Advancing the Global Health Security Agenda

Toward a world safe and secure from infectious disease threats

November 30, 2016

Beth Cameron, PhD

Senior Director for Global Health Security and Biodefense
National Security Council Staff
The White House

Note: This presentation draws from material and slides produced by Finland and other GHSA participants, as well as the U.S. Government
PREVENT FUTURE OUTBREAKS FROM BECOMING EPIDEMICS

THE GLOBAL HEALTH SECURITY AGENDA

“...We have to change our mindsets and start thinking about biological threats as the security threats that they are....”

President Barack Obama
September 26, 2014
Why do we need a Global Health Security Agenda?

- In today’s increasingly interconnected world we remain vulnerable.
- No one nation can achieve health security on its own.
- The vitality of the global economy is only as secure as the collective health of our people.

Ebola: 11,000+ people dead; over 28,000 infected.
- MERS in the Republic of Korea cost estimated in billions.
- 12 years ago SARS cost $30 billion in only 4 months.
- The anthrax attacks of 2001 infected 22 people, killed 5, and cost more than $1 billion to clean up.
- The 2009 H1N1 influenza pandemic killed 284,000 people in its first year alone.
- AIDS spread silently for decades.

INTERNATIONAL HEALTH REGULATIONS (2005)
- 70% non-compliance
- No map of clear gaps
Global Health Security Agenda: Vision

To attain a world safe and secure from global health threats posed by infectious diseases… whether natural, deliberate, or accidental

- Infectious disease epidemics pose not only a local health threat but also an international health security threat.

- National multi-sectoral 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.

- Engage the non-governmental sector in the effort.
GHSA: A global accelerator

- **Launched on February 13, 2014**
- **Transcends borders** in the fight against biological health threats
- A voluntary, country-driven five-year IHR and PVS accelerator

*Concrete commitment required*
Global Health Security Agenda

Prevent avoidable catastrophes

Detect threats early

Respond rapidly and effectively
Targets are Essential

Antimicrobial Resistance
Zoonotic Diseases
Biosafety/Biosecurity
Immunization

National Laboratory Systems
Surveillance
Reporting
Workforce Development

Emergency Operations Centers
Linking Public Health with Law Enforcement and Multisectoral Rapid Response
Medical Countermeasures and Personnel Deployment
Statement by the Chair of Global Health Security Agenda White House Event, September 26, 2014

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.
Country Commitments & Management

- 11 GHSA Targets, Action Packages
- G-7 collective commitment: 76 countries
- 10 country Steering Group (SG)
  - Chaired by Finland in 2015 (Troika model)
  - Chaired by Indonesia in 2016
  - Chaired by Republic of Korea in 2017
- Emphasis on cross-sectoral cooperation
- Non-governmental involvement


55 Country Partners

Argentina, Australia, Azerbaijan, Bangladesh, Canada, Chile, China, Colombia, Cote D’Ivoire, Denmark, Ethiopia, Finland, France, Georgia, Germany, Ghana, Guinea, Guinea-Bissau, India, Indonesia, Israel, Italy, Japan, Jordan, Kenya, Laos, Liberia, Malaysia, Mexico, Mongolia, the Netherlands, Norway, Pakistan, Peru, Portugal, the Republic of Korea, the Kingdom of Saudi Arabia, Senegal, Sierra Leone, Singapore, South Africa, Spain, Sweden, Switzerland, Tanzania, Thailand, Turkey, Uganda, Ukraine, United Arab Emirates, United Kingdom, United States, Vietnam, Yemen, and Zimbabwe

*Steering Group Countries
Health Security depends upon collaborations across all societal sectors

- Health
- Agriculture
- Development
- Environmental
- National security/defense
- Science/technology
- Academic/research communities
- Private sector
U.S. Efforts to advance GHSA, including Biosecurity

- **U.S. Centers for Disease Control and Prevention (CDC)**
  - All GHSA targets, including Workforce Development, biosurveillance, disease detection, Emergency Operations Centers, Biosafety and biosecurity

