

# Infectious Disease Border Issues Conference – Meeting Synopsis

April 2012

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REPORT NUMBER:



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## Report Documentation Page

*Form Approved*  
*OMB No. 0704-0188*

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|   |                                    |   |                            |   |                                 |
|---|------------------------------------|---|----------------------------|---|---------------------------------|
| 1. REPORT DATE<br><b>03 APR 2012</b>  |                                    | 2. REPORT TYPE<br><b>Meeting synopsis</b> |                            | 3. DATES COVERED<br><b>19-06-2011 to 21-06-2011</b> |                                 |
| 4. TITLE AND SUBTITLE<br><b>Infectious Disease Border Issues Conference Meeting Synopsis</b>  |                                    |   |                            | 5a. CONTRACT NUMBER                                 |                                 |
|   |                                    |   |                            | 5b. GRANT NUMBER                                    |                                 |
|   |                                    |   |                            | 5c. PROGRAM ELEMENT NUMBER                          |                                 |
| 6. AUTHOR(S)<br><b>Priya Baliga; Annette Von Thun</b>   |                                    |   |                            | 5d. PROJECT NUMBER                                  |                                 |
|   |                                    |   |                            | 5e. TASK NUMBER                                     |                                 |
|   |                                    |   |                            | 5f. WORK UNIT NUMBER                                |                                 |
| 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)<br><b>Armed Forces Health Surveillance Center, 11800 Tech Road Suite 220, Silver Spring, MD, 20904</b>   |                                    |   |                            | 8. PERFORMING ORGANIZATION REPORT NUMBER            |                                 |
| 9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)<br><b>Armed Forces Health Surveillance Center, 11800 Tech Road Suite 220, Silver Spring, MD, 20904</b>  |                                    |   |                            | 10. SPONSOR/MONITOR'S ACRONYM(S)<br><b>AFHSC</b>    |                                 |
|   |                                    |   |                            | 11. SPONSOR/MONITOR'S REPORT NUMBER(S)              |                                 |
| 12. DISTRIBUTION/AVAILABILITY STATEMENT<br><b>Approved for public release; distribution unlimited</b>   |                                    |   |                            |   |                                 |
| 13. SUPPLEMENTARY NOTES   |                                    |   |                            |   |                                 |
| 14. ABSTRACT<br><b>In June 2011, the United States Central Command (USCENTCOM), with support from the Armed Forces Health Surveillance Center (AFHSC) and the Center for Disaster and Humanitarian Assistance Medicine (CDHAM) sponsored a conference addressing Infectious Disease Border Issues. The conference was hosted by the Royal Medical Service (RMS) in Amman, Jordan.</b> |                                    |   |                            |   |                                 |
| 15. SUBJECT TERMS<br><b>infectious disease, border, centcom, jordan</b>   |                                    |   |                            |   |                                 |
| 16. SECURITY CLASSIFICATION OF:   |                                    |   | 17. LIMITATION OF ABSTRACT | 18. NUMBER OF PAGES                                 | 19a. NAME OF RESPONSIBLE PERSON |
| a. REPORT<br><b>unclassified</b>  | b. ABSTRACT<br><b>unclassified</b> | c. THIS PAGE<br><b>unclassified</b>       |                            |   |                                 |



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## Executive Summary

In June 2011, the United States Central Command (USCENTCOM), with support from the Armed Forces Health Surveillance Center (AFHSC) and the Center for Disaster and Humanitarian Assistance Medicine (CDHAM) sponsored a conference addressing Infectious Disease Border Issues. The conference was hosted by the Royal Medical Service (RMS) in Amman, Jordan.

A request was made by the RMS for additional training in support of the bilateral exercise Eager Lion (EL). EL was a Jordanian Armed Forces full spectrum exercise centered on potential missions in support of global contingency operations. It was a 10-day event composed of field exercises, command post exercises and cooperative defense workshops/conferences. The Jordanian planners identified the need for a conference to exchange information with respect to border and pandemic issues which arise at national boundaries to prepare, contain, and mitigate the spread of disease.

The workshop was designed for mid- to senior level professionals who were actively involved in Jordan's public health and pandemic preparedness efforts in ensuring the integrity of national borders. The primary objective was to strengthen inter-ministerial level relationships between essential policy makers and share priorities, successes, and challenges in preparedness and mitigation capabilities directed at pandemic influenza, emerging infectious diseases and other public health emergencies.

The Infectious Disease Border Issues Conference aimed to:

- a) Conduct information exchange with Jordan on medical response to infectious diseases;
- b) Build capacity to defend, operate, or maintain essential health and government functions in a pandemic/infectious disease environment; and
- c) Enhance inter-ministerial emergency response coordination mechanisms.

Of note, 93% of participants evaluating the conference agreed that the workshop clearly met these goals and objectives.

The conference was attended by 82 participants from Jordan and the United States. The majority of participants were military officers from the RMS Jordan. Other organizations represented included Jordan's Ministry of Health, Ministry of Interior, Public Security Directorate, Customs Department, Civil Defense Agency, Food and Drug Administration, local hospitals and universities, as well as USCENTCOM, AFHSC, CDHAM, World Health Organization, U.S. Department of Homeland Security, and U.S. Defense Threat Reduction Agency.

