



# Development Strategy and 5 Year Action Plan of the National Center for Disease Control and Public Health

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## Abbreviations

NCDC&PH	National Center for Disease Control and Public Health
MOLHSA	Ministry of Labour, Health and Social Affairs
WHO	World Health Organization
EU	European Union
UNICEF	United Nations Children Fund
UNFPA	United Nations Population Fund
UNDP	United Nations Development Program
FAO	Food and Agriculture Organization of the United Nations
WB	World Bank
ECDC	European Centre for Disease Control and Prevention
OIE	World Organization for Animal Health
CDC	US Centers for Disease Control and Prevention
FELTP	Field Epidemiology and Lab Training Program
DTRA	US Defense Threat Reduction Agency
WRAIR	Walter Reed Army Institute of Research
USAID	United States Agency for International Development
NIH	US National Institutes of Health
JUP	Joint University Partnership
USAMRIID	US Army Medical Research Institute of Infectious Diseases
AIDCO's Instrument for Stability	Sustainability Instrument of the Agriculture and Industrial Development Company
GAVI	Global Alliance of Vaccination and Immunization
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
WRF	Wishnevskaya-Rostropovich Foundation
ISTC	International Scientific Technical Centre
STCU	Scientific-Technical Centre of Ukraine
IARC	International Agency for the Research of Cancer
BSEC	Black Sea Economic Cooperation

## **Introduction**

National Center for Disease Control and Public Health (NCDC&PH) is designated as a central Agency for public health. The history of the institution takes its origin from 1937, when a Georgian Plague Station was established. After regaining independence the Georgian Plague Station was transformed into the Research Center for Especially Dangerous Pathogens in 1992 and following reform of the Sanitary Epidemiological System in 1995 it was legally established as National Center for Disease Control. Further major reorganizations took place in 2007 and 2010 by assuming functions of a medical statistics and public health department.

The NCDC&PH is a legal entity of Public Law accountable to the Ministry of Labour, Health and Social Affairs (MoLHSA) with a dedicated line in the state budget. The Center provides national leadership in preventing and controlling of communicable and non-communicable diseases, through developing of national standards and guidelines, health promotion, disease surveillance, immunization, laboratory work, research, providing expert advice and responding to public health emergencies. The NCDC&PH provides health statistics to monitor population health and guide policy actions.

In pursuance of the Decree N422 issued by the Government of Georgia in 2013 NCDC&PH moved to the next stage of its development by integrating with the R. Lugar Public Health Research Centre. NCDC&PH stands out in the region with its lab capacity, thus creating the ground for increasing the responsibility and empowering the NCDC&PH with new obligations in the area of public health and bio safety. To respond to the new challenges the NCDC&PH requires the long-term strategy, which will set priorities for its future work. The strategy will help to align resources to support the priorities and organize management systems to deliver these priorities. At the same time the strategy will assist in communicating the NCDC&PH role to the partners, stakeholders and to a public.

The present strategy has been developed and is based on the Constitution and following Laws of Georgia: Laws on Healthcare, Public Health, Tobacco Control, HIV/AIDS, Prophylaxis of Diseases Caused by Iodine, Other Microelement and Vitamin Deficiency along with the international agreements and conventions ratified by the Parliament of Georgia.

## **I. Vision and Mission**

**Vision: Our Knowledge - for Health Services of the Population.**

**Mission: Protection and improvement of the health of Georgian population through scientific evidence based prevention, preparedness and timely response to the public health threats.**

## **II. Mandate**

Protection on public health is a shared responsibility among different partners/agencies both within and outside of the health sector. The NCDC&PH as a state institution has a leadership role in public health and biomedical science. In collaboration with its partners and various government entities the NCDC&PH delivers its broad mandate:

1. Monitoring, assessment and analysis of health status of Georgian population and associated risk factors;
2. Surveillance, control and prevention of communicable diseases;
3. Efficient operation of the unified lab system for detection, surveillance and response to the agents of Especially Dangerous Infections, national referral lab and pathogen collections; Provision and monitoring of bio safety;
4. Prevention and surveillance of non-communicable diseases;
5. Health promotion, education and awareness raising of population;
6. Environmental and human health hazards assessment;
7. Promotion of science and education in the area of public health, epidemiology, microbiology, immunology, molecular biology and genetics;
8. Contribution to the development of policies, standards and state regulations for public health, bio security and lab operation;
9. Preparedness and response to emergencies and disasters; Implementation of the functions of a focal point for International Health Regulations.

### III. Values

**Leadership** - the NCDC&PH guides and contributes to the policy development process of public health and bio-security and provides that the scientific evidence is turned into practice; The NCDC&PH is at front line to tackle and/or raise awareness about public health challenges;

**Partnership** - the NCDC&PH acts in partnership with those who share the responsibility for protecting public health; the NCDC&PH values international cooperation and support of foreign universities and scientific research centers as well as WHO, UNICEF, UNFPA, OIE, FAO, DTRA, CDC, WRAIR, ECDC and other international organizations.

**Accountability** - the NCDC&PH ensures that reporting to the public is accurate and transparent; Ensures budget allocations are well managed and aligned to public health priorities.

**Commitment to excellence** - the NCDC&PH values highest quality information based on the best available evidence, builds on and develops the intellectual assets of the organization and applies ethical standards in the practice.

### IV. Strategic Priorities

This strategy represents an important next step for the NCDC&PH. It articulates four strategic priorities, which will help the Center to realize the mission:

**Strategic Priority 1: Decrease morbidity, disability and mortality caused by communicable diseases;**

**Strategic Priority 2: Decrease morbidity, disability and mortality caused by non-communicable diseases;**

**Strategic Priority 3: Assessment and correction of environmental hazards and behavioral risk-factors to improve health status of population;**

**Strategic Priority 4: Development of applied and fundamental biomedical and biotechnological scientific research potential.**

These strategic priorities will contribute to achieve one of the essential goals of the Government of Georgia – improve health of the population.

## **V. Goals, objectives, activities**

To pursue the strategy priorities the NCDC&PH will focus on five major goals, which will guide the institution's work for the next five years. The goals are cross-cutting and serve all strategic priorities. All of the goals are interdependent and build upon each other. For each goal the objectives that will have efficient and most immediate impact have been identified. A set of specific activities stemming from each objective to monitor progress have been elaborated. The activities do not represent full range of actions that the NCDC&PH implements on a daily bases, rather they will focus on those which will help to realize given strategy.

### **Goal 1: Produce reliable information through monitoring, assessment and analysis of the population's health status and environmental factors**

Monitoring, assessment and analysis of the population's health status is one of the core public health functions. NCDC&PH as a leading national institution plays a pivotal role in the development and delivery information to relevant organizations/institutions about the population's health. Such information should allow various stakeholders to make transparent and evidence-based decisions.

