



Quarterly Newsletter of the USPHS
 Veterinary Category
 Winter 2015/2016



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Why Vet Bites?

The Vet Bites team hopes that this publication helps officers:

- Feel more connected the rest of the category
- Stay better informed about important issues affecting the category
- Have higher morale through recognition of accomplishments

We encourage all category members to submit ideas for articles, announcements of upcoming events/opportunities, and accomplishments for inclusion in our newsletter. We'd love to see Vet Bites better utilized to highlight the great work done by the Veterinary Category. Please submit items to CDR Willy Lanier (William.Lanier@fsis.usda.gov).

Our best wishes for a successful 2016,

The Vet Bites Team

Keeping the category connected!

The Communications Committee has been hard at work over the past few months putting together this latest edition of Vet Bites. You will notice a new layout (many thanks to LCDR Danielle Buttke), with the same focus on what we are currently doing, scientific issues we should be aware of as veterinarians, and ways to engage within the professional and public health community.

As always, the work that we do is best exemplified by the officers themselves, so we welcome submissions from the officers from the field of the great work you do everyday!



PHS VETERINARIANS IN ACTION

Submitted by CDR Willy Lanier

How did DHS and NBIC respond to the HPAI outbreak in the U.S. and what was your contribution to the response to the HPAI outbreak in the U.S.?

A critical part of the DHS mission is to foster information sharing and collaboration. NBIC is particularly recognized as the contact point in the Department for infectious disease situational awareness, monitoring, and reporting. NBIC integrates, analyzes, and shares national biosurveillance information related to human, animal, plant, food, water, and environmental concerns, enabling situational awareness and early warning to inform critical decisions directing response and recovery efforts. My official title is Biosurveillance Operations Analyst, but my functional role is as the primary animal health subject matter expert in the Center. When NBIC first learned of the detection of HPAI in the U.S. in mid-December 2014, I was immediately designated as the subject matter lead for our monitoring and reporting of the incident. Upon receipt of the initial notification of the detection of HPAI in Whatcom County, Washington, we were able to draft a brief description of the incident for our National Biosurveillance Integration System (NBIS) Monitoring List as well as begin working on a more extensive Biosurveillance Event Report, which was released to our government stakeholders within a day or two after the public notification. NBIC always allows the lead federal agency on an incident to give the first notice to the public before issuing any reports on the situation.

The 2014–2015 HPAI outbreak persisted from mid-December 2014 through mid-June 2015. In addition to providing subject matter expertise and support to the department, I led the production and release of 13 weekly one-page situation update documents to the DHS Secretary and 18 Biosurveil-

lance Event Reports to over 1700 federal, state, and local stakeholders representing over 200 Departments, Agencies, and organizations. Reports were also provided to congressional members and the National Security Staff. Additionally, I coordinated briefings to key federal and state stakeholders.

Which federal partners or agencies did you work with during the HPAI outbreak?

U.S. Department of Interior, National Wildlife Health Center (DOI/NWHC)

U.S. Department of Agriculture, Animal and Plant Health Inspection Service (USDA/APHIS)

DHS, Federal Emergency Management Agency (DHS/FEMA)

U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response (HHS/ASPR)

The 2014–2015 HPAI outbreak in the U.S. was unprecedented in scope. Were there any highlights in your work with the HPAI outbreak that you would like to mention?

The HPAI outbreak certainly was very unprecedented and had devastating impacts of the domestic economy, international markets, and animal health. When this outbreak started, I had been working with NBIC for one year and had worked on several other animal health-related incidents; however, none of those incidents were comparable in scale. It was exciting to have a role in the surveillance and reporting on such a significant animal health emergency. It was also satisfying to be perceived as a point of contact on this incident in the Center and Department and to know that the reports that I've written were so well received.

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LCDR Yandace Brown, DVM, MPH

Contact email address:

Yandace.Brown@hq.dhs.gov

Commissioning Date: Oct 2012

Current duty station and location:

National Biosurveillance Integration Center (NBIC), Office of Health Affairs (OHA), Department of Homeland Security (DHS)

Job title and responsibilities: Biosurveillance Operations Analyst

Previous experience as a Commissioned Corps officer (previous duty stations):

I have been assigned to the Department of Homeland Security, Office of Health Affairs since I commissioned. My first assignment was with the Food, Agriculture, and Veterinary Defense Branch where I wrote the Food and Agriculture annex for the DHS Incident Response book. The annex specifically addressed response to a Food-and-Mouth Disease incursion and a catastrophic foodborne event of either intentional contamination, disruption of food delivery due to natural disaster, import of contaminated food products, or large-scale accidental contamination. I also had the opportunity to work on a canine first-aid manual for distribution to the handlers for approximately 1,500 working dogs throughout the Department.