The three-day workshop was organized into three main themes: Infectious Disease Containment and Surveillance, Border Issues and Quarantine, and Medical Reporting and Information

Sharing. Didactic lectures each morning provided background in topics covered by the table top exercise (TTX) execution each afternoon. Many participants praised the excellent discussion provided by the TTX, which allowed participants to deliberate the scenarios in interdisciplinary groups and exchange thoughts and ideas regarding infectious disease border issues. Participants expressed that the TTX was the most valuable aspect of the conference for the participants. The RMS Jordan expressed great interest in continuing this collaboration with USCENTCOM for similar future conferences, perhaps expanding to a multi-lateral event involving other countries from the USCENTCOM region.

## **Infectious Disease Containment and Surveillance**

Dr. Hashim Elmoussaad, World Health Organization (WHO) presented on ***Cross Border Infections in the Eastern Mediterranean Region Office (EMRO) and Challenges Facing Prevention and Control***. Dr. Elmoussaad provided several examples of infectious disease outbreaks in the EMRO, including Rift Valley Fever, poliomyelitis, influenza, and methicillin-resistant *Staphylococcus aureus* (MRSA). Operation MECACAR 1998 was highlighted as a successful example of cross-border coordination. Operation MECACAR was an unprecedented coordinated polio eradication effort across 18 countries in the Mediterranean, Caucasus and Central Asia regions, which achieved 92% coverage, reached up to 60 million children for vaccination, and ultimately interrupted transmission of wild poliovirus in large geographic areas. Dr. Elmoussaad also discussed disease transmission across national boundaries, illustrating several gaps and providing several suggestions for improvement. The absence of policies, lack of information exchange between human and veterinary public health officials (no joint training courses, no joint public health investigation teams) and illegal animal transportation across borders were identified as some of the existing gaps in infectious disease containment. He suggested developing a system for cross-border epidemic warnings; having common criteria for ensuring cross-border alerts, risk assessment procedures and concerted response; and supporting regular meetings between local disease control officers posted at borders. WHO's role was highlighted for their efforts in strengthening cross-border activities in the region, which includes advocacy, providing technical support to member countries, and mobilizing resources. In addition to strengthening health services, WHO hopes to focus on developing an adequate educational plan at border sites.

MAJ (Dr.) Ronald L. Burke, Head, Respiratory Disease Surveillance, AFHSC presented a lecture on ***Medical Surveillance: Collecting and Accumulating Data for Public Health Action***. MAJ Burke addressed aspects of medical surveillance: assessing public health status, defining public health priorities, monitoring trends of disease including detection of epidemics or outbreaks, evaluating public programs and policies, and providing a basis for epidemiologic research.

MAJ Burke also reviewed various types of surveillance. Passive surveillance, which is provider initiated but may not be representative or timely, is most beneficial to establish trends. Active surveillance is usually used during outbreaks or specific investigations for brief periods of time due to the huge amount of resources required. Sentinel surveillance is based on selected population samples chosen to represent the relevant experience of particular groups, and is used to monitor key health events through sentinel sites such as hospitals or clinics. Population-based surveillance pertains to a general population defined by geographical boundaries. This type of surveillance has the increased potential for detecting rare diseases, but can be expensive. Syndromic surveillance, which clusters data into broad groups based on syndromes or symptoms, was discussed. Sources for this type of data could originate from emergency room visits, outpatient clinics, pharmacy sales, ambulance trip logs, etc. Strengths include providing an early indication of outbreaks. However, limitations include variable data accuracy and completeness, and sensitive but non-specific data. MAJ Burke concluded by summarizing that all surveillance systems have trade-offs and that coordination of surveillance systems for animal and human health, as well as integration of infectious and non-communicable disease surveillance are also important factors for a successful surveillance system.

## **Border Issues and Quarantine**

Ms. Sharon I. Peyus (National Incident Response Unit, U.S. Immigration and Customs Enforcement, Department of Homeland Security) and Mr. Robert C. Hutchinson (Assistant Special Agent in Charge, U.S. Immigration and Customs Enforcement, Department of Homeland Security) started Day 2 of the workshop with a lecture on *Options for Preventing Disease Transmission at Borders*, which described two national strategy models: containment and resilience. They discussed issues for consideration with each option, and then provided a practical example of disease transmission at a border with lessons learned from an airport simulation exercise. The main principle of the containment model is interrupting or slowing perceived threats across borders. This model has several challenges, which include human and civil rights considerations, trade and economic impacts, as well as possible impracticality of implementation. The resilience model includes acceptance of entry into the country and adapting to the consequences. This model has its own challenges because it requires clear explanation of public responsibilities and governmental capabilities for preparedness and response, identification of critical infrastructure, information sharing and planning, and good leadership.

Ms. Peyus and Mr. Hutchinson shared lessons learned from a recent airport simulation exercise conducted at the Miami airport. Their exercise scenario involved suspicious symptoms reported on an inbound international flight. The airport used thermal imaging for passengers, and several symptomatic passengers were referred for additional screening. This exercise demonstrated to the airport personnel that screening could work with sufficient staff. However, it was recognized that this process would be quickly overwhelmed if more than one plane required screening. The response also depended on staffing at full capacity, and did not take into account reduced staffing

due to illness or health concerns. Finally, the Miami team found that containment of passengers was a significant challenge particularly when moving people and separating families.