Public health information space of Georgia is experiencing significant changes. Ongoing changes include privatization of health service providers as well as changes in organizational structure. Country faced need of development of healthcare integrated electronic system to make medical services simple and convenient for consumers, ensure financial transparency and cost-efficiency. In order to develop the electronic healthcare system for clinical management and reporting by including electronic medical records, substantial adaptation of current healthcare information system is essential. Referred changes will challenge the traditional systems of health related information collection, management and analysis. However it will become possible to remediate current deficiencies in the collection of information. NCDC&PH will play a crucial role in the development of electronic healthcare and will ensure the adequate improvement of the healthcare information systems.

NCDC&PH has defined three objectives to achieve the referred goals:

## **Objective 1.1 Improvement of Health Information System**

Since the health care providers collect the primary data on population health, they play a key role in the management of information and are responsible for data quality. Over the last decade a great number of projects have been implemented within the health information system to strengthen its different segments. Despite the fact that some projects were successful, the current system still experiences deficiencies, which require specific measures of improvement.

NCDC&PH facilitates the improvement of the health information system through the implementation of following:

### **a) Active Involvement in the Capacity Building of the Health Statistics System**

Participation in the adjustment and monitoring in the field of health statistics. The above mentioned includes the development of proposals and recommendations for improvement of health statistics mechanisms and elaboration of the regulations in the field of health statistics within NCDC&PH competence.

### **b) Development of Basic Package of Health Indicators and Design of Indicator “Passports”:**

Wide spectrum of indicators is already available, that serve various goals. As for the basic package, it will include the indicators needed for the assessment and monitoring of public health status. They will be selected in view of the international practice and local specifics. Indicators should match each level of service delivery. They should be simple, understandable and related to specifics. To this end NCDC&PH will prepare a detailed description of each indicator (so called “Indicator Passports”) including the following: indicator identification, calculation method, type and means of the collected data, sources of data, organizations/agencies responsible for the data collection and reporting, and frequency of reporting as well as recommendations on the application of indicators in the decision-making process, methodology and interpretation issues to be considered.

### **c) Gradual Introduction of New Technologies for the Collection of Statistical Information;**

Introduction of case oriented electronic reporting templates throughout the country, including the development of a relevant plan (activities, terms, responsibilities and other), piloting, trainings, regular monitoring.

**d) Substitution of the Current Reporting Templates and Development of Proposals for Amendments to the Applicable Regulations;** Prior to the creation of electronic health records and their comprehensive introduction hard copy format of reporting will be maintained. Amendments to the reporting templates are required to meet the new requirements in the healthcare system.

**e) Participation in the Registration Design/Introduction of Various Diseases/Conditions;** In line with international requirements (WHO/IARC) and National Plan for Hospital Sector Development a Cancer Registry is being designed. NCDC&PH will maintain the Cancer Registry, supervise and analyze the process of its operation. NCDC&PH will also participate in the development of registries for various diseases based on international experience.

**f) Institutional Capacity Building of NCDC&PH in Health Information System at the Regional Level–** Identification of Contact Persons who will be responsible for coordination of data collection process, verification of data quality, aggregation and analysis of data within the regions and information management. Contact persons will be responsible for the inventory of responsible officials on institutional level. They will also define the training needs of the latter.

**g) Adaptation of National Classifiers with International System of Classification –** The following have already been adapted and endorsed in Georgia: International Classifier of Diseases (ICD-10), Hospital Intervention Classifier developed by the Nordic Medico-Statistical Committee (NOMESCO) for Scandinavian Countries (NCSP) and International Classifier for Primary Healthcare for Out-Patient Care (ICPC). NCDC&PH will get actively involved in the process of update/adaptation of the classifiers and in boosting the knowledge of health care providers. Information will be exchanged also through the training modules. New web-manuals will be developed in cooperation with partners to facilitate the introduction of classifiers.

***Objective 1.2. Research Management and Implementation for Collection of Information on Population Health and Biology, Environment and Behavioral Risk Factors***

Information obtained as a result of the routine reporting is not sufficient for making conclusions on population health status and threats. In-depth studies are required to fill the gaps in the routine data reporting and to assess the various risk factors affecting the public health status. NCDC&PH identifies and studies the priority problems in the healthcare sector

and/or the applicable policy. It regularly conducts such studies to collect information, which will be used in developing the evidence-based policy-making. Following actions should be taken for the execution of the objective:

**a) Identification and Planning of Essential Studies in Public Health, Oriented to the Study of Health Status of population, Biological, Environmental and Behavioral Risk Factors.**

Initially, NCDC&PH together with MOLHSA and donor agencies will define a plan of studies, which will elaborate a detailed list of annual surveys, requirements towards individual studies and required budgets. The referred document will be used both in the process of annual budgeting, as well as in raising and advocating of external resources (financial and technical). The plan will become a dynamic document.

**b) Implementation of a Plan of Studies.** NCDC&PH will implement the plan, which will be subject of the annual review and update. It will carry out studies with its own resources and external technical and/or financial support.

***Objective 1.3. Capacity Building for Data Analysis and Interpretation***

Within the next five years NCDC&PH will focus on the further development of its analytic capacity and implementation of priorities set by the organization. To implement this objective NCDC&PH will establish a mechanism to **ensure the quality of analytic products**, wide application of advanced bio-statistical methods. To achieve this goal the Scientific Research Unit of NCDC&PH **will be significantly strengthened**. Analytical and interpretation function will substantially contribute to the development of scientific potential of NCDC&PH.

**Goal 2: Strengthen disease and public health risks prevention, surveillance, preparedness and response system**

Health related threats emerges from different sources and change over time. Population health may be protected through the system based on the existing knowledge on preparedness, prevention and response on threats. In addition NCDC&PH is a focal point of International Health Regulations (IHR) and bears responsibility over the immediate notification of relevant international organizations on emergencies in the field of public health and of global/international significance.

Today the issue of emerging and re-emerging infectious diseases is at the forefront of public health concern. The NCDC&PH plays a leading role in coordinating actions of different

actors involved in communicable disease surveillance, prevention and response system in Georgia. Over the last years significant resources have been invested to strengthen disease surveillance and response system in the country, however some gaps still exist. The NCDC&PH will work in partnership with all stakeholders to address these gaps and ensure that the system reaches world-class standards and meets international requirements.

Non-communicable diseases are one of the major factors for mortality and morbidity in Georgia. Traditionally the NCDC&PH's work was more associated with communicable diseases while non-communicable diseases were given less attention. Today an urgent need exists for a more comprehensive approach to collection and analysis of non-communicable disease data. Therefore the NCDC&PH will contribute to implementation of screening programs and augment its capacity in this area to develop strong system of surveillance and prevention.