- **U.S. Agency for International Development (USAID)**
  - Many GHSA targets and Emerging Pandemic Threats Program, which focuses on zoonotic disease threats

- **U.S. Department of State: Biosecurity Engagement Program**
  - Biosecurity and Biosafety, Disease Surveillance, Collaborative Research

- **U.S. Department of Defense (DOD), Cooperative Biological Engagement**
  - Biosecurity, biosurveillance, detection, and reporting
  - Africa, South & Southeast Asia, East, Central Europe, and the Middle East

- **Federal Bureau of Investigation (FBI)**
  - Capacity building and linking public health with law enforcements in Southeast Asia; partnerships with Indonesia, Philippines, and Malaysia.

- **U.S. Department of Agriculture (USDA)**
  - Collaborative research toward new vaccines, diagnostics, and molecular epidemiology; biosafety and biosecurity
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.

31 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, Malaysia, Mali, Mozambique, Pakistan, Peru, Rwanda, Senegal, Sierra Leone, Tanzania, Thailand, Uganda, Ukraine, and Vietnam.

In addition, we plan to partner with the Caribbean Community (CARICOM) to strengthen regional capacity.
GHSA impact over 5 years
*Measuring Progress, Country Roadmaps*

**Prevent**
- Antimicrobial Resistance
- Zoonotic Disease
- Biosafety & Biosecurity Systems
- Immunization

**Detect**
- Laboratory Systems
- Real-Time Biosurveillance
- Rapid Reporting
- Workforce Development

**Respond**
- Emergency Operations Centers
- Multi-sectoral Response
- Medical Countermeasures and Personnel

2015 2016 2017 2018 2019
How do we get there?
3 Basic Steps

1. **Assess Gaps: Joint External Evaluations (JEE)**
   - GHSA Assessment tool (2015); WHO added other IHR elements (2016)
   - The GHSA targets were created to measure core capacities more specifically

2. **5-Year National Plan or “Roadmap” to achieve each target**
   - Partner with host country and other donors to develop a step-by-step plan with specific annual milestones to achieve each of the targets.

3. **Implement Roadmap, Re-assess**
   - Country capacity moves from **Red** → **Yellow** → **Green** over time
   - Host country and partners work together according to common country plan
Pilot GHSA assessments

Published at: GHSAgenda.org
Joint External Evaluations (JEE)  
What gets measured, gets done!

