



OHA Working Together to Protect the DHS Workforce Against Chagas Disease



**Homeland
Security**

Department of Homeland Security (DHS)
Office of Health Affairs (OHA)

What is Chagas Disease

- *Trypanosoma cruzi*
 - Protozoan Parasite causing disease and **death** in humans and dogs.
 - Transmitted by Kissing Bug (*Triatoma* species)
 - *Triatoma* species commonly found in southern states but as far north as Illinois and Pennsylvania.
- Frequently called a “**silent killer**”
 - People frequently do not feel sick or seek treatment
 - Causes heart disease in 30% of infected people
 - Main cause of death is heart disease
 - Disease has been neglected for many years in US
- No FDA approved treatment in the US



What is Chagas Disease (continued)

- Three Phases of Disease:
 - Acute: short episode of normally mild to asymptomatic symptoms such as fever, anorexia, swelling around site of infection. Rarely results in severe cardiac or brain involvement in this phase.
 - Chronic Indeterminate: No parasites found in blood. Most are unaware of disease in this phase.
 - Chronic Complications: Estimated 20-30% of infected people progress to this phase.
 - Dilated heart
 - Dilated esophagus or colon
 - Heart arrhythmias that can lead to **sudden death**



Why Chagas is Important to DHS

- Chagas disease (American trypanosomiasis), a parasitic infection of humans and animals, is endemic in Mexico, Central America, and South America.
- Worldwide there are approximately 8 million people infected, of which 300,000 to 1 million are in the United States.
- Most U.S. infections are attributed to previous infection of immigrants from endemic Latin American countries and cost the U.S. roughly \$1 billion in healthcare.
- Department of Homeland Security's workforce, including canines and canine handlers, working along the Mexico-Texas border are at increased risk for Chagas disease. Education, prevention measures, and early treatment are key strategies to combating Chagas infections.
- There is a need to increase surveillance/awareness of the disease to more fully protect the DHS workforce, including canines and canine handlers.



Why Chagas is Important to DHS

- Recently recognized as an emerging threat in U.S.
 - 12 reported human cases acquired in TX the first year of required Chagas reporting, another 24 foreign acquired
- Many DHS employees stationed along Southern Border
- Costs the United States roughly \$1 billion annually
- DHS has 3100 working dogs valued at approximately \$1.2M
 - Cost includes the lifespan of the dog
 - Approximately \$3M if include seizure value (narcs, money, etc.).



OHA's Approach to Chagas Disease

- Using DHS working dogs along TX border as sentinels
 - Collecting much-needed data to determine if DHS K-9 are at increased risk of disease
 - Informal data indicates 2 sectors are 3-4 times higher risk than stray dog population in TX
- Coordinated study effort involving:
 - OHA Occupational Medicine, Medical Liaison Officer, Veterinarian
 - CBP Canine Program Managers
 - DHS Center of Excellence – Institute of Infectious Animal Disease (IIAD)

Vector Triatomine bug



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Purpose of the Study

- Develop strategy for mitigating the risk of the disease to DHS employees (Both human and K-9)
- Determine if the DHS working dogs along the TX-Mexico border are at increased risk of Chagas Disease as compared to other K-9 in the area.
- Establish baseline of the disease in DHS canine to evaluate effects of mitigation efforts.
- Further advance the knowledge of this disease in the U.S.



Next Steps

- Further surveillance to determine how extensive disease is in DHS Working Dog population.
 - Prevalence of disease in other States bordering Mexico
 - Prevalence of disease in other States such as Gulf Coast, FL, and even in States that are not documented to have the vector.
- Assessment of risk for handlers and other DHS personnel along the southern border.



Conclusion

- Knowledge of Chagas disease as it affects the DHS workforce is in its infancy.
- OHA's approach of collaboration and coordination involving multiple specialties is the most effective method to minimize the impact of Chagas disease on the DHS mission.



