Working Together: Global Health Security Agenda and the Role of Public Health Organizations

Eric Blank, DrPH
Senior Director, Public Health Systems
Association of Public Health Laboratories (APHL)

- NGO, non-profit organization
- Manages the public health laboratory network of US state & local public health labs, state environmental and agricultural labs

**Vision:**
A healthier world through quality laboratory systems

**Mission:**
Shape national and global health outcomes by promoting the value and contribution of public health laboratories and continuously improving the public health laboratory system and practice
The History Behind GHSA

**WHO-Maputo declaration** for strengthening of laboratory systems in RLS

**WHO-IHR**: binds all countries to be alert and ready to respond collectively to public health threats, also across borders.

**WHO-IDS**R: Makes the best use of country resources to conduct integrated surveillance of priority diseases.

→**Implement IHR**

**FAO-OIE-WHO** One-health concept note: prevent, detect, respond to public health and animal risk through inter-sectoral collaboration.

**US GHSA**: international effort of nations and organizations to accelerate progress toward a safer world, by speeding up the implementation of IHR and OIE PVS using an intersectoral approach.
Addressing the Objectives: 11 Action Packages

- Prevent 1: Antimicrobial Resistance
- Prevent 2: Zoonotic Disease
- Prevent 3: Biosafety and Biosecurity
- Prevent 4: Immunization
- Detect 1: National Laboratory System
  - USA committed to leading this along with Thailand and South Africa
- Detect 2 & 3: Real-Time Surveillance
- Detect 4: GHSA Reporting
- Detect 5: Workforce Development
- Respond 1: Emergency Operations Centers
- Respond 2: Linking Public Health with Law and Multi-sectoral Rapid Response
- Respond 3: Medical Countermeasures and Personnel Deployment Action Package
National Laboratory System Action Package

• **Five-Year Target:** Real-time biosurveillance with a national laboratory system and effective modern point-of-care and laboratory-based diagnostics.

• **As Measured by:** A nationwide laboratory system able to reliably conduct at least five of the 10 core tests on appropriately identified and collected outbreak specimens transported safely and securely to accredited laboratories from at least 80 percent of districts in the country.

• **Desired National Impact:** Effective use of a nationwide laboratory system capable of safely and accurately detecting and characterizing pathogens causing epidemic disease, including both known and novel threats, from all parts of the country. Expanded deployment, utilization, and sustainment of modern, safe, secure, affordable and appropriate diagnostic tests or devices.
Development and Review of National Laboratory Strategic Plans and Policy Documents

- **Mandate**
  - National laboratory policy
  - Laboratory strategic Plan

- **Capacity**
  - Integrated, tiered system
  - Financial plan

- **Access**
  - Quality and safety
  - Training and retention

**GHSA Action Package(s)**
- Laboratory System, Real-Time Surveillance, EOC, Workforce Biosafety/Biosecurity
Laboratory Twinning Model

• Ongoing, multi-year partnership with specific goals and objectives
• Provides a dedicated training venue for strengthening diagnostic capacity
• Allows for mentorship across technical lanes
• Allows participants to see an integrated public health system

Uganda Central Public Health Laboratory with New Mexico State Public Health Laboratory

• Assist with design of organogram of new national public health reference laboratory
• Provide leadership, management and business processes training
• Assist with development of quality management system, including policies and protocols
• Review WHO IHR requirements

GHSA Action Package(s)
Laboratory System, Real-Time Surveillance, EOC, Workforce Biosafety/Biosecurity
Developing Resilient Laboratory Networks

- Standardized diagnostics
- Secure communication, alert, reporting system
- Training and instrumentation standards
- Quality standards testing
- Assurance of biosafety and biosecurity
- Connected to EOC

**GHSA Action Package(s)**

Laboratory System, Real-Time Surveillance, EOC, Workforce Biosafety/Biosecurity

**National**
- Assess all reports w/in 48 hours
- Notify WHO immediately through NFP

**Intermediate**
- Confirm status of event
- Assess event immediately, report to national level

**Local/Community**
- Detect events
- Report results
- Implement control measures
Workforce

• Emerging Leader Program
• Development of Public Health Laboratory Service Fellowship (PHLSF) curriculum and implementation framework
  • Program to address the regional or country’s public health laboratory workforce gaps.
  • Inclusive of mentoring and field projects
    – Framework for implementation of fellowship based on curriculum.
    – Collaboration with public health institutes and other stakeholders

GHSA Action Package(s) | Laboratory System, Real-Time Surveillance, EOC, Workforce Biosafety/Biosecurity
Lessons Learned

- Importance of system strengthening
- Importance of strategic plans, policy documents and M&E
- Develop long term twinning partnerships for mentorship
- Develop resilient laboratory networks
- Leverage partnerships
- Leverage other investments e.g. PEPFAR
- Develop sustainable training solutions
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Working Together: Global Health Security Agenda & the Role of Public Health Organizations – The CSTE Perspective

Jennifer Lemmings, MPH
Epidemiology Program Director
About CSTE
Established in 1950s to determine a systematic method of defining nationally reportable communicable diseases

Grown to over 1,700 members and a National Office Staff of 35+

Continued responsibility for the NNC list as well as a range of other activities
• CSTE is the professional home for all applied public health epidemiologists
• Member-driven organization
• Activities include:
  • Best practices
  • Workforce development & technical assistance, including fellowship programs
  • Assessments & reports
Ensure that public health epidemiology informs decision making in an era of increasing complexity and instantaneous information sharing