Prior to 2015: **Zero** IHR external assessments

Now: **22** completed; **~30** scheduled

Published on: GHSAgenda.org

**United States has published**
Joint External Evaluation: Biosecurity included

PURPOSE OF THE JOINT EXTERNAL EVALUATION

The Joint External Evaluation Tool - International Health Regulations (2005) is intended to assess country capacity to prevent, detect, and rapidly respond to public health threats independently of whether they are naturally occurring, deliberate, or accidental. The purpose of the external evaluation process is to measure country specific status and progress in achieving the targets. This will require a sustainable and flexible process to allow for additional countries and regular evaluation visits. The first time the external evaluation is conducted, it will establish a baseline measurement of the country’s capacity and capabilities. Subsequent evaluations are necessary to identify progress made and ensure any improvements in capacity are sustained.
<table>
<thead>
<tr>
<th>Score</th>
<th>Indicators - Biosafety and Biosecurity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P.6.1 Whole-of-government biosafety and biosecurity system is in place for human, animal, and agriculture facilities</td>
</tr>
<tr>
<td>No Capacity - 1</td>
<td>No elements of a comprehensive national biosafety and biosecurity system are in place</td>
</tr>
<tr>
<td>Limited Capacity - 2</td>
<td>Some, but not all, elements of a comprehensive biosafety and biosecurity system are in place; country is:</td>
</tr>
<tr>
<td></td>
<td>Starting the process to monitor and develop an updated record and inventory of pathogens within facilities that store or process dangerous pathogens and toxins and what they house</td>
</tr>
<tr>
<td></td>
<td>Developing, but has not finalized, comprehensive national biosafety and biosecurity legislation</td>
</tr>
<tr>
<td></td>
<td>Developing laboratory licensing</td>
</tr>
<tr>
<td></td>
<td>Developing pathogen control measures, including standards for physical containment and operational handling and failure reporting systems</td>
</tr>
<tr>
<td></td>
<td>Not consolidating dangerous pathogens and toxins into a minimum number of facilities</td>
</tr>
<tr>
<td></td>
<td>Not employing diagnostics that preclude culturing dangerous pathogens</td>
</tr>
<tr>
<td></td>
<td>Not implementing oversight monitoring and enforcement mechanisms</td>
</tr>
<tr>
<td>Developed Capacity - 3</td>
<td>Comprehensive national biosafety and biosecurity system is being developed; country is:</td>
</tr>
<tr>
<td></td>
<td>Finalizing the process to support the active monitoring and maintaining of up-to-date records and pathogen inventories within facilities that store or process dangerous pathogens and toxins</td>
</tr>
<tr>
<td></td>
<td>Finalizing the development and implementation of comprehensive national biosafety and biosecurity legislation</td>
</tr>
<tr>
<td></td>
<td>Finalizing the development and implementation of laboratory licensing</td>
</tr>
<tr>
<td></td>
<td>Finalizing the development and implementation of pathogen control measures, including standards for physical containment and operational handling, and containment failure reporting systems</td>
</tr>
<tr>
<td></td>
<td>Starting the consolidation of dangerous pathogens and toxins into a minimum number of facilities</td>
</tr>
<tr>
<td></td>
<td>Starting to put into place tools and resources to support diagnostics that preclude culturing dangerous pathogens</td>
</tr>
<tr>
<td></td>
<td>Starting to put into place oversight monitoring and enforcement mechanisms</td>
</tr>
<tr>
<td>Country has a training program in place with common curriculum; has begun implementation:</td>
<td></td>
</tr>
<tr>
<td>Country has a training program in place at most facilities housing or working with dangerous pathogens and toxins</td>
<td></td>
</tr>
<tr>
<td>Training on biosafety and biosecurity has been provided to staff at some, but not all, facilities that maintain or work with dangerous pathogens and toxins</td>
<td></td>
</tr>
<tr>
<td>Country is developing, or has not yet implemented, a train-the-trainers program for biosafety</td>
<td></td>
</tr>
<tr>
<td>Country is developing sustained academic training for those who maintain or work with dangerous pathogens and toxins</td>
<td></td>
</tr>
</tbody>
</table>
## Example: 5-Year National Plan

### GHSA Goal
Prevent Avoidable Epidemics

### GHSA Objective
Promoting national biosafety and biosecurity systems.

### GHSA 5-Year 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.

### 5-Year Goal: National biosafety and biosecurity system strengthened to ensure that dangerous pathogens are identified, held, transferred, secured and monitored in a minimal number of facilities according to best practices.

<table>
<thead>
<tr>
<th>Key Milestones</th>
<th>Responsible Vietnam Government Body</th>
<th>International Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• A comprehensive understanding of biosafety and biosecurity (BSS) management system and leverage points of relevant government agencies obtained</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Biosafety and bio-risk management capacity strengthened at national level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Assessment of current BSS research, practices and teaching methods at academic institutes of human and animal medicines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• A national BSS framework drafted to secure and consolidate collections of dangerous pathogens and their associated research at a minimum number of secure facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MARD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOD / MONRE / MOST</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USAID</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DoD CTR / CBEP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Institutes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WHO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USAID / OHW</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Year 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Collaborative revision/upgrade of BSS regulations and guidelines aligned with WHO/OIE standards and core competencies required</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• A national BSS framework piloted to secure and consolidate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MARD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOD / MONRE / MOST</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USAID</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DoD CTR / CBEP</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

Global Health Security Roadmap
Unique Moment in Time...