During the robust discussion on containment vs. resilience, the two posed crisis operations questions, such as what is the breaking point, what would be the health risks to those quarantined, and what are the consequences if the public declines to obey quarantine orders. They urged participants to take the momentum of this conference and turn it into a common vision by moving the concept of resilience from its “buzz word” status to operational. Resilience is longer an abstraction, but a shared vision that should drive decisions on government priorities and resources in order to create a truly resilient nation.

The speakers concluded by highlighting three major difficulties in preventing disease transmission at borders. First, previous pandemic threats have proven difficult to control in our global economy. Second, the speed and ease of travel today often reduces the ability to identify and mitigate health threats. Finally, many social, economic and political considerations can affect or reduce policy and strategy options for diminishing disease transmission at borders.

Mr. Hutchinson and Ms. Peyus also presented on *Steady State Resources versus Crisis Resources for Border Containment*. They discussed options for steady state operations: developing strategic and operational plans and enhancing capabilities in medical surge; mass fatality management, isolation and quarantine; epidemiology and surveillance; public awareness and prevention; preventive hygienic practices; and continuity of operations. They stressed assessing border facilities, medical resources (such as antiviral medication and personal protective equipment), domestic and international agreements and cooperation, and applying a risk management framework for steady state operations. For crisis resources, considerations need to be made for: enhancing (through planning and preparedness) current authorities’ agreements and resources; establishing realistic goals and expectations to respond with differing resource levels; training to prepare personnel to execute strategies and plans; conducting exercises to evaluate readiness and permit improvements and enhancements; and strategizing to match responsibilities with resource capabilities.

Mr. Hutchinson and Ms. Peyus continued the border issues theme of the day with their next lecture, *Border Security/Port Security Issues: How Long Can Crisis Operations be Sustained?* They discussed sustaining efforts through communication and collaboration, information sharing, the use of the military, surge capacity and a unified capabilities approach and multi-jurisdictional planning. Three types of border interventions were examined: 1) a risk-based approach, 2) limited border closure, and 3) complete border closure. A risk-based approach includes layered border measures such as: flight restrictions from an affected region; exit screening from affected countries; health screening of travelers en route and upon arrival; screening at borders to allow for continued movement of passengers and goods; public health guidance; identification of persons with symptoms of illness; and questions about recent travel and thermal screening. Limited border closure involves preservation of cargo flow, and screening



according to a layered approach, such as control of cargo transporters, but full closure to all others. In addition to high costs, limited border closures are resource and personnel intensive missions. Complete border closure is the prohibition of all movement of people and cargo across borders, at and between ports of entry. Complete border closure involves surveillance; interdiction and apprehension of individuals attempting to cross the border; detention and/or removal of apprehended individuals; and constant cooperation and coordination between national agencies. This measure is not only resource intensive, with high associated costs, but will also result in diminished revenue due to lost fees, duties and tariffs, and will likely result in promoting an environment of panic and fear. The most viable solution is a risk-based approach, due to its flexibility, operational feasibility, and ability to slow the spread of a pandemic by identifying persons and cargo that could potentially be infected. Living with the risk-based approach includes continuing to make preparations for a worst-case scenario, keeping preparations flexible and sustainable, not over-committing resources, focusing on adaptable plans, and engaging with all stakeholders through a whole of community methodology.

LTC (Dr.) Gregory Kimm (USCENTCOM) closed the didactic portion of Day 2 with his lecture on *Refugee and Internally Displaced Populations (IDP): Special Considerations to Slow the Spread of a Disease Outbreak*. This presentation addressed the various risk factors associated with camps and standard precautions necessary to prevent the spread of infections. Refugee and IDP camps are particularly vulnerable to disease spread because of overcrowding, poor access to basic health services, limited access to hospitals for supportive care and treatment of complications, high prevalence of malnutrition, and the high prevalence of other communicable diseases such as malaria, diarrheal diseases, and acute respiratory illnesses. There are often logistical challenges resulting from remote location of the camps, ongoing active conflict, a lack of adequate surveillance or early warning systems to detect outbreaks, poor links to national disease surveillance systems, possible exclusion from national preparedness and response activities, and lack of trained or equipped staff to investigate outbreaks and manage ill individuals. Standard precautions to prevent the person-to-person spread of infection include: hand washing, use of latex or other protective gloves, masks, eye protection or face shields, gowns, proper handling of soiled patient care equipment, proper environmental cleaning, minimal handling of soiled linen, proper disposal of needles and other sharp equipment, and placing patients who cannot maintain appropriate cleanliness in a private room. LTC Kimm concluded his lecture with the message that effective control measures decrease impact on the healthcare system, and reduce the economic, political and social burdens while allowing time for vaccine development and production.

