Final

STAFF SUMMARY OF MEETING

COMMITTEE ON LEGISLATIVE EMERGENCY PREPAREDNESS, RESPONSE, AND RECOVERY

Date: 10/23/2014

Time: **09:30 AM** to **11:51 AM**

Place: HCR 0112

This Meeting was called to order by
Senator Lambert

This Report was prepared by
Erin Vanderberg

ATTENDANCE

Devlin	X
Eddins	X
Garcia	A
Haskins	X
Herreid	X
Jani	X
Markwell	X
Saine	X
Ziegler	X
Nicholson	E
Lambert	X

X = Present, E = Excused, A = Absent, * = Present after roll call

Bills Addressed:	Action Taken:
Call to Order	Committee Discussion Only
Ebola Pandemic Update	Witness Testimony and Committee Discussion
Department of Public Safety Briefing	Witness Testimony and Committee Discussion
Review of Continuity of Operations Planning	Committee Discussion Only
Review the LEPRRC Final Report	Committee Discussion Only

09:31 AM -- Call to Order

Senator Lambert, chair, called the meeting to order. A quorum was present. Senator Lambert discussed the purpose of the Legislative Emergency Preparedness, Response, and Recovery Committee (LEPRRC), and introduced guests at the table and in the audience.

09:37 AM -- Ebola Pandemic Update

A panel of presenters representing state health agencies came to the table to provide a briefing of the state's response to the ebola pandemic, including Dr. Larry Wolk, Colorado Department of Public Health and Environment (CDPHE); Dr. Mark Johnson, Colorado Medical Society; Pat Conroy, University of Colorado Hospital; Dr. Michelle Barron, University of Colorado Division of Infectious Diseases; John Douglas, Tri-County Health Department representing the Colorado Association of Local Public Health Officials; Gail Finley, Colorado Hospital Association; and Colleen Casper, Colorado Nurses Association. Members of the committee were provided a memorandum on the ebola pandemic prepared by Legislative Council Staff (Attachment A).

09:40 AM -- Dr. Wolk, representing the CDPHE, provided an overview of the ebola pandemic to the committee. He stated that the countries of concern are in West Africa, specifically Sierra Leone, Liberia, and Guinea. He stated that as of October 22, 2014, there were 9,915 cases of ebola, with a little more than half the cases having lab confirmation, and 4,555 of those cases resulting in death. He said that in the United States, there have been three cases and one death. Dr. Wolk discussed the Centers for Disease Control (CDC) response to the ebola pandemic, specifically its funneling of travelers from the West Africa region to five U.S. airports and the health screening facilities set up at these airports. He discussed the Colorado-specific response plan, and explained the public information campaign called "Facts not Fear." He showed the information graphics to the committee that the CDPHE is using to explain the event (Attachment B), which are also available on the state's ebola response website, www.colorado.gov/ebola. He discussed the use of the website, the helpline (COHELP 303-389-1687 or 877-462-2911), social media, and public service announcements to disseminate ebola-related information to and answer questions from Colorado residents. Earlier in the week, the CDPHE hosted a media briefing. For health professionals, a campaign focused on the principles of "Ask, Isolate, Call" has been rolled out. This entails health care providers asking about travel, exposure to persons with ebola, and symptoms of every patient. When a patient meets criteria, they are to be isolated in a private room. Finally, the health professional should call CDPHE and hospital leadership so the response to the case can be coordinated appropriately.

09:49 AM

Dr. Wolk began responding to questions from the committee. He responded to a question about the infection of nurses in Dallas, Texas, stating that the CDC was still investigating the event. He responded to another question about the statistics and public notification efforts around enterovirus and D68. He responded that the "Facts not Fear" slogan was the basis of these campaigns as well, and discussed the statistics of each virus.

09:57 AM

The panel continued responding to questions from the committee about the nature of the ebola threat and concerns about non-compliant ebola patients; coroner and first responder protocols; and the chain of patient custody and whether or not the state is considering implementing a quarantine protocol.

10:11 AM - Dr. Mark Johnson of the Colorado Medical Society (CMS), which represents 8,000 physicians in Colorado, delivered his prepared remarks to the committee. He stated that the CMS was taking the ebola threat very seriously. He said that his organization had received a lot of questions from its membership and was in the process of preparing a training seminar to help prepare and equip them. Mr. Johnson responded to a committee request to characterize the questions coming in. He stated the questions were mainly about ensuring personal protective equipment (PPE) is in place and that ample training has been received to use it properly.

10:17 AM -- Ms. Gail Finley of the Colorado Hospital Association delivered her prepared remarks to the committee. She stated that all state hospitals are on high alert for ebola. She explained the different facilities of hospitals in the state -- all hospitals have a minimum capacity to "ask, isolate, and call," but not all hospitals have the physical space to contain patients and transfers will be involved. She discussed the biocontainment facilities available in the country. She compared the response to trauma patients to the response to ebola patients and stated that the arrangements being made are conceptually similar. She noted that three hospitals in Colorado have stepped forward as capable of hosting ebola patients from anywhere -- Denver Health, University of Colorado Hospital, and Children's Hospital.

10:26 AM

Ms. Finley responded to questions from the committee about biocontainment facilities, PPE supplies, differences in the state's hospitals, and arrangements between hospitals and Emergency Medical Services providers. Ms. Finley stated that hospitals are fully equipped with PPE and discussed the federal supply caches.

10:33 AM -- Mr. Pat Conroy of the University of Colorado Hospital (UCH) delivered his prepared remarks to the committee. Mr. Conroy discussed his work in emergency preparedness at the UCH. He discussed the issue of information overload and the changing dynamic of PPE. He also discussed the costs to healthcare institutions.

