GLOBAL HEALTH SECURITY AGENDA PILOT ASSESSMENT OF GEORGIA

JANUARY 11 TO 16, 2015

Global Health Security Agenda

Global Health Security Agenda

Preamble

The Global Health Security Agenda (GHSA) is an effort by nations, international organizations, and civil society to accelerate progress toward a world safe and secure from infectious disease threats; to promote global health security as an international priority; and to spur progress toward full implementation of the World Health Organization (WHO) International Health Regulations 2005 (IHR), the World Organization for Animal Health (OIE) Performance of Veterinary Services (PVS) pathway, and other relevant global health security frameworks. Assessments will be performed in order to determine the status of participating Global Health Security Agenda participating countries for the purpose of identifying the baseline situation and later measuring progress of work implemented in the 11 Action Packages of the GHSA. Georgia was the first country to be assessed for the GHSA, in order to pilot test the usefulness of a novel GHSA Assessment Tool.

Background

Mission place and time

Tbilisi, Georgia; January 11 to 16, 2015

Mission team members

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Objectives

Primary objective

To assess the application of the GHSA Assessment Tool (version December 8, 2014) using information, data and observations on those structures and functions in Georgia, which are included in or relevant for the 11 Action Packages of the GHSA Action Packages document (version adopted September 26, 2014), in order to make proposals for improving the Assessment Tool.

Secondary objective

To describe structures and functions in Georgia essential in performing communicable disease surveillance and control, to the extent enabling application and evaluation of the GHSA Assessment Tool in the Georgian context.

Preparation and Implementation of the Mission

- Presentations during the visit were well prepared and presented and helped build the framework to understand the broader communicable disease (CD) surveillance and control activities which are relevant for the assessment. It would be helpful to have these materials in advance to better plan the meeting program for the week of the site visit.
- The hosting organizations and experts demonstrated great openness in sharing data and experiences, high flexibility in modifying the daily program as needed, and the availability of experts, thus optimizing the time of the mission team spent in Tbilisi, Georgia.

Limitations and Assumptions

- The lead time for preparing and commenting on the assessment tool, and acquiring the documents, data and other information prior to the mission was extremely short, which is reflected in the mission outcome. In more optimal circumstances, with e.g. 3-4 months of efficient and interactive preparations with the country to be assessed, a number of the conclusions would be more definite.
- The size of the piloting assessment team was only three persons, with expertise covering only some of the range of issues in all 11 Action Packages. This, together with the short timeframe, lead to a situation where the large amount of information and data provided by Georgia during the mission week could not be fully digested into as comprehensive a report as a 5-6 person team with balanced, comprehensive areas of expertise regarding all the 11 Action Packages could have performed. A larger team could also divide to assess specific tasks, and visit 1-2 regions or provinces for one day to acquire information and consolidate or validate that information acquired on central level.
- Short preparation time and limited expert resources available in Georgia set severe constraints for translation of national documents into English, if they had not been previously translated for other purposes.
- The information acquired during the mission on described systems in the central level could be assessed more confidently if there is an opportunity for visiting a limited random sample of regions and peripheral sites over 1-2 days in a country of Georgia's size. This would incorporate more objectivity in the assessment
- The separate list containing all the questions for note-taking turned out not to be of practical use in collecting the information. It would be an additional step increasing the work to be done during the week.
- The mission team received requests to still modify the assessment method used while already in Georgia performing the assessment. After the GHSA pilot assessment phase, all terms of reference, including objectives and methodology used should be given to both the assessment team and the hosting country at least 3 months prior to the site visit in order to support effective interaction in advance preparations between the assessment team and the hosting country.

Structure of the Assessment

The assessment part of the report is organized by each of the 11 GHSA Action Packages, consisting of 1) key findings made in Georgia that are relevant for scoring the 'Level of capability' according to the Assessment tool criteria; 2) comments on the Assessment tool (version December 8, 2014) regarding its applicability or difficulties in applying it in the context of Georgia; and 3) comments on whether the GHSA Action Packages main document approved in September, 2014, contains components which could be introduced into the Assessment tool, when revisions are made.

The assessment and scoring by Assessment tool was based on the state of the structure or function at the time of the mission, regardless of possible plans or prospects of establishing the structure or function in the near future.