## Medical Reporting and Information Sharing

MAJ Burke began the final day of the conference with a lecture titled, *Medical Reporting: Keeping Governments and Health Organizations Informed* in which he reviewed the WHO IHR (2005) reporting mandate and discussed the public health emergency of international concern (PHEIC). MAJ Burke addressed the four main questions to determine if an event constitutes a PHEIC:

- 1) Is the public health impact serious? (i.e. large number of cases or deaths, potential for high impact, or events where external assistance is required)
- 2) Is the event unusual or unexpected?
- 3) Is there significant risk of international spread? (i.e. epidemiological link to a similar event in another state or potential for cross-border movement)
- 4) Is there a significant risk of international travel or trade restrictions? (i.e. previous history, contaminated goods, or events associated with gathering or tourism)

After reviewing when to report, MAJ Burke provided examples of reporting forms and discussed different models of electronic reporting systems, such as the Suite for Automated Global Electronic bioSurveillance (SAGES) and the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE).

Dr. Elmoussaad continued the theme with his lecture *Who Can Be Trusted to Provide the Best Information in a Crisis, and Who Cannot?* Dr. Elmoussaad discussed various stakeholders or sources of information and analyzed their reliability in a crisis. He also addressed the use of social media as an information source during a crisis, which he appraised as a relevant source to gain a perspective of pertinent issues but of low reliability. He stressed the importance of recognizing information gaps or inaccuracies in data sources and using of unconventional or innovative methods of information sources in pandemic situations.

Ms. Peyus and Mr. Hutchinson concluded the didactic portion of Day 3 with their lecture on *Diplomatic Agreements and Resources*. The speakers emphasized the importance of international organizations such as the WHO for international coordination during pandemic threats through preparedness, planning, surveillance, and response while linking the points made from their previous lectures regarding containment vs. resilience. With regards to the WHO, they highlighted aspects of the IHR (2005) Areas of Work (2007), including fostering global partnerships; strengthening public health security in travel and transport; improving the WHO global alert and response systems; strengthening management of specific risks; sustaining rights, obligations and procedures; and conducting studies to monitor progress. They also discussed the United Nation's global health and foreign policy, and its clear role in supporting responses to urgent health-related and non-health related problems that have an effect on national and global health.

## **Tabletop Exercise: National Pandemic Response**

The Infectious Disease Border Issues Conference Tabletop Exercise (TTX) was designed to examine issues associated with response to a global influenza pandemic. LTC Kimm introduced the TTX goals and objectives. LTC Kimm introduced the initial scenario, modeled after the current world situation, and set the stage for the pandemic exercise.

Each afternoon of the conference, facilitators broke up the participants into two groups to discuss each of the four scenarios and the issues that accompanied each scenario. After the breakout sessions, groups returned to convey the most poignant topics discussed.

### **Exercise Objectives and Expected Outcomes**

The objectives of the TTX were to:

- Examine, discuss and exercise select portions of the draft Jordan National Response Plan and associated Ministry of Health medical plans;
- Conduct information exchange with Jordan on medical response to infectious diseases;
- Build capacity to defend, operate, or maintain essential health and government functions in a pandemic/infectious disease environment; and
- Enhance inter-ministerial emergency response coordination mechanisms.

Expected outcomes of the exercise were for participants to:

- Gain a deeper understanding of the challenges that are likely to arise in a pandemic;
- Gain a deeper understanding of pandemic planning requirements;
- Identify existing gaps in readiness to conduct operations during a pandemic; and
- Identify opportunities for improving national and regional coordination mechanisms.

### **TTX Discussion and Lessons Learned**

During the TTX in Amman, facilitators noted that the Jordanians have an established and clear-cut national pandemic response plan. However, this plan has not been previously exercised in a formal setting.

The Jordanian national pandemic response plan adopts an all-hazards approach to disaster management. The plan's design leverages overarching pillars and adaptive planning according to the needs of a specific disaster or public health event. Each governmental organization has created its own strategy that fits within the overarching national plan, which are executed in times of need. However, these plans were noted to have gaps which, if not addressed, will create challenges in successful implementation and execution of the current national plan.

An identified example of the potential shortcomings was the handling of corpses in a mass casualty event. Would group burial or cremation be culturally acceptable? Does Jordan have the

capacity in its cemeteries and burial grounds to handle a mass casualty event? These questions were novel and had yet to be deliberated thoroughly.

Another potential concern included contingencies for the absenteeism of the worried-well in a pandemic situation. It was apparent that there was a plan for ill healthcare workers in the RMS. Shifts would increase from 8 to 12 hours and retired medical personnel would be called upon to increase capacity for an influx of patients. However, it was uncertain if the national plan compensated for the absenteeism of non-affected healthcare workers.

The Jordanians had commendable communication plans – between governmental organizations as well as with the media. In the case of pandemic influenza, the participants discussed how all governmental organizations need to be involved, not just those related to the medical field. They emphasized clear communication and unification between agencies, neighboring countries, and international organizations as essential in achieving successful coordination during a crisis. Communication was valued as a critical tool for promoting border security, increasing information flow, and obtaining international aid.

The Jordanian participants recognized that effective media relations required one representative from the Ministry of Health who would be responsible for informing the media throughout each stage of the pandemic. The effective, strategic communication between the government and media was considered crucial in building trust between the government and the public and minimizing panic that may arise.