10:40 AM -- Dr. Michelle Barron of the University of Colorado's Division of Infectious Diseases discussed the infection prevention and control role. She discussed universal precautions, the history of epidemics, the public health role of hospitals, and the effectiveness of simulations and drills. She and Mr. Conroy responded to questions from the committee about PPE guidelines.

10:53 AM

The panel responded to additional questions from the committee related to land travel and disinfection.

11:03 AM

Members of the committee thanked the panel for their presentation. The chair asked all panelists for their input on necessary legislation, state funding priorities, or closing thoughts. Dr. Wolk thanked the chair and stated that he would work with panelists to prepare recommendations. Mr. Conroy discussed funding at the federal level, specifically through the Hospital Preparedness Program.

11:08 AM -- Colleen Casper of the Colorado Nurses Association, which represents 50,000 registered nurses in the state, suggested that resources be directed to exploration and gap analysis, in concert with hospitals and the biotech industry. The committee asked Ms. Casper to discuss any preparedness concerns on behalf of the CNA. She discussed the incident in Texas, changing preparation standards, and PPE training.

11:12 AM

The panel responded to a question from the committee on what is being done to advance the vaccine and prevent the disease. John Douglas of the Tri-County Health Department discussed the vaccine timeline and the history of the disease.

11:15 AM

The chair called a recess.

11:28 AM -- Department of Public Safety Briefing

The chair called the meeting back to order.

11:29 AM - Stan Hilkey, newly appointed Executive Director of the Department of Public Safety (DPS), came to the table to introduce himself to the committee. Director Hilkey discussed his background in local government affairs, most recently as the elected sheriff of Mesa County. He responded to questions from the committee about the electronic discovery system he implemented while in his role as sheriff. Senator Lambert requested that Director Hilkey make future recommendations for legislation to the committee as needed. Director Hilkey stated that members of his staff were available to answer questions specific to ReadyOp and capitol security.

11:35 AM -- Kevin Klein, Director of the Division of Homeland Security and Emergency Management (DHSEM) in DPS, came to the table to discuss ReadyOp. He explained the implementation process for the communications platform and responded to questions from the committee about mechanisms in place in DPS to measure and respond to shortfalls in the communication system.

11:39 AM -- Review of Continuity of Operations Planning

The chair requested an update on summer Continuity of Operations (COOP) planning efforts throughout the legislative agencies.

11:40 AM -- Erin Reynolds, Legislative Council Staff, addressed the committee. She stated that members of the legislative agencies had completed a course on Mission Essential Functions planning which was presented by the Federal Emergency Management Agency and hosted by DHSEM. The legislative agencies employed this training to update their COOPs, which had last been updated in 2006. She stated that these updated COOPs were now uploaded to ReadyOp. Additionally, she stated that the agencies have begun regular independent tests of the ReadyOp system.

11:42 AM -- Review the LEPRRC Final Report and Other Business

The chair requested an overview of the final report.

11:42 AM -- Nicole Myers, Office of Legislative Legal Services, addressed the committee and provided an overview of the draft 2014 LEPRRC Final Report. The report will be available on the LEPRRC website at www.colorado.gov/lcs/leprrc.

11:48 AM

The chair apprised the committee of his recent conversations with the Federal Bureau of Investigation related to matters of legislative security and asked for the committee's participation in continued conversations in this vein. He stated that the next meeting of the committee would be dependent on the new legislative membership, and would likely happen early in the 2015 session.

11:51 AM

The committee adjourned.

Colorado Legislative Council Staff

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M E M O R A N D U M

August 11, 2014

TO: Interested Persons

FROM: Amanda King, Senior Research Analyst, 303-866-4332

SUBJECT: Ebola Pandemic

Summary

This memorandum responds to your request for information about efforts to address a potential ebola pandemic. Specifically, this memorandum describes the ebola virus, and provides a summary of state efforts to address ebola concerns and ebola treatment and testing efforts.

Ebola Virus

According to the U.S. Centers for Disease Control and Prevention (CDC), the ebola virus causes viral hemorrhagic fever disease. The symptoms include fever, headache, joint and muscle aches, weakness, diarrhea, vomiting, stomach pain, lack of appetite, and abnormal bleeding. Ebola is transmitted though direct contact with the blood or bodily fluids of an infected person or through exposure to objects that have been contaminated with infected secretions. It is not transmitted through the air. While some people who become sick with ebola are able to recover, others are not. According to the World Health Organization, ebola outbreaks have a fatality rate of up to 90 percent.

It is difficult to diagnose a person who has only been infected with ebola for a few days because many of the symptoms are similar to those of more commonly occurring diseases. However, if there is reason to believe a patient has been exposed to ebola, the patient should be isolated and public health professionals should be notified. The patient can then submit samples for laboratory testing to confirm infection. The standard treatment for ebola is limited to supportive therapies, and consists of balancing the patient's fluids and electrolytes, maintaining the patient's oxygen status and blood pressure, and treating the patient for any complicating infections.

Ebola was first discovered in 1976 in Africa. Currently, there have been cases of ebola reported in the following West African countries: Guinea, Liberia, Nigeria, and Sierra Leone. On July 31, 2014, the CDC elevated their warning to U.S. citizens encouraging them to defer unnecessary travel to this area of Africa over concerns that travelers may not have access to health care facilities and personnel should they need them. While two U.S. citizens who were infected with the disease while in Africa have been transported to the United States for treatment, there are no reported cases of anyone contracting ebola in the United States. According to materials published by the CDC, ebola poses no significant risk in the United States.