Documents and presentations acquired, as well notes from interactive sessions are separately provided as a collection of supporting documents, covering in more detail the functions in Georgia relevant for the GHSA Action Packages.

GHSA Antimicrobial Resistance

(*GHSA Action Package Prevent-1*)

Introduction

Bacteria and other microbes evolve in response to their environment and inevitably develop mechanisms to resist being killed by antimicrobial agents. For many decades, the problem was manageable as the growth of resistance was slow and the pharmaceutical industry continued to create new antibiotics.

Over the past decade, however, this problem has become a crisis. The evolution of antimicrobial resistance (AMR) is occurring at an alarming rate and is outpacing the development of new countermeasures capable of thwarting infections in humans. In Europe, AMR kills more than 25,000 people a year. This situation threatens patient care, economic growth, public health, agriculture, economic security, and national security.

Georgia Level of Capabilities

- Since September 1st, 2014, antibiotics are no longer available over-the-counter.
- A National Strategic Plan on Antimicrobial Resistance (version June 24, 2014) has been drafted with support from World Health Organisation (WHO), and will still undergo a consultation round, which is anticipated to cause changes in the document. It is expected to be officially adopted at the second half of year 2015. First surveillance functions are expected to start in 2015 with 11 identified sentinel sites/ 7 hospitals for the microbes listed in the Central Asian and Eastern European Surveillance on Antimicrobial Resistance (CAESAR) project. There is no data to present on the system.
- Currently, AMR is not measured in animals and it was unclear if there is a plan to test for AMR in the future.
- The National Center for Disease Control and Public Health (NCDC) Lugar Center, AMR reference laboratory has since 2014 been certified by the international CEASAR program AMR External Quality Assessment program.
- TB resistance situation (MDR, XDR) in Georgia is one of the worst globally, surveillance for first and second line tuberculosis drugs take place in a vertical TB control program, with WHO certified laboratory functions both peripherally and on the central level, with participation in international EQA.

Scoring for Georgia Using the Assessment Tool

- Surveillance plan implementation: No capacity (score 0 out of 4).
- Laboratory testing: Limited capacity (score 1 out of 4).
- The two assessment tool indicators for this Action Package (AP) seem well applicable to reflect the level of capabilities in the country.

Assessment Tool

- The information and data to be collected interfaces closely with Action Packages D-1 and D-2/3 in several ways: it is thus useful to address at least the surveillance component in an 'integrated' manner with those Action Packages.
- Conceptually TB susceptibility monitoring belongs to the 'AMR issues'. As it is not presented elsewhere in the 11 APs as a program, it could it be incorporated somewhere in the assessment (tool).

GHSA Action Packages Main Document

- Are there possibilities to derive further indicators from examining the OIE Tool for the Evaluation of Performance of Veterinary Services (OIE PVS Tool) Pathway approaches and guidance, to include also the AMR situation monitoring in animals?
- No clear –cut further indicators identified in the Action Items list through the Georgia piloting experience that could be used in further development of the Assessment Tool.

GHSA Zoonotic Disease

(*GHSA Action Package Prevent-2*)

Introduction

Zoonotic diseases are communicable diseases and microbes spreading between animals and humans. These diseases are caused by bacteria, viruses, parasites, and fungi that are carried by animals, and insect or inanimate vectors may be needed to transfer the microbe. Approximately 75% of recently emerging infectious diseases affecting humans are diseases of animal origin; approximately 60% of all human pathogens are zoonotic.

Georgia Level of Capabilities

- Georgia has surveillance systems in place for five animal diseases that have been listed in the country as having significant public health concern (anthrax, brucellosis, influenza in birds, rabies, tuberculosis).

- The veterinary and food safety organizations are required to notify a wide array of findings or diseases listed in a manual for the Electronic Information Disease Surveillance system (EIDSS), which is also used for human disease surveillance. Information on defined zoonotic animal infection cases or clusters are through this system available to appropriate users of EIDSS in health care system.