It is widely recognized that environmental and behavioral factors make a substantial contribution to the burden of non-communicable diseases. Tracking environmental and behavioral factors in a standardized manner is essential to understand possible associations between the exposure factors and adverse health effects. Currently such data is not available; responsibility on environmental health is shared among different agencies while the NCDC&PH's role is limited to the standard setting. The NCDC&PH will increase its function in environmental health protection through establishing mechanism for data collection from other agencies performing routine monitoring of environmental hazards. The NCDC&PH will undertake risk assessments to collect evidence for policy development and provide guidance to stakeholders.

The following objectives have been identified to achieve the referred goal:

***Objective 2.1. Maintenance and Further Development of a Leading Role in the Electronic Integrated Disease Surveillance System***

Prevention and control of the communicable disease requires a definition of an interaction between the environment and health of humans and animals. To have a precise definition of an interaction with human and animal health, the integrated approach is based on the cooperation between various sectors. Within the given strategic objective NCDC&PH will become a major responsible entity for the planning, coordination and enforcement of all actions required for population health. Following actions need to be taken to achieve the referred goal:

**a) In managing the electronic integrated disease surveillance system NCDC&PH's duties and responsibilities have been clearly defined through the development of legislative initiatives;**

**b) Monitoring of nation-wide natural foci of especially dangerous infections;**

**c) Establishment of sustainable functional links** with the Ministry of Agriculture lab, National Food Agency, lab of the Ministry of Agriculture in the Autonomous Republic of Adjara, Georgian Revenue Service of the Ministry of Finance, Ministry of Environment and other stakeholders;

**d) Facilitation of vertical and horizontal/inter-sectoral coordination on activities related to human health.**

***Objective 2.2. Extension and Maintenance of Vaccination Coverage Envisaged in the National Calendar***

Comprehensive management of immunization is possible only through the joint efforts of various institutions and parties involved in this process: national government authorities, local authorities, state and private healthcare providers and population. Success may not be achieved without interaction and shared efforts. To achieve this goal NCDC&PH will actively work with all stakeholders.

Inadequate management of the immunization program in recent years has led to the weakened links with the primary healthcare segment. System of funding has been changed and insurance companies have become responsible for the scheduled immunization component. The aforesaid resulted in the drop of indicators within the immunization program. Hence, institutional resource and efforts will need to be strengthened to increase the child immunization coverage. Vaccination coverage in some regions is very low, which required immediate actions to be taken. In response to the referred challenges NCDC&PH will carry out the following measures:

**a) Improvement in the management of the immunization program**

It requires a unit to be established at the NCDC&PH and improvement of general management skills. NCDC&PH will extend its multi-year plan within the national immunization program as one of the instrument of efficient management and implementation. Plan will be updated on the grounds of the detailed analysis of program execution and situation analysis. Composition of the multi-year plan includes all the important components of the immunization system for the country. It includes the program objectives, activities, budgeting and funding, scenarios of financial sustainability and strategies to achieve the sustainability. Most important of them are: improvements and upgrade of the logistics system for the cold chain, vaccination and immunization materials; implementation of the national and sub-national campaign within the eradication of

poliomyelitis, measles and elimination/eradication of Rubella congenital syndrome by considering the global, regional and national goals, taking into account the epidemiologic situation; ensured immunization safety; revision of current regulations; introduction of new vaccines.

**b) Assessment of the impediments in the immunization program**

Some impediments within the program are already known, but a thorough study is still required of these factors. On the grounds of an adequate assessment and analysis of the situation, it will become possible to plan and enforce the applicable measures to overcome these barriers. Cooperation with various participating parties is thus required.

**c) Further upgrade of the immunization management information system**

Over the past ten years significant reforms have been carried out in the immunization management information system. The upgraded system enables for the generation of better quality data reports at every level. It now enables for the improved management of the immunization program and rational use of resources. However, further improvement of the immunization management information system in the overall healthcare system and especially at the level of primary healthcare was required in response to the reforms carried out in the recent years. . Namely, the current software is less convenient to process the data. Respectively, introduction of modern technologies is in our current agenda. Registration of civil records on the immunization history of individuals should be based on the new electronic system of civil registration in a long-run perspective. It is currently at the early stage of development and testing.

**d) Optimization of the cold chain system**

Taking into account the future perspectives and on the background of introduction of new vaccines in the national immunization calendar, cold chain system, established with technical and financial support of international organizations, requires upgrades and improvements. One of the most important tasks within the implementation of the immunization program is to approximate the cold chain system with international requirements. It requires proper logistics of the vaccines and materials needed for immunization at the central level with safe further expedition. To achieve this objective, cold chain equipment available at the centre will be upgraded; technical support will be provided to the municipal public health centers; methodology and recommendations will be developed for the service providers and introduced through training sessions.

### ***Objective 2.3. Improvement of the Epidemiological Surveillance, Prevention, Control and Response System of Especially Dangerous Pathogens and Other Communicable Diseases***

Traditionally epidemiological surveillance and control of communicable diseases has been one of the main functions of NCDC&PH. After 90's a great number of reforms have been implemented in the field of public health, which negatively affected the operation of the epidemiological surveillance and control system of communicable diseases. Many stakeholders are involved in the current structure of the system, out of which NCDC&PH carries out a leading role. With the international technical and financial support (WHO, DTRA, EU, USAID, CDC, WRAIR and others) solid institutional capacity has been built in the area of Especially Dangerous Pathogens. Newly emerged and transformed communicable diseases require a consistent, solid and rapid response system both locally and overseas. In addition, cooperation and coordination with stakeholders and international institutions has never been so crucial. To enable the NCDC&PH to meet its obligations as a National Focal Point of International Health Regulations, permanent capacity building of NCDC&PH is high up in the agenda. Achievement of the referred task requires the implementation of following measures:

#### **a) Adaptation and implementation of a nation-wide Electronic Integrated Disease Surveillance System (EIDSS)**

It is a mechanism which enables the integration of human and veterinary lab and epidemiological surveillance data. It provides notifications of identified cases in real time regime. EIDSS was originally designed to control the Especially Dangerous Pathogens. Its further versions involved all the notifiable communicable diseases. In 2012 EIDSS became official diseases notification system defined under the Order of Ministry of Labor, Health and Social Affairs of Georgia. Nevertheless capacity building both at the central and local levels is required for its fully fledged operation. In close cooperation with its partner organizations, NCDC&PH will make sure that the electronic surveillance system responds to all the requirements of communicable diseases in the country. It will help the NCDC&PH in effectively executing its leading role in the operation of the integrated system of epidemic surveillance of diseases in the country.