A post-pandemic recovery plan was also discussed, although it was unclear whether this was a part of their national plan or a separate entity. For post-pandemic recovery, participants noted they would continue surveillance and case reporting on a weekly basis; vaccinate the population once a vaccine became available (focusing first efforts on vital employees such as healthcare workers, government officials, and first responders); prioritize distribution of non-medical key resources such as water, food, fuel, and electricity; request international organizations for financial and logistical assistance; coordinate with donor countries to obtain supplies; and finally, identify gaps in the previous after-crisis plan to begin developing a new and improved pandemic response plan.

## **Conclusion and Way Forward**

The *Infectious Disease Border Issues Conference* was organized by the Armed Forces Health Surveillance Center, the Center for Disaster and Humanitarian Assistance Medicine, and the United States Central Command, and hosted in Amman, Jordan by the Jordan Royal Medical

Service. It included a series of lectures on topics of infectious disease containment and surveillance, border issues and quarantine, medical reporting and information sharing. It also included a tabletop exercise on national pandemic response, tailored to the Hashemite Kingdom of Jordan.

Facilitators were able to help the Jordan RMS identify gaps in their national pandemic response plan, but it was recognized that many participants were not familiar on the specifics of the plan itself. Next steps in the US/Jordan collaboration may involve a more thorough review of the plan itself, as well as revisiting a tabletop exercise with the plan physically in hand to identify serious gaps or oversights. It would be beneficial for Jordan to test the performance of their response plan in a simulation exercise at a border or international airport.

The consensus expressed by participants was that the TTX was the most valuable aspect of the conference. The RMS expressed great interest in continuing this collaboration with USCENTCOM for similar future conferences, perhaps expanding to a multi-lateral event including other countries from the USCENTCOM region.

## **Acknowledgements**

The authors would like to thank the following individuals for their presentations, TTX facilitations and contributions to the *Infectious Disease Border Issues Conference* and this report:

Jordan Royal Medical Services

Lt Col (Dr.) Awni Abulail

Center for Disaster and Humanitarian Assistance Medicine: <http://www.cdham.org>

CDR Carlos Williams

Dr. Charles Beadling

Ms. Brittany Tang-Sundquist

Ms. Faith Cooper

Department of Homeland Security: <http://www.ice.gov/>

Ms. Sharon I. Peyus

Mr. Robert C. Hutchinson

Armed Forces Health Surveillance Center: <http://www.afhsc.mil/home>

CAPT Kevin Russell

COL Robert Lipnick

MAJ Ronald Burke

United States Central Command: <http://www.centcom.mil/>

LTC Gregory Kimm

Capt Issam Sebaihi

World Health Organization: <http://www.emro.who.int/jordan/>

Mr. Hashim Elmousaad

**APPENDIX A**  
**Conference Agenda**

*Sunday, June 19, 2011*

- 7:30 a.m. – 8:30 a.m.      Registration**
- 8:30 a.m. – 9:00 a.m.      Opening Remarks**  
*LTC Gregory Kimm, US Central Command, (USCENTCOM)*  
*MAJ Ron Burke, Armed Forces Health Surveillance Center (AFHSC)*  
*Major General Dr. Abdel-Latif A. Woreikat, Jordan Royal Medical Services*
- 9:00 a.m. – 9:45 a.m.      Break and Group Photo**
- 9:45 a.m. – 10:00 a.m.      Welcome**  
*Capt Issam Sebaihi, USCENTCOM*
- 10:00 a.m. – 10:30 a.m.      Cross Containment of Infectious Disease in EMR**  
*Dr. Hashim Elmousaad, World Health Organization (WHO)*
- 10:30 a.m. – 11:00 a.m.      Medical Surveillance and Data Accumulation**  
*MAJ Ron Burke, Armed Forces Health Surveillance Center (AFHSC)*
- 11:00 a.m. – 11:30 a.m.      Question / Answer / Discussion**
- 11:30 a.m. – 12:30 p.m.      Lunch**
- 12:30 p.m. – 2:00 p.m.      TTX Phase I – Predictive Analysis of a Likely Viral and What Steady State Planning Should Occur: Planning for National Security and the Costs of an Infected Workforce**  
*LTC Gregory Kimm, USCENTCOM - Lead Facilitator*
- 2:00 p.m. – 3:00 p.m.      Group Back Brief and Discussion**
- 3:00 p.m. – 5:00 p.m.      Networking Social**

***Monday, June 20, 2011***

- 8:30 a.m. – 9:00 a.m. Options for Preventing Disease Transmission at Border: What Works and What Does Not***  
*Sharon I. Peyus, DHS*
- 9:00 a.m. – 9:30 a.m. Steady State Resources versus Crisis Resources for Border Containment***  
*Robert C. Hutchinson, DHS*
- 9:30 a.m. – 10:00 a.m. Question / Answer / Discussion***
- 10:00 a.m. – 10:30 a.m. Break***
- 10:30 a.m. – 11:00 a.m. Border Security/Port Security Issues – How Long Can Crisis Operations be Sustained?***  
*Sharon I. Peyus, DHS*
- 11:00 a.m. – 11:30 a.m. Quarantines, Refugee Camps, and VIPs – Special Considerations to Slow the Spread of Disease***  
*LTC Gregory Kimm, USCENTCOM*
- 11:30 a.m. – 12:00 Noon Question / Answer / Discussion***
- 12:00 Noon – 1:00 p.m. Lunch***
- 1:00 p.m. – 2:00 p.m. TTX Phase II – Mutual Assistance Pacts, Hostile and Unsecured Borders, Livestock, Refugees and Cargo***  
*LTC Gregory Kimm, USCENTCOM - Lead Facilitator*
- 2:00 p.m. – 3:00 p.m. Group Back Brief and Discussion***