- The laboratory testing for animal diseases and food materials is implemented in the laboratory of Ministry of Agriculture. The microbiologic laboratory functions under Ministry of Agriculture relevant for human enteric zoonotic bacteria are focused on identification of the microbes, but are not designed or resourced to support e.g. typing of enteric microbes from specific animal or food sources to belong together/be associated with human isolates from outbreaks or clusters, as there are no serogrouping (salmonella) or other typing methodologies used in these laboratories, nor are strains/isolates shared with the human sector reference laboratories.
- In 2012 and 2013, 176 and 164 cases of human Salmonellosis were notified in the national surveillance system. In both years, three outbreaks of Salmonellosis occurred in humans, with results from epidemiologic studies for vehicle of infection suggesting a specific vehicle in five: the information available indicated that there were either no samples or no findings from food samples. During these years two outbreak investigations suggested S. aureus as the causative agent, and 43 cases of botulism were identified, part of them in clusters, and in some cases with microbiological evidence also from food (all diagnostics for botulism and carried out in the NCDC Lugar Center laboratory).
- Georgia's veterinarians fall in two groups with significant differences in the extent of their training relevant for public health. A large proportion of the veterinarians are aged >50 years and have received a training curriculum containing training for public health. The recent and current veterinary undergraduate training has very limited training oriented towards public health. This raises a question of sustainability, as the Field Epidemiology and Laboratory Training Program (FELTP) veterinary graduates work almost solely on the national level. (see Detect-5: Workforce development and supporting documentation)
- The national reference laboratories under Lugar Center/NCDC/Ministry of Health (MoH) have well developed capabilities for serotyping/grouping of a number of bacterial

pathogens important in food safety, and could possibly implement typing of certain zoonotic pathogens from the food safety and veterinary sector.

Scoring for Georgia Using the Assessment Tool

- Surveillance systems in place for priority zoonotic diseases/pathogens (in animals): Demonstrated capability (score 3 out of 4).
- Veterinarians: Either Demonstrated Capability (score 3 out of 4) OR Sustainable Capacity (score 4 out of 4). (See below for difficulties in applying the scoring).

Assessment Tool

- The assessment tool should be more specific/comprehensive about lists of important zoonotic diseases under surveillance both on human and on veterinary sector: 'five most important diseases' in the pre-mission response document from Georgia was a list, in which the public health importance was not the main reason for inclusion of some diseases, but scientific novelty. It will be useful to address separately food safety–related capacities from those in animal health, involving e.g. salmonella which is not necessarily considered an important animal 'disease', but is an important zoonotic agent and cause of human disease, relevant for public health.
- Microbiological safety of water is important for public health. Functions related to ensuring quality of water and controlling possible water-borne outbreaks fall under various government sectors. Although outbreaks from potable water may not have potential for major international threats, addressing in the Assessment tool laboratory capabilities related to potable water could contribute significantly to public health nationally.
- For the indicator 'Veterinarians' in the Assessment tool, the following items cause difficulty or ambiguity in defining the proper score: 'public health trained physician' should be defined explicitly; it is difficult to estimate the geographic distribution of public health trained veterinarians with various amounts of public health–oriented training; the score 'Sustainable capability' contains only the numeric ratio of veterinarians per animal units nationally, which can be met and is currently met in Georgia by the FELTP trained veterinarians working almost solely on the national level, even in the absence of field epidemiology trained veterinarians in districts.
- There is clearly too little attention in the assessment tool for measuring/defining the laboratory capabilities in the veterinary and food safety sector to support identifying common source of enteric pathogens in outbreaks, or identifying enteric outbreaks through reference laboratory work. (also addressed in D-1)
- There is nothing on outbreak investigations in the assessment tool: questions should cover outbreak investigation collaboration between human and food safety/veterinary sectors, and the ways/processes how microbiological laboratories support it. Suggest adding in assessment tool a question on a list of outbreak investigations over the most recent two years, particularly caused by enteric pathogens, the causative agents identified, how the animal or food safety laboratory functions contributed to the investigation, and in how many outbreak investigation an analytic epidemiologic investigation (cohort or case-control investigation) was implemented. This links intimately to the quality and impact of measuring workforce development (Action Package Detect-5).

GHSA Action Packages Main Document

- No clear-cut further indicators identified in the Action Items list through the Georgia piloting experience that could be used in further development of the Assessment Tool.

GHSA Biosafety and Biosecurity

(*GHSA Action Package Prevent-3*)

Introduction

Working with pathogens in the laboratory is vital to ensuring that the global community possess a robust set of tools—such as drugs, diagnostics, and vaccines—to counter the ever evolving threat of infectious diseases.