#### **b) Development/Update of the guiding recommendations on epidemiological surveillance of communicable diseases**

Guiding recommendations on epidemiological surveillance are developed for the majority of priority diseases. NCDC&PH plans to develop recommendations for epidemiological surveillance of all communicable diseases and to update the existing recommendations to

comply with international standards. NCDC&PH will periodically (or whenever required) review the priorities and will amend the list of diseases under epidemiological surveillance.

NCDC&PH also plans to define/amend the rules of epidemiological surveillance over the diseases/conditions under surveillance.

**c) Development/update of notification/reporting procedures on communicable diseases**

It is essential, cases of target diseases not to be beyond the epidemiological surveillance system. Procedures of notification/reporting should thus be improved, accessible and feasible. Procedures of notification, reporting, prevention, control and response will be updated in line with the requirements of epidemiological surveillance system. For delivery of information about the changes, relevant measures will be carried out at every level of the epidemiological surveillance system.

**d) Development of technical capacity for preparation of epidemiological data analysis and high quality analytic reports**

Despite the progress, which is so apparent in the operation of NCDC&PH, there is a need to further improve the epidemiological data analysis and interpretation capacity. With an aim of preparing quality analytic reports, NCDC&PH will focus on the development of this potential. To achieve the attained results, scientific unit of NCDC&PH will be substantially developed and empowered. Hence, function of analysis and interpretation will become closely related to the development of its scientific potential.

***Objective 2.4. Improvement of Epidemiological Surveillance of HIV/AIDS, Tuberculosis, STI, Hepatitis B and C***

**A) Epidemiological Surveillance of HIV/AIDS**

Significant structural changes have been made over the past few years in the epidemiological surveillance system of HIV/AIDS in the country. NCDC&PH assumed responsibility over the management of national epidemiological surveillance system of HIV/AIDS. Changes were made as a result of the routine epidemiological surveillance system reform, followed with a development of a national plan and recommendations for epidemiological surveillance of HIV/AIDS and creation of an electronic database. The latter collects information on every person tested on HIV and automatically generates a multisided analytic report. Over the coming five years NCDC&PH plans to carry out the following actions:

- **Regular assessment of epidemiological situation and data analysis;**

- **Development of recommendations for modification of variables, indicators and definitions for the epidemiological analysis.**
- **Creation of a flexible web based portal for monitoring and evaluation of HIV/AIDS at national level to increase awareness of stakeholders;**
- **Enforcement of a monitoring and evaluation system for disease management.**

NCDC&PH assume a role of the contact point at the national level. It will submit reports on HIV/AIDS to international organizations and will ensure the exchange of accurate information at the international level.

**B) Development of epidemiological surveillance system for STI, Hepatitis B and C**  
Epidemiological surveillance is not carried out at an adequate level for such priority diseases, as STI, Hepatitis B and C. According to various studies, increase has been observed in the prevalence of these diseases along with the significant growth of the disease burden. It is particularly high among the high risk groups. Current routine surveillance system fails to adequately monitor these data. Hence, NCDC&PH plans to create a strong system of epidemiological surveillance over STI and Hepatitis B and C to carry out the following measures: 1) **Changes in the registration, notification and reporting forms, standard operation procedures and development of guiding principles and recommendations for the epidemiological surveillance of STI, Hepatitis B and C;** 2) **Definition of national program priorities for STI, Hepatitis B and C and development of applicable programs.**

**C) Development/adaptation of a national epidemiological surveillance system of Tuberculosis**

Currently NCDC&PH has been assigned a partial responsibility over the epidemiological surveillance of tuberculosis together with the National Centre of Tuberculosis and Lung Diseases. Anti-tuberculosis labs have been integrated within the NCDC&PH lab network. Currently epidemiological surveillance of tuberculosis is carried out in two parallel systems: through EIDSS operating at NCDC&PH and electronic database operating at the National Centre of Tuberculosis and Lung Diseases (which registers all the cases including treatment, monitoring and outcomes). In line with the vision of MOLHSA, which envisages the integration the epidemiological surveillance of all communicable diseases into a single system, surveillance of tuberculosis may be perceived as a part of this system. Nevertheless, it is essential to carry out a thorough study of the applicable advantages and disadvantages and to clearly define the functions and responsibilities of participating organizations with an aim of smooth implementation of the integration process.

***Objective 2.5. Improvement of Epidemiological Surveillance over the Healthcare Associated Infections (Nosocomial) and Anti-microbial Resistance***

Scarce information is available in Georgia on the healthcare associated infections and anti-microbial resistance. Respectively NCDC&PH was instructed to assess the prevalence and trends of healthcare associated infections. Also to assess the anti-microbial resistance, which is essential to carry out nosocomial infections control measures. NCDC&PH will carry out the following actions to achieve the referred objective:

- a) Development and periodic update of guiding principles and recommendations on nosocomial infections for healthcare providers;**
- b) Planning and implementation of sentinel studies to collect information on healthcare associated (nosocomial) infections;**
- c) Planning and implementation of sentinel studies on antimicrobial resistance.**

NCDC&PH will support healthcare providers through consultations and training sessions in the introduction and improvement of infections control system. It will also share national surveillance data on healthcare associated infections and antimicrobial resistance at international level. All the aforesaid will support the improvement of healthcare quality in the country.

***Objective 2.6. Boosting the Lab Capacity of Public Health***

Lab network system of NCDC&PH has its hierarchy. It consists of various level labs, starting with the regional Lab Surveillance Stations (LSS), BSL- 2 Zonal Diagnostic Laboratories (ZDL) and ending with the R. Lugar BSL-3 Laboratory. All BSL-2 and 3 laboratories are staffed with qualified personnel and they play a major role in the stimulation of epidemiological and bio surveillance of diseases. Lab network is being developed and is based on national strategy and economic priorities that serve to the provision of national security, population health protection, animal health, increased potential of cattle breeding and export of agriculture products, creation of safe environment for the development of tourism, growth in effectiveness of investments. Respectively it is essential to significantly increase the capacity of the lab network through the improvements in staff management, increased professional competencies, standardization of operation, quality assurance system, etc. Lab network should extend the services in the area of public health to meet the current requirements and carry out its mission. To achieve the referred goals, NCDC&PH will continue close collaboration with local and international partners, private sector and municipal services of public health.

In general, quality and effective functioning of country's lab system is one of the main challenges of healthcare system. The most important pre-condition of this challenge is the lack of requirements for quality assurance at labs. Another weakness is the lack of national gold standard of screening and confirmatory tests, which does not restrict the labs in using low quality or inappropriate test-systems. As a result, labs issue inaccurate test results thus often leading to inaccurate interventions and serving as a reason of incorrect medical treatment of diseases. Procurement of quality materials, tests and reagents is often detrimental by the public procurement regulations. In response to these challenges NCDC&PH assumes responsibility to come up with a quality management system and national standards of lab diagnosis for its laboratory network. It will also offer clinic labs the external quality control mechanisms.