Strategic Priorities

• Address critical gaps in population health surveillance
• Increase visibility and recognition as the applied public health epidemiology resource
• Continue to build a sustainable funding portfolio
Council of State and Territorial Epidemiologists

Strategic Plan 2015 – 2017

ENSURE THAT PUBLIC HEALTH EPIDEMIOLOGY INFORMS DECISION MAKING IN AN ERA OF INCREASING COMPLEXITY AND INSTANTANEOUS INFORMATION SHARING

ADDRESS CRITICAL GAPS IN POPULATION HEALTH SURVEILLANCE

- Develop a prepared workforce in public health informatics
- Guide applied epidemiology workforce and program development
- Adapt applied epidemiology practices to meet the challenges posed by advanced molecular detection
- Identify methods to leverage the electronic health record for population health monitoring
- Build applied epidemiology capacity in chronic and other non-infectious conditions

INCREASE VISIBILITY AND RECOGNITION AS THE APPLIED PUBLIC HEALTH EPIDEMIOLOGY RESOURCE

- Be known as the organization whose members monitor the health of the population and respond to public health threats
- Build stronger linkages with healthcare providers and their representative organizations
- Improve collaboration, data linkages, and data usage across infectious and non-infectious program areas

CONTINUE TO BUILD A SUSTAINABLE FUNDING PORTFOLIO

- Accelerate implementation of the funding diversification plan
- Build expertise in fundraising
<table>
<thead>
<tr>
<th>Committee</th>
<th>Focus Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD/MCH/Oral Health Steering Committee</td>
<td>Epidemiology Capacity Building, Maternal &amp; Child Health, Oral Health</td>
</tr>
<tr>
<td>Environmental/Occupational/Injury Steering Committee</td>
<td>Climate Change, Disaster Epidemiology, Environmental Epidemiology, Injury Surveillance &amp; Control, OH Surveillance</td>
</tr>
<tr>
<td>Infectious Diseases Steering Committee</td>
<td>Food Safety, HAI, Hep C, HIV, Influenza, STD, Vaccine Preventable, Vectorborne</td>
</tr>
<tr>
<td>Surveillance/Informatics Steering Committee</td>
<td>Electronic Laboratory &amp; Disease Reporting, Surveillance Policy</td>
</tr>
<tr>
<td>Cross Cutting I Steering Committee</td>
<td>Alcohol, Alcohol &amp; Other Drug Indicators, Marijuana, Overdose, Prescription Drug Monitoring, Preparedness, Substance Abuse</td>
</tr>
<tr>
<td>Cross Cutting II Steering Committee</td>
<td>Border/International Health, Disparities, Epidemiology Methods, Public Health Law, Tribal Epidemiology, Workforce Development</td>
</tr>
</tbody>
</table>

Council of State and Territorial Epidemiologists
CSTE’s Global Response Activities
Prior 2015, the majority of CSTE’s International work focused on our partnership with the Influenza Division at CDC
  • Data Management Trainings
  • Influenza Surveillance Reviews
Beginning in January 2015, four French speaking CSTE travelers deployed to four high risk Ebola Virus unaffected countries in Western Africa
  • Supported by the CDC Foundation
  • Benin, Senegal, Cote d’Ivoire, and Mali
Goal-to enhance the epidemiologic capacity and provide:
  • Capacity building, technical assistance and guidance to the Ministries of Health/Health Departments
  • Assessment of existing capacities and recommendations for improvement of policies and procedures
• Supported through CDC/CSTE Cooperative Agreement
• Objective: to send 10 French Speaking Epidemiologists to Ebola affected countries for one month each
• CSTE supported 7 French Speaking Epidemiologists to travel to Guinea (one to Liberia)
• Deployments ranged from about four weeks to three months for a total of 10 months
• Support continued in the next funding cycle to include up to 40 epidemiologists through June 30, 2016 to Guinea, Sierra Leone, and Liberia
Training and Roles

• 3-5 day training at CDC in Atlanta prior to deployment
  • Training, equipment receipt, and IT access
• Flew directly from Atlanta to the assigned country
• Assignments range from ~30-90 days
• Roles in country (examples):
  • Epidemiologist
    • manage data and analyze for various requests that include risk assessments, survey results, case surveillance data, and other Ebola data sources
  • Laboratory Support
  • Health Communication
    • to encourage members of rural/low-literacy resistant communities to disclose information on suspect Ebola cases to local contact tracing teams
Stories from the field

Lon Kightlinger –

• State Epidemiologist, South Dakota DOH
• Guinea, November 2015
• Collected data on the newly launched OraQuick Ebola Rapid Diagnostic Test,
• Traveled to 15 rural health stations
• Reviewed 3000 patient records
• Workdays were 11 hours, 6 days a week
Mari Gasiorowicz –

- Epidemiologist in the AIDS/HIV Program at the Wisconsin Division of Public Health
- Guinea, April 2015
- Monitoring alerts from the Ebola hotline that were assigned to teams to investigate.
- Observing and monitoring outcomes of a four-day social mobilization campaign to reach 55,000 households.
Challenges and Successes

- Successful partnership with CDC
- Funding availability and source
- CSTE volunteer pool of epidemiologists
  - Volunteer list is currently at 243 individuals
  - Language skills, Qualifications, International experience
- International logistics
- International travel policy
- Continuous change in players
  - At CDC and in country
- DOL/IRS independent contractor interpretations
Next Steps