Research with infectious agents is critical for the development and availability of public health and medical tools that are needed to detect, diagnose, recognize, and respond to outbreaks of infectious disease of both natural and deliberate origin. At the same time, the expansion of infrastructure and resources dedicated to work with infectious agents have raised concerns regarding the need to ensure proper biosafety and biosecurity to protect researchers and the community. Biosecurity is important in order to secure infectious agents against those who would deliberately misuse them to harm people, animals, plants, or the environment.

Georgia Level of Capabilities

- Systems seem to have been developed which indicate internationally taken advanced biosafety and biosecurity measures, at least centrally: the lack of visit(s) to peripheral sites prevents validation of the acquired information on the lower levels of the tiered laboratory system.
- Georgia has consolidated all of the Especially Dangerous Pathogens (EDPs) in one location at the Lugar Center in Tbilisi, Georgia. EDP consolidation is required by law and any confirmed EDPs must be transferred to the Lugar Center for storage in the repository or must be destroyed.
- The Lugar Center, under management by the NCDC, is a regional resource for public health surveillance and research and for biosafety and biosecurity training.
- Georgia public health laboratories are required to have comprehensive biosafety and biosecurity programs in place and all personnel with laboratory access are required to complete biosafety and biosecurity training prior to accessing the laboratories.
- Vetting of Georgian and foreign laboratory workers should be documented to ensure the biosecurity of the laboratory infectious agents.
- A standard operating procedure should be developed to prevent, detect and respond to potential laboratory-acquired infections and laboratories should have occupational health programs.

Scoring for Georgia Using the Assessment Tool

- Whole-of-government biosafety and biosecurity system is in place? Sustainable capability (4 out of 4): This assessment is based on the current data that Georgia has provided, with the understanding that as donor funding decreases in the future, the Government of Georgia must work to determine funding for the sustainability of the public health system.
- Biosafety and biosecurity training and practices? Sustainable capability (4 out of 4): The biosafety and biosecurity training infrastructure is in place at the National Level at the Lugar Center, at the Zonal Diagnostic Laboratories and the Laboratory Support Stations in the human and veterinary laboratories. Sustainability may be an issue in the future when donor funding is withdrawn.

Assessment Tool

- The two indicators are extremely long and should be broken into additional indicators in order to be able to better track the data. Some of the measures are redundant and could be deleted.
- Employing diagnostics in order to eliminate the need for culturing EDPs (and other infectious agents) should be a separate indicator.
- For Prevent-3, the assessment tool has a disproportionately large number of questions, and is to some extent unnecessarily repetitive. Considering the relative importance between this AP and e.g. Zoonotic Disease, National Laboratory System, and Real-time biosurveillance, the tool should be more compact for Prevent-3.
- The rationale for a list of Especially Dangerous Pathogens in the current Assessment tool is defined in footnote 2 of the Action Package in GHSA Action Packages main document. It is important to develop the criteria in a way, that the epidemiological situation and risks in diverse countries can be appropriately addressed in the composition of the list.

GHSA Action Packages Main Document

- Consider adding other categories of biosafety and biosecurity questions more specific to agricultural, veterinary, food safety, research and clinical laboratories if they participate in the public health system for the country.

GHSA Immunization

(*GHSA Action Package Prevent-4*)

Introduction

Immunization is one of the most successful global health interventions and one of the most cost-effective ways to save lives and prevent disease. Immunizations prevent greater than two-million deaths a year globally.

Georgia Level of Capabilities

- Georgia has a comprehensive national childhood vaccination program.
- The coverage rate for first Measles vaccination dose (MMR) is over 90 according to administrative reports. The current developments in birth registration linked to adopting eHealth data handling system across the health care system, together with the established use of national unique person identifier allocated to each individual, is expected further improve the accuracy of the estimates.
- Concern was caused by a large measles outbreak in 2013, which has mainly occurred in persons 10 – 35 years of age: a gap in immunity in this age group was caused by a major disruption of vaccination late 1980s and 1990s. A campaign was introduced in recent years to vaccinate these age groups, but a 'vaccination scare' caused by adverse events attracting strong attention of media stopped it.
- Vaccination of risk groups for seasonal influenza has started, but is progressing at a slow pace, as planned (8000 doses purchased in 2014).
- Surveillance of vaccine preventable diseases: according to verbal information, guidelines exist for clinicians for using microbiology in serious infection. Measles serology is implemented in some clinical laboratories, and confirmation is available in NCDC/Lugar Center. CSF samples and/or isolates in invasive infections of H. influenzae, N. meningitidis and S. pneumoniae are submitted to the NCDC/Lugar Center reference laboratory, where typing is done for H. influenzae and N. meningitidis.