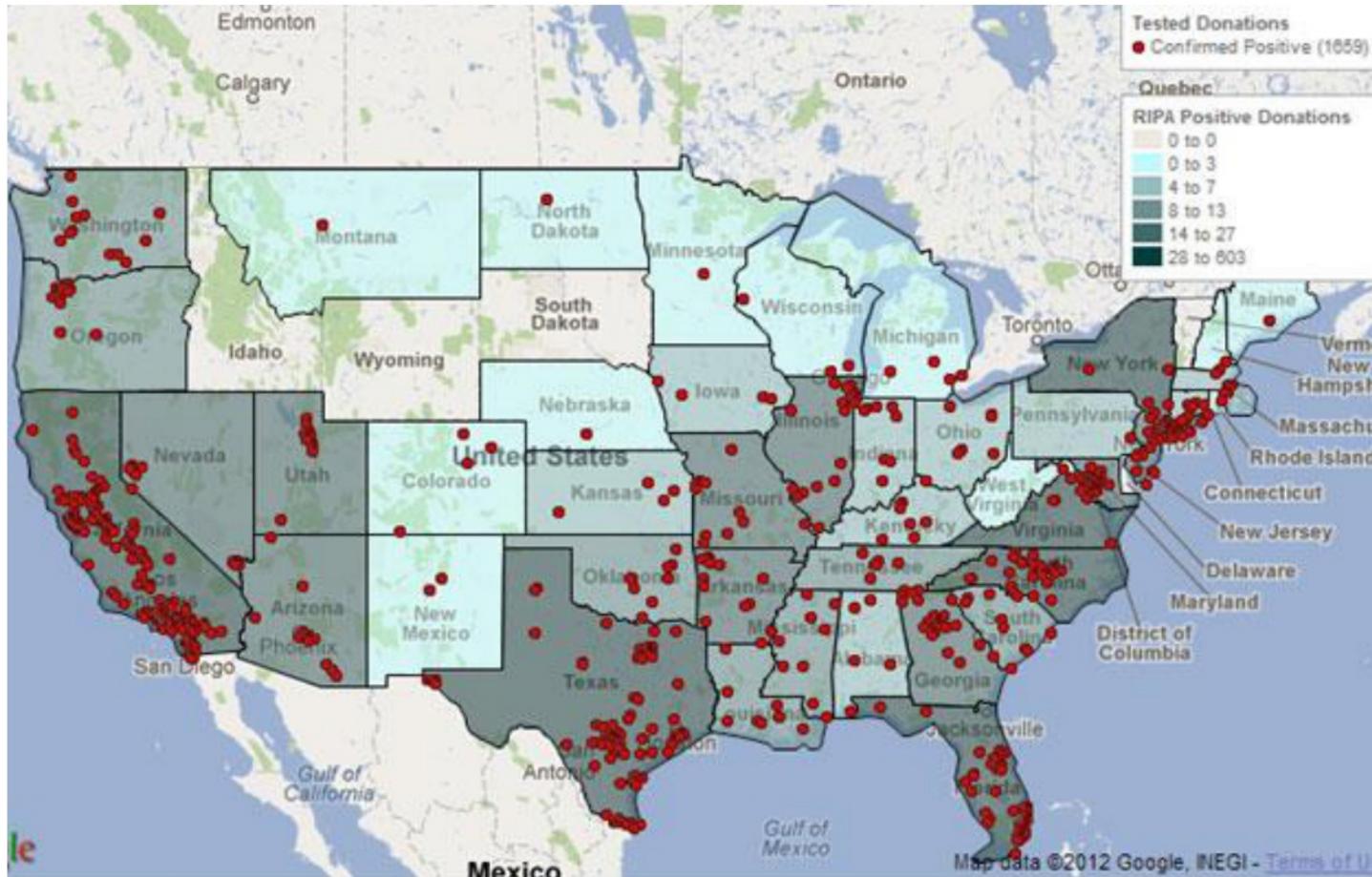


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States with Chagas Disease Confirmed Positive Blood Donors



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States With Kissing Bugs Reported



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DEPARTMENT OF HOMELAND SECURITY (DHS)

STATEMENT OF WORK (SOW) FOR

Development of a National Livestock Readiness Program (NLRP) for Local, State, and Regional Agriculture Response

1.0 GENERAL

1.1 BACKGROUND

Effective local, state, regional, tribal nations and national animal disease outbreak response is dependent upon coordinated efforts across disciplines in planning, training and education. Trans-boundary animal disease identification and response is initiated at the local, state, regional, tribal nations and regional levels. Minimizing the deleterious effect of a disease outbreak on the US livestock industry requires local, state, tribal nations and regional agriculture response entities be fully prepared in their response planning, training, and education. Current response planning, training, and education at the local, state, tribal nations, and regional levels across the US vary greatly in form, function, and levels of development. There exists no common program to direct local or state animal disease outbreak plan development and evaluation, outbreak response training, or educational credentialing for positions within the Incident Command System (ICS). A coordinated National Livestock Readiness Program (NLRP) for local and state, tribal, and regional response entities would provide this much needed guidance.

1.2 SCOPE

This proposal will develop an initial structure and capability of a National Livestock Readiness Program to coordinate planning, training, and education between local, state, tribal nations, and regional response agencies.

1.3 OBJECTIVE:

- 1.3.1 Develop a one stop shop for planning, training, and education information to support the preparedness and response capability for an animal disease outbreak on a local, state, tribal nations, and regional basis.
- 1.3.2 Objective 1.3.1 is the initial step in the long range objective of developing a standardized preparedness and response program to facilitate sharing of resources during time of emergencies.

1.4 APPLICABLE DOCUMENTS

1.4.1 Compliance Documents

The following documents provide specifications, standards, or guidelines that must be complied with in order to meet the requirements of this contract:

1.4.1.1 Privacy Threshold Analysis and Privacy Impact Assessment

1.4.2 Reference Documents

The following documents may be helpful to the Contractor in performing the work described in this document:

- 1.4.2.1** Foreign Animal Disease Preparedness and Response Plan (FAD PReP)
- 1.4.2.2** Comprehensive Preparedness Guide (CPG) 101
- 1.4.2.3** Livestock Emergency Response Plan (LERP) Toolkit

2.0 SPECIFIC REQUIREMENTS/TASKS:

2.1 Task One: Food, Agriculture and Veterinary Defense Strategic Plan

- 2.1.1** Phase 1 will develop the Strategic Plan. It will establish the goals and objectives that serve as the foundational elements of the strategic plan. The Strategic Plan from Phase 1 will be coordinated with the Director of HTR before Phase 2 work begins.
- 2.1.2** Phase 2 will develop the multi-year implementation plan. This phase will identify time and phased specific projects and tasks designed to achieve the goals and objectives detailed in Phase 1. Each task will have a rough cost estimate for each task which can be used for programming and budgeting estimates. The draft document will be coordinated with HTR/OHA management during the building process modification and adaptation can be made in order to ensure final product approval by OHA Management.