***Adjourn***



***Tuesday, June 21, 2011***

- 8:00 a.m. – 8:30 a.m.      Administrative Remarks***  
*AFHSC/CDHAM Team*
- 8:30 a.m. – 9:00 a.m.      Medical Reporting – Keeping Governments and Health Organizations Informed***  
*MAJ Ron Burke, AFHSC*
- 9:00 a.m. – 9:30 a.m.      Who Can Be Trusted to Provide the Best Information in a Crisis, and Who Cannot?***  
*Dr. Hashim Elmoussaad, WHO*
- 9:30 a.m. – 10:00 a.m.      Question / Answer and Discussion***
- 10:00 a.m. – 10:30 a.m.      Break***
- 10:30 a.m. – 11:00 a.m.      Diplomatic Agreements and Resources versus Crisis Resources for Border Containment***  
*Robert C. Hutchinson, DHS*
- 11:00 a.m. – 12:00 Noon      TTX Phase III – The Return to Steady State Operations and Reconstitution***  
*LTC Gregory Kimm, USCENTCOM - Lead Facilitator*
- 12:00 Noon – 1:00 p.m.      Lunch***
- 1:00 p.m. – 2:00 p.m.      Back Brief and Discussion***
- 2:00 p.m. – 3:00 p.m.      Closing Remarks and Certificate Distribution***
- Adjourn***

**APPENDIX B**  
**National Pandemic Response Tabletop Exercise**

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**Exercise Introduction**

**Beginning Situation**

**Session 1 (Scenario and Issues)**

**Session 2 (Scenario and Issues)**

**Session 3 (Scenario and Issues)**

**Session 4 (Scenario and Issues)**

*Infectious Disease Border Issues Conference (IDBIC)*

*Tabletop Exercise*

*Welcome!*

This tabletop exercise is designed to examine the issues associated with a response to a global influenza pandemic by the national government of the Hashemite Kingdom of Jordan, other national governments, non-governmental organizations, medical institutions and international/regional organizations. Participants include organizational leaders who are likely to have a significant role in pandemic response operations. The purpose, objectives and expected outcomes of this exercise are:

***OBJECTIVES:***

*The overall conference objectives are:*

- Examine, discuss, and exercise select portions of the draft Jordan National Response Plan and associated Ministry of Health medical plans;
- Conduct U.S. information exchange with Jordan on medical response to infectious diseases;
- Build capacity to defend, operate, or maintain essential health and government functions in a pandemic/infectious disease environment;
- Enhance inter-ministerial emergency response coordination mechanisms.

***EXPECTED EXERCISE OUTCOMES:***

*Exercise participants will:*

- Gain a deeper understanding of the challenges that are likely to arise in a pandemic.
- Gain a deeper understanding of pandemic planning requirements.
- Identify existing gaps in readiness to conduct operations during a pandemic.
- Identify opportunities for improving national and regional coordination mechanisms.

We understand your time is valuable and we sincerely appreciate your participation in this national exercise.

*Infectious Disease Border Issues Conference (IDBIC)*  
*Tabletop Exercise*

**BEGINNING SITUATION:**

Current World Situation (Actual)

- Current phase of alert in accordance with the WHO Global Influenza Preparedness Plan (Avian influenza A, H5N1)<sup>1</sup>
- Limited occurrence of Influenza A H5N1 in humans.<sup>2</sup>
  - ✓ 35 human cases thus far in 2011 (15 deaths)
  - ✓ 48 human cases of H5N1 in 2010 (no deaths)
  - ✓ 72 human cases of H5N1 in 2009 (32 deaths)
  - ✓ 44 human cases of H5N1 in 2008 (33 deaths)
  - ✓ 88 human cases of H5N1 in 2007 (59 deaths)
- After a significant reduction in cases in 2010, cases in 2011 are on a pace to exceed the past three years.
- Human to human transmission remains very rare.
- Efficient and sustained human to human transmission has not yet occurred.

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<sup>1</sup> [http://www.who.int/csr/disease/avian\\_influenza/phase/en/index.html](http://www.who.int/csr/disease/avian_influenza/phase/en/index.html) (accessed 4/27/2011)

<sup>2</sup> [http://www.who.int/csr/disease/avian\\_influenza/country/cases\\_table\\_2010\\_01\\_28/en/index.html](http://www.who.int/csr/disease/avian_influenza/country/cases_table_2010_01_28/en/index.html)