Scoring for Georgia Using the Assessment Tool

- Vaccine coverage (measles): Demonstrated capability (score 4 out of 4).
- National vaccine access: Demonstrated capability (score 4 out of 4).

Assessment Tool

- The Assessment tool focuses on measles vaccination coverage in less than 15 months old. It should address also gaps in the older age groups (as reflected by the measles situation, including the age grouping of gaps in immunity, in Georgia).The vaccination coverage rates and vaccine access rates are highly dependent on the quality of data on denominator population, which should be addressed in the Assessment Tool.
- The sustained capability category criteria field of National vaccine access contains a very complicated set of criteria, which could be split to be better applicable.
- Addressing vaccination for seasonal influenza could be relevant as an indicator, as high level of activity could contribute to capability of providing pandemic vaccine in a short period of time to a large proportion of the population in a severe pandemic situation.

GHSA Action Packages Main Document

- Point 2 in the 5-year action items should be raised into Assessment Tool as reflected by the Georgian measles situation.
- Also point 4 on communication may be important to address in more detail, in light of the scare on adverse event and failed measles campaign in Georgia.
- Vaccine preventable diseases surveillance is intimately associated with information for D1 and D2/3 Action Packages. Those VPDs for which National Reference Laboratory confirmation or typing capability is essential, could be identified in more detail in the Assessment tool in either this Prevent-4 or Detect-1.

GHSA National Laboratory System

(*GHSA Action Package Detect-1*)

Introduction

Public health laboratories provide essential services including disease and outbreak detection, emergency response, environmental monitoring, and disease surveillance. State and local public health laboratories can serve as a focal point for a national system, through their core functions for human, veterinary and food safety including disease prevention, control, and surveillance; integrated data management; reference and specialized testing; laboratory oversight; emergency response; public health research; training and education; and partnerships and communication.

Georgia Level of Capabilities

- The country has the capacity to test for 10 priority diseases with short turnaround times to receive the test result in the National Laboratory.
- Advanced diagnostics and typing are present for a number of microbes on the human sector in NCDC Lugar Center laboratories. Some of the NCDC Lugar center national reference laboratory testing functions have been accredited by WHO.
- The Laboratory of Ministry of Agriculture is accredited to ISO 17025 standard.
- NCDC has a network of 10 human laboratories in the regions. The public health laboratories in the regions submit regularly human isolates/samples to the central reference laboratory. Private sector microbiology laboratories can submit isolates for confirmation and typing, as relevant, but it is not known how systematically this takes place.
- There is regular sample and isolate transportation within the NCDC laboratory network with appropriate packaging. The private sector laboratories in the Capital area can transport their samples/strains directly to NCDC, in the regions they submit these to the NCDC laboratory network laboratories, to be transported to the central reference laboratories.
- There was limited data available on the numbers of isolates/identifications of different microbes in the national reference laboratories located at the NCDC Lugar Center.
- 80% of hospital services and all of expert outpatient care are in the private sector and there is some microbiology testing in the private sector. There is no national licensure system for microbiological laboratories.
- In the animal and food safety sector national laboratories no typing capability is present, isolates and samples are destroyed after identification of the microbe without further typing or referring to the human sector reference laboratories.

Scoring for Georgia Using the Assessment Tool

- Laboratory testing capacity for 10 core tests for detection of 10 priority diseases: Demonstrated capability (score 3 out of 4) OR Sustainable capability (4 out of 4). Part of the criteria for Sustainable capability is 'limited donor funding' which should be defined more specifically: for Georgia considerable external support is present for the National Reference Laboratories, with a transition scheme until 2018.
- Specimen referral and transport: Demonstrated capability (score 3 out of 4).
- Effective modern point of care and laboratory based diagnostics: there is not enough information available, in the absence of site visits to appropriate treatment care units, to score for this measurement indicator.