2.2 Task Two: Training Information Outreach website

- 2.2.1** Develop and deploy a National Livestock Readiness Program (NLRP) web site to provide rapid access to links for all livestock emergency response training opportunities and reliable information resources available within the US.
 - 2.2.1.1** The website will also have a question and answer capability where people can ask questions and can expect an answer within 24 hours.
 - 2.2.1.2** The website will include a training calendar showing scheduled training opportunities within the US agricultural response community

2.3 Task Four: Training Management Tool

- 2.3.1** Explore further development and promote use of the Agriculture training management system to track individual responder training status in relation to their role in the ICS structure.
- 2.3.2** Develop a usable Training Management Tool business plan for sustainability

2.4 Task Five: Planning and Evaluation

- 2.4.1** Develop a one to two hour Introduction to Agriculture Planners Course (IAPC 101) which would serve as an introductory course for future agriculture planners and overview for state level agriculture preparedness program managers.

- 2.4.2 Develop a strategy for a sustainable National Livestock Readiness Program (NLRP) such as through providing training program, obtaining grants, and consultant fees. The basis of this will be identifying the programs users and stakeholders and how to target them through various marketing strategies.
 - 2.4.3 Host a training and response workshop bringing state veterinarians, producers, and animal health officials together with agricultural emergency planners to identify gaps and needs for coordinated response within local, state, and regional entities.
- 2.5 Task Six: Option year One Task
- 2.5.1 Develop an Agriculture Readiness Consultant capability where the consultant can evaluate an agriculture readiness program with recommendation/roadmap that can take them from an entry level to a fully developed agriculture readiness program
 - 2.5.1.1 Develop a state level livestock preparedness and response capability evaluation check list to use to evaluate state level of overall readiness
 - 2.5.1.2 Maintain the Identifying Corrective Actions from Agriculture Response (ICAAR) system for readiness program improvement
 - 2.5.2 Develop a prototype Training Management Tool (Ref: Task 2.3 above)
 - 2.5.3 Develop an Advanced Agriculture Planners Course (AAPC 201). This is an approximately one week course where the planner would get in depth training on the interaction between agriculture and emergency management (including specifics about state EOC, EMRS-2, ESF-11), training on the Livestock Emergency Response Plan Toolkit, and conduct as well as an in depth review of their individual state plan. (Ref: task 2.4 above)
 - 2.5.4 Present pilot classes of the Introduction and Advanced Agriculture Planners Course to stakeholder on each level. Also conduct at least two pilot state agriculture readiness assessment as an implementation step for task 2.5.1 above.

3.0 CONTRACTOR PERSONNEL

Contractor personnel shall have a resume of successful development of plans and training programs and managing a website.

3.1 QUALIFIED Personnel

The Contractor shall provide qualified personnel to perform all requirements specified in this SOW.

3.2 Continuity of Support

The Contractor shall ensure that the contractually required level of support for this requirement is maintained at all times. The Contractor shall ensure that all contract support personnel are present for all hours of the workday. If for any reason the Contractor staffing levels are not maintained due to vacation, leave, appointments, etc., and replacement personnel will not be provided, the Contractor shall provide e-mail notification to the Contracting Officer's Representative (COR) prior to employee absence. Otherwise, the Contractor shall provide a fully qualified replacement.

3.3 Key Personnel

3.3.1 The following Contractor labor categories shall be considered key:

a) Principal Investigator (PI)

The PI shall have experience in developing training programs and managing agriculture readiness programs

b) Project Manager (PM)

The Project Manager shall be a single point of contact for the Contracting Officer and the COR. It is anticipated that the Project Manager shall be one of the senior level employees provided by the Contractor for this work effort. The name of the Project Manager, and the name(s) of any alternate(s) who shall act for the Contractor in the absence of the Project Manager, shall be provided to the Government as part of the Contractor's proposal. During any absence of the Project Manager, only one alternate shall have full authority to act for the Contractor on all matters relating to work performed under this contract. The Project Manager shall be available to the COR via telephone between the hours of **9:00 AM and 3:00 PM CST**, Monday through Friday, and shall respond to a request for discussion or resolution of technical problems within **72** hours of notification.

3.3.1 Contractor *Key* personnel shall not be assigned by the Contractor to more than one key position for this requirement

3.4 Reserved

3.5 Employee Identification

3.5.1 Contractor employees visiting Government facilities shall wear an identification badge that, at a minimum, displays the Contractor name, the employee's photo, name, clearance-level and badge expiration date. Visiting Contractor employees shall comply with all Government escort rules and requirements. All Contractor employees shall identify themselves as Contractors when their status is not readily apparent and display all identification and visitor badges in plain view above the waist at all times.