• Evaluation
• Written publications, summaries, and dissemination of activities
  • CSTE blog and peer reviewed publication
• Continuing to provide epidemiologic surge support
  • Support CDC emergency outbreak response, both domestically and internationally
  • Enhance public health systems worldwide
• Zika
  • Building public health surveillance and epidemiology capacity in the Pacific Islands
CSTE Annual Conference

SAVE THE DATE
2016 cste annual conference
June 19-23
ANCHORAGE ALASKA
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Atlanta, Georgia 30341
770.458.3811
770.458.8516
jlemmings@cste.org
THE GLOBAL HEALTH SECURITY AGENDA (GHSA)

AMBASSADOR BONNIE JENKINS
COORDINATOR, THREAT REDUCTION PROGRAMS
MAY 24, 2016
WHY IS GLOBAL HEALTH SECURITY AN IMPORTANT ISSUE?

- Emergence and spread of new microbes
- Majority of countries are not fulfilling their IHR requirements
- Weak health systems in the vast majority of countries
- Globalization of travel and trade
- Infectious disease is a permanent phenomenon
- Causes loss of life, interrupts transportation, extremely expensive to address
- Rise in antimicrobial drug resistance
- A global problem from every angle and requires a global focus effort that spans all parts of the government…every sector
- Different departments/ministries, one health, nongovernmental sector
Global Health Security Launch
February 13, 2014

New diseases are inevitable, but in the 21st century we have the tools to greatly reduce the threat posed by global epidemics. We can put in place a safe, secure, globally linked, inter-operable system to prevent disease threats, detect outbreaks in real time, and share information and expertise to respond effectively.”

--Secretary Sebelius, Secretary Kerry, and Assistant to the President Lisa Monaco, February 2014

“This [the Global Health Security Agenda] is indeed a timely initiative. It raises the political profile of the threat from emerging and epidemic-prone diseases. And it energizes efforts to improve health security…in line with WHO International Health Regulations...”

--World Health Organization
Director General Margaret Chan
February 13, 2014
THE VISION OF THE GHSA

“TO ATTAIN A WORLD SAFE AND SECURE FROM GLOBAL HEALTH THREATS POSED BY INFECTIOUS DISEASES”

• INFECTIOUS DISEASE EPIDEMICS POSE NOT ONLY A LOCAL HEALTH THREAT BUT ALSO AN INTERNATIONAL HEALTH SECURITY THREAT

• NATIONAL MULTISECTORAL COOPERATION AND PREPAREDNESS ARE AT THE CORE OF EFFECTIVE CONTROL OF INFECTIOUS DISEASES THROUGH STRENGTHENED HEALTH SYSTEMS AND PREPAREDNESS

• OPERATIONALIZATION OF “ONE HEALTH” CONCEPT AT NATIONAL AND INTERNATIONAL LEVELS
BENEFITS FROM STRENGTHENING GLOBAL HEALTH SECURITY

• PROTECT POOREST COUNTRIES AND MOST NEGLECTED POPULATIONS; HEALTH AND ECONOMIC BENEFITS

• STRENGTHEN COUNTRY CAPACITY TO FOCUS AND IMPLEMENT HEALTH PROGRAMS MORE EFFECTIVELY

• CREATE SUSTAINABLE SYSTEMS TO INCREASE VACCINATION COVERAGE AND ADDRESS ANTIMICROBIAL RESISTANCE

• STRENGTHEN COUNTRY ORGANIZATIONS’ CAPACITY AND RESILIENCE TO ADDRESS ANY HEALTH THREAT

• STRENGTHEN ALL SEGMENTS OF SOCIETY BY TAKING A HOLISTIC APPROACH TO HEALTH AND SECURITY
GHSA ACTION PACKAGES

• PREVENT 1 – ANTIMICROBIAL RESISTANCE
• PREVENT 2 – ZOONOTIC DISEASE
• PREVENT 3 – BIOSAFETY AND BIOSECURITY
• PREVENT 4 - IMMUNIZATION
• DETECT 1 – NATIONAL LABORATORY SYSTEMS
• DETECT 2/3 – REAL TIME SURVEILLANCE
• DETECT 4 – REPORTING
• DETECT 5 - WORKFORCE DEVELOPMENT
• RESPOND 1 – EMERGENCY OPERATIONS CENTERS
• RESPOND 2 – MULTISECTORAL RAPID RESPONSE
• RESPOND 3 – MEDICAL COUNTERMEASURES
44 countries announced over 100 new commitments to prevent, detect and respond to biological threats worldwide. President Obama and senior officials from around the world called on nations to act now to achieve enduring global health security capacity in West Africa and around the world.