Assessment Tool

- There should be separate, specific series of relevant questions for human and veterinary/food safety sector laboratories, respectively.
- There should be more specific and separated focus on tests needed on the animal and food safety sector for public health purposes. The 10 core tests list in the footnote of the GHSA Action Packages main document for Detect-1 does not necessarily reflect the needs in middle income and high-income countries.
- The question on '10 priority diseases' is ambiguous: there should be a request for a more specific lists on microbes of any public health importance for which standard microbiologic diagnostics are available, at what level, list of microbe strains/isolates systematically referred to central reference laboratory, as well as the number of referred isolates for a recent year.
- Some of the 'Measures' in the tool contain anticipation of future events/developments: this should be deleted and assessment applied only on currently existing documents, systems and facts.

GHSA Action Packages Main Document

- The assessment tool should contain material from OIE/PVS–related assessment methodologies particularly in regard to animal and food safety laboratory functions.

GHSA Real-Time Surveillance

(*GHSA Action Package Detect-2/3*)

Introduction

The purpose of real-time surveillance to advance the safety, security, and resilience of the Nation by leading an integrated biosurveillance effort that facilitates early warning and situational awareness of biological events.

Georgia Level of Capabilities

- The country has an advanced Electronic Information and Disease Surveillance System (EIDSS) used in the human and animal health and food safety sectors, and is applying it for notifications, data processing and reporting, as well as linkages to other systems. There are some issues with frequency and quality of EIDSS reporting at the local level.
- There are 78 notifiable diseases/conditions notifiable to EIDSS, 42 of them require urgent notification. The data is collected on forms and entered into the system by trained public health personnel in the districts.
- The country has syndromic surveillance systems, partly implemented by the population based EIDSS surveillance system, partly as sentinel surveillance (influenza ILI and Severe Acute Respiratory Infection SARI, Acute Flaccid Paralysis AFP, bacterial meningitis in children <5 y, gastrointestinal diseases in children <5y). In the sentinel syndromic surveillance sites arrangements for enhanced microbiological diagnostics are present.

Scoring for Georgia Using the Assessment Tool

- Syndromic surveillance systems: Demonstrated capability (score 3 out of 4).
- Inter-operable, interconnected, electronic real-time reporting system: Sustainable capability (score 4 out of 4).

Assessment Tool

- The questions should include listing diseases under electronic indicator-based surveillance. This will give a more concrete picture of an efficient, electronic real-time indicator based surveillance. To be specific, this surveillance needs support/linkage to high quality clinical and reference microbiology, covered in Action Packages P-2 and D-1. Then, the overall indicator-based surveillance will be able to identify incidents of concern in real-time, particularly when cases are geographically dispersed and do not constitute a clear-cut local outbreak/cluster.
- A list of 'candidate' syndromes for syndromic surveillance (part of indicator-based surveillance) should be included in the Assessment Tool document for clarity.
- Statistics/figures should be provided (in advance) on notification rates of key human and animal disease cases, the number/proportion of these that are laboratory confirmed, number of cases in sentinels and the proportion positive for microbial testing used for the sentinel.
- It is difficult to investigate during a short visit the ways surveillance data is reported and otherwise utilized, when there is a language barrier (e.g. website).

GHSA Action Packages Main Document

- Indicator –based surveillance is mentioned, but not ‘transferred’ to the Assessment Tool.

GHSA Reporting

(*GHSA Action Package Detect-4*)

Introduction

Health threats at the human–animal–ecosystem interface have increased over the past decades, as pathogens continue to evolve and adapt to new hosts and environments, imposing a burden on human and animal health systems. Collaborative multidisciplinary reporting on the health of humans, animals, and ecosystems reduces the risk of diseases at the interfaces between them.

Georgia Level of Capabilities

- The country has one WHO International Health Regulations (IHR) Focal Point in the National Center for Disease Control (NCDC), and the 5 operative officers of the organization have been trained.
- The country has an OIE delegate and World Animal Health Information System (WAHIS) contact point, who have been trained.
- For infectious diseases, several public health emergencies of international concern (PHEIC). PHEICs have been reported recently, including Crimean Congo Haemorrhagic Fever occurrence and the unusual occurrence of Dengue.
- There has been numerous exercises on reporting from various levels of country organization to the central level.

Scoring for Georgia Using the Assessment Tool

- System for efficient reporting to WHO, FAO and OIE: Sustainable capability (score 4 out of 4).
- Reporting network and protocols in country: Sustainable capability (score 4 out of 4).