3.5.2 Contractor employees working on-site at Government facilities shall wear a Government issued identification badge. All Contractor employees shall identify themselves as Contractors when their status is not readily apparent (in meetings, when answering Government telephones, in e-mail messages, etc.) and display the Government issued badge in plain view above the waist at all times.

3.6 Employee Conduct

Contractor's employees shall comply with all applicable Government regulations, policies and procedures (e.g., fire, safety, sanitation, environmental protection, security, "off limits" areas, wearing of parts of DHS uniforms, and possession of weapons) when visiting or working at Government facilities. The Contractor shall ensure Contractor employees present a

professional appearance at all times and that their conduct shall not reflect discredit on the United States or the Department of Homeland Security. The Project Manager shall ensure Contractor employees understand and abide by Department of Homeland Security established rules, regulations and policies concerning safety and security.

3.7 Removing Employees for Misconduct or Security Reasons

The Government may, at its sole discretion (via the Contracting Officer*), direct the Contractor to remove any Contractor employee from DHS facilities for misconduct or security reasons. Removal does not relieve the Contractor of the responsibility to continue providing the services required under the contract. The Contracting Officer will provide the Contractor with a written explanation to support any request to remove an employee.

4.0 OTHER APPLICABLE CONDITIONS

4.1 SECURITY

Contractor access to unclassified, but Security Sensitive Information may be required under this SOW. Contractor employees shall safeguard this information against unauthorized disclosure or dissemination.

Contractor access to classified information is not currently required under this SOW. However, the Government at a later date may require all Contractor personnel to have Secret clearances.

4.2 PERIOD OF PERFORMANCE

Periods as follows:

Base Period	Aug 30, 2016 through Aug 29, 2017
Option Period One	Aug 30, 2017 through Aug 29, 2018

4.3 PLACE OF PERFORMANCE

The primary place of performance will be the Contractor's facilities with frequent visits to the Department of Homeland Security facilities in the Washington Metro Area.

4.4 HOURS OF OPERATION

Contractor employees shall generally perform all work between the hours of 9:00 AM and 3:00 PM EST, Monday through Friday (except Federal holidays). However, there may be occasions when Contractor employees shall be required to work other than normal business hours, including weekends and holidays, to fulfill requirements under this SOW.

4.5 TRAVEL

Contractor travel may be required to support this requirement. All travel required by the Government outside the local commuting area(s) will be reimbursed to the Contractor in accordance with the Federal Travel Regulations. The Contractor shall be responsible for obtaining pre-approval from the COR (electronic mail is acceptable) for all reimbursable travel.

4.6 POST AWARD CONFERENCE

The Contractor shall attend a Post Award Conference with the Contracting Officer and the COR no later than **30** business days after the date of award. The purpose of the Post Award Conference, which will be chaired by the Contracting Officer, is to discuss technical and contracting objectives of this contract and review the Contractor's draft project plan. The Post Award Conference will be held at the Government's facility, located at the **Contractor's Facility** or via teleconference.

4.7 PROJECT PLAN

The Contractor shall provide a draft Project Plan at the Post Award Conference for Government review and comment. The Contractor shall provide a final Project Plan to the COR not later than 30 business days after the Post Award Conference.

4.8 BUSINESS CONTINUITY PLAN.

The Contractor shall prepare and submit a Business Continuity Plan (BCP) to the Government. The BCP Plan shall be due **90** business days after the date of award, and will be updated on an annual basis. The BCP shall document Contractor plans and procedures to maintain support during an emergency, including natural disasters and acts of terrorism. The BCP, at a minimum, shall include the following:

- A description of the Contractor's emergency management procedures and policy
- A description of how the Contractor will account for their employees during an emergency
- How the Contractor will communicate with the Government during emergencies
- A list of primary and alternate Contractor points of contact, each with primary and alternate:
 - Telephone numbers
 - E-mail addresses

4.8.1 Individual BCPs shall be activated immediately after determining that an emergency has occurred, shall be operational within **24** hours of activation or as directed by the Government, and shall be sustainable until the emergency situation is resolved and normal conditions are restored or the contract is terminated, whichever comes first. In case of a life threatening emergency, the COR shall immediately make contact with the Contractor Project Manager to ascertain the status of any Contractor personnel who were located in Government controlled space affected by the emergency. When any disruption of normal, daily operations occur, the Contractor Project Manager and the COR shall promptly open an effective means of communication and verify:

- Key points of contact (Government and contractor)
- Temporary work locations (alternate office spaces, telework, virtual offices, etc.)
- Means of communication available under the circumstances (e.g. email, webmail, telephone, FAX, courier, etc.)
- Essential Contractor work products expected to be continued, by priority

4.8.2 The Government and Contractor Project Manager shall make use of the resources and tools available to continue contracted functions to the maximum extent possible under emergency circumstances. Contractors shall obtain approval from the Contracting Officer prior to incurring costs over and above those allowed for under the terms of this contract. Regardless of contract type, and of work location, Contractors performing work in support of authorized tasks within the scope of their contract shall charge those hours accurately in accordance with the terms of this contract.