To achieve this objective NCDC&PH will carry out the following actions:

- a) **Extend the list of the existing national referral labs and ensure their inclusion in international networks, including those of the World Health Organization and International Animal Bureau. It will facilitate the acquisition of a collaborative centre/sub-regional referral lab status of the World Health Organization.**
- b) **Manage the lab network of public health (define the needs, provide the applicable human resources and essential supplies);**
- c) **Use the lab network capacity to meet the requirements in public health;**
- d) **Render lab services to healthcare institutions;**
- e) **Develop, update, implement and monitor the bio safety and bio security standards;**
- f) **Develop the quality management system, which will include the administrative requirements, standard operation procedures and specific correction measures;**
- g) **Develop the standards for lab diagnosis;**
- h) **Extend cooperation with labs employing best practices to increase the external quality control .**

***Objective 2.7. Strengthening the System of Epidemic Surveillance, Prevention and Control of Non-Communicable Diseases, Health Conditions and Risks***

Currently cardio-vascular diseases, cancer, diabetes, chronic respiratory diseases, psychiatric diseases and traumas create the greatest threat to the Georgian population. The system of surveillance, prevention and control of the non-communicable diseases, health conditions

and hazards is not fully developed in the country and needs to be strengthened through the implementation of relevant activities. Integrated system of the chronic diseases surveillance will be developed for the disease surveillance and control. The latter will ensure the collection of information on the health condition of the population . It will help the country to make an adequate assessment of the performance of goals and objectives for the improvement of the population health. Scientific capacity will be boosted, especially in the area of epidemiology. For the development of the adequate policies and programs evidence-based information will be collected. To achieve this goal NCDC&PH will carry out the following actions:

- a) Develop and introduce the methodology for integrated surveillance of non-communicable diseases, health condition, biologic and behavioral risk factors;**
- b) Enrich the data sources (bases) with registries of various chronic diseases and studies;**
- c) Develop the human resource capacity/potential in data analysis and evidence-based information processing;**
- d) Define the problems, priorities and preventive measures/strategies; coordinate their practical implementation.**

***Objective 2.8. Strengthening the Surveillance system of the Maternal and Child Health and Reproductive Health***

Improvement of maternal and child health and achievement of millennium goals 4 and 5 are one of the major objectives of the national health priorities of Georgia. Timely, accurate and comprehensive information is essential both for the monitoring of maternal and child health and for the evidence-based policy-making. Routine data on the health condition of mothers and children consist restricted information and is not sufficient; despite the fact that certain studies are carried out within various projects, no in-depth analysis has been done on the grounds of the available data. Until recently there was no specialized unit at the national level responsible for the monitoring and analysis of the data, collection of information for strategic planning. To remediate this deficiency NCDC&PH recently established a special unit of Maternal, Child and Reproductive Health and thereby planned to carry out the following actions:

- a) Development/revising the national indicators on maternal and child health;**
- b) Development and implementation of the surveillance methodology;**
- c) Revising the reporting instruments of the routine data;**

d) Defining the program priorities and current problems of maternal and child health, and elaboration of the relevant strategies;

e) Active cooperation with the maternal and child health coordination council.

***Objective 2.9. Promotion and Improvement of the Information Integration on Health and Environmental Hazards***

Provision of a safe health environment includes labor, living, recreation, nutrition, education, radiation and chemical safety issues.

As a result of reforms carried out in the field of public health in Georgia duties and responsibilities of the healthcare system were reduced on the creation of a safe environment of human health and were inadequately distributed among the other sectors; segregation of duties and responsibilities deteriorated the coordination. Currently less attention is paid to the assessment of negative environmental impact on humans, risk analysis and health-related aspects; Risk assessment requires the collection of reliable, timely and permanent information through a pre-defined indicators. It is essential to introduce the sustainable development principles in a long-term perspective and to implement a policy, which ensures the prevention of the hazardous environmental impact on the health of humans through a multi-sectoral approach, deepened international cooperation and coordinated actions of various stakeholders.

To achieve this goal, NCDC&PH will carry out the following activities:

a) **Designing the mechanism for the collection of information to identify potential links between the environment and health from the institutions implementing the monitoring of the quality of environmental conditions;**

b) **Planning and implementation the studies for the assessment of environmental risk factors;**

c) **Strengthening the technical capacity of data processing and analysis for the creation of an integrated reporting on the environmental hazards assessment;**

d) **Awareness raising among the decision-makers and stakeholders on the safe environment for the health of humans.**

***Objective 2.10. Preparedness and Response to Public Health Emergencies, Provision of Bio Safety***

Accidental or on purpose spread of biological or other hazardous substances will cause a particularly negative impact on the health of humans and economy of the country.

Respectively it is required to timely identify and liquidate the hazardous impact. NCDC&PH plays a major role in the identification of such emergencies and will develop recommendations for various institutions for the prevention of outbreaks and/or liquidation. In addition in line with International Health Regulations (IHR), NCDC&PH is responsible to timely notify relevant international organizations when public health emergency of international concern occurs. Respectively, it is essential for NCDC&PH to keep close operating links with systems of international alarm, surveillance and response. It should also develop effective and rational mechanisms of an early alarm and response in the country. To improve the preparedness and response system to bio hazards and for the effective response to other emergencies related to public health it is essential to carry out the following actions:

- a) Develop/update the relevant standards of early alarm system and provision of public health specialists, practicing doctors and lab staff with these standards; development of standard operating procedures, training and introduction at every level to ensure timely and safe transportation of the lab specimens;**
- b) Develop the strong communication mechanisms for a response system;**
- c) Develop the methodology for the implementation of response measures when identifying emergency cases and in cases of outbreaks;**
- d) Create the effective coordination mechanisms for various institutions/sectors involved in the process;**
- e) Closely cooperate with international partners to improve the hazard risk assessment and the response system;**
- f) Consolidate all the pathogens and repository at the Lugar Centre if Especially Dangerous Pathogen is identified.**

### **Goal 3: Health promotion of the population**

Health promotion/improvement is a joint responsibility of different governmental and non-governmental agencies, local authorities, health care providers and communities. There was inadequate attention paid to routine health promotion/improvement activities in Georgia; there is a lack of policy framework for health promotion, monitoring and evaluation is not implemented. Lack of nationally representative data on lifestyles and behaviour in Georgia hinders development of an adequate strategy. Over the last years various developments took place, however coordination between deferent players and holistic approach at the national level needs strengthening.