Notable achievement(s) or accomplishment(s):

- Subject matter expert in the NBIC response to the 2014–2015 outbreak of Highly-Pathogenic Avian Influenza (HPAI) in the U.S.
- Provided valuable veterinary expertise to the DHS response to the outbreak



White house panel on antibiotic resistance

Antimicrobial Resistance: the President's One Health Call to Action

LCDR Danielle Buttke

"We must recognize that the health of humans, animals, and the environment are more connected than ever before," President Barack Obama, the Presidential Proclamation—Get Smart About Antibiotics Week, 2015.

It is exciting to see such high level recognition of One Health, which includes both the interconnectedness of all species and the importance of interdisciplinary approaches to health issues. Antimicrobial resistance is a growing global health concern. With over two million antibiotic-resistant infections every year and 23,000 deaths directly attributable to these infections worldwide, the burden of disease from this issue makes it one of the most pressing and fastest growing health threats today. For this reason, President Obama declared November 16–22, 2015 as "Get Smart About Antibiotics Week" and urged scientists, medical professionals, educators, businesses, industry leaders, and all Americans to make the threat of antimicrobial resistance a public health priority.

How big is this problem and what does it mean to the average person? In 2006, the Centers for Disease Control and Prevention (CDC), the World Health Organization (WHO), and other health experts conducted a survey of 25 Global reference laboratories that found 20% of all tuberculosis (TB) isolates were multiple drug resistant (MDR), resistant to at least the two most potent TB drugs (CDC 2006). Extensively drug resistant TB (XDR TB), isolates re-

sistant to first-line, second-line, and fluoroquinolone antibiotics, was identified in 2006. By 2013, XDR TB was confirmed in 84 countries, causing the duration for effective treatment to lengthen from six months to two years and the cost to rise from \$17,000 for drug susceptible TB to \$430,000 for XDR TB (WHO 2015; Marks et al. EID. 2014). This is only one example of antimicrobial resistance; many additional examples exist with sobering implications for human and animal health.

Recent studies describe the MCR-1 resistance gene that confers resistance to the last-line antibiotic, colistin has been found in bacteria throughout human and animal GI tracts in multiple countries worldwide. Many of the more impacted regions are in African and European countries where study authors pointed out that colistin is widely used in animal production (Schnirring 2015).

There is conflicting data about the percentage of commercially-sold antibiotics used for animal production. According to the Natural Resource Defense Council, in 2012, 80% of all antibiotics sold in the United States were used on livestock and poultry. The American Veterinary Medical Association states that the lack of organized tracking makes it difficult to quantify the amount of antibiotics used in veterinary medicine and animal products and that the real issue "shouldn't be the amount or frequency of antimicrobials used." Regard-

less of the numbers, engagement of producers and food-animal veterinarians in this issue is essential due to the large role of animal production in antimicrobial use. Proper dispensing and responsible use of antibiotics are significant factors, and the Veterinary Feed Directive was recently expanded to encourage responsible antibiotic use in veterinary feeds by requiring veterinary supervision. But antimicrobial use in animal health is only one part of the issue. Up to 50% of antibiotics prescribed for humans are not necessary or not optimally effective as prescribed (CDC 2013); human healthcare providers must also be a part of the solution. For this reason, an interdisciplinary, One Health approach to this issue is needed, as reiterated by President Obama. Changes in veterinary medicine alone will not solve this growing problem, and veterinarians must be at the table and play a lead role in preserving the utility of antibiotics for the health of all species.

Literature Cited

- Marks S. et. al. Treatment Practices, Outcomes, and Costs of Multi-Resistant and Extensively Drug-Resistant Tuberculosis, United States, 2005–2007. *Emerging Infectious Diseases*. 2014. 20(5):812–820.
- Schnirring L. More MCR-1 findings lead to calls to ban ag use of colistin. *Centers for Infectious Disease Research and Policy News*. Dec 18 2015.
- World Health Organization (WHO). Multidrug-resistant tuberculosis (MDR-TB) 2015 Update. http://www.who.int/tb/challenges/mdr/mdr_tb_factsheet.pdf?ua=1.
- Wright A. et al. Emergence of *Mycobacterium tuberculosis* with Extensive Resistance to Second Line Drugs—Worldwide, 2000–2004. *MMWR*. 2004. 55(11):301–305.