4.9 PROGRESS REPORTS

The Project Manager shall provide a **monthly** progress report to the Contracting Officer and COR via electronic mail. This report shall include a summary of all Contractor work performed, including a breakdown of labor hours by labor category, all direct costs by line item, an assessment of technical progress, schedule status, any travel conducted and any Contractor concerns or recommendations for the previous reporting period.

4.10 PROGRESS MEETINGS

The Project Manager shall be available to meet with the COR upon request to present deliverables, discuss progress, exchange information and resolve emergent technical problems and issues. These meetings shall take place at a location or via teleconference as determined by the Government

4.11 GENERAL REPORT REQUIREMENTS

The Contractor shall provide all written reports in electronic format with read/write capability using applications that are compatible with DHS workstations (Windows XP and Microsoft Office Applications).

4.12 INTELLECTUAL PROPERTY

All rights to any intellectual property developed during this project will be retained by the government.-

4.13 PROTECTION OF INFORMATION

Contractor access to information protected under the Privacy Act is required under this SOW. Contractor employees shall safeguard this information against unauthorized disclosure or dissemination in accordance with the law and Government policy and regulation.

Contractor access to proprietary information is required under this SOW. Contractor employees shall safeguard this information against unauthorized disclosure or dissemination in accordance with DHS MD 11042.1, Safeguarding Sensitive But Unclassified (For Official Use Only) Information. The Contractor shall ensure that all Contractor personnel having access to business or procurement sensitive information sign a non-disclosure agreement (DHS Form 11000-6).

4.14 SECTION 508 COMPLIANCE

Pursuant to Section 508 of the Rehabilitation Act of 1973 (29 U.S.C. 794d) as amended by P.L. 105-220 under Title IV (Rehabilitation Act Amendments of 1998) all Electronic and Information Technology (EIT) developed, procured, maintained and/or used under this contract shall be in compliance with the "Electronic and Information Technology Accessibility Standards" set forth

by the Architectural and Transportation Barriers Compliance Board (also referred to as the "Access Board") in 36 CFR Part 1194. The complete text of Section 508 Standards can be accessed at <http://www.access-board.gov/> or at <http://www.section508.gov>.

5.0 GOVERNMENT TERMS & DEFINITIONS

5.1 COR – Contracting Officer’s Representative

5.2 DHS – Department of Homeland Security

5.3 GFE – Government Furnished Equipment

6.0 GOVERNMENT FURNISHED RESOURCES

The Government will not furnish any government owned equipment to the Contractor in support of this contract.

The Government will provide a list of responder positions and training requirement data to the Contractor for work required under this contract.

The Contractor shall use Government furnished information, data and documents only for the performance of work under this contract, and shall be responsible for returning all Government furnished information, data and documents to the Government at the end of the performance period. The Contractor shall not release Government furnished information, data and documents to outside parties without the prior and explicit consent of the Contracting Officer.

7.0 CONTRACTOR FURNISHED PROPERTY

The Contractor shall furnish all facilities, materials, equipment and services necessary to fulfill the requirements of this contract, except for the Government Furnished Resources specified in SOW 2.0 and SOW 6.0.

8.0 GOVERNMENT ACCEPTANCE PERIOD

The COR will review deliverables prior to acceptance and provide the contractor with an e-mail that provides documented reasons for non-acceptance. If the deliverable is acceptable, the COR will send an e-mail to the Contractor notifying it that the deliverable has been accepted.

8.1 The COR will have the right to reject or require correction of any deficiencies found in the deliverables that are contrary to the information contained in the Contractor’s accepted proposal. In the event of a rejected deliverable, the Contractor will be notified in writing by the COR of the specific reasons for rejection. The Contractor may have an opportunity to correct the rejected deliverable and return it per delivery instructions.

8.2 The COR will have **30** business days to review deliverables and make comments. The Contractor shall have **30** business days to make corrections and redeliver.

8.3 All other review times and schedules for deliverables shall be agreed upon by the parties based on the final approved Project Plan. The Contractor shall be responsible for timely delivery to Government personnel in the agreed upon review chain, at each stage of the review. The Contractor shall work with personnel reviewing the deliverables to assure that the established schedule is maintained.

9.0 DELIVERABLES

The Contractor shall consider items in **BOLD** as having mandatory due dates. Items in *italics* are deliverables or events that must be reviewed and/or approved by the COR prior to proceeding to next deliverable or event in this SOW.

ITEM	SOW REFERENCE	DELIVERABLE / EVENT	DUE BY	DISTRIBUTION
1	4.6	Post Award Conference	30 days Post Award	N/A
2	4.6, 4.7	<i>Draft Contractor Project Plan</i>	30 days Post Award	COR, Contracting Officer
3	4.7	Final Contractor Project Plan	30 days Post Award Conference	COR, Contracting Officer
4	4.8	Original Business Continuity Plan	90 days post award	COR, Contracting Officer
5	4.8	Updated Business Continuity Plan	Annually	COR, Contracting Officer
6	4.9	Progress Reports	Monthly	COR, Contracting Officer
7	2.1	Deliver Tasks 2.1.1; 2.4.1	6 months post award	COR, Contracting Officer
8	2.1 and 2.2	Deliver Tasks 2.1.2; 2.2	11 months post award	COR, Contract Officer,
9	2.3 and 2.4	Deliver Tasks 2.3; 2.4.2	11 months post award	COR, Contract Officer,
10	2.4	Deliver Task 2.4.3	8 months post award	COR, Contract Officer,
11	Last Entry	N/A	N/A	N/A

