

## **Meeting Report:**

### **Accelerating Progress in Real-Time Biosurveillance Action Package of GHSA**

**March 26-28, 2018**

**Tbilisi, Georgia**

#### ***Executive summary***

On 26-28 March 2018, the first meeting of the Global Health Security Agenda Action Package for Real Time Biosurveillance, entitled “Accelerating progress in the Real-Time Biosurveillance Action Package of GHSA”, was held in Tbilisi, Georgia. Led by the Georgian National Centre for Disease Control, together with the Norwegian Institute of Public Health, over 70 participants from GHSA partner countries, contributing countries of Real-Time Surveillance Action Package, and international partner organizations met in order to support the strengthening of capacities to detect infectious disease threats.

The overall meeting objectives were to strengthen partnerships between GHSA partners including contributing countries of the Real-Time Surveillance Action Package, non-governmental organizations, and international partners; and to exchange best practice and share experiences in order to strengthen surveillance as an IHR (2005) core capacity. The meeting included speakers from a range of countries and organizations who provided insight on different topics related to surveillance, including implementation of integrated electronic systems, surveillance in a One Health perspective and regional approaches to surveillance. In addition, two breakout sessions and a short tabletop exercise were held in order to allow groups to share experiences and identify clear actions to accelerate progress in the Real-Time Surveillance Action Package.

Participants emphasized the importance of collaboration across sectors and sharing of best practices in order to implement systems for detecting public health events in a timely manner. Some common obstacles to implementing and maintaining surveillance systems discussed during the meeting included lack of formalized mechanisms for coordination and information sharing between sectors, lack of resources to sustain surveillance systems and a general lack of use of surveillance for public health decision-making.

Participants provided a number of suggestions on how best to accelerate the Real Time Biosurveillance Action Package activities. These included establishing a secretariat and national points of contact for the Real Time Surveillance Action Package to better engage with other action packages as well as the GHSA secretariat, conducting joint meetings with other action packages, including laboratory and One Health, establishing a platform for sharing information and best practices, and conduct joint simultaneous exercises across Action Package countries.

### **Background**

Georgia's focal point for the Global Health security Agenda (GHSa) and International Health Regulations (IHR 2005), together with the Norwegian Institute of Public Health, organized this first GHSa Surveillance Action Package meeting. The topic for the GHSa meeting was "Accelerating progress in the Real-Time Biosurveillance Action Package of GHSa". The meeting was held on March 26-28, 2018, in Tbilisi, Georgia, and brought together GHSa partner countries, contributing countries of the Real-Time Surveillance Action Package, and international partner organizations supporting the strengthening of capacities to detect infectious disease threats within the Real-Time Surveillance Action Package and other crosscutting packages.

### **Meeting Objectives**

1. Strengthen partnerships with GHSa partner/contributing countries of the Real-Time Surveillance Action Package and engage and strengthen collaborations with non-governmental organizations and international partners;
2. Exchange best practice and share experiences on
  - Building capacity to meet compliance with International Health Regulations (moving country score up to green on the IHR-Joint External Evaluation (JEE) tool).
  - Implementation of integrated electronic systems
  - Regional approach for communicable disease surveillance
  - Community Based Surveillance as part of Event Based Surveillance
  - Use of biosurveillance data for public health action
  - Strengthening integrated disease surveillance systems that facilitate a One Health approach to disease detection and control
3. Promote collaboration at country and regional level with other Action Package activities in a cross-cutting manner as a sustainable pathway to health security overall;
4. Sustain surveillance: to provide funding to surveillance as a cost-effective investment;
5. Discuss expectations and strategy for the Real-Time Surveillance Action Package;

### **Expected outcomes**

- Regional communicable disease surveillance approaches encouraged;
- Knowledge on insights into disease surveillance through sharing of best practices updated;
- Recommendations developed for better planning and operationalization of disease surveillance systems;
- Next steps for Real-Time Surveillance Action Package defined.

## **Summary of Meeting Proceedings:**

### **Day 1**

The Minister of Labor, Health and Social Affairs of Georgia, First Deputy Ministry of Agriculture, Norwegian Institute of Public Health, US Centers for Disease Control and Prevention South Caucasus Office and National Center for Disease Control (NCDC) and Public Health of Georgia welcomed meeting participants. After the opening remarks, Georgia and Norway presented on the role of biosurveillance in GHSA on how to enable countries to achieve IHR core capacity implementation.