State Efforts to Address Ebola Concerns

Colorado Department of Public Health and Environment. On August 5, 2014, the Colorado Department of Public Health and Environment (CDPHE) issued a statement concerning ebola (Attachment A). According to the statement, public health officials are closely monitoring developments related to ebola. If a patient presents ebola symptoms, the CDPHE staff can arrange for testing and assure that appropriate precautions are followed. If a case of ebola was identified in Colorado, the CDPHE would initiate an investigation, monitor any individuals who may have come in contact with bodily fluids from the case, and notify the CDC.

According to the CDPHE, Colorado hospitals can safely manage a patient with ebola by using CDC guidelines. Every hospital has the ability to follow the CDC guidelines for isolation precautions for ebola, but no CDC guidance specifies that a special type of isolation room is required. In some situations, the patient might need a procedure that would necessitate a negative pressure room, but almost all hospitals, particularly the hospitals that would be most likely to care for these patients, have these rooms, which are also used for patients with conditions such as tuberculosis, measles, and chicken pox.

Governor's Expert Emergency Epidemic Response Committee. In addition to the CDPHE's role in control disease outbreaks, the Governor's Expert Emergency Epidemic Response Committee (GEEERC), which is chaired by Dr. Larry Wolk, the executive director of the CDPHE, must meet at least once a year to review and amend, as necessary, the supplement to the state disaster plan that is concerned with the public health response to acts of bioterrorism, pandemic influenza, and epidemics caused by novel and highly fatal infectious agents. Additionally, the GEEERC provides expert public health advice to the Governor in the event of an emergency epidemic, and provides information to, and fully cooperates with, the Governor's Disaster Emergency Council.[1]

The next scheduled meeting of the GEEERC is on August 14, 2014, at 11 a.m. at the CDPHE's main campus located at 4300 Cherry Creek Drive South in Denver. The agenda for the meeting has not been finalized, but one of the agenda items is discussion of the ebola virus.

Rocky Mountain Regional Biocontainment Laboratory. Colorado State University operates the Rocky Mountain Regional Biocontainment Laboratory. It is one of 13 regional biocontainment laboratories in the United States. In 2008, it formally received "Select Agent" research approval from the CDC, making it the first lab of its kind to begin studying highly regulated bioterrorism agents. While this facility can handle ebola and other hemorrhagic fever viruses, it was built for research purposes and not for patient containment.

[1] Section 24-33.5-704 (8), C.R.S.

Ebola Treatment and Testing Efforts

The following paragraphs highlight a few of the efforts, of which there are many, to develop treatments and testing equipment for ebola. Currently only experimental treatments are available to treat individuals infected with ebola. According to the World Health Organization, several ebola vaccines are being tested, but no licensed vaccines are available.

Treatment development. ZMapp is being developed by Mapp Biopharmaceuticals, Inc., as a treatment for individuals with ebola. This drug is still in the experimental stages and only a limited quantity of the drug exists. ZMapp was administered to the two Americans who currently have ebola, and they appear to be responding positively to the treatments. This was the first time the drug was given to humans.

In 2010, Tekmira Pharmaceutical Corporation, which is based in Canada, signed a $140 million contract with the U.S. Department of Defense to advance an ebola treatment. In January 2014, a Phase I clinical trial commenced, but was later halted by the U.S. Food and Drug Administration (FDA). According to the Tekmira website, the FDA requested additional data before the trial proceeds.

Rapid diagnostic test development. Corgenix, which is based in Broomfield, was recently awarded a three-year, $2.9 million National Institutes of Health grant to continue work on the development of an ebola rapid diagnostic test kit. The rapid diagnostic test kits will be able to be used in any clinical or field lab to determine in a matter of minutes if a patient is infected with ebola. Current testing for ebola requires testing samples to be sent to special laboratories, which may take several days resulting in critical loss of time in diagnosing, treating, and preventing the spread of ebola.

National Guard Civil Support Teams. Recently, several Internet reports have stated that ebola detection kits have been sent to National Guard units in all 50 states. These reports appear to be in reference to a statement made by Carmen J. Spencer, Joint Program Executive Officer for Chemical and Biological Defense, to the U.S. House of Representatives Subcommittee on Intelligence, Emerging Threats, and Capabilities (Attachment B). In his statement, Mr. Spencer makes one reference to hemorrhagic fever, of which ebola is a type, when discussing the diagnostic capabilities of the Chemical and Biological Defense Program. Additionally, Mr. Spencer discusses providing domestic response capability kits to the National Guard Weapons of Mass Destruction Civil Support Teams (CST) in all 50 states. According to the statement, the kits provide emerging threat mitigation capability that includes detection, personnel protection, and decontamination. According to the Colorado Department of Military and Veterans Affairs, these kits were deployed in 2013, but not in response to recent ebola outbreaks.

According to the Colorado Department of Military and Veterans Affairs, the Colorado National Guard is home to the 8th CST. The unit's mission is to provide a rapid response team to support civil authorities at domestic chemical, biological, radiological, nuclear, and high-yield explosive incident sites. They do this by identifying chemical, biological, radiological, and nuclear agents and substances; assessing current and projected consequences; advising on response measures; and assisting with appropriate requests for additional support. The 8th CST has equipment that could be used to identify a biological agent, such as hemorrhagic fever, but only if the appropriate reagent or substance for detecting a component was utilized with the system. No such reagent has been issued. Additionally, the CST is only authorized to test environmental samples. As such, they have neither the technical capacity, nor the authority, to conduct testing as has been suggested in recent internet reports.