President of the United States Barack Obama, National Security Advisor Rice, Assistant to the President for Homeland Security and Counterterrorism Monaco, and Secretaries Burwell, Kerry and Hagel met today with Ministers and senior officials from 43 other countries and leading international organizations to make concrete commitments to advance the Global Health Security Agenda.
<table>
<thead>
<tr>
<th>Action Package</th>
<th>Action Package Leading Countries</th>
<th>Action Package Contributing Countries</th>
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<tbody>
<tr>
<td><strong>Biosafety and Biosecurity</strong></td>
<td>Canada</td>
<td>Azerbaijan</td>
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<td><strong>Prevent-3</strong></td>
<td>Denmark</td>
<td>Germany</td>
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<td>Kenya</td>
<td>Jordan</td>
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<td>Spain</td>
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<td><strong>Nationwide Laboratory Systems</strong></td>
<td>South Africa</td>
<td>Canada</td>
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<td><strong>Detect-1</strong></td>
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<td>China</td>
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<td>Yemen</td>
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<td><strong>Emergency Operations Centers</strong></td>
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<td><strong>Respond-1</strong></td>
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<td>Saudi Arabia</td>
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<td>Turkey</td>
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<td>South Africa</td>
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<td>Vietnam</td>
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GHSA TODAY

COUNTRY COMMITMENTS & MANAGEMENT

• 11 GHSA TARGETS, ACTION PACKAGES; JOINT EXTERNAL EVALUATION TOOL (JEE)

• U.S. 31-COUNTRY COMMITMENT; G-7 COLLECTIVE 76-COUNTRY COMMITMENT

• 10 COUNTRY STEERING GROUP (SG)
  • CHAILED BY FINLAND IN 2015 (TROIKA MODEL)
  • CHAILED BY INDONESIA IN 2016
  • CHAILED BY REPUBLIC OF KOREA IN 2017

• EMPHASIS ON CROSS-SECTORAL COOPERATION

• NON-GOVERNMENTAL INVOLVEMENT

• ADVISORY PARTNERS: WHO, OIE, FAO, WORLD BANK, INTERPOL, EUROPEAN COMMISSION, AU, ECOWAS, UNIDSR

50 Country Partners
Australia, Azerbaijan, Bangladesh, Canada, Chile, China, Colombia, Denmark, Ethiopia, Finland, France, Georgia, Germany, Ghana, Guinea, Guinea-Bissau, India, Indonesia, Israel, Italy, Japan, Jordan, Kenya, Liberia, Malaysia, Mexico, the Netherlands, Norway, Pakistan, Peru, Portugal, the Republic of Korea, the Kingdom of Saudi Arabia, Sierra Leone, Singapore, South Africa, Spain, Sweden, Switzerland, Tanzania, Thailand, Turkey, Uganda, Ukraine, United Arab Emirates, United Kingdom, United States, Vietnam, Yemen, and Zimbabwe
HOW DO WE GET THERE?
VOLUNTARY GHSA EXTERNAL ASSESSMENTS

- OBJECTIVE IDENTIFICATION OF GAPS IN HEALTH SECURITY RELATED TO 11 ACTION PACKAGES
- BASELINE AND PROGRESS ASSESSMENT
- PEERS-ASSESSING-PEERS, LEARNING OPPORTUNITY
- BENEFITS TO COUNTRY AND DEVELOPMENT PARTNERS, COUNTRY PLANS
- SUPPORT AND ACCELERATE WHO IHR, OIE STANDARDS AND OTHER HEALTH SECURITY CAPACITY BUILDING PROCESSES
- TRANSPARENCY OF PROCESS AND RESULTS
FIVE PILOT ASSESSMENTS

• UGANDA
• PERU
• PORTUGAL
• GEORGIA
• UNITED KINGDOM
• ALL COMPLETED, ALL POSTED ONLINE; BASIS FOR FUTURE WORK
JOINT EXTERNAL EVALUATION TOOL

• GHSA ASSESSMENTS +
• NATIONAL LEGISLATION POLICY AND PLANNING
• COORDINATION, COMMUNICATION AND ADVOCACY
• FOOD SAFETY
• CHEMICAL EVENT
• RADIATION EMERGENCIES
FUTURE GHSA EXTERNAL ASSESSMENTS

• ETHIOPIA (COMPLETED JEE)
• TANZANIA (COMPLETED JEE)
• FINLAND
• GUINEA
• ITALY
• UKRAINE
• UNITED STATES
• MOZAMBIQUE
Example: Action Package on Biosafety & Biosecurity System

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<td>Portugal</td>
<td>United Kingdom</td>
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<td>Spain</td>
<td>United States</td>
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Target: A whole-of-government national biosafety and biosecurity system is in place, ensuring that especially dangerous pathogens are identified, held, secured and monitored in a minimal number of facilities according to best practices; biological risk management training and educational outreach are conducted to promote a shared culture of responsibility, reduce dual use risks, mitigate biological proliferation and deliberate use threats, and ensure safe transfer of biological agents; and country-specific biosafety and biosecurity legislation, laboratory licensing, and pathogen control measures are in place as appropriate.

As Measured by: Number of countries who have completed/completion of a national framework and comprehensive oversight system for pathogen biosafety and biosecurity, strain collections, containment laboratories and monitoring systems that includes identification and storage of national strain collections in a minimal number of facilities.

Prevent 3: Biosafety and Biosecurity

<table>
<thead>
<tr>
<th>Whole-of-government biosafety and biosecurity system is in place</th>
<th>No Capacity</th>
<th>Limited Capacity</th>
<th>Developed Capacity</th>
<th>Demonstrated Capability</th>
<th>Sustainable Capability</th>
</tr>
</thead>
<tbody>
<tr>
<td>No elements of a national biosafety and biosecurity system are in place.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Country has in place some, but not all, elements of a comprehensive biosafety and biosecurity system, including any of the elements below:</td>
<td></td>
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<tr>
<td>• Country maintains an updated record of where and in which facilities especially dangerous pathogens and toxins are housed and worked with.</td>
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<tr>
<td>• Country is developing but has not yet finalized or implemented specific biosafety</td>
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<tr>
<td>Country has developed a comprehensive national biosafety and biosecurity system, but it is not fully funded or fully sustainable:</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>• Country maintains an updated record of where and in which facilities especially dangerous pathogens and toxins are housed and worked with.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Country has in place and is implementing specific biosafety and biosecurity legislation.</td>
<td></td>
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<tr>
<td>• Country has in place laboratory licensing, inventory control</td>
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</table>