Over the next five years the NCDC&PH will assume a leading role in coordination of health promotion activities covering the following: improvement the knowledge of population, raising awareness and increasing the level of information on health, provision of evidences for legislative initiatives and state programs, stimulation of the exchange of information between the various sectors on the health promotion activities and approaches. Following objectives have been defined to achieve the referred goal:

***Objective 3.1. Establishment of Favorable Environment for the Improvement of Health***

First national health promotion strategy was developed in 2010, but it was not adopted due to certain disagreement between some stakeholders. NCDC&PH plans to implement the following in cooperation with other partners:

1. **a) Revision of the current version of the national health promotion strategy, b) Initiate the maximum involvement of concerned stakeholders in review process and c) facilitate its adoption.**
2. **Introduction of healthy life style through the improvement of the environment facilitating modification of population specific behavior risk factors; a) Collect, analyze and assess the data/evidences on the life style and behavioral pattern of the population; b) Develop the evidence-based legislative initiatives and recommendations for the promotion of modifications of risk behaviors and formation of healthy behavior patterns; c) Develop the state programs.**

***Objective 3.2. Raising Awareness and Health Education of Population***

To achieve this objective it is essential to carry out a well-organized education, information and communication measures, covering the following actions:

- a) Develop education products for the target population and increase their accessibility and affordability**

It is essential to improve an individual responsibility of a person in the protection of health and to equip each citizen of the country with knowledge and skills that will enable him/her to better care about one's own health. Hence NCDC&PH will prepare an evidence based education material for the wide-spread dissemination among population and stakeholders through the relevant instruments. Materials will be available through a web-based portal of NCDC&PH, social media and/or printed form.

- b) Exchange of information with various stakeholders and partners (including the methodology, guides, seminars, conferences, workgroup meetings)**

Core audience, which includes the other sectoral institutions, local authorities, healthcare practitioners and medical service providers, should well understand their duties and obligations within the health promotion strategy. The population health can be improved through the exchange of information among the stakeholders on the approaches employed in the health promotion for the joint efforts. To achieve this goal, NCDC&PH will organize seminars and conferences, develop intervention methodology and guideline, tools, education/information packs and kits.

**c) Plan/conduct public awareness raising and educational campaigns by taking into account the principles of social marketing**

Within the health promotion, focus will be made on the acknowledged health behavioral factors(e.g. harm of tobacco consumption, healthy food, physical activity, harmful impact of alcohol and drugs, health of women, road safety, immunization, HIV/AIDS and other). NCDC&PH will plan and implement/procure the campaigns, which are targeted at the raising of public awareness and increase education level of population on health. Communication strategy will be developed within such campaigns – including the messages, education and information packages, etc., by taking into account the characteristic features of the target audience, which will be piloted before wide-scale dissemination. Instruments will be altered on the basis of the most recent data obtained from various studies about the life style, behavioral patterns and factors.

**Goal 4: Advance public health and bio-medicine science for evidence based public health policy**

The science and research are important strategic source of information for the NCDC&PH. The Center is committed to ensure that the advice and services it provides are based on the sound scientific methodology and best available scientific evidence. Research conducted by NCDC&PH will continue to be closely tied to public health to support decision-making process. The NCDC&PH will partner with educational and research institutions to strengthen its own as well broaden country research capacity. The NCDC will seek opportunities to be engaged in international research projects. The Center has unique opportunity to utilize high standard laboratory facilities and use the best international expertise to get established as a centre of excellence with regional importance. The above mentioned goal may be achieved through the implementation of three objectives as follows:

#### ***Objective 4.1. Development of Scientific Potential***

Over the following five years, NCDC&PH will focus on the further development of its scientific-research and analytic potential to provide Center's scientific-research and analytic products compliance with the requirements of "One Health", bio safety, bio technologies of the country and international standards.

To achieve this objective, NCDC&PH plans the following:

- a) **Introduce the new advanced methodologies of scientific and analytic studies in close cooperation with its partners;**
- b) **Annually increase the number of staff involved in studies/analytic work (both at central and regional levels);**
- c) **Consistently increase the number of scientific-research articles published in professional international reference magazines and journals;**
- d) **Increase the number of analytic publications concentrated on healthcare priorities of the population and the country; informing the state policy-making entities/persons;**
- e) **Provide maximum support to the scientific research conducted at the Lugar Centre focusing on antibiotic resistance, including multi-resistance tuberculosis, pandemic influenza, natural- bed, zoonotic and vector-borne diseases, bio-safety, phages, clinical tests of preparations and other priority issues;**
- f) **Establish and promote functioning of scientific council composed of leading and independent experts.**

#### ***Objective 4.2. Cooperation with Education Sector, Development and Implementation of Joint Projects***

NCDC&PH aims to get established as a short and long-term training centre for university graduates in the field of public health and epidemiology. In order to facilitate development of human resources in the health sector NCDC&PH will continue to work in this direction. In addition NCDC&PH will actively cooperate with public health schools and other research institutions in order to involve them in joint projects or to use their resources in research activities of public health issues. NCDC&PH will extend its cooperation with the bio-medical, bio-technological and veterinary Universities, especially in the field of biology and genome research, to train high grade young scientific and practicing specialists.

### ***Objective 4.3. Strengthening Scientific-Research International Cooperation***

Over the following five years NCDC&PH plans to extend the strategic international cooperation using full lab capacity of the Lugar Centre. This will be twice as beneficial for the NCDC&PH. International scientific recognition of NCDC&PH will be increased, its institutional, scientific and research potential will be strengthened. To this end NCDC&PH will continue close cooperation with CDC, DTRA, NIH, WRAIR, USAMRIID, JUP, ISTC, STCU and partner universities; UN, EU and other international organizations WHO, OIE, FAO, UNICRI, ECDC, AIDCO's Instrument for Stability; international professional associations (American Society for Microbiology, Assoc. of Public Health Laboratories, American Society for Clinical Pathology and others); Within the available opportunities it will cooperate with private funds and philanthropic organizations, such as Gates Foundation, Wellcome Trust, Oxfam international, GAVI, WRF and others. In addition, it will establish close relation with other leading research institutions to plan and conduct joint research.

To implement objectives 4.1, 4.2 and 4.3, NCDC&PH plans the following:

- a) Carry out permanent training for NCDC&PH staff;**
- b) Extend the participation of its staff in international scientific conferences.**

### **Goal 5: Development and Maintenance of Institutional Capacity**

Qualified, motivated and adequately skilled staff plays the most important role in the successful implementation of the NCDC&PH's strategy. Strong organizational capabilities require efficient mechanisms of management and adequate financial support.