Assessment Tool

- Among the two indicators, the second one overlaps the first one in the description fields regarding international reporting, even if not in title. This causes ambiguity in using the criteria.
- Timeframes: the delay is counted from the time laboratory confirmation of the incident is available (should be defined explicitly).

GHSA Action Packages Main Document

- No clear–cut further indicators identified in the Action Items list through the Georgia piloting experience that could be used in further development of the Assessment Tool.

GHSA Workforce Development

(*GHSA Action Package Detect-5*)

Introduction

Workforce development is important in order to develop a sustainable public health system over time by developing and maintaining the highly qualified public health workforce with appropriate technical training, scientific skill, and subject-matter expertise.

Georgia Level of Capabilities

- There is a well-functioning FELTP program in Georgia since 2009, with over 40 graduates working mostly in relevant positions. Their backgrounds are diverse and support 'One Health', but most of them work at the central level.
- There are altogether 41 graduates from the FELTP field epidemiology program. Consequently there is a trained field epidemiologist per approximately 100,000 population, and approximately one trained 'human' field epidemiologist per approximately 200,000. Half of the graduates have a human medicine background, others have miscellaneous training backgrounds.
- There is no national workforce strategy.
- The FELTP program, running since 2009, receives considerable external funding and expert support, raising the issue of sustainability of the training program in longer term. Currently there is no academic affiliation to ensure sustainability.
- The U.S. CDC is currently responsible for the training, raising a concern of sustainability of the program in the long run.

Scoring for Georgia Using the Assessment Tool

- Trained field epidemiologists – human: either No capacity (0 out of 4) or Demonstrated capability (3 out 4). (see below of problems in applying the scoring)
- Field Epidemiology Training program or other applied epidemiology training program in place: Sustainable capability (4 out of 4): however, even though the indicator criteria does not contain a component of sustainability, the situation in Georgia needs attention to sustainability of the program.
- Workforce strategy: no scoring, as the team and the diverse experts with which the issue has been discussed have come up with a view that a national comprehensive workforce strategy would be very rare, possibly non-existent even in countries with highly developed communicable diseases –related systems.

Assessment Tool

- Through information acquired in in Georgia's response document and discussions, Georgia has very few field epidemiology trained epidemiologists, human or veterinary, in the districts: thus it would not meet limited capacity in the Assessment tool, and therefore would receive a score of No capacity. However, the nature of this indicator changes at score 2 to 3, to consist of a national ratio to population, making Georgia meeting in that respect quantitatively Demonstrated capability, i.e. score 3. The indicator needs to be revised to prevent this ambiguity.

- A new indicator could possibly be developed requesting information/data on outbreak investigations in which an analytic epidemiologic approach has been used, and total number of outbreak investigations performed, with information/data on whether a definite or likely source/vehicle was identified with epidemiological association or by microbiology in both humans and suspected source/vehicle. This could reflect the quality of the epidemiologic training and the impact of well-trained field epidemiologists.

GHSA Action Packages Main Document

- No clear–cut further indicators identified in the Action Items list through the Georgia piloting experience that could be used in further development of the Assessment Tool.

GHSA Emergency Operations Centers

(*GHSA Action Package Respond-1*)

Introduction

A public health emergency operations centers (EOC) is a central location for coordinating operational information and resources for strategic management of public health emergencies and events. EOCs provide communication and information tools and services and a management system during a response to an emergency or event. They also provide other essential functions to support decision-making and implementation, coordination, and collaboration.

Georgia Level of Capabilities

- EOC space has been identified on the national level in the Emergency Situation Management Department of Ministry of Internal Affairs of Georgia (to be taken into use by end of January 2015) and in NCDC (no building activities, yet). The national level EOC will not be activated unless there is a request from MOH for assistance during public health emergencies.
- A national disaster plan incorporating biothreat scenarios exists, and in the Influenza Pandemic Preparedness Plan as well as the Ebola incident action plan the roles of various actors are described in 'normal' and in 'emergency' situations.
- Staff will consist of currently existing staff in various organizations, who will be placed in the identified physical EOC spaces according to the needs of the scenario met.
- National level emergency operations exercises have been conducted. Exercises have not been performed at NCDC to date. There are currently no deliberate use scenario for infectious agents.