A comprehensive national biosafety and biosecurity system is in place, including:
• Country maintains an updated record of where and in which facilities especially dangerous pathogens and toxins are housed and worked with.
• Country has in place and is implementing specific biosafety and biosecurity legislation.
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<thead>
<tr>
<th></th>
<th>Country 1</th>
<th>Country 2</th>
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<tbody>
<tr>
<td></td>
<td>Score</td>
<td>Score</td>
<td>%</td>
<td>Score</td>
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<tr>
<td></td>
<td>Assessed</td>
<td>Possible</td>
<td></td>
<td>Assessed</td>
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<tr>
<td>Overall summary</td>
<td>54</td>
<td>96</td>
<td>56%</td>
<td>84</td>
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<tr>
<td>Prevent</td>
<td>14</td>
<td>32</td>
<td>44%</td>
<td>28</td>
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<tr>
<td>Antimicrobial Resistance</td>
<td>2</td>
<td>8</td>
<td>25%</td>
<td>8</td>
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<tr>
<td>Zoonotic Disease</td>
<td>3</td>
<td>8</td>
<td>38%</td>
<td>8</td>
</tr>
<tr>
<td>Biosafety and Biosecurity</td>
<td>3</td>
<td>8</td>
<td>38%</td>
<td>4</td>
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<tr>
<td>Immunization</td>
<td>6</td>
<td>8</td>
<td>75%</td>
<td>8</td>
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<tr>
<td>Detect</td>
<td>30</td>
<td>40</td>
<td>75%</td>
<td>32</td>
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<tr>
<td>National Laboratory System</td>
<td>8</td>
<td>12</td>
<td>67%</td>
<td>12</td>
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<tr>
<td>Real Time Surveillance</td>
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<td>8</td>
<td>75%</td>
<td>6</td>
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<td>Reporting</td>
<td>8</td>
<td>8</td>
<td>100%</td>
<td>6</td>
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<td>Workforce Development</td>
<td>8</td>
<td>12</td>
<td>67%</td>
<td>8</td>
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<tr>
<td>Respond</td>
<td>10</td>
<td>24</td>
<td>42%</td>
<td>24</td>
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<tr>
<td>Emergency Operations Centers</td>
<td>6</td>
<td>12</td>
<td>50%</td>
<td>12</td>
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<tr>
<td>Linking Public Health and Law Enforcement</td>
<td>2</td>
<td>4</td>
<td>50%</td>
<td>4</td>
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<tr>
<td>Medical Countermeasures and Personnel Deployment</td>
<td>2</td>
<td>8</td>
<td>25%</td>
<td>8</td>
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</tbody>
</table>
GHSA IMPACT OVER 5 YEARS
POTENTIAL ASSESSMENT PROGRESS, SAMPLE COUNTRY

Prevent

Detect

Respond

Multi-sectoral Response

Medical Countermeasures and Personnel

2015  2016  2017  2018  2019
GHSA FIVE YEAR ROADMAP

• ROADMAP FOR ONGOING AND PLANNED GHSA ACTIVITIES IN SUPPORT OF THE GHSA GOALS

• WILL ENSURE COORDINATION AND PARTNERSHIP ACROSS ALL ORGANIZATIONS TO SO THAT GHSA TARGETS ARE MET AND SUSTAINABLE SYSTEMS AND NETWORKS ARE ESTABLISHED

• ORGANIZED BY SPECIFIC CAPACITIES UNDER THE PREVENT, DETECT AND RESPOND FRAMEWORK.

• MEANT FOR PLANNING AND DISCUSSION PURPOSES BETWEEN THE HOST GOVERNMENT AND OTHER GHSA PARTNERS.
Develop 5 year Roadmap

Host Country

- Update policy and plan for labs
- Improved adherence to safe transport policies procedures to 30%
- Increased capacity in quality management
- Improve capacity for # of labs to conduct at least 5/10 core tests
- Achieve 3 star accreditation for at least # labs
GHSA Tools Must Be Accessible by All
What Kenya will do

- Agree to work to achieve all 11 GHSA targets in five years.
- Partner to develop and endorse a Kenyan 5-year national roadmap with milestones to achieve each target.
- Assess progress against each target.
- Provide and coordinate resources to achieve the goals in the 5-Year GHSA Roadmap.

What the U.S. will do

- Provide technical and financial assistance to achieve the 11 targets.
- Partner across all relevant Ministries on both sides to achieve the milestones in the roadmap.
  - Health, Development, Agriculture, Foreign Affairs, Interior, Defense
- Facilitate other partner resources according to the Kenyan national roadmap, as needed.