Public health functions at the local level are carried out by municipal health centers under the local authorities. Accordingly NCDC&PH as a leading central organization requires the adequate legal environment to provide healthcare services at the local level and to have a significant impact on the service quality. The following objectives have been identified for the upcoming five years for development the institutional capacity:

#### ***Objective 5.1. Development of Management Staff and Professional Potential***

NCDC&PH is staffed by the experienced personnel of various fields of public health and lab sciences. However it is essential to develop their skills especially in the following areas: mid-level management, application of advanced approaches in analytic reports, development of project applications and elaboration of advocacy instruments. Lack of staff evaluation system

and inadequate human resources management affects the motivation and productivity of staff. Following activities should be taken to develop the human resources potential:

- a) **Develop and introduce the staff evaluation system;**
- b) **Elaborate a plan of human resources development for each operating unit related to institutional goals and objectives;**
- c) **Create a favorable environment motivation, creativity, self-development and team working culture of staff;**
- d) **Develop skills in elaboration of analytic (including the epidemiologic and statistical analysis) and project applications and management skills;**
- e) **Improve the management skills of the mid-level managerial staff;**
- f) **Introduce the corporate culture and adhere to the rules of work ethics;**
- g) **Upgrade the knowledge of the lab staff on bio-security and bio-safety and develop their practical skills;**
- h) **Develop the technical skills of the lab staff;**
- i) **Maintain the comprehensive lab and logistics systems; Improve their management potential;**
- j) **Organize the needs-based training courses and professional development programs;**
- k) **Assess and monitor permanently horizontal and vertical management system.**

***Objective 5.2. Development of Effective Mechanisms of Cooperation with Municipal Public Health Centers***

In line with the legislation local authorities play a significant role in the prevention of public health threats at the local level through the monitoring of environment and human health. To carry out this function local authorities established municipal centers of public health. These Centers are staffed with professional personnel by the local authorities and financed from the following three sources of funding:

- 1) **Municipal budget for implementation of the exclusive executive functions of the local authorities;**
- 2) **Transfers from the central budget to carry out the functions delegated under the “Law on Public Health”;**

3) Agreements concluded by NCDC&PH with these centers to carry out activities stipulated by the public health state program.

Current activities ensure the accessibility of financial and technical resources for the prevention, epidemic surveillance and control of communicable diseases. Nevertheless, other requirements of public health (e.g. identification and monitoring of population needs) are mainly left unmet. This is conditioned by several factors: less priority of public health and capacity deficiencies at the local level, lack of functional links with medical service providers at the local level and respectively weak surveillance. System is based on personal contacts and fragile institutional mechanisms. Due to the scarce methodology recommendations from center local authorities fail to execute their exclusive duties in public health at the local level. As for the delegated functions, public health is not a specific aim for the targeted transfers of state budget allocations. Respectively, municipalities distribute these funds according to their own needs. NCDC&PH should play a leading role in the making the focus on the problem through the policy-led discussions and relevant adjustments. NCDC&PH should provide methodology guidance to the local authorities and should increase its control over the execution of liabilities assumed under agreements concluded with public health centers. In addition it should also facilitate the development of human resources in the field of public health.

Following activities should be carried out to meet this objective:

- a) **Initiate the process of amendments to the legislation and regulations;**
- b) **Refine the agreements concluded with municipal health centers;**
- c) **Monitor and assess the municipal health centers activity, that will be carried out by establishing a Regional Management Department at NCDC&PH;**
- d) **Develop a list of specialties and relevant competencies in public health.**

***Objective 5.3. Development of Efficient and Effective Systems of Administration and Management***

NCDC&PH is working on developing standard operation procedures of administration. Logistics management systems should be developed as well. Budgeting function is limited to the formulation of an annual budget on the grounds of historic data, so that needs are not taken into consideration and strategic methods of budgeting are not applied. To address these

deficiencies over the coming five years NCDC&PH plans to develop the efficient administration and management systems. Conceptual framework of monitoring and assessment of current programs of public health are also being developed. It will be used to assess and analyze the program implementation. This process will facilitate the use of findings of analysis for developing future programs.

To strengthen scientific-research work of NCDC&PH it is essential to use in full the base of Lugar Centre to search local and international grant funding and ensure the efficient and effective management of this type of financial support.

Respectively NCDC&PH plans to carry out the following actions to boost the efficiency of administration and management:

- a) **Develop the standard operating procedures of administration;**
- b) **Create a framework of monitoring and assessment for public health programs; monitor, analyze and assess the program implementation;**
- c) **Develop and refine the financial planning and management systems;**
- d) **Develop and introduce the effective systems of logistics, lab, warehouse and other infrastructure management;**
- e) **Revise NCDC&PH charter, update and approve new structure.**

#### ***Objective 5.4. Provision of Center's Financial Sustainability***

NCDC&PH's budget is replenished from the State Budget and allocations from external sources. NCDC&PH cares about the maintenance and gradual increase of base funding from the government. To this end it demonstrates the outcome of expenditures and informs the authorities and population about the importance of achievements made by NCDC&PH. In addition it continues to raise additional funding from external sources for promotion and development of its institutional and scientific-research potential. Particularly important will be the use the capacity of the Lugar Centre to solicit scientific projects and new partners for development of genome study, elaboration new diagnostic methods, vaccines and medicines.

To ensure sustainability of unified laboratory network NCDC&PH labs will provide service to private health care providers to generate revenues. To achieve this goal the following actions should be implemented:

- a) **Develop an advocating strategy to solicit the adequate funding from the state budget;**
- b) **Develop and implement raise funding strategy;**

c) Develop the fundraising capacity by rendering lab services to the private sector;

d) Create a structural unit for project fund-raising and management.

## VI Potential Risks

Implementation of the strategy may be impacted by a number of external factors, which may be beyond the control of the organization, and force majeure circumstances. Below is a list of major factors:

- **Insufficient funding;**
- **Lack of competent human resources to continue work and initiate new activity;**
- **Inefficient cooperation in the healthcare sector, as well as with the partners beyond it;**
- **Unexpected changes in the healthcare sector;**
- **Political and economic instability.**

## VII Milestones

Major stages are defined according to the strategy goals and objectives will be used to assess the achieved progress. These stages may be re-defined if needed by taking into account the available resources and priorities.