#### *Session 1: Exchange best practice and share experiences*

The first part of the session was dedicated to **implementation of integrated electronic systems** and representatives from NCDC Georgia, Robert Koch Institute, University of Oslo and World Organization for Animal Health (OIE) shared best practices regarding the establishment of real-time electronic surveillance systems and moving to electronic reporting. Some key features of the electronic system mentioned were flexibility, improved communication and feedback, secure data exchange, and high interoperability. Representative of OIE described the World Animal Health Information System (WAHIS) with its Early Warning System, Monitoring System, Information and Annual Reports. The importance of the political and stakeholder commitment to integrate systems was highlighted during the discussion.

The second part of the session was dedicated to **sharing best practice on the regional approach for communicable disease surveillance**, followed by the presentation from Azerbaijan on the use of biosurveillance data for public health action, followed by a presentation from Ghana on the use of Biosurveillance data for Public Health Action. Several keys to regional collaboration were mentioned, including surveillance system compatibility, common approaches, e.g., One Health approach, similar capabilities, regional network with charter and legal recognition. The challenges to coordination between human and animal health sectors still exist and to promote coordination, the National Health Platform, which is part of an inter-ministerial committee, has been instituted by Ghana.

The last presentation of day 1 was devoted to the building of surveillance capacity to meet compliance with IHR. The participant from the WHO EURO mentioned in his presentation that GHSA is a force multiplier for IHR and local security is the foundation of global security. Multisectoral coordination is a requirement to meet IHR.

#### *Break Out Session (1): Minimal requirements for a surveillance/reporting system*

The end of the day was devoted to group work addressing minimal requirements for surveillance/reporting systems. The aim of the session was to give participants the opportunity to share experiences and best practices concerning the minimal requirement for surveillance systems. Participants identified main obstacles and discussed suggested solutions.

The following challenges were identified by the groups:

- Lack of funds to conduct surveillance and knowledge gaps to interpret data and take action;
- Integration of surveillance systems (e.g. animal and human health sectors);
- Lack of using data for Public Health Action;

- Under reporting of disease events;
- Data collection;
- Lack of Information sharing between agencies;

Identified potential solutions:

- Providing evidence-based information to decision makers and donors;
- Conducting cost-benefit analysis;
- Budgeting of a surveillance component into all disease control programs;
- Changing legal requirements;
- Establishing One Health Secretariat/governmental coordinating body;
- Raising awareness of the positive/negative consequences (evidence based/cost-benefit);
- Conducting more trainings (developing SOPs/Protocols);
- Encouraging community-based surveillance;
- Strengthening capacity of data managers and decision makers to interpret and communicate data;
- Open access to data and improved dissemination;
- Building transparent system between ministries;
- Using more simplified tools to collect minimum agreed data;
- Encouraging information sharing;

## **Day 2**

### *Session 2: One Health Approach to Disease Surveillance Systems*

The first session of the day was dedicated to sharing One Health approach practices. Representatives from the National Center for Disease Control and Public Health, Georgia and from the National Food Agency, presented jointly on One Health Approach in Georgia. Successful examples of the collaboration between sectors used while combating rabies, brucellosis, anthrax and Crimean-Congo Hemorrhagic Fever (CCHF) were highlighted. A new plan on enhancement of this approach in Georgia was outlined - One Health Unit at the National Center for Disease Control and Public Health is planned to be established in the near future.

The participant from the Food and Agriculture Organization of United Nations presented on the topic of One Health Approach to Disease Surveillance Systems. The presenter highlighted objectives of the EPT-2 project on Livestock Surveillance as an example of a multi-country surveillance programme. Other examples included surveillance projects in Africa and the Near East, as well as the Tripartite between FAO-OIE-WHO, which provides leadership in collaboration and the multi-sectoral approach to health security. Development of the One-Health Strategic Plan, which will include the collaboration with other sectors, as well as establishment of the practice of sharing strategies developed for the priority diseases was considered as a priority during discussion. Other topics concerned trainings within One Health and the role/need of awareness campaigns prior to implementation of new approaches in the scope of One Health. During the second half of the session, collaboration with crosscutting action packages was

discussed, followed by the presentations on the role of the reference laboratory in surveillance by Kazakhstan and laboratory integration by the expert from US CDC.