What others may do

- Provide additional technical and financial resources toward each GHSA target as outlined in the Kenyan 5-year roadmap.
- Develop and provide technical and/or financial resources for new activities to complement the 5-year roadmap.
- Coordinate with Kenya, the U.S. and other governmental and non-governmental donors in Kenya.
# LIBERIA MILESTONES
## PREVENT3 – BIOMEDICAL SAFETY & BIOSECURITY

<table>
<thead>
<tr>
<th>GHSA Goal</th>
<th>GHSA Objective</th>
<th>GHSA 5-Year Target</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prevent Avoidable Epidemics</strong></td>
<td></td>
<td>A whole-of-government national biosafety and biosecurity system is in place, ensuring that especially dangerous pathogens are identified, held, secured and monitored in a minimal number of facilities according to best practices; biological risk management training and educational outreach are conducted to promote a shared culture of responsibility, reduce dual use risks, mitigate biological proliferation and deliberate use threats, and ensure safe transfer of biological agents; and country-specific biosafety and biosecurity legislation, laboratory licensing, and pathogen control measures are in place as appropriate.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Key Milestones</th>
<th>US Government Activity</th>
<th>Host Government Activity</th>
<th>Other Activity (e.g. NGO, other governments, multilaterals)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td>DTRA – Technical Assistance</td>
<td>Ministries of Health, Agriculture</td>
<td>Other activity to be determined</td>
</tr>
<tr>
<td>2.</td>
<td>Dangerous pathogens for animal and human health identified and documented Capacities in Biosafety and Biosecurity (BSS) among key laboratories assessed</td>
<td>CDC – Technical Assistance</td>
<td>Other activity to be determined</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>USAID – Technical Assistance</td>
<td>ACCEL – technical assistance and integration of clinical lab and public health labs.</td>
<td></td>
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<tr>
<th>Year 2</th>
<th>Key Milestones</th>
<th>US Government Activity</th>
<th>Host Government Activity</th>
<th>Other Activity (e.g. NGO, other governments, multilaterals)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td>DTRA can support some biosafety &amp; security activities;</td>
<td>Determine GOL competent authority for Biosecurity</td>
<td>Other activity to be determined</td>
</tr>
<tr>
<td>2.</td>
<td>Multi-sectoral BSS governance structure at the national level with representatives at the sub-national level created Country specific legislation to support national BSS program drafted; Assessment of BSS requirements at key laboratories conducted</td>
<td>CDC – Technical Assistance</td>
<td>Other activity to be determined</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td>USAID – Technical Assistance</td>
<td>ACCEL – technical assistance and integration of clinical lab and public health labs.</td>
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</tbody>
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<tr>
<th>Year 3</th>
<th>Key Milestones</th>
<th>US Government Activity</th>
<th>Host Government Activity</th>
<th>Other Activity (e.g. NGO, other governments, multilaterals)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>BSS infrastructure improvements initiated/completed (i.e. enhanced Biosafety Cabinets (BSC) certification/physical security/transport security) in compliance with WHO and OIE standards</td>
<td>DTRA can support some biosafety &amp; security activities</td>
<td>GOL activity to be determined</td>
<td>Other activity to be determined</td>
</tr>
<tr>
<td>2.</td>
<td>BSS focal points in each region established Harmonization of professional training with pre-existing/new BSS curriculums (i.e. laboratory technicians, physicians, hazardous waste disposal technicians, etc.) in compliance with WHO and OIE standards</td>
<td>CDC – Technical Assistance</td>
<td>ACCEL – technical assistance and integration of clinical lab and public health labs.</td>
<td></td>
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<tr>
<td>3.</td>
<td></td>
<td>USAID – Technical Assistance</td>
<td>ACCEL – technical assistance and integration of clinical lab and public health labs.</td>
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</table>
## PREVENT3 MILESTONES (CONTINUED)

| Year 4 | 1. Routine mentoring and supervision for BSS program developed;  
2. Dangerous pathogens identified and consolidated at a central laboratory;  
3. Strategic Action Plan for biosafety and biosecurity developed  
4. System for ensuring lab meets fully functional biosafety conditions and best practices in place |  |  
|---|---|---|---|
|  | DTRA can support some biosafety & security activities  
CDC – Technical Assistance  
USAID – Technical Assistance | GOL activity to be determined | Other activity to be determined  
ACCEL – technical assistance and integration of clinical lab and public health labs. |
| Year 5 | 1. National BSS plan approved and disseminated which categorizes risks among indigenous agents and provides guidance on best practices;  
2. BSS system evaluation conducted  
3. BSS capacities in animal labs meet WHO/IHR standards |  |  
|  | DTRA can support some biosafety & security activities  
CDC – Technical assistance  
USAID – Technical Assistance | GOL activity to be determined | Other activity to be determined |
GHSA EFFORTS IN LIBERIA – ONE YEAR PLAN EXAMPLES

• DEVELOP PLAN, TIMELINE AND MATERIALS FOR SENSITIZATION OF POLICY MAKERS AT THE NATIONAL AND SUBNATIONAL LEVELS REGARDING BENEFITS OF A ONE HEALTH APPROACH
  • USAID, CDC

• SUPPORT BIOSAFETY AND BIOSECURITY ASSESSMENT OF VETERINARY LABS AND TRAINING NEEDS
  • USAID

• DEVELOP A STRATEGIC PLAN FOR THE PUBLIC HEALTH EMERGENCY OPERATIONS CENTER THAT COMMUNICATES MISSION, GOALS, OBJECTIVES, AND MILESTONES
  • MOH, CDC, WHO

• DEVELOP AN INTEGRATED DISEASE SURVEILLANCE AND RESPONSE PROGRAM
  • CDC – JOHNS HOPKINS UNIVERSITY
GHSA Assistance Efforts
GHSA VISION AND TARGETS

Vision
Our vision is a world safe and secure from global health threats posed by infectious diseases.