STATE OF COLORADO

John W. Hickenlooper, Governor
Larry Wolk, MD, MSPH
Executive Director and Chief Medical Officer

Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department
of Public Health
and Environment

Ebola Virus Disease
Public Health Response
August 5, 2014

Ebola Virus Disease is a severe disease caused by a virus that occasionally is transmitted from animals to people. Once humans are infected, the disease can be spread person-to-person through direct contact with bodily fluids such as, blood, urine, sweat, semen, and breast milk. Patients can spread the virus from the time they have fever and through later stages of disease, as well as after death, when persons touch the body during funeral preparations. The Ebola virus is not spread through the air, so the general population is not at risk. There is no specific treatment for the disease, but supportive care in a hospital is required. This infection has resulted in significant concern among the public, but public health is prepared to respond quickly and efficiently, using well-practiced public health procedures. The first outbreak of Ebola Virus Disease occurred in 1976, and since that time, outbreaks have occurred in Africa with some regularity. These outbreaks have continued to occur due to the lack of public health and health care infrastructure.

Beginning in March 2014, an outbreak of Ebola Virus Disease was identified in the West African countries of Guinea, Sierra Leone, and Liberia. Nigeria has also recently reported several cases, some of which are related to travel to the other three countries. There have been a cumulative total of 1440 suspect and confirmed cases of Ebola virus disease and 826 deaths, as of July 30, 2014. The disease continues to be transmitted there in part because many citizens do not trust the official messages about how to control Ebola virus. Two US citizens have recently been transported to Emory University Hospital in the U.S. to receive care for Ebola infections acquired in Liberia.

In addition to warning travelers to avoid going to the region, the Centers for Disease Control and Prevention (CDC) is also assisting with active screening and education efforts on the ground in West Africa to prevent sick travelers from getting on planes. On the remote possibility that they do, CDC has protocols in place to protect against further spread of disease. These include notification to CDC of ill passengers on a plane before arrival, investigation of ill travelers, and, if necessary, quarantine. In the case of Colorado residents involved in these travel related incidents, state and local public health staff would assist with this process. Public health staff are experienced in this type of tracking. CDC also provides guidance to airlines for managing ill passengers and crew and for

disinfecting aircraft. CDC has issued two Health Alert Notices reminding U.S. healthcare workers of the importance of taking steps to prevent the spread of this virus, how to test and isolate suspected patients and how they can protect themselves from infection. CDPHE and local public health staff have forwarded these notices to all health care providers in the state, all laboratories, all emergency departments, and all hospital infection preventionists (hospital staff who are responsible for assuring that appropriate infection prevention measures are followed).

In addition to the preparations described above, the CDC laboratory is available to test patients who have symptoms and risk factors for Ebola virus disease. Health care providers have been instructed to contact either a local or state public health officials if they suspect Ebola Virus Disease. CDPHE staff can arrange for testing and assure that appropriate precautions are being followed. If a case were identified, CPDHE would quickly initiate an investigation to identify and monitor any individuals who might have come into contact with bodily fluids from the case. CDPHE would also notify CDC immediately.

Using CDC guidance, Colorado hospitals can safely manage a patient with Ebola Virus Disease by following recommended isolation and infection control procedures. These are procedures routinely available in Colorado hospitals and are familiar to hospital staff. Appropriate disinfectants for Ebola virus include 10% bleach solution, or hospital-grade quaternary ammonium or phenolic products. Standard procedures, per hospital policy and manufacturers' instructions, are recommended for cleaning and/or disinfection of environmental surfaces, equipment, laundry, food utensils and dishware.

Colorado state and local public health staff continue to closely follow the ongoing developments related to Ebola Virus Disease and will continue to update the health care community as necessary.

RECORD VERSION

STATEMENT BY

MR. CARMEN J. SPENCER
JOINT PROGRAM EXECUTIVE OFFICER FOR
CHEMICAL AND BIOLOGICAL DEFENSE

BEFORE THE

HOUSE ARMED SERVICES COMMITTEE
SUBCOMMITTEE ON INTELLIGENCE, EMERGING THREATS AND CAPABILITIES

SECOND SESSION, 113TH CONGRESS

ON

THE FISCAL YEAR 2015 BUDGET REQUEST FOR THE DEPARTMENT OF DEFENSE AND COMBATING WEAPONS OF MASS DESTRUCTION IN A CHANGING GLOBAL ENVIRONMENT

APRIL 8, 2014

NOT FOR PUBLICATION UNTIL RELEASED BY THE
COMMITTEE ON ARMED SERVICES

INTRODUCTION

Mr. Chairman, Congressman Langevin, and distinguished members of the subcommittee, thank you for the opportunity to testify on behalf of the Department of Defense (DoD) Chemical and Biological Defense Program, the U.S. Army as the Program's Executive Agent, and as the Joint Program Executive Officer for Chemical and Biological Defense. I am pleased to be joined by my leaders and partners who set the strategic priorities for the mission of countering weapons of mass destruction. I am going to provide an update regarding the Chemical and Biological Defense Program contribution to this mission, specifically focusing on the Program's four areas of emphasis which are medical countermeasures, diagnostics, biosurveillance, and non-traditional agent defense. I will also note the role of the countering weapons of mass destruction research and development community in the mission to destroy Syrian chemical weapons.

MISSION AND STRUCTURE

The DoD Chemical and Biological Defense Program was created by Public Law 103-160, enacted by Congress in 1993. The law required the Secretary of Defense to assign responsibility for overall coordination and integration of chemical and biological defense programs to a single office within the Office of the Secretary of Defense. The Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs has that task and is responsible for oversight. Public Law 103-160 also established the U.S. Army as the Executive Agent for the Chemical and Biological Defense Program with the mission of coordination and integration of research, development, test and evaluation, and acquisition for the Military Services.