*Breakout session (2): Target and activities for the Biosurveillance Action Package*

Participants discussed the following questions in each group:

**1. Are the Biosurveillance Action Package TARGETS, INDICATORS, and IMPACT still relevant?**

Suggestions from the groups:

- GHSA targets should directly align to IHR monitoring including data for action;
- Need a target related to capacity to analyze and apply surveillance data for action;
- Ensure targets include human, animal and environment;
- Improved communication and collaboration across sectors and between sub-national, national, regional and global levels;
- Improved country and regional capacity to analyze and link data from and between different sectors;

**2. Which activities should the Biosurveillance Action Package focus on in the future?**

Suggestions from the groups:

- Link to other relevant Action Packages (e.g. zoonotic, lab, workforce, Emergency Operations Centre (OEC), Antimicrobial resistance (AMR))
- Continuous evaluation of the package;
- Bring all stakeholders under One Health together using interoperable/interconnected real time reporting;
- Develop and implement a one health policy;
- Focus on resources / funds mobilization for the package;
- Develop integrated electronic system that is adaptable to any interoperable system;
- Develop training pipeline (e.g. YouTube online);
- Develop education program to include all age groups and specialties based on unique geographical origins (city vs rural);
- Develop translation services (especially for migrants);
- More best practice sharing;

**3. How can participating countries work more effectively together to improve surveillance?**

Suggestions from the groups:

- Regional approach– Biosurveillance Network of the Silk Road (BNSR) as an example; strengthen cross-border surveillance;
- Establish working groups;
- Conduct joint research;
- Encourage «Twinning» programs (e.g. mentoring);
- Continuous evaluation / assessment of the surveillance;
- Georgia to establish secretariat for the package to engage other countries;

- Gain experience in costing surveillance systems and calculating cost-effectiveness of surveillance investments;
- Sharing best practices (e.g. face to face meetings, regional conferences)
- Establish web-based platform; open sources;
- Develop a directory of contributing country focal points;

#### *Cost and cost effectiveness of improving surveillance*

The day ended with a virtual presentation on sustaining surveillance: cost and cost effectiveness of improving surveillance by a modeling expert from US CDC. He described the importance of determining costs of surveillance and impact of investments to advocate for required resources to maintain (or expand) surveillance. Following is the link to the SurvCost tool:

<https://www.cdc.gov/globalhealth/healthprotection/idsr/resources.html>

### **Day 3**

#### *Breakout session (3): Table top exercise on surveillance*

A tabletop exercise on Nipah virus Infection was conducted. Participants worked through a scenario to identify gaps and areas for improvement in handling the detection, alert, risk assessment, information sharing and surveillance of an emerging zoonotic event. Participants were divided into groups based on regions and worked through a scenario on Nipah virus to identify gaps and areas for improvement in handling the detection, alert, risk assessment, information sharing and surveillance of an emerging zoonotic event. Some main challenges identified in the group work:

- Lack of information-sharing between human and animal health sector (especially frontline field level)
- Communication to the public
- Conflicting political and economic interests between sectors and departments (compensation to farmers)
- Lack of collaboration with the environmental sector (wildlife)
- Lack of information-sharing between human health and veterinary laboratories

Some main actions identified in the group work:

- Need of formalizing mechanisms for financing one health approaches
- Review preparedness plans regularly (including communication)
- Beneficial to analyze and document cost-effectiveness when implementing preparedness measures

#### *Next Steps for the Biosurveillance Action Package*

After the breakout session, participants discussed expectations and future strategy for the Real-Time Surveillance Action Package. The following next steps were suggested during the discussion:

- Establish a rotating secretariat of the action package that will coordinate future activities of the Surveillance Action Package, facilitate collaborations with other GHS action packages, and engage with the GHSA Secretariat;

- Establish a group of country specific points of contacts for the action package;
- Establish a platform, where countries can continue discussions, share best practice and publish relevant documents (as suggested to the steering committee);
- Conduct joint simulation exercises.
- Continue with regular meetings in the action-package, preferably co-arranged with other relevant action-packages (e.g. national laboratory network)

At the end of the meeting, participants were offered the opportunity to visit Georgia's biosafety level 3 laboratory (BSL3), Lugar Center.

#### Participants

**Countries:** Azerbaijan, Ukraine, Armenia, Kazakhstan, Côte d'Ivoire, Senegal, Ghana, Moldova, Malawi, Norway, Italy, Uganda, United States, Georgia.