Scoring for Georgia Using the Assessment Tool

- Status of EOC (space): Limited capacity (score 1 out of 4).
- Status of EOC (staff): Developed capacity (score 2 out of 4).
- Emergency Operations Program: Developed capacity (score 2 out of 4).

Assessment Tool

- Stress is on the EOC premises when, in light of the discussions, the key question is preplanned coordination, communication and definition of obligations, powers and relevant training background, when an extraordinary situation arises: less focus on the premises.
- Documentation on the above EOC-related issues in a single document is difficult, because it is fragmented in various coordination and other plans, and not comprehensively incorporated in the context of a 'physical' EOC.

GHSA Action Packages Main Document

- Is it likely that, as stated in footnote No. 9, any EOC procedures, as described above for Georgia, would be accredited according to any ISO or analogical standards?
- In small countries with light or flat organizations, some of the described approaches may be too heavy requiring resources to an extent that does not support efficient function.

GHSA Linking Public Health with Law and Multisectoral Rapid Response

(*GHSA Action Package Respond-2*)

Introduction

Public health emergencies pose special challenges for law enforcement, whether the threat is manmade (e.g., the anthrax terrorist attacks) or naturally occurring (e.g., flu pandemics). In a public health emergency, law enforcement will need to quickly coordinate its response with public health and medical officials.

Georgia Level of Capabilities

- The relationship between health and law enforcement is defined in regulations, and additional agreements are not considered relevant.
- There have been exercises between public health and law enforcement agency.

Scoring for Georgia Using the Assessment Tool

- Public Health and Law Enforcement are linked during a suspect or confirmed biological event: Demonstrated capability (score 3 out of 4).

Assessment Tool

- The scoring content and measures section miss the fact that in a number of countries the relationship is defined in regulations, not in 'agreements' or lower level documents.
- The criterion for Sustainable capacity is too complex, having too many parameters: it should be broken down.

GHSA Action Packages Main Document

- No clear–cut further indicators identified in the Action Items list through the Georgia piloting experience that could be used in further development of the Assessment Tool.

GHSA Medical Countermeasures and Personnel Deployment

(*GHSA Action Package Respond-3*)

Introduction

Medical Countermeasures (MCM) are vital to national security and protect nations from potentially catastrophic infectious disease threats. Investments in the MCM create opportunities to improve overall public health. In addition, it is important to have trained personnel would can deploy in case of a public health emergency for response.

Georgia Level of Capabilities

- Some of the relevant issues for this Action Package are incorporated in the Pandemic Preparedness Plan in a generic manner.
- There does not seem to be a need for a separate plan in this functional area, at least not in a small country, as the issues are addressed either in legislation or in various other plans, including the Pandemic Preparedness Plan, and there does not seem to be obstacles to the movements of countermeasures or personnel into or out of country/countries from Georgia's point of view.

Scoring for Georgia Using the Assessment Tool

- System is in place for sending and receiving medical countermeasures during a public health emergency: Demonstrated capability (score 3 out of 4).
- System is in place for sending and receiving health personnel during a public health emergency: no scoring made, as the indicator is considered as difficult or ambiguous, and a full evaluation would require assessing relevant legislation which is not possible in the time available.

Assessment Tool

- Instead of creating a separate plan for deployment, the information in the Pandemic Preparedness Plan (PPP) could be used, possibly complemented by incorporating a few items not covered by the PPP in tabletop exercises of various preparedness scenarios.

GHSA Action Packages Main Document

- No clear–cut further indicators identified in the Action Items list through the Georgia piloting experience that could be used in further development of the Assessment Tool.

Attachments

Attachment 1	**Global Health Security Agenda Action Packages**
Attachment 2	**Global Health Security Self-Assessment for Georgia, 9 January 2015**
Attachment 3	**Global Health Security Meeting Agenda, NCDC, 12 January 2015**
Attachment 4	**Georgian Influenza Pandemic Preparedness Plan 3 August 2009**
Attachment 5	**Georgia National Strategy Against Antimicrobial Resistance, 24 July 2014**
Attachment 6	**Outbreaks of Food-borne Intoxications in Georgia, 2012-2013**
Attachment 7	**Georgian National Animal Health Program 2013-2018 & Animal Health Action Plans 2013 & 2014, July 2013**