Primary components of the Chemical and Biological Defense Program are the Joint Staff's Joint Requirements Office for Chemical, Biological, Radiological, and Nuclear Defense to establish priorities and requirements, the Defense Threat Reduction

Agency's Joint Science and Technology Office for Chemical and Biological Defense to execute science and technology programs that provide the technical foundation for future capabilities, and the Joint Program Executive Office for Chemical and Biological Defense to manage the advanced development, procurement, fielding, and life-cycle management of systems. The Chemical and Biological Defense Program Test and Evaluation Executive establishes test policy and standards while the Program Analysis and Integration Office oversees budget execution. External to the DoD, the Chemical and Biological Defense Program works closely with our federal agency partners such as the Department of Health and Human Services and the Department of Homeland Security. We also maintain an active international engagement and collaboration program that includes several of our Nation's closest allies.

FISCAL YEAR 2015 DEPARTMENT OF DEFENSE BUDGET REQUEST

The Fiscal Year 2015 Budget Request for the Chemical and Biological Defense Program includes $320.5 million for procurement, $553.6 million for advanced development, and $407.2 million for science and technology efforts within a total of $1.387 billion. The budget request supports the Program's four enduring strategic goals:

1. Equip the force to successfully conduct military operations to prevent, protect against, and respond to chemical, biological, radiological, and nuclear threats and effects.
2. Prevent surprise by anticipating chemical, biological, radiological, and nuclear threats and developing new capabilities for the Warfighter to counter emerging threats.
3. Maintain infrastructure to meet and adapt current and future needs for personnel, equipment, and facilities within funding constraints.
4. Lead the enterprise to integrate and align activities to fulfill the Chemical and Biological Defense Program mission.

Continued realization of these strategic goals is significantly impacted by progress in the Program's emphasis areas of medical countermeasures, diagnostics, biosurveillance, and non-traditional agent defense.

MEDICAL COUNTERMEASURES

Medical countermeasures include capabilities to protect the Warfighter against chemical, biological, and radiological threats. The Chemical and Biological Defense Program develops both prophylaxes, such as vaccines to immunize personnel, and therapeutics to treat personnel in the event of exposure. *Homeland Security Presidential Directive – 18: Medical Countermeasures Against Weapons of Mass Destruction (2007)* directed U.S. government agencies to collaborate on the development of medical countermeasures. A primary mechanism for that collaboration is the Public Health Emergency Medical Countermeasures Enterprise. This body coordinates Federal efforts to increase national preparedness with respect to medical countermeasures. It is led by the Department of Health and Human Services Office of the Assistant Secretary for Preparedness and Response and includes the Centers for Disease Control and Prevention, the Food and Drug Administration, the National Institutes of Health, the DoD, the Department of Veterans Affairs, the Department of Homeland Security, and the Department of Agriculture. Mr. Andrew Weber, the Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs, represents the DoD at the most senior level of this interagency body. Typifying coordination within the Enterprise is the Portfolio Advisory Committee which works to align DoD and Department of Health and Human Services resources for medical countermeasures development and infrastructure. Other Enterprise mechanisms for collaboration include the integrated product teams established to synchronize the continued efforts of several agencies against specific threats such as Anthrax and Botulism.

While there is a great deal of collaboration and coordination, it is important to understand that different agencies have different requirements based on their distinct missions. For instance, critical to the DoD is protecting deployed military forces prior to

exposure or attack while the Department of Health and Human Services emphasizes responding to attacks and threats to the U.S. population after exposure. *Homeland Security Presidential Directive - 18* affirmed the unique nature of DoD requirements, stating, “The Secretary of Defense shall retain exclusive responsibility for research, development, acquisition, and deployment of medical countermeasures to prevent or mitigate the health effects of WMD threats and naturally occurring threats to the Armed Forces and shall continue to direct strategic planning for and oversight of programs to support medical countermeasures development and acquisition for our Armed Forces personnel.” The composition of the DoD Chemical and Biological Defense Program medical countermeasures portfolio is determined by the Warfighter’s funded requirements and based on Warfighter threats and priorities. The Joint Staff’s Joint Requirements Office for Chemical, Biological, Radiological, and Nuclear Defense identifies future operational capability needs including medical countermeasures with input from the Military Services, the Joint Staff-led Capabilities Based Assessments, and the Combatant Commands. The output of this process is the Joint Priority List, which identifies and prioritizes required capabilities.

To accelerate the fulfillment of our unique requirements, the Chemical and Biological Defense Program is establishing the DoD Medical Countermeasures Advanced Development and Manufacturing Capability, a dedicated state-of-the-art center of excellence focused on flexible, modular, and disposable single-use manufacturing techniques. The intent is flexible and modular manufacturing to support DoD quantities, which have historically been significantly less than the quantities required by the Department of Health and Human Services, while working with our unique industrial base which in this specialized area is normally small businesses. The facility will cover a full array of development and production services and be capable of Biosafety Level 3 manufacturing. As we establish a product pipeline feeding Chemical and Biological Defense Program medical countermeasure programs of record to the center of excellence, we intend to implement lessons learned on each additional DoD product with advances in new regulatory sciences and manufacturing processes to shorten development cycles and eliminate redundancies. The goal of the effort is to

enable faster delivery of medical countermeasures designed to protect and treat military personnel. This past October, the prime contractor for the DoD Medical Countermeasures Advanced Development and Manufacturing Capability began construction of a thirty-acre complex in Alachua, Florida, using privately secured financing to fulfill the contract awarded by the DoD. We anticipate that the facility will be completed by the end of fiscal year 2015.

DIAGNOSTICS

Diagnostic capabilities provide health care providers with timely and accurate information to inform individual patient treatment. Additionally, the threat identification information obtained during diagnostic testing will provide commanders with situational awareness of biological hazards to support Force Protection and Force Health Protection decision making. Our diagnostic end state is to provide seamless biological warfare diagnostic capabilities throughout all echelons of the DoD Combat Health Support System and to facilitate the use of next generation diagnostic capabilities by the DoD in the areas of field analytics, infectious disease biosurveillance, cooperative engagement, and pathogen discovery.