**Partner organizations:** US Centers for Disease Control and Prevention (CDC); Norwegian Institute of Public Health; FAO; OIE, WHO; Robert Koch Institute; Oslo University; British Medical Journal (BMJ); URC Georgia office; National Food Agency of Georgia; Laboratory of Ministry of Agriculture of Georgia; WRAIR / USAMRID; U.S European Command; Defense Threat Reduction Agency (DTRA)

**Annex 1. Agenda**

<p align="center"><b>“Accelerating progress in the Real-Time Biosurveillance Action Package of GHSA”</b>  <b>March 26-28, 2018, in Tbilisi, Georgia,</b></p>		
<b>26 March</b>	<b>PRESENTATIONS</b>	<b>SPEAKERS</b>
<b>9:00-9:30</b>	<b>Registration</b>	
<b>9:30-10:00</b>	<b>Welcome and Opening Remarks</b>	<p><b>Davit Sergeenko</b>, Minister of Labour, Health and Social Affairs, Georgia</p> <p><b>Nodar Kereselidze</b>, Deputy Minister, Ministry of Environmental Protection and Agriculture, Georgia</p> <p><b>Beth Skaggs</b>, Country Director, CDC South Caucasus Office</p> <p><b>Line Vold</b> (co-chair) Department Director, Norwegian Institute of Public Health</p> <p><b>Amiran Gamkrelidze (moderator)</b>, Director General, NCDC Georgia</p>
<b>10:00-10:15</b>	<i>Purpose/objectives of the meeting, expected outputs, and overview of agenda</i>	<b>Dr. Paata Imnadze</b> Scientific Director, NCDC Georgia
<b>10:15-10:45</b>	<b>Media Coverage</b>	
	<b>Coffee Break</b>	
<b>10:45-11:30</b>	<i>Role in GHSA and Road towards IHR Implementation</i>	<p><b>Georgia</b></p> <p><b>Ana Kasradze</b> Head of Public Health Emergency Preparedness and Response Division, NCDC</p> <p><b>Norway</b></p> <p><b>Line Vold</b> Department Director Norwegian Institute of Public Health</p>

11:30-11:45	Survey results	<p><b>Norway</b>  <b>Emily MacDonald</b>  Senior Adviser  Norwegian Institute of Public Health</p>
11:45-13:15	<b>Plenary Session 1: Exchange best practice and share experiences</b>	
	Implementation of integrated electronic systems	<p><b>Christopher Murrill (moderator)</b>  US Centers for Disease Control and Prevention  <b>Georgia</b>  Khatuna Zakhshvili  Head of Communicable Disease Department, NCDC  <b>Sarah McFarland</b>  Robert Koch Institute, Germany  <b>Prosper Behumbiize</b>  University of Oslo, Norway</p>
	World Animal Health Information System (WAHIS)	<p><b>Kazimieras Lukauskas</b>  Professor, Head of the OIE Regional Representation for Europe in Moscow</p>
13:15-14:15	<b>Lunch</b>	
14:15-15:15	<b>Exchange best practice and share experiences (cont.)</b>	
	<p>A regional approach for communicable disease surveillance</p> <p>Use of biosurveillance data for public health action</p>	<p><b>Azerbaijan</b>  Nazifa Mursalova  Leading adviser, Sector of Sanitary Epidemiological Surveillance, MoH  <b>Ghana</b>  Michael Adjabeng  Epidemiologist, Disease Surveillance Department, Ghana Health Service and National IHR Focal Point</p>
	Building surveillance capacity to meet compliance with IHR	<p><b>Irshad Shaikh,</b>  Technical Officer, Readiness; Country Health Emergency Preparedness &amp; IHR, Division of Health Emergencies &amp;</p>

		Communicable Disease, WHO
<b>15:15-15:45</b>	<b>Coffee Break</b>	
<b>15:45-17:30</b>	<i>Break Out Session (1): Minimal requirements for a surveillance/reporting system</i>	<i>Facilitators: Karin Nygård, NIPH Emily MacDonald, NIPH Line Vold, NIPH Bente Faugli, NIPH WHO, CDC</i>
<b>17:30-18:00</b>	<b>Summary of Day 1 and Closing Remarks</b>	<b>Beth Skaggs</b> , Country Director, CDC South Caucasus Office
<b>19:00</b>	<b>Dinner/Reception</b>	

