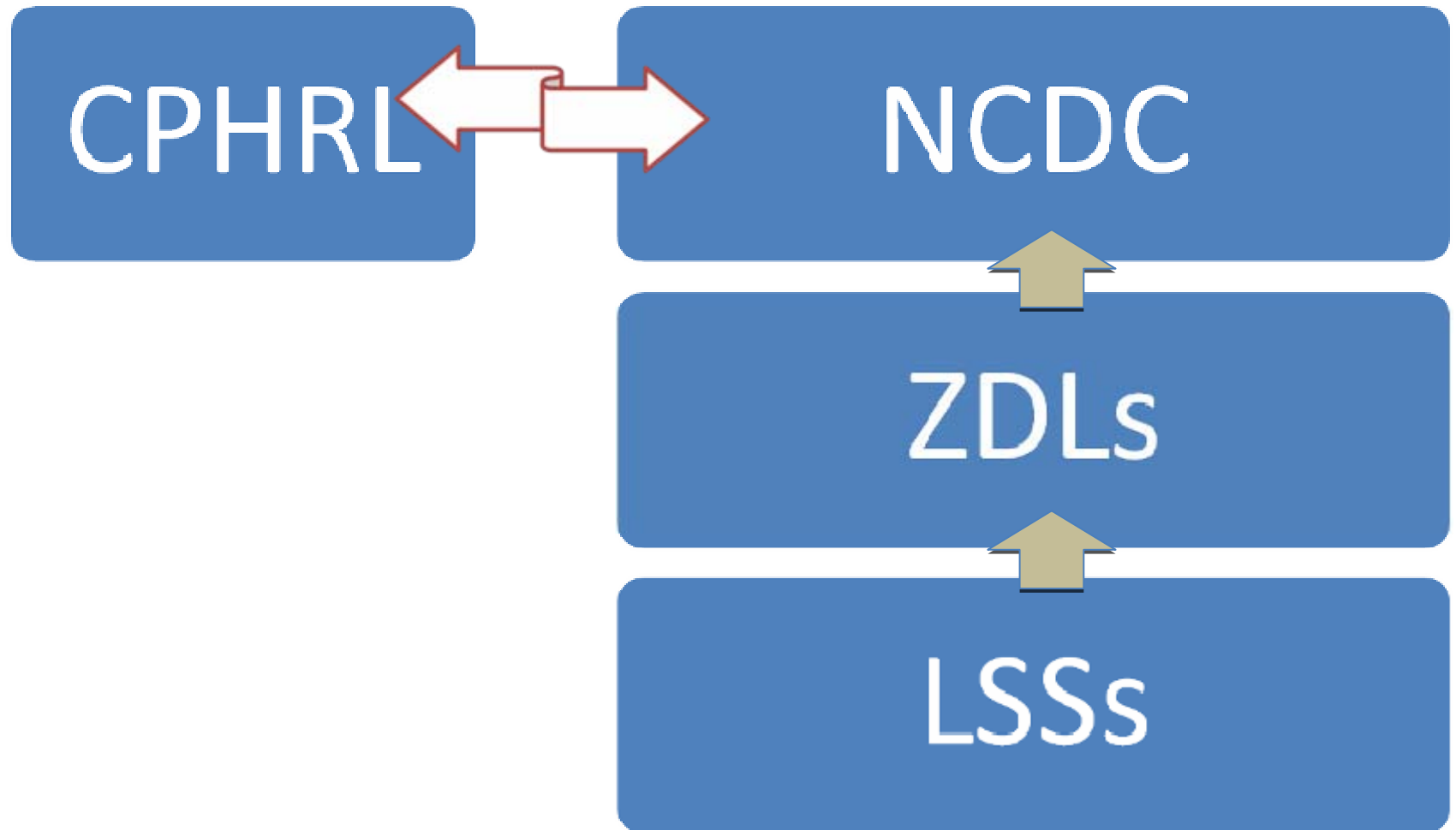
- International Health Regulations (IHR) – 2007 of the World Health Organization (WHO)
- Prevention and response to acute risks to public health
- “Competent Body” – MoLHSA
- Point of Contact for IHR - National Center for Disease Control and Public Health (NCDC).

- Georgia – European Union Partnership and Collaboration Agreement (PCA) – 1999 ENP or EU/Georgia
- Plan for Action of European Neighborhood Policy 2006 -
 - Education and Training in Health Care and Safety issues, with emphasis on activities containing high risk.

- Law of Georgia “On Public Health” - 2007
- Prevention of Communicable Diseases
- Assuring Biological Safety
 - Ministry of Labor, Health and Social Affairs (MOLHSA) (MoLHSA) overall national strategy for assuring biological safety of the population
 - Competency of MoLHSA - complex organizational medico-biological and engineering – technology activities for preventing personnel handling pathogenic biological agents

- Safety – one of main elements of Quality Management System (QMS)
 - Institute of Clinical and Diagnostic Standards (CLSI)
 - Biosafety Trainings provided by Battelle