The Chemical and Biological Defense Program has sharpened the DoD diagnostics portfolio by increasing the capability of our fielded system, some 340 of which have been provided to the Military Services. The Joint Biological Agent Identification and Diagnostic System is a portable system capable of rapid, reliable, and simultaneous identification of specific biological agents and pathogens. By partnering with the U.S. Army Medical Research and Materiel Command and the Food and Drug Administration, we have made accessible additional diagnostic assays for high consequence, low probability biological threat agents for use during declared public health emergencies. This collaboration has facilitated the availability of viral hemorrhagic fever diagnostic assays for use during a declared emergency and adds previously unavailable preparedness capabilities to this fielded system.

Looking to the future, our Next Generation Diagnostics System is under development. It will be part of a family of systems supporting medical diagnostics and surveillance across echelons of care, with the additional objective to provide common biological identification materiel solutions across our portfolio of equipment. The Next Generation Diagnostics System Increment 1 – Deployable Component recently completed competitive prototyping and the winning contractor is in the process of developing Food and Drug Administration cleared medical diagnostics devices as well as diagnostic assays. Increment 1 of the system offers increased ease of use over the currently fielded system as well as immediate military utility through available commercial-off-the-shelf assays cleared by the Food and Drug Administration. The plan is for the Next Generation Diagnostics System Increment 1 to replace the Joint Biological Agent Identification and Diagnostic System beginning in 2017.

BIOSURVEILLANCE

Consistent with *Homeland Security Presidential Directive – 21: Public Health and Medical Preparedness* (2007), the *National Strategy for Countering Biological Threats* (2009), the *National Strategy for Biosurveillance* (2012), and the Global Health Security Agenda (2014), the Chemical and Biological Defense Program is moving forward assertively to apply its expertise and equipment to improve situational awareness for the Warfighter and the Nation. The *National Strategy for Biosurveillance* defines biosurveillance as “the process of gathering, integrating, interpreting, and communicating essential information related to all-hazards threats or disease activity affecting human, animal, or plant health to achieve early detection and warning, contribute to overall situational awareness of the health aspects of an incident, and to enable better decision-making at all levels.” The Chemical and Biological Defense Program’s competencies lend themselves well to this complex challenge. We are determined to advance biosurveillance technology by integrating chemical and biological defense systems so that field detectors, diagnostic devices, and information systems can better inform battlefield commanders.

A prime example is the ongoing Joint United States Forces Korea Portal and Integrated Threat Recognition advanced technology demonstration, also known by the acronym, JUPITR. Led by the Joint Program Executive Office for Chemical and Biological Defense and supported by U.S. Army Edgewood Chemical Biological Center, this advanced technology demonstration is providing specific detection and analysis resources to address the need for biosurveillance on the Korean Peninsula. The objective is to significantly increase defense capabilities to mitigate impending biological threats to U.S. Forces Korea and the Republic of Korea. Currently underway, JUPITR is providing, 1. a web-based portal that facilitates unclassified collaboration by automatically collecting and sharing biological threat information as well as generating hazard analysis and situation reports to better inform command decision-making; 2. new, cutting edge laboratory equipment to identify biological toxins and pathogens of concern much more rapidly than current systems in use at U.S. Forces Korea facilities; 3. an assessment of a variety of environmental field sensors to determine the best product for biological detection and identification by U.S. Forces Korea; and, 4. integration of a suite of non-chemical and non-biological force protection sensors, such as cameras and radar, with chemical and biological standoff and point sensors to demonstrate a chemical and biological early warning capability. The JUPITR advanced technology demonstration is expected to be completed during fiscal year 2015.

NON-TRADITIONAL AGENT DEFENSE

Non-traditional agents are chemicals and biochemicals reportedly researched or developed with potential application or intent as chemical warfare agents, but which do not fall in the category of traditional chemical warfare agents, toxic industrial chemicals, or toxic industrial materials. The 2010 Quadrennial Defense Review directed the DoD to increase resources for research and development of countermeasures and defenses to non-traditional agents. The Fiscal Year 2015 Budget Request continues to evaluate non-traditional agent threats and test developmental technologies to enhance the capability of Chemical and Biological Defense Program systems to counter these threats. To address the need for a near term capability to combat emerging threat

materials, we have already provided Domestic Response Capability kits to the National Guard weapons of mass destruction civil support teams resident in all 50 states. These kits provide emerging threat mitigation capability that includes detection, personnel protection, and decontamination.

ELIMINATION OF SYRIA'S CHEMICAL WEAPONS

In anticipation of the need to address Syria's chemical weapons stockpile in the context of the Syrian Civil War, the DoD created the Field Deployable Hydrolysis System, a transportable, high throughput neutralization system designed to convert chemical warfare materiel into compounds unusable as weapons. The DoD response in this case is an excellent example of collaboration and agility in capability development. An acquisition effort was launched in February of 2013 and the first system was delivered less than six months later. A government team comprised of the Joint Program Executive Office for Chemical and Biological Defense, the Defense Threat Reduction Agency, U.S. Army Edgewood Chemical Biological Center, U.S. Army Chemical Materials Activity, and U.S. Army Contracting Command produced this capability which is now deployed aboard the motor vessel *Cape Ray*. When this roll-on/roll-off type ship receives Syrian chemical warfare materials, it will head out to international waters to carry out the neutralization process using the Field Deployable Hydrolysis System, a capability that the U.S. would not have but for this innovative joint effort within the DoD.