1. Afghanistan
2. Antigua and Barbuda
3. Bahamas
4. Bangladesh
5. Barbados
6. Belize
7. Benin
8. Brazil
9. Burkina Faso
10. Burundi
11. Cambodia
12. Cameroon
13. CARICOM (regional)
14. Central African Republic
15. Chad
16. Cote D'Ivoire
17. Democratic Republic of Congo
18. Dominica
19. Dominican Republic
20. East African Community (regional)
21. Ecowas (regional)
22. Egypt
23. Ethiopia
24. Gabon
25. Gambia
26. Georgia
27. Ghana
28. Grenada
29. Guinea
30. Guinea-Bissau
31. Guyana
32. Haiti
33. India
34. Indonesia
35. Jordan
36. Kazakhstan
37. Kenya
38. Kosovo
39. Kyrgyzstan
40. Laos
41. Liberia
42. Libya
43. Madagascar
44. Malaysia
45. Malawi
46. Mali
47. Mauritania
48. Mozambique
49. Myanmar
50. Nepal
51. Niger
52. Nigeria
53. Pakistan
54. Palestinian Authority
55. Peru
56. Phillipines
57. Rwanda
58. Senegal
59. Sierra Leone
60. Somalia
61. South Sudan
62. Sudan
63. Suriname
64. Tajikistan
65. Tanzania
66. Thailand
67. Togo
68. Trinidad and Tobago
69. Tunisia
70. Uganda
71. Ukraine
72. Uzbekistan
73. Vietnam
74. Yemen
75. Zambia
76. Zimbabwe
Leaders: Commitment

- **2015 Africa visit**: announced 17 priority countries; $1B
- **ROK**: President Park hosted second GHSA high level event, Able Response bio preparedness exercise; $100M/13 country commitment
- **Indonesia**: 2016 GHSA Chair
- **Pakistan**: Among first countries to complete the Joint External Evaluation
- **Nordic Leaders**: Committed to assist 10 countries
- **Ukraine**: Published assessment; 5-year roadmap with GP under development
- **India**: 5-year national plan
- **Argentina**: Committed to join GHSA and publish a Joint External Evaluation
- **China**: Encouraged countries to undergo JEE
- **ASEAN**: All Leaders committed to JEE
- **Laos**: Committed to GHSA and JEE
Executive Order: Advancing the GHSA
November 4, 2016

• Establishes a senior level policy coordination mechanism within the United States for the GHSA initiative; defines specific roles and responsibilities for participating agencies.

• Advances U.S. ability to implement the GHSA, including a commitment to regularly undergo.

• Furthers U.S. capacity to partner with new sectors to address epidemic threats and to leverage U.S. leadership to synchronize assistance across health systems.

“The Executive Order will save lives by further leveraging the full power and leadership of the United States Government and is an important step toward a safer, more resilient future.”

--National Security Advisor Susan E. Rice
Non-Governmental Engagement

• GHSA Consortium
• GHSA Private Sector Roundtable
• GHSA NextGen Leaders
• Alliance for Joint External Evaluations
• **Be Bold**: Make targeted investments in West Africa and other vulnerable nations to establish all needed capacity to prevent, detect and rapidly respond to outbreaks – before they become epidemics.

• **What Gets Measured Gets done**: Implement Joint External Evaluations and fill identified gaps, building on GHSA pilot assessment experience.

• **Invest in the Future**: expand the Next Generation Global Health Security Leaders program.

• **Synchronize Approaches**: Map and share governmental and non-governmental efforts across the GHSA, including best practices, country plans, and assessments.

• **Expand Regional GHS Leadership**: Support African Union to create an African CDC; Real-time, interoperable biosurveillance networks

“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.”

--Former Secretary Sebelius, Secretary Kerry, and Assistant to the President Lisa Monaco, February 2014
“Together, our countries have made over 100 commitments...And now, we’ve got to turn those commitments into concrete action – starting in West Africa. We’ve got to make sure we never see a tragedy on this scale again...”

President Barack Obama
September 26, 2014
For More Information

GHSAgenda.org