DEPARTMENT OF HOMELAND SECURITY (DHS)

STATEMENT OF WORK (SOW)

FOR

Determining Risk and Policy for Chagas Disease in DHS Working Dogs

1.0 GENERAL

1.1 BACKGROUND

There is currently a crisis of canine Chagas disease in the southern USA, in which many dog populations are being impacted, including hunting dogs, military working dogs, border patrol dogs, household pets, and shelter dogs. Chagas disease is a vector-borne parasitic disease that causes acute and chronic heart disease and death in dogs and humans, and there is no vaccination or available treatment in the USA. Chagas disease is caused by the *Trypanosoma cruzi* parasite and is transmitted by *Triatoma* species 'kissing bugs' to humans, dogs and a variety of wildlife species that serve as reservoirs of infection. There is a current lack of awareness in the USA which hinders our ability to protect canine and human health. Over 300,000 humans are estimated to be infected in the USA with an especially high burden in Texas (Hotez 2008; Bern & Montgomery 2009).

1.2 SCOPE

This analysis will consist of an epidemiological investigation of Chagas disease in canines within a network of DHS working dogs populations throughout the US. The proposed work will provide a better understanding of the geographic areas dogs are becoming exposed in and quantify the prevalence of exposure, which is critical information for canine management and vector control programs. In order to determine when and where dogs are becoming exposed, and quantify the prevalence of exposure. This information is prerequisite for an effective disease management program.

1.3 OBJECTIVE

- 1.3.1 Determine the geographic patterns of canine seroprevalence (i.e., presence of *T. cruzi*-specific antibodies) and possible parasitemia (i.e., parasite circulating in the blood) through statistical sampling of working dogs at areas in the US;
- 1.3.2 Analyze infection of dogs in relation to their age, location, pedigree travel history, and clinical status to identify risk factors for infection;

1.4 APPLICABLE DOCUMENTS

1.4.1 Compliance Documents

The following documents provide specifications, standards, or guidelines that must be complied with in order to meet the requirements of this contract:

N/A

1.4.2 Reference Documents

The following documents may be helpful to the Contractor in performing the work described in this document:

1.4.2.1 Susan Montgomery, *Neglected Parasitic Infections in the United States: Chagas Disease*, Am. J. Trop. Med. Hyg., 90(5), 2014, pp. 814–818.

1.4.2.2 *Chagas Disease: “The New HIV/AIDS of the Americas”*, <http://www.plosntds.org/article/info%3Adoi%2F10.1371%2Fjournal.pntd.0001498>

2.0 SPECIFIC REQUIREMENTS/TASKS

2.1 TASK ONE. *Identify Patterns of Canine Seropositive and Parasitemia in Southern Border States*

- 2.1.1** Statistical sampling of DHS dogs in **southern border states** that coincide with established vector populations and infected wildlife reservoirs (CA, AZ, NM, TX, LA, MS, AL, GA, FL). Re-sampling of dogs in Texas in Year 2 will allow assessment of change in exposure over time.
- 2.1.2** Obtain information and significant medical history about the genetics of each dog as well as a timeline of where the dog has been working from DHS staff
- 2.1.3** Obtain information and significant medical history about loss of duty days and reason for removing the canine from service to DHS.
- 2.1.4** Obtain blood and kissing bug samples and analyze for Chagas titers and parasites by recognized methods used in the State of Texas.
- 2.1.5** Deliver final data to government in electronic format, i.e. excel spreadsheet

2.2 TASK Two: *Identify Patterns of Canine Seropositive and Parasitemia in DHS Working Dogs*

- 2.2.1** Statistical sampling of DHS dogs in **southern border states** that coincide with established vector populations and infected wildlife reservoirs (CA, AZ, NM, TX, LA, MS, AL, GA, FL). Re-sampling of dogs in Texas in Year 2 will allow assessment of change in exposure over time.
- 2.2.2** Obtain information and significant medical history about the genetics of each dog as well as a timeline of where the dog has been working from DHS staff
- 2.2.3** Obtain information and significant medical history about loss of duty days and reason for removing the canine from service to DHS.
- 2.2.4** Obtain blood and kissing bug samples and analyze for Chagas titers and parasites by recognized methods used in the State of Texas.
- 2.2.5** Develop a spatial map of *T. cruzi* infected vectors and canines to help inform handlers of high risk areas. This map should not include number of canines and only distributed within DHS.
- 2.2.6** Deliver final data to government in electronic format, i.e. excel spreadsheet

2.3 TASK Three. Analyze Data and Make Recommendations for DHS Dogs Across the Remaining US Where Risk Is Assumed To Be Low

2.3.1 Identify risk factors of becoming infected, loss of duty days and removal from service by analyzing the results of task one

2.2.2 Develop control measures based on the outcomes of task 2.2.1.

2.3.3 Deliver findings in format suitable for publication in a peer review journal.

3.0 CONTRACTOR PERSONNEL

The contractor should have a resume of successful research studies with chagas disease and extensive knowledge of the disease in both animals and humans in Texas.