Category Kudos!

Flag Officer promotion

Congratulations to **RADM Terri Clark** on her flag officer promotion! In addition to this being a fantastic personal achievement, it brings honor to our whole category. Her promotion ceremony occurred January 14, 2016 at 1 pm on the NIH campus, Natcher Conference Center (Building 45), Natcher Auditorium.

Recent publications

CAPT Sean Altekruise was recognized in November 2015 for his contributions on the Cancer Trends Progress Report Redesign Team. The team received the National Cancer Institute Award of Merit for their work to redesign the *Cancer Trends Progress Report*. This report highlights advances across the cancer control continuum from prevention to end of life care. The report is posted at <http://www.progressreport.cancer.gov/>

CDR Willy Lanier reviewed the book "Gracey's Meat Hygiene (11th Edition)" for the September 15, 2015 issue of *JAVMA*.

New appointments

As of December 1, 2015, **CAPT Jennifer McQuiston** is the new Deputy Director for the Division of High Consequence Pathogens and Pathology, within the National Center for Emerging and Zoonotic Infectious Diseases at the CDC. Congratulations to CAPT McQuiston on her new position.

CAPT Casey Barton Behravesh was appointed as the new Director for the CDC One Health Office in October 2015. We congratulate CAPT Behravesh on her appointment.

New Veterinary Corps Officer

Welcome to **LT Matthew Doyle**! **LT Doyle** is a new officer in the veterinary category who attended the Officer Basic Course held in December 2015. He is assigned to the Food and Drug Administration.

Congratulations to the new leadership of the VetPAC!

Incoming VetPAC Chair:
CDR Evan Shukan
(NIH)

Thank you, **CAPT Kis Robertson**, for your leadership as VetPAC chair this past year!

New Voting Members:
CDR Jeffery McCollum
(IHS)

CDR Temeri Wilder-Kofie (NIH)

LCDR Tara Anderson
(CDC)

LCDR Yandace Brown
(DHS)

LCDR Ann Schmitz
(CDC)

Dr. Nicole Lukovksy
(CDC)

These officers will be joining CDR Renee Shibukawa-Kent (FDA), LCDR Linda Pimentel (CDC), and CDR Willy Lanier (FSIS) to complete the voting team.

EPA Crop Tour

CDR Princess Campbell

In March 2015, I participated in one of the U.S. Environmental Protection Agency (EPA)'s Crop Tours during which we visited several facilities in the state of Florida. The tour group consisted of a mix of participants from state and local agencies, the U.S. Department of Agriculture, the U.S. Food and Drug Administration, and the local university. In many ways, the event reminded me of a deployment. The days were long as we traveled from facility to facility and attended "lunch and learn" presentations.



Inspecting irregularities seen in queen bee cells.

The experience was very rewarding. It provided me with the opportunity to see how the regulations we developed impacted the users in the field. Firstly, I noted that biosecurity is alive and well on our fruit and vegetable farms. There were farms that enforced very strict travel rules between crop facilities on the farm. Workers and visitors had to disinfect themselves as they moved from one location on the farm to another.

This year, the tour included a visit to an apiary (a "bee yard" where many beehives are kept). It was heart-wrenching to learn that while we were diligently trying to protect our fresh fruits and vegetables, there is a possibility that "non-target" organisms such as the bees could be affected by pesticide products used in the field.

I also noted that farmers will do whatever it takes to protect their produce even if it involves a huge sacrifice. I observed burnt tomato fields as the producer attempted to destroy a persistent pest which was affecting the quality of the tomato crop.



A field of tomatoes destroyed to combat a pest.

A highlight of the tour was a helicopter ride with pilots who were performing aerial pesticide spraying at different locations. We were able to see first-hand the work being done to protect the public from mosquito infestations. The helicopter pilots gave us a few examples of difficulties they encountered as they tried to comply with EPA regulations. These lessons learned are an important purpose of our crop tours. We have an opportunity to gather feedback from our pesticide users as to the efficacy and ease of use of the products we register. While I sit at my desk and develop regulations (and subsequently label language for our pesticides), it is the *user* who has to ensure that the stipulations on the label are followed.