CONCLUSION

As this subcommittee is well aware, a confluence of technological, political, and economic factors are making the current security environment as challenging as any Congress and the President have faced in the Nation's history. Continued collaboration is critical to advancing chemical, biological, and radiological defense science and engineering to maintain the technological advantage currently held by our forces. I look forward to continued cooperation with the subcommittee to meet the DoD's unique

requirements for specific systems for the Warfighter. Mr. Chairman, Congressman Langevin and members of the subcommittee, on behalf of the men and women of the Chemical and Biological Defense Program, thank you again for the opportunity to appear before you today and thank you for your continued support.

Attachment B

Action plan

for a suspected case of Ebola in Colorado

a person is suspected
of having Ebola

State health department working in parallel

notify state
health department

health department
will ask about all contacts

EMS transports
person to hospital

investigation starts and contacts are identified

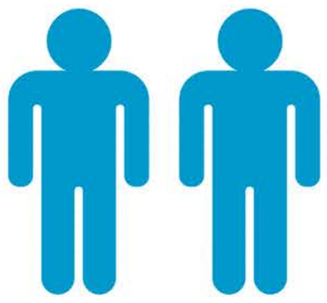
contacts are watched for symptoms of sickness
for 21 days (contact tracing)

if contact
shows symptoms,
isolate, test and
provide care

Ask about
new contacts

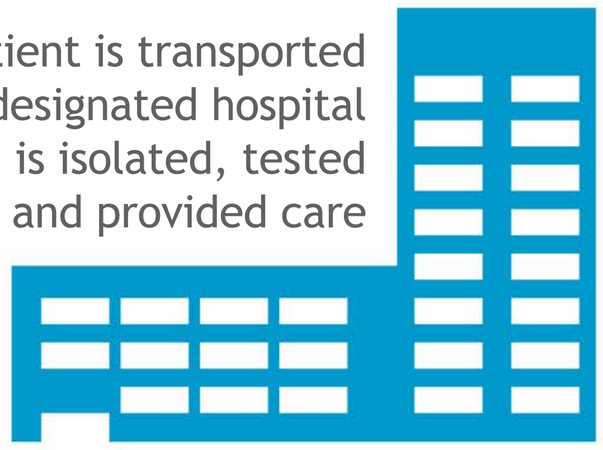
Watch new contacts
for symptoms
for 21 days

Repeat until there are
no new patients



if contact shows
no symptoms
after 21 days,
he or she
is not at risk

patient is isolated
in a private room



patient is transported
to a designated hospital
and is isolated, tested
and provided care

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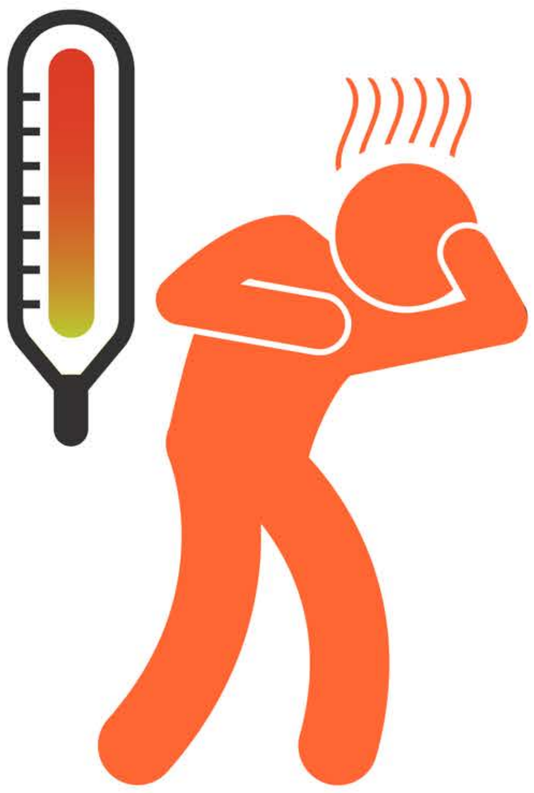
Health & Environment

medical waste
is disposed of properly



How do you get ebola?

Body fluids of an infected person

Contaminated needles and medical equipment

A person infected with ebola **can't spread it** until symptoms appear.

The time from exposure to signs or symptoms appear is 2 to 21 days, but the average time is 8 to 10 days.

Protect yourself

DO wash your hands often with soap and water or use an alcohol-based hand sanitizer.

Do NOT touch the blood or body fluids (like urine, feces, saliva, vomit, sweat, and semen) of people who are sick.

Do NOT handle items that may have come in contact with a sick person's blood or body fluids, like clothes, bedding, needles, or medical equipment.

Do NOT touch the body of someone who has died of ebola.

CDPHE COLORADO
Department of Public Health & Environment

#FactsNotFear

READY TO RESPOND

What is Colorado public health doing about Ebola?

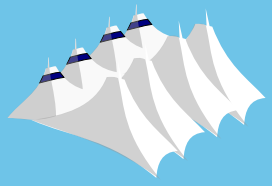
Attachment B

Sharing the latest guidance with health care providers, hospitals, and first responders across the state weekly.

Monitoring persons identified as having exposure to Ebola.

Ensuring proper waste management and hazardous materials handling for potential cases.

Collaborating with Denver International Airport on emergency protocols.



Updating COHELP with the latest information & answering phone calls from the public.