**“Accelerating progress in the Real-Time Biosurveillance Action Package of GHSA”  
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<b>27 March</b>	<b>PRESENTATIONS</b>	<b>SPEAKERS</b>
<b>9:30-9:45</b>	<i>Opening Remarks, Review Day 2</i>	<b>Georgia</b> <b>Dr. Lasha Avaliani (chair)</b> <i>Head of Veterinary Department, National Food Agency</i> <b>Norway</b> <b>Karin Nygård (co-chair)</b> <i>Head of Emergency and Preparedness Program</i> <i>Norwegian Institute of Public Health</i>
<b>9:45-10:30</b>	<i>Group work presentations</i>	
<b>10:30-11:00</b>	<b>Coffee Break</b>	

<b>11:00-12:00</b>	<i>One Health Approach to Disease Surveillance Systems</i>	<b>Georgia</b> <b>Dr. Lasha Avaliani</b> <i>Head of Veterinary Department, National Food Agency</i> <b>Dr. George Chakhunashvili</b> <i>Specialist at VPD, Respiratory and Zoonotic Disease Division, Communicable Disease Department, NCDC</i> <b>Dr. Daniel Beltran-Alcrudo</b> <i>Food and Agriculture Organization of UN (FAO)</i>
<b>12:00-12:40</b>	<i>Promote collaboration at country and regional level with other Action Package activities in a cross-cutting manner as a sustainable pathway to health security overall</i> <ul style="list-style-type: none"> <li>● <i>The role of Reference Lab in biosurveillance</i></li> <li>● <i>Laboratory Integration</i></li> </ul>	<b>Kazakhstan</b> <i>Dina Bugybayeva</i> <i>Biological safety officer, Central Reference Laboratory;</i> <b>Len Peruski</b> <i>US Centers for Disease Control and Prevention</i>
<b>12:40-13:00</b>	<i>BMJ vision for GHSA integration and sustainment</i>	<b>Elisa Roma</b> <i>Regional Development Manager</i> <i>BMJ / London</i>
<b>13:00-13:20</b>	<i>Evolution of JEE tool</i>	<b>Irshad Shaikh,</b> <i>Technical Officer, Readiness;</i> <i>Country Health Emergency Preparedness &amp; IHR, Division of Health Emergencies &amp; Communicable Disease, WHO</i>
<b>13:20-14:20</b>	<b>Lunch</b>	
<b>14:20-15:30</b>	<i>Break Out Session (2)</i> <i>Developing your roadmap to improving surveillance in your country</i> <i>(move your JEE score into the green zone!)</i>	<i>Facilitators: CDC, WHO, NIPH</i>
<b>15:30-16:10</b>	<i>Group work presentations</i>	
<b>16:10-16:40</b>	<b>Coffee Break</b>	

<b>16:40-17:00</b>	<i>Sustaining surveillance: cost and cost effectiveness of improving surveillance</i>	<b>Martin Meltzer</b> <i>Lead of the Health Economics and Modeling Unit (HEMU), CDC Atlanta</i>
<b>17:00-17:30</b>	<b>Summary of Day 2</b> <b>Closing Remarks</b>	<b>Beth Skaggs</b> , Country Director, CDC South Caucasus Office.

<b>“Accelerating progress in the Real-Time Biosurveillance Action Package of GHSA” March 26-28, 2018, in Tbilisi, Georgia,</b>		
<b>28 March</b>	<b>PRESENTATIONS</b>	<b>SPEAKERS</b>
<b>9:30-9:45</b>	<b>Opening Remarks, Review Day 3</b>	
<b>9:45-12:00</b>	<b>Surveillance exercise</b>	<i>Facilitators: Emily MacDonald, NIPH Line Vold, NIPH Karin Nygård, NIPH Bente Faugli, NIPH</i>
<b>12:00-12:30</b>	<b>Closing remarks</b>	<i><b>Line Vold</b> Department Director, Norwegian Institute of Public Health <b>Amiran Gamkrelidze</b>, Director General, NCDC Georgia</i>
<b>12:30-13:30</b>	<b>Lunch</b>	
<b>13:30-14:15</b>	<b>Optional visit to Lugar Center, BSL3 laboratory</b>	
<b>14:15</b>	<b>Transfer to the Hotel</b>	