The ingenuity of our producers is also noteworthy. Sometimes nature can willingly perform the task of pest control. As cute as these little owls are, they serve an important pest control role as they are used to control rodents in the field.



*Barn owls (*Tyto alba*), nature's pest managers*

We also had the pleasure to visit the only "vertically integrated" orange juice producer in the United States. At this facility, not only were oranges grown for juice production, but the waste material from producing the juice was also efficiently converted to animal feeds, orange oil cleaning products, etc.— nothing was wasted. We discovered that hurricanes, drought, and citrus greening (a citrus plant disease) are having a negative impact on the industry. The main impact of the disease is the crops fall to the ground prematurely, seriously affecting the amount of oranges available for juice production. We were not allowed to take pictures or walk in the orange field to ensure we did not become contaminated with the causative organism. There is currently research ongoing to address the citrus greening problem.

Though I did not receive continuing education credit for this activity, it was a week of learning that will be very beneficial to my continuing role as an environmental protection specialist at EPA. When I was selected to participate in the tour, I did not know what to expect, or if this crop tour would be relevant to my public health role. My doubts were quickly dispelled from the very first day. EPA has an important One Health role to fulfill. It is not just an Agency tasked to register pesticides, but also to ensure the safety of the environment and the public's health, especially as this pertains to the health of several million agriculture workers. We veterinarians know that the protection of health also includes the safety of all creatures large and small.

Upcoming Professional Development Opportunities

Submitted by CDR Christa Hale

Free Online Veterinary Continuing Education from VetGirl

VetGirl is a subscription-based podcast and webinar service offering RACE-approved, online veterinary continuing education (CE) through a multimedia approach — via podcasts, webinars, blogs, videos, and social media. As active duty personnel, we are eligible for free ELITE subscriptions. While this CE mostly covers clinical topics, there are some more general topics like social media and working with emotional clients that I have found helpful. I also watch many of the clinical topics to stay abreast of our discipline as best possible given that I no longer practice.

Go to this website to learn more: <http://vetgirlontherun.com/veterinary-continuing-education-military-veterinarians-free-vetgirl-membership-vetgirl-blog/>

More Free CE: Emerging and Exotic Diseases of Food Animals Threaten Global Food Security

Offered through the Center for Disease Control and Prevention's Clinical Outreach and Communication Activity (COCA), this 60-minute webcast can be viewed to earn 1.2 hours of CE in jurisdictions that recognize AAVSB/RACE CE approval.

New diseases of food animals are emerging at an increasing rate and are spreading regionally and globally. Many of the same factors leading to emergence of human diseases are responsible for the emergence of animal diseases, and many of the animal diseases are zoonotic. The challenges of controlling emerging food animal diseases are very different between intensive animal agriculture and small holder animal production and depend upon the veterinary and public health infrastructure available. During the COCA call, participants will learn about reasons for the increasing rate of emergence of food animal diseases, some specific examples, challenges for their control, and implications for public health and food security.



Pet Health Insurance through COA

COA now offers dog and cat health insurance coverage for COA members. Reportedly, there are restrictions such as limits on the ages of pets that can be insured. If you are interested in more information, check out the website: <http://www.coainsurance.com/pet-health-insurance>.

PHS Vets in Action (*continued*)

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NBIC is in a unique position as a program created to serve as a coordinating body within the federal government. NBIC is not the lead agency for any sector or incident, but rather takes the role in coordinating information from various sources, including federal, state, and local official sources, private sector news releases, and media articles. It was interesting to have awareness of and receive reports from so many sources and perspectives. Additionally, I had the opportunity to participate in various meetings and webinars to review lessons learned and stay abreast of all of the preparedness efforts taking place.

Additional Announcements

Submitted by CDR Christa Hale

Can't Remember Your PHS Number? That's OK...It's Being Replaced!

As of January 1, 2016, PHS Officers will use their Direct Access Employee ID (EMPLID) for official purposes instead of the PHS serial number. You will now use your EMPLID as your User ID for Direct Access and include your EMPLID on documents you fax to your eOPF, on your CV, and on inquiries about pay issues, among other things. Basically, include it anywhere you would have included your PHS serial number in the past.