Promoting adequate preparedness in all of Colorado's hospitals.

www.colorado.gov/ebola

COHELP: 303.389.1687 or 1.877.462.2911

COLORADO
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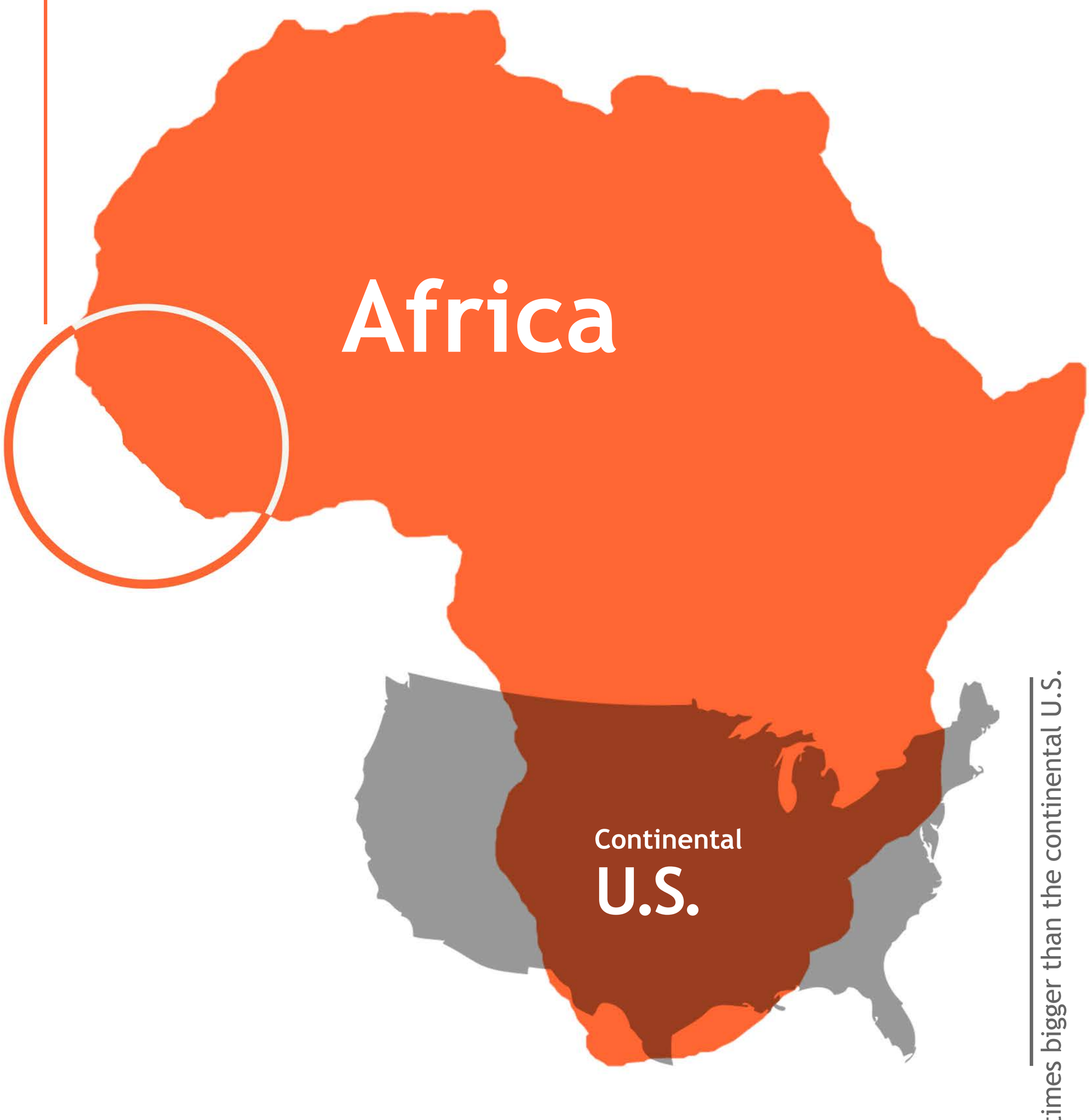
The current
Ebola outbreak
activity is focused in
a very small
part of Western Africa



Africa is the second largest continent

It is at least four times bigger than the continental U.S.

CDPHE COLORADO
Department of Public
Health & Environment

COLORADO

colorado.gov/ebola

Actions

Direct monitoring
Working with partners to identify individuals with possible Ebola exposures.

Hospital and EMS
Refining plans for identification, isolation, care, and transport.

Collaborating with
CDC
National and public health organizations,
Other states

Regular Communications
with partners, hospitals, health care providers, first responders, local public health agencies, and laboratories.

Hazardous Materials
Refining plans to manage waste.

Hospital and EMS Assessment

Incident command
Emergency Preparedness and Response
Communications
Communicable Disease
Health Facilities
Emergency Medical Services (EMS)
Hazardous Materials Management
Air and Water Quality Control

COLORADO
Department of Public Health & Environment

Ebola Information?

CO HELP
(303) 389-1687
(877) 462-2911

www

colorado.gov/ebola

Attachment B

Ask!

About Ebola

ASK

About travel

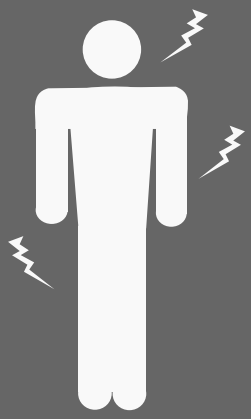
To Sierra Leone, Guinea, Liberia (in West Africa) in the past 21 days.

And exposure

To persons with Ebola.

And symptoms

Fever, headache, joint & muscle aches, weakness, fatigue, diarrhea, vomiting, stomach pain, loss of appetite, sometimes bleeding.



ISOLATE

If travel or exposure criteria are met and the person has symptoms of Ebola, place the person in a private room.

CALL US

Notify hospital leadership and CDPHE at 303.692.2700 (after hours 303.370.9395). www.colorado.gov/ebola

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Department of Public Health & Environment