## SESSION 1:

- Two weeks ago, health authorities from Thailand reported an outbreak of an influenza-like illness (ILI) in a rural village north of the provincial capital of Udon Thani.
- Laboratory sequencing of initial viral samples, confirmed the presence of a hybrid animal/avian – Human H5N1 virus.
- Initially, Thai health authorities reported 88 known H5N1 cases in three distinct clusters, including one at the provincial hospital in Udon Thani. Thirteen patients at the hospital died while being treated for ILI. There were reports of four additional early deaths in the initial outbreak village that were not initially attributed to H5N1.
- Due to concern about a delay in initial reporting and the relatively rapid spread of the outbreak, the World Health Organization (WHO) Director General increased the pandemic alert to Phase 4 immediately after the initial report was received by the WHO.
- During the past week, Thai authorities continued to report the spread of the outbreak to the WHO. There are currently eight confirmed clusters in Thailand, located primarily in and around the provincial capital of Udon Thani and in the national capital, Bangkok. Officials now report a total of 840 confirmed cases and a death toll of 88.
- WHO and Thai health officials agree that initial containment efforts in Thailand have failed and agree that further efforts to contain the outbreak are unlikely to be successful.
- Further analysis by the WHO Reference Laboratories in Hong Kong and Japan of viral samples obtained in Thailand confirms the emergence of a novel strain of influenza A, H5N1 virus that is capable of sustained and efficient human-to-human transmission.
- In the past few days, health officials in Laos reported a confirmed outbreak of influenza A, H5N1 infection at a hospital in the provincial capital of Muang PakXan and additional outbreaks of influenza-like illness (ILI) in three villages near the Laos-Thailand border. Officials report 76 persons infected, including several healthcare workers, and two known deaths. The WHO is assisting Laotian officials in processing viral samples.
- Concurrent with the outbreak in Laos, health officials in The Republic of the Philippines reported a confirmed outbreak of influenza A H5N1 in two separate clusters near Manila. They reported several hundred persons infected and attribute at least 16 deaths to the outbreak. Philippine government officials are implementing stringent containment protocols to isolate the outbreak area.
- Thailand, Laos, and The Philippines are requesting assistance from other governments, the UN and international agencies.
- International media is showing intense interest in the outbreaks and “expert” media sources are already saying that the reported cases are probably the beginning of a global influenza pandemic.
- Due to the rapid regional spread of the outbreak, the Director General of the WHO has now declared that there is a Global Health Emergency of International Concern. WHO global assessment is now Pandemic Alert Level Phase 5.

SESSION 1 - ISSUES:

1. What reporting requirements do Thailand and other initial outbreak countries have under the International Health Regulations (IHR)?
2. How would other national governments monitor the global situation to ensure they have the latest pandemic-related information?
3. What actions should the Jordanian Government take at this early stage of a potential global pandemic?
4. At this point, what actions are warranted from regional organizations, medical institutions, NGOs and other pandemic stakeholders?

## SESSION 2:

- Confirmed outbreaks exist in Thailand, Laos, Philippines, Vietnam, Cambodia, Myanmar, Indonesia, China, United States, Mexico, Canada, Germany, Netherlands, France, Belgium, Luxembourg, Austria, Nigeria, South Africa and Zimbabwe. The world-wide death toll is estimated to exceed 25,000, with the majority located in Laos, Thailand, Philippines and Zimbabwe.
- In consideration of the spread of the pandemic, the Director General of the WHO has declared Pandemic Alert Level Phase 6.
- Suspected disease clusters have been reported in the past two days in Jerusalem and Amman. While testing of viral samples from these outbreaks is not yet complete, officials strongly suspect that the cause is attributable to the H5N1 virus. Officials currently report five known deaths in Jerusalem, with 117 persons hospitalized and seven deaths in Amman, with 189 hospitalized. Officials believe the outbreak in Jerusalem originated from infected persons arriving from Europe, although they have not isolated the origination source. The outbreak in Amman has been traced to a Chinese trade delegation. Viral samples have been sent to the WHO reference laboratory in Egypt.
- Most nations have implemented their National Pandemic Response Plans and are informing WHO of their activities. Many nations are requesting WHO assistance to process laboratory samples and are requesting release and pre-outbreak staging of WHO anti-viral medications.
- Some food shortages exist, particularly in lesser-developed outbreak areas due to the failure of food distribution and food processing infrastructure. Food shortages in Laos, Vietnam and Zimbabwe are particularly severe. Many countries are stockpiling food and limiting exports of foodstuffs. Experts are warning of the pandemic's potential impact on the next harvest in some regions and overall global food security.
- The refugee population caused by mass migrations out of the most severely impacted areas is already estimated to exceed 12 million, with most located in Southeast Asia, but the refugee migrations from outbreak areas in sub-Saharan Africa and the Middle East are increasing.
- Many airports, train routes and border crossings are either closed or are significantly impeded by pandemic-related processing of travelers.
- United Nations System Agencies and International NGOs are working to assist all nations requesting assistance but are finding it necessary to prioritize support to only those nations most severely impacted by the pandemic.
- Work continues to develop an effective vaccine but despite media reports to the contrary, experts predict a vaccine will not be available for at least three more months, and initial distribution will be very limited.
- Media reporting of the pandemic continues to be intense, but is being hampered by a cessation of print media distribution within severely impacted countries.

## SESSION 2 - ISSUES:

1. What direct response, if any, should national governments execute at this early stage in the development of a potential pandemic?
2. What is the role of the United Nations at this point in the emerging pandemic?
3. How would regional organizations facilitate crisis response operations during a global pandemic event?
4. How would International NGOs coordinate and prioritize their regional response operations during a global pandemic?
5. What media messaging, if any, is appropriate at this early stage and to what extent should NGOs, regional organizations and national governments coordinate such messaging? (How will you keep your citizenry informed?)