Your EMPLID can be found on the Commissioned Corps Management Information System (CCMIS) website by logging in to the "Officer Secure Area". Once in the "Officer Secure Area" at the very top of the page, your name will appear followed by your SERNO and EMPLID. We all know how long it takes to get new forms created, so in the interim, if a form asks for your PHS Serial Number (or SERNO), include your 7-digit EMPLID instead.

Bi-monthly Pay is Coming...Just Not Quite Yet

While bi-monthly pay was scheduled to start on January 1, 2016, PHS Officers will continue to receive once monthly pay for an estimated 3–6 months after the transition to the U.S. Coast Guard's Direct Access system in January 2016. Headquarters does not want to risk any possible interruptions in Officer pay; thus, they will perform further testing to ensure a smooth transition to Direct Access–processed pay for PHS Officers before implementing the new pay system.

Officers should continue submitting payroll documents (such as direct deposit, Thrift Savings Plan, and tax withholding updates) **directly** to the Compensation Section. Following active duty pay migration to DA, officers will have the ability to enter most of the documents through the self-service feature. Until these functions are available, the Corps must continue using the current process to manage pay, allotments, and deductions.

For more information on the following topics, follow the links below:

Bi-monthly pay: http://dcp.psc.gov/ccmis/PDF_docs/DA%20Migration%20Communication%20-%20Change%20in%20Frequency%20of%20Pay%20.pdf

Continuing to send documents to Compensation Branch: http://ccmis.usphs.gov/ccmis/PDF_docs/Payroll%20Documents%20to%20CCHQ%20Compensation%20Section%2012-23-15.pdf

Direct Access migration: http://ccmis.usphs.gov/ccmis/DA_migration_m.aspx

Leave Balance Carry Over

Because of the migration to Direct Access, the Commissioned Corps will transition from using the calendar year (January 1–December 31) to using the fiscal year (October 1–September 30) for leave scheduling. You will still only be able to carry over 60 days of leave. However, because of the transition to the fiscal year, any leave over 60 days was not "lost" on January 1 of this year. So, you have until September 30, 2016 to get out of the office and use those days before then. You've earned them!

New Direct Access Self-Service Absence Request (Or How to Request Leave in this New System)

Now that we've migrated to Direct Access, Officers will enter their own leave requests, which will be referred to as "Absence Requests" in the new system. Directions, User Guide, and an FAQ are on the CCMIS website: http://ccmis.usphs.gov/ccmis/DCCPR_officer_leave_FAQ_m.aspx.

This website includes a couple of FAQs that were not included in the mass email sent around to Officers such as when you need to use Direct Access and when an informal email will suffice and info on when you can and cannot make changes to your leave requests. So check out the electronic FAQs to be fully informed.

New Fax Cover Sheet for eOPF Submissions

The new fax cover sheet must accompany eOPF submissions. The new fax cover sheet can be found here: http://ccmis.usphs.gov/ccmis/PDF_docs/eOPF%20Fax%20Cover%20Sheet.pdf. Officers that are not up for promotion in the current cycle are asked to wait to submit or re-submit documents until submissions for this promotion cycle have been processed.

Read the eOPF webpage for information on the changes and instructions before using the new fax cover sheet: http://ccmis.usphs.gov/ccmis/promotions/PROMOTIONS_eOPF_m.aspx#3.



Upcoming Conferences and Events

Western Veterinary Conference, Las Vegas, NV — March 6–10, 2016

Epidemic Intelligence Service (EIS) Conference, Atlanta, GA — May 2–5, 2016

CVC Virginia Beach, Virginia Beach, VA — May 12–15, 2016

USPHS Symposium, Oklahoma City, OK — May 16-19, 2016

Did we forget a conference that would be of interest to the VetPAC? If so, email CDR Willy Lanier (William.Lanier@fsis.usda.gov) so that we can include it in the future!

Did you know?

The first zoonosis *on record* in the United States was rabies, which was likely imported to the colonies in a domestic dog, and recorded in the “Archives of Virginia” in 1753. An epizootic was later recorded during 1785–1789. Rabies was likely not the only zoonosis brought by the settlers, as brucellosis was also imported into the U.S. with cattle and later spread to and became endemic in wildlife populations (wildlife are victims too!).

Source: J.H. Steele. Rev. Sci. Tech. OIE. 1991. 10(4):951–983.

Vet Bites

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Vet Bites Team

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