3.1 QUALIFIED Personnel

The Contractor shall provide qualified personnel to perform all requirements specified in this SOW.

3.2 Continuity of Support

The Contractor shall ensure that the contractually required level of support for this requirement is maintained at all times. The Contractor shall ensure that all contract support personnel are present for all hours of the workday. If for any reason the Contractor staffing levels are not maintained due to vacation, leave, appointments, etc., and replacement personnel will not be provided, the Contractor shall provide e-mail notification to the Contracting Officer's Representative (COR) prior to employee absence. Otherwise, the Contractor shall provide a fully qualified replacement.

3.3 Key Personnel

The Principal Investigator (PI) is designated as Key Personnel. The PI should have research experience in Chagas Disease and extensive knowledge of this disease in the canine.

Before replacing any individual designated as *Key* by the Government, the Contractor shall notify the Contracting Officer no less than 15 business days in advance, submit written justification for replacement, and provide the name and qualifications of any proposed substitute(s). All proposed substitutes shall possess qualifications equal to or superior to those of the *Key* person being replaced, unless otherwise approved by the Contracting Officer. The Contractor shall not replace *Key* Contractor personnel without approval from the Contracting Officer. The following Contractor personnel are designated as *Key* for this requirement. Note: The Government may designate additional Contractor personnel as *Key* at the time of award.

3.4 Project Manager

The Contractor shall provide a Project Manager who shall be responsible for all Contractor work performed under this SOW. The Project Manager shall be a single point of contact for the Contracting Officer and the COR. It is anticipated that the Project Manager shall be one of the senior level employees provided by the Contractor for this work effort. The name of the Project Manager, and the name(s) of any alternate(s) who shall act for the Contractor in the absence of

the Project Manager, shall be provided to the Government as part of the Contractor's proposal. The Project Manager is further designated as *Key* by the Government. During any absence of the Project Manager, only one alternate shall have full authority to act for the Contractor on all matters relating to work performed under this contract. The Project Manager and all designated alternates shall be able to read, write, speak and understand English. Additionally, the Contractor shall not replace the Project Manager without prior approval from the Contracting Officer.

3.4.1 The Project Manager shall be available to the COR via telephone between the hours of **9:00 AM and 3:00 PM CST**, Monday through Friday, and shall respond to a request for discussion or resolution of technical problems within **72** hours of notification.

3.5 Employee Identification

3.5.1 Contractor employees visiting Government facilities shall wear an identification badge that, at a minimum, displays the Contractor name, the employee's photo, name, and badge expiration date or other official documentation that verifies contractor representative's employment. Visiting Contractor employees shall comply with all Government escort rules and requirements. All Contractor employees shall identify themselves as Contractors when their status is not readily apparent and display all identification and visitor badges in plain view above the waist at all times.

3.6 Employee Conduct

Contractor's employees shall comply with all applicable Government regulations, policies and procedures (e.g., fire, safety, sanitation, environmental protection, security, "off limits" areas, wearing of parts of DHS uniforms, and possession of weapons) when visiting or working at Government facilities. The Contractor shall ensure Contractor employees present a professional appearance at all times and that their conduct shall not reflect discredit on the United States or the Department of Homeland Security. The Project Manager shall ensure Contractor employees understand and abide by Department of Homeland Security established rules, regulations and policies concerning safety and security.

3.7 Removing Employees for Misconduct or Security Reasons

The Government may, at its sole discretion (via the Contracting Officer*), direct the Contractor to remove any Contractor employee from DHS facilities for misconduct or security reasons. Removal does not relieve the Contractor of the responsibility to continue providing the services required under the contract. The Contracting Officer will provide the Contractor with a written explanation to support any request to remove an employee.

4.0 OTHER APPLICABLE CONDITIONS

4.1 SECURITY

Contractor access to unclassified, but Security Sensitive Information may be required under this SOW. Contractor employees shall safeguard this information against unauthorized disclosure or dissemination.

Contractor access to classified information is not currently required under this SOW. However, the Government at a later date may require all Contractor personnel to have Secret clearances

4.2 PERIOD OF PERFORMANCE

Base Period **May 11, 2015 through May 10, 2016; or 12 months from the Date of Award (DOA)**

4.3 PLACE OF PERFORMANCE

The primary place of performance will be the Contractor's facilities with frequent visits to the Department of Homeland Security facilities in the Washington Metro Area.

4.4 HOURS OF OPERATION

Contractor employees shall generally perform all work between the hours of 9:00 AM and 3:00 PM EST, Monday through Friday (except Federal holidays). However, there may be occasions when Contractor employees shall be required to work other than normal business hours, including weekends and holidays, to fulfill requirements under this SOW.

4.5 TRAVEL

Contractor travel may be required to support this requirement. All travel required by the Government outside the local commuting area(s) will be reimbursed to the Contractor in accordance with the Federal Travel Regulations. The Contractor shall be responsible for obtaining COR approval (electronic mail is acceptable) for all reimbursable travel in advance of each travel event.