### SESSION 3:

- Severe outbreaks are now present in every global region. While not every country is experiencing widespread illness, most are reporting confirmed cases. The morbidity rate for the virus is estimated at 30-35%, while the overall case fatality rate is estimated at 2-3%.
- The death tolls in the most severely impacted nations exceed 200,000, with the global death toll currently exceeding three million.
- Civil unrest is rising in many countries as the pandemic's economic impact begins to influence the ability of citizens to obtain food, medicine and other essential commodities. In the most severely impacted countries, governmental and societal institutions have ceased to function, destabilizing local, provincial/state and national governments.
- The pandemic is developing rapidly throughout the Middle East, including Israel, Saudi Arabia, Syria, Lebanon and Egypt. These countries are experiencing significant casualties and widespread migration of populations out of the worst outbreak areas. Syria has been particularly impacted and has declared a state of emergency due to violence and absenteeism. Police in Ar Ramtha are reporting that refugees from Syria are attempting to cross the border into Jordan seeking medical care, shelter and food.
- Over the past week, the Jordanian Ministry of Health has confirmed 2330 pandemic-related deaths throughout the country thus far, with at least 1,000 deaths expected each week during the ongoing pandemic wave. Hospitals and clinics throughout Jordan are experiencing extremely high volumes of patients seeking care for influenza symptoms, far exceeding capacity.
- As the death toll rises, people within Jordan are increasingly concerned. Several demonstrations in urban areas have become violent, with three persons killed by police during a rock-throwing melee near the Al Hayat Hospital in Amman.
- Gas stations and markets in the major urban areas of Jordan are almost empty of fuel and other commodities due to hoarding and a collapse of food distribution networks.
- Reports indicate that criminal elements in the hardest hit regions of the country are becoming increasingly active, wreaking havoc on the local population. There are confirmed reports of attacks on trucks carrying aid supplies to rural areas of the country.
- The Department of Immunization, Vaccines and Biologicals at the WHO is reporting that a vaccine has been developed and is being tested. Several manufacturers are preparing to manufacture the vaccine. The WHO has advised member states that expected production capacity is not sufficient to meet demand for at least six months.
- United Nations System Agencies and International NGOs are prioritizing their resources and are providing assistance to the most severely impacted nations. The requirement to safeguard staff and sustain response capability for future requirements has limited the amount of aid provided in many areas.

### SESSION 3 - ISSUES:

1. What actions should national governments take during this peak pandemic period? (Health care systems, border crossings, aid distribution, etc.)
2. What is the role of the UN and regional organizations during the peak pandemic phase?
3. Do NGOs have sufficient resources to provide needed support to national response operations during a severe global pandemic?
4. What level of “outside” funding is necessary to support national response operations during a severe global pandemic, and will this level of funding be available?
5. What systems are in place to prioritize the distribution of limited resources during a severe pandemic, including the distribution of food, water, anti-viral medications, pandemic influenza vaccine, etc.?
6. What consideration is given in national planning to support of pandemic-related refugees and internally displaced persons (IDP). What actions will be required to cope with possible refugee/IDP requirements?
7. Is there any change in messaging as the pandemic peaks, and if so, how are these changes coordinated among the various NGOs, national governments and regional organizations?

#### SESSION 4:

- The World Health Organization (WHO), working with member states and pharmaceutical companies, has initiated global production of a pandemic influenza vaccine. Production capacity is increasing as more production facilities are identified and certified to produce the vaccine. Prioritization of distribution continues to be a contentious issue among Member Nations.
- The most recent pandemic wave is abating as pharmaceutical and non-pharmaceutical interventions are broadly applied.
- International passenger travel and cargo shipments remain very limited. Isolated oil shortages continue to limit power production in some countries. Some petroleum refineries report no output due to lack of crude oil.
- Financial markets are stabilizing, but availability of capital remains a major concern. Economic impact of the pandemic is severe in many countries. Experts predict unprecedented increases in corporate bankruptcies, increased unemployment, and significant reduction in the financial support provided to poorer nations by G20 nations.
- Significant numbers of refugees and internally displaced persons exist in many areas, having fled the worst outbreak areas. Many countries are struggling to deal with the feeding and housing of these populations and how to best return them to their home areas.
- The combination of refugees and displaced persons, food shortages and lack of resources are proving problematic for nations throughout the Middle East. These factors are contributing to widespread social unrest and an increase in tension between various population groups within the region.
- United Nations System Agencies and International NGOs are working to expand their capabilities to assist with national recovery efforts in severely impacted areas but are experiencing pandemic-related shortfalls in personnel and other resources. Available resources are insufficient to meet the extraordinary post-pandemic demands. Priority is being given to the most severely impacted nations, but officials are also attempting to achieve a balance of resourcing among the various global regions.

#### SESSION 4 - ISSUES:

1. How will the focus of pandemic response operations change as we transition from immediate pandemic response to longer-term recovery operations?
2. Do current national pandemic response plans adequately address the post-pandemic recovery phase?
3. What resources are required to support long-term recovery operations within the region?
4. Will these required resources be available to national governments and those organizations supporting their efforts?