PH Laboratory System



NCDC laboratorial network in GEORGIA



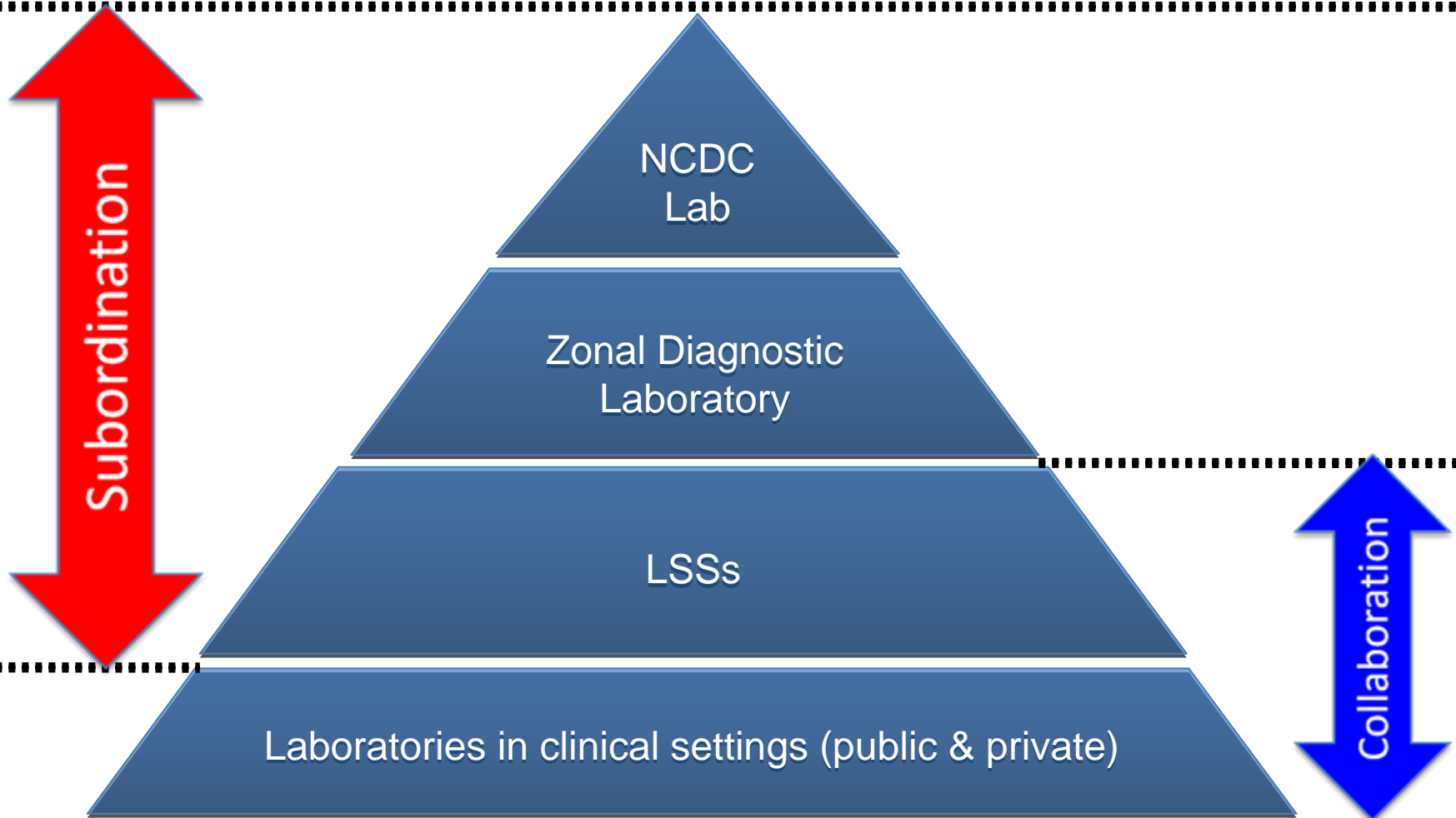
Functional integrity of NCDC laboratory network

- Systematic and uniform approach to:
 - Laboratory operations management
 - Quality management system
 - Biosafety and biosecurity
 - Electronic Integrated Disease Surveillance System

Functional capacity of NCDC labs

- ZDLs
 - Serology
 - Microbiology
 - Molecular: PCR, Sequencing, PFGE
 - Virology (Tissue and viral cultures) – NCDC lab only
- LSS:
 - Serology
 - Microbiology
 - Initially – microscopy, packaging and transporting only
 - Gradually - developing full microbiology capacity

Tiered Lab System



Evolution of the concept

- The EDP specific concept for TADR/PH laboratory network has been subjected to evolution lately
- Driving forces:
 - Discrepancy between the PH needs of Georgia and the narrow scope of EDP specific activities
 - Low EDP prevalence and hence inadequate sample flow
 - Sustainment concerns

Current model

- The current concept for PH lab network is tailored to address public health needs of the country:
 - To develop comprehensive and broad-spectrum surveillance system (EDP and non-EDP)
 - To build up PH oriented applied research capacity
 - To develop and evaluate new diagnostics
 - To provide broad clinical laboratory services to health care facilities
 - To be used as a laboratory support for several screening and prevention state programs
 - To use it as a training and educational facility

- The committee on management of laboratory quality NCDC&PH develops:
 - Manual of laboratory quality in NCDC&PH
 - Manual of Biosecurity and Biosafety in NCDC&PH

Thank You