4.6 POST AWARD CONFERENCE

The Contractor shall attend a Post Award Conference with the Contracting Officer and the COR no later than 30 business days after the date of award. The purpose of the Post Award Conference, which will be chaired by the Contracting Officer, is to discuss technical and contracting objectives of this contract and review the Contractor's draft project plan. The Post Award Conference will be held at the **Contractor's facility** or via teleconference.

4.7 PROJECT PLAN

The Contractor shall provide a draft Project Plan at the Post Award Conference for Government review and comment. The Contractor shall provide a final Project Plan to the COR not later than **30** business days after the Post Award Conference.

4.9 PROGRESS REPORTS

The Project Manager shall provide a **monthly** progress report to the Contracting Officer and COR via electronic mail. This report shall include a summary of all Contractor work performed, including a breakdown of labor hours by labor category, all direct costs by line item, an

assessment of technical progress, schedule status, any travel conducted and any Contractor concerns or recommendations for the previous reporting period.

4.10 PROGRESS MEETINGS

The Project Manager shall be available to meet with the COR upon request to present deliverables, discuss progress, exchange information and resolve emergent technical problems and issues. These meetings shall take place at location or via teleconference as determined by the Government

4.11 GENERAL REPORT REQUIREMENTS

The Contractor shall provide all written reports in electronic format with read/write capability using applications that are compatible with DHS workstations (Windows and Microsoft Office Applications).

4.13 PROTECTION OF INFORMATION

Contractor access to information protected under the Privacy Act is required under this SOW. Contractor employees shall safeguard this information against unauthorized disclosure or dissemination in accordance with the law and Government policy and regulation.

Contractor access to proprietary information is required under this SOW. Contractor employees shall safeguard this information against unauthorized disclosure or dissemination in accordance with DHS MD 11042.1, Safeguarding Sensitive But Unclassified (For Official Use Only) Information. The Contractor shall ensure that all Contractor personnel having access to business or procurement sensitive information sign a non-disclosure agreement (DHS Form 11000-6).

5.0 GOVERNMENT TERMS & DEFINITIONS

- 5.1 COR – Contracting Officer’s Representative
- 5.2 DHS – Department of Homeland Security
- 5.3 GFE – Government Furnished Equipment
- 5.4 –

6.0 GOVERNMENT FURNISHED RESOURCES

The Government will not furnish any Government Furnished Equipment (GFE) to the Contractor in support of this contract.

The Government will provide the following property to the Contractor for work required under this contract:

The Government will provide the following information, data and documents to the Contractor for work required under this contract: **Available medical records of the CBP working dogs that have been selected to be sampled.**

The Contractor shall use Government furnished information, data and documents only for the performance of work under this contract, and shall be responsible for returning all Government furnished information, data and documents to the Government at the end of the performance period. The Contractor shall not release Government furnished information, data and documents to outside parties without the prior and explicit consent of the Contracting Officer.

7.0 CONTRACTOR FURNISHED PROPERTY

The Contractor shall furnish all facilities, materials, equipment and services necessary to fulfill the requirements of this contract, except for the Government Furnished Resources specified in SOW 2.0 and SOW 6.0.

8.0 GOVERNMENT ACCEPTANCE PERIOD

The COR will review deliverables prior to acceptance and provide the contractor with an e-mail that provides documented reasons for non-acceptance. If the deliverable is acceptable, the COR will send an e-mail to the Contractor notifying it that the deliverable has been accepted.

8.1 The COR will have the right to reject or require correction of any deficiencies found in the deliverables that are contrary to the information contained in the Contractor’s accepted proposal. In the event of a rejected deliverable, the Contractor will be notified in writing by the COR of the specific reasons for rejection. The Contractor may have an opportunity to correct the rejected deliverable and return it per delivery instructions.

8.2 The COR will have **30** business days to review deliverables and make comments. The Contractor shall have 30 business days to make corrections and redeliver.

8.3 All other review times and schedules for deliverables shall be agreed upon by the parties based on the final approved Project Plan. The Contractor shall be responsible for timely delivery to Government personnel in the agreed upon review chain, at each stage of the review. The Contractor shall work with personnel reviewing the deliverables to assure that the established schedule is maintained.

9.0 DELIVERABLES

The Contractor shall consider items in **BOLD** as having mandatory due dates. Items in *italics* are deliverables or events that must be reviewed and/or approved by the COR prior to proceeding to next deliverable or event in this SOW.

ITEM	SOW REFERENCE	DELIVERABLE / EVENT	DUE BY	DISTRIBUTION
1	4.6	Post Award Conference	30 days Post Award	N/A

ITEM	SOW REFERENCE	DELIVERABLE / EVENT	DUE BY	DISTRIBUTION
2	4.6, 4.7	<i>Draft Contractor Project Plan</i>	30 days Post Award	COR, Contracting Officer
3	4.7	Final Contractor Project Plan	30 days Post Award Conference	COR, Contracting Officer
5	4.9	Progress Reports	Monthly	COR, Contracting Officer
6	2.1	Delivery of Task 2.1.4	DOA + 6 months	COR, Contract Officer,
7	2.2	Delivery of Task 2.2.6 and 2.3.3	DOA + 12 months	COR, Contract Officer,

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