Goals and Objectives	Milestones
1. Produce reliable information through monitoring, assessment and analysis of the population's health status and environmental factors	<ul style="list-style-type: none"><li>• Update health indicator sets by the end of 2013;</li><li>• Update annual statistic reporting forms/information elements by the end of per year;</li><li>• Develop Statistical Yearbook "Healthcare" (by the end of per year);</li><li>• Pilot electronic data collection throughout the country by the end of 2013 through the reporting forms NIV-066 "Report on patients discharged from the hospital" and NIV-025 "New cases enrolled by the out-</li></ul>

	<p>patient facility";</p> <ul style="list-style-type: none"> <li>• Update Georgian version in line with of WHO International Statistical Classification of Diseases and Related Health Problems 10<sup>th</sup> Revision (ICD-10) adaptation and post on the website of MOLHSA and NCDC&amp;PH by the end of per year;</li> <li>• Complete ICD-10 web-based training tool by the end of 2013;</li> <li>• Conduct training of trainers in International Statistical Classification's 10<sup>th</sup> Revision at the regional level by the end of 2013;</li> <li>• Develop analysis and report on the "Assessment of quality of death certification in selected districts of Georgia" by the end of 2013;</li> <li>• Perform statistical analysis using the Cancer Registry data 2014 by the end of 2015;</li> <li>• Update format of annual statistical reports by the end of 2013;</li> </ul>
<p>2. Strengthen disease and public health risks prevention, surveillance, preparedness and response system</p>	<ul style="list-style-type: none"> <li>• Detect at an early stage public health emergencies by 2015;</li> <li>• Achieve and maintain immunization coverage level under the extended program of vaccination by 2017;</li> <li>• Upgrade Information system on immunization management by the end of 2013;</li> <li>• Update annually Disease Surveillance Integrated Electronic System and provide full-scale operation by the end of 2015;</li> </ul>

	<ul style="list-style-type: none"> <li>• Update on a regular basis technical capacity of data analysis of epidemiological surveillance and quality analytical reports;</li> <li>• Data on HIV epidemiological surveillance for the national monitoring and assessment system will provide reliable information;</li> <li>• Develop STI, Hepatitis B and C surveillance system by the end of 2014;</li> <li>• Introduce system of epidemiological surveillance over the healthcare associated infections and anti-biotic resistance by the end of 2014;</li> <li>• Develop quality system for public health labs by the end of 2013;</li> <li>• Develop lab diagnostics standards in microbiology by the end of 2014;</li> <li>• Apply sources of available data (including the records) for the collection of reliable information on non-communicable diseases;</li> <li>• Provide analysis of environmental hazards and their connection with health status by the end of 2014.</li> </ul>
<p>3. Health promotion of the population</p>	<ul style="list-style-type: none"> <li>• Create favorable environment for health by the end of 2015;</li> <li>• Develop and update annually core messages on the life style and behavioral aspects for various target groups;</li> </ul>
<p>4. Advance Public Health and Bio-Medicine Science for the Evidence-Based Public Health Policy</p>	<ul style="list-style-type: none"> <li>• Increase annually number of scientific articles published in the professional reference magazines and journals;</li> <li>• Increase annually number of papers</li> </ul>

	<p>submitted to international conferences;</p> <ul style="list-style-type: none"> <li>• Implement joint projects with the education sector.</li> </ul>
5. Development and Maintenance of Institutional Capacity	<ul style="list-style-type: none"> <li>• Elaborate human resources development plans for each unit involved by the end of 2013;</li> <li>• Revise agreements signed with municipal health centers prior to 2014 programs approval;</li> <li>• Develop standard operation procedures of administration by the end of 2013;</li> <li>• Develop Public Health programs conceptual framework of monitoring and assessment for the year 2014;</li> <li>• Budget annually and timely submit Public Health programs to MOLHSA;</li> <li>• Formulate relevant budgets for public health labs on an annual basis.</li> </ul>

## VIII Budget for the Strategy Implementation

### Budget

Table 1 presents financial resources including investment expenses (for development of human resources, for necessary funds for providing technical assistance of different activities but not current funding). Five year full investment budget amounts to 3.396 million GEL. About 68% of financial resources is needed for implementation of the Goal 2 “Strengthen disease and public health risks prevention, surveillance, preparedness and response system”. In this direction the largest investment will be implemented in 2014.

Table 2 presents the dynamics of funding needs of LEPL L. Sakvarelidze National Centre of Disease Control and Public Health for the period of 2013-2017 (including the State Budget,

international support and revenues generated through fee-charging entrepreneurial activities).

Table 3 presents an estimated budget of R. Lugar Public Health Research Center, calculated separately.

Annex 1 presents the 5 year action plan of the National Centre for Disease Control and Public Health (NCDC&PH) (17 pages).

**Table 1: Strategy Investment Budget (in GEL)**

NCDC&PH Development strategy		2013	2014	2015	2016	2017	Total
<b>Goal 1</b>	Produce reliable information through monitoring, assessment and analysis of the population's health status and environmental factors	75,153	118,388	23,678	23,678	23,678	<b>264,573</b>
<b>Goal 2</b>	Strengthen disease and public health risks prevention, surveillance, preparedness and response system	219,640	984,473	575,000	194,015	314,548	<b>2,287,676</b>
<b>Goal 3</b>	Health Promotion of the population	56,018	112,035				<b>168,053</b>
<b>Goal 4</b>	Advance Public Health and Bio-Medicine	70,495	70,495	70,495	6,975	70,495	<b>288,953</b>

NCDC&PH Development strategy		2013	2014	2015	2016	2017	Total
	Sciences for the Evidence-Based Public Health Policy						
<b>Goal 5</b>	Development and Maintenance of Institutional Capacity	88,490	174,455	57,288	12,588	54,846	<b>387,666</b>
<b>Total</b>		<b>509,794</b>	<b>1,459,844</b>	<b>726,460</b>	<b>237,255</b>	<b>463,566</b>	<b>3,396,919</b>

**Table 2: Dynamics of funding of LEPL L. Sakvarelidze National Centre for Disease Control and Public Health in 2013-2017.**

(Excluding the funding of Richard G. Lugar Public Health Research Centre)

*(in thousand GEL)*

Budgets	2013	2014	2015	2016	2017
<b>Total</b>	<b>20,439</b>	<b>22,919</b>	<b>25,654</b>	<b>29,407</b>	<b>33,521</b>
<b>State Budget Allocations</b>	17,194	19,045	21,026	23,874	26,908
<b>Grant Funding from International Sources for Scientific Research and Studies</b> (including the material and financial resources)	2,895	3,474	4,169	5,003	6,003
<b>Revenues Generated from Fee-Charging Entrepreneurial Activities</b>	350	400	460	530	610

**Table 3: Estimated Budget for the Lugar Center (in USD)**

Capacity	Budget (USD)				
	2013	2014	2015	2016	2017
14%	3,633,880	3,696,636	3,761,845	3,830,431	3,902,557
80%	4,315,021	4,396,266	4,480,889	4,569,861	4,663,391
100%	4,516,840	4,603,564	4,693,939	4,788,951	4,888,823

**Note:** The above budgets will be revised after the completion of the liquidation process of NPPE Richard Lugar Public Health Research Centre and its full merger with LEPL L. Sakvarelidze National Centre for Disease Control and Public Health and after the Governments of Georgia and USA sign the “Joint Transition Agreement between the Government of Georgia and the United States Government Regarding Transition Sustainment for the Unified Laboratory System for Detection, Epidemiological Surveillance and Response to Especially Dangerous Infections and Richard G. Lugar Center for Public Health Research” (in August-September).