U.S. Overarching Target
Over the next five years the United States commits to working with at least 30 partner countries (containing at least 4 billion people) to prevent, detect and effectively respond to infectious disease threats... We call on other countries to join in this effort to realize the vision of a world where all 7 billion people are effectively protected...

When the GHSA was launched, the United States made a commitment to partner with at least 30 countries over five years to achieve the GHSA targets. In July 2015, the U.S. Government announced its intent to invest more than $1 billion in resources to expand the GHSA to prevent, detect, and respond to future infectious disease outbreaks in 17 countries. Today, we are announcing an additional 13 countries, with which the United States will partner to achieve the targets of the GHSA.

30 countries:
Bangladesh, Burkina Faso, Cambodia, Cameroon, Cote d’Ivoire, Democratic Republic of Congo, Ethiopia, Georgia, Ghana, Guinea, Haiti, India, Indonesia, Jordan, Kazakhstan, Kenya, Laos, Liberia, Mali, Mozambique, Pakistan, Peru, Rwanda, Senegal, Sierra Leone, Tanzania, Thailand, Uganda, Ukraine, and Vietnam.

*Malaysia has since become the 31st country.
G20 members recommit to full implementation of the WHO’s International Health Regulations (IHR)... Interested G20 members are supporting this goal through initiatives to accelerate action across the Economic Community of West African States and other vulnerable regions and will report progress and announce a timeline by May 2015 at the World Health Assembly.

We commit to preventing future outbreaks from becoming epidemics by assisting countries to implement the World Health Organization’s International Health Regulations (IHR), including through Global Health Security Agenda and its common targets and other multilateral initiatives. In order to achieve this we will offer to assist at least 60 countries, including the countries of West Africa, over the next five years, building on countries’ expertise and existing partnerships. We encourage other development partners and countries to join this collective effort.
G7 GHSA COMMITMENT

• 2015: “WE COMMIT TO PREVENTING FUTURE OUTBREAKS FROM BECOMING EPIDEMICS BY ASSISTING COUNTRIES TO IMPLEMENT THE WORLD HEALTH ORGANIZATION’S INTERNATIONAL HEALTH REGULATIONS (IHR), INCLUDING THROUGH GLOBAL HEALTH SECURITY AGENDA AND ITS COMMON TARGETS AND OTHER MULTILATERAL INITIATIVES. IN ORDER TO ACHIEVE THIS WE WILL OFFER TO ASSIST AT LEAST 60 COUNTRIES, INCLUDING THE COUNTRIES OF WEST AFRICA, OVER THE NEXT FIVE YEARS.”

• COMMITMENT IS TO 76 COUNTRIES!
GLOBAL PARTNERSHIP MEMBERSHIP

• MEMBERS: AUSTRALIA, BELGIUM, CANADA, CZECH REPUBLIC, CHILE, EUROPEAN UNION, DENMARK, FINLAND, FRANCE, GERMANY, HUNGARY, IRELAND, ITALY, JAPAN, KAZAKHSTAN, MEXICO, NETHERLANDS, NEW ZEALAND, NORWAY, THE PHILIPPINES, POLAND, PORTUGAL, REPUBLIC OF KOREA, SPAIN, SWEDEN, SWITZERLAND, UKRAINE, UNITED KINGDOM, UNITED STATES

• 21 OF 29 GP MEMBERS ARE GHSA PARTNERS

• OBSERVING RELEVANT INTERNATIONAL ORGANIZATIONS:
  • WHO, FAO, OIE, INTERPOL, BWC-ISU, UNSCR
GP sub-working groups focus on:

- Nuclear/Radiological Security
- Chemical Security
- Biological Security
- Centers of Excellence
- New Members
GLOBAL PARTNERSHIP BIOSECURITY SUB- WORKING GROUP (BSWG)

- ESTABLISHED IN 2012
- BROADENED ENGAGEMENT BEYOND SECURITY TO INCLUDE HEALTH (ANIMAL AND HUMAN) AND LAW ENFORCEMENT
- BEGAN DISCUSSIONS ON ACTION ITEMS FOR THE GROUP FOR THE NEXT FIVE YEARS, 2012-2017
- JUNE 2012 AGREED TO 5 DELIVERABLES
  - WHO, FAO, OIE, INTERPOL WERE PART OF ALL DISCUSSIONS LEADING UP TO THE 5 DELIVERABLES
- TODAY THE DELIVERABLES HELP PROMOTE MEMBERS Dedicating resources TO PROGRAMS FALLING WITHIN SEVERAL GHSA ACTION PACKAGES, PARTICULARLY PREVENT-3, BIOSAFETY AND BIOSECURITY
GLOBAL PARTNERSHIP BIOSECURITY DELIVERABLES

1. SECURE AND ACCOUNT FOR MATERIALS THAT REPRESENT BIOLOGICAL PROLIFERATION RISKS.

2. DEVELOP AND MAINTAIN APPROPRIATE AND EFFECTIVE MEASURES TO PREVENT, PREPARE FOR, AND RESPOND TO THE DELIBERATE MISUSE OF BIOLOGICAL AGENTS.

3. STRENGTHEN NATIONAL AND GLOBAL NETWORKS TO RAPIDLY IDENTIFY, CONFIRM AND Respond TO BIOLOGICAL ATTACKS.

4. REINFORCE AND STRENGTHEN BIOLOGICAL NONPROLIFERATION PRINCIPLES, PRACTICES AND INSTRUMENTS.

5. REDUCE PROLIFERATION RISKS THROUGH THE ADVANCEMENT AND PROMOTION OF SAFE AND RESPONSIBLE CONDUCT IN THE BIOLOGICAL SCIENCES.
GP / GHSA PROGRAMS FUNDED BY GLOBAL PARTNERSHIP MEMBERS

- FINLAND SUPPORTING BIOSECURITY PROJECTS IN TANZANIA
- CANADA GLOBAL PARTNERSHIP PROGRAM FUNDING BIOSAFETY AND BIOSECURITY PROJECTS IN NIGERIA
- DENMARK FUNDING BIOSECURITY PROJECTS IN KENYA
- EUROPEAN UNION: SPAIN, AND ITALY – LABORATORY STRENGTHENING PROJECTS AND TRAINING OF PERSONNEL IN SOUTH EAST ASIA
The Role of Nongovernmental Stakeholders in the Global Health Security Agenda
WHAT DOES THE NGS DO IN GLOBAL HEALTH SECURITY?
THE NGS COMMUNITY SUPPORTING

GHSA

- Implementers/Service Providers
- Academics/Researchers
- Foundations
- Conveners
- Think Tanks
- Private Sector
Non-Governmental Sector Engagement and Areas of Assistance

- Action Packages and Gaps
  - P1: Antimicrobial Resistance
  - P2: Zoonotic Disease
  - P3: Biosafety & Biosecurity Systems
  - P4: Immunization
  - D1: Laboratory Systems
  - D2/3: Real-Time Biosurveillance
  - D4: Rapid Reporting
  - D5: Workforce Development
  - R1: Emergency Operations Centers
  - R2: Multi-sectoral Response
  - R3: Medical Countermeasures and Personnel

- Launch Year: 2015

- Partners:
  - APHL, Massey University AU, Health Security Partners, Kansas State College
  - MRIGlobal, University of Cambridge, CORDS, EcoHealth Alliance
  - CRDF, Elizabeth R. Griffin Foundation, IFBA, Howard University, Rostropovich-Vishnevskaya Foundation
  - African Society of Laboratory Medicine, AFRICABIO, Fondation Merieux, BD & Co., Johnson & Johnson
  - CRDF, Gryphon Scientific, Gates Foundation, Skoll Global Threats
  - International Society for Infectious Diseases
  - Global Health, Population and Nutrition; Massey University, National Academies
  - APHL, GM University, GW University
  - Paul G. Allen Foundation, George Mason University, CORDS
  - International Medical Corps, MRIGlobal
GHSA NGS Consortium and Consortium Working Groups
GLOBAL HEALTH SECURITY AGENDA NGS CONSORTIUM (GHSAC)

- GHSAC works with interested governments in support of the GHSA
- Seeks to efficiently and effectively apply the resources and global expertise they have with the vast governmental needs in achieving the goals of GHSA
- Primary communication conduit between NGS and government stakeholders in matters related to GHSA
- Led by a steering group of GHSA stakeholders
PRIVATE SECTOR ROUNDTABLE (PSRT)

- LED BY JOHNSON & JOHNSON AND GENERAL ELECTRIC FOUNDATION
- MISSION: MOBILIZE INDUSTRY TO HELP COUNTRIES PREPARE FOR AND RESPOND TO HEALTH-RELATED CRISIS, AND STRENGTHEN SYSTEMS FOR HEALTH SECURITY
- ALIGNS PUBLIC HEALTH NEEDS WITH OVERARCHING BUSINESS OBJECTIVES
- CENTRAL TOUCHPOINT FOR COMPANIES SEEKING TO CONTRIBUTE TO THE AIMS OF THE GHSA AND COORDINATE ITS EFFORTS TO PROMOTE GHSA
SEOUL MINISTERIAL HEALTH SECURITY PARTNERSHIP WITH NON-GOVERNMENTAL STAKEHOLDERS FORUM

• HOSTED BY THE GOVERNMENT OF SOUTH KOREA AND THE KOREA FOUNDATION FOR INTERNATIONAL HEALTH CARE (KOFIH)

• OVER 400 ATTENDEES

• GOAL: BRING TOGETHER BOTH GOVERNMENTAL AND NON-GOVERNMENTAL LEADERS TO MAKE BETTER STRATEGIES FOR ENHANCING GLOBAL HEALTH SECURITY, AND FORTIFYING PARTNERSHIPS AND COOPERATION
Summary from NextGen GHSA Network Breakout Session (Sep 07, 2015)

• Presentations given by Youngki Kim (Yonsei Univ), Sugy Choi (Seoul National Univ), and JM Ocampo (Georgetown Univ) on:
  • Background and recent updates RE: NextGen GHSA Network
  • Specific proposals for using NextGen Network:
    • Help with translations (e.g., translating ProMED articles)
    • Raise awareness of global health security concept in Korea
• Introductions and group discussion with attendees:
  • Why they are interested in GHS & ideas on how to move forward with this network
  • Important challenges identified, like: how to involve non-English speaking individuals
• Around 30 people participated in breakout session
GLOBAL HEALTH SECURITY AGENDA
CONSORTIUM MEETING
FEBRUARY 25, 2016

• U.S. Department of State Marshall Center
• Over 60 attendees
• Breakout sessions to discuss individual Working Group priorities and coordinate plans for 2016
• Next meeting in early July
GHS Agenda.org