# Center for One Health Illinois: August 2013 Summit



On August 1, 2013, The Center for One Health Illinois held its second One Health Illinois Summit. Experts from academia, government, and the private sector presented updates on and discussed the current health of Illinois human, animal and ecosystem communities; efforts to develop an integrated health surveillance system; current and recent One Health research projects; trends regarding zoonotic and infectious diseases; and current and potential health policy initiatives.

- Outcomes White Paper
- Speaker Presentations
- Student Poster Presentations

#### **CENTER FOR ONE HEALTH ILLINOIS SUMMIT 2013**

2<sup>nd</sup> Summit Champaign, IL August 1, 2013

In keeping with the first Summit held in 2010, the purpose of the Center for One Health Illinois 2013 Summit was:

- o To provide an update on the health of Illinois' human, animal and ecosystem communities
- o To encourage communication among representatives from university faculty, state agencies, policymakers, private sector advocates and food producers
- o To consider policy options designed to improve the health of Illinois communities through an integrated One Health approach

Early on during the Summit, Dr. Herrmann, Co-Director of the Center, asked the audience to consider once again how the One Health concept could be moved from an idea to action; how One Health could be operationalized within state agencies, academia and the private sector.

During the discussion that flowed throughout the day's presentations and the working lunch, a number of future activities were proposed by attendees and will form the basis of the post-Summit action plan. They were 1) the continued development of an integrated surveillance system, 2) leverage of past successes in research, teaching and outreach to attract future grants from both private and public sectors 3) educate the public and legislators about matters of public health through partnering with media 4) encourage state agencies to consider One Health concepts in their policies and activities and 5) urge private practice veterinarians to continue to inform and educate their clients regarding the importance of One Health topics.

Integrated surveillance system for human, animal and ecosystem health (funding needed)

Once again, attendees recognized the need for an integrated surveillance system in Illinois that would assess human, animal and ecosystem health and that would incorporate data from public and private sources, including social media, and overlying weather and other environmental data.

At the first Summit, three near term projects were proposed:

- Identify sources of surveillance, assess their validity and formats and develop the appropriate software to integrate disparate data sources while respecting individual confidentiality requirements.
- Develop a geospatial information system to describe spatial and temporal data on topics of interest
- o Develop a practice based survey for veterinarians to determine the percentage of practices that use practice management software and would be interested in

participating in a voluntary statewide surveillance pilot program based on a small number of diseases that are common to both humans and animals.

All three of these project goals have been substantially met. However, as noted previously, among the challenges to the development of such a surveillance system are confidentiality of human and agricultural producer information, source validity, format compatibility and timeliness of reporting systems. Although progress has been made on the Indicator surveillance system platform, much more progress needs to be made in inclusion of veterinary and wildlife data which will be hampered by lack of funding and personnel.

Leverage past successes in research, teaching and outreach to attract future grants from both private and public sector (little or no cost)

Certainly the past track record of accomplishments of the COHI is significant. A suggestion was made that the COHI explore partnerships with other universities engaging in One Health activities and that those potential partnerships could be leveraged into obtaining additional public and or private funding.

Since funding will be scarce for the foreseeable future, low or no cost projects should be considered. One such topic might be to investigate why PEP for rabies is so seldom administered correctly (18%) in Illinois; gaining the support of Dr. Austin at IDPH would be helpful.

Educate the public and legislators about matters of public health through partnering with media (little or no cost)

During the previous Summit, a suggestion to develop an interactive Illinois Center for One Health website was advocated. That website was developed and has been active for the past three years, with postings of activities of the COHI, including links to videos of community health forums and external webpages of interest.

At the 2013 Summit, it was suggested that a more formal overture to the media be made to position the COHI as a "go to" source of non-partisan, evidence based information on topics of One Health. The recent community health forum series sponsored by COHI is an example of such public education efforts. However, the series is not without cost; the 2013 series budget exceeded \$6,000.00.

A suggestion was also made to enlist a celebrity spokesperson to "push" the One Health agenda. An example of such a project may be a PSA regarding the dangers of consuming raw milk and the need to keep children current on immunizations.

Encourage state agencies to consider One Health concepts in their policies and activities (little or no cost)

Recognizing that institutions, whether public or private, often change slowly, attendees considered how COHI could encourage the adoption of One Health concepts by organizations involved in the broad definition of public health. In further post-Summit conversation, it was suggested that perhaps COHI advocate the issuance of an Executive Order by Governor Quinn stating that One Health concepts should be considered when conducting Executive branch agency activities. An alternative strategy might be to ask state legislators to sponsor legislation designed to achieve the same goal.

Urge private practice veterinarians to continue to inform and educate their clients on One Health topics (little or no cost)

The invitees agreed that veterinarians, especially those in private practice, should continue to serve as a first line source of evidence based information on topics of One Health interest for the public. Veterinarians could use topics such as the importance of immunizing their clients' animals (and, by extension, clients should recognize the importance of their own and their children's immunizations) and the dangers of consuming raw milk as opportunities to demonstrate One Health concepts.

#### Summary

Many participants of the 2013 Summit have been working together in an active network since the creation of the Center for One Health Illinois in 2008 and over the course of the special grant program. The established interactions are ongoing because of permanent collaborations or continuing commitment to the concept of One Health. Even though funding for the umbrella grant has terminated, activity should carry on by collaborators with open eyes toward expansion of the effort and seeking external sources of funding. Because of this ongoing commitment, it was suggested that the group consider future summits so the momentum can be continued. This could be funded through solicitation of required funding from participating units and institutions.

### **August 2013 Summit Speaker Presentations**

- "Trends in Human Disease, Both Infectious and Non-Infectious," Dr. David Gill, M.D., Illinois Department of Public Health
- "Legislative Update 2013," David Carvalho, J.D., Illinois Department of Public Health
- "Assessment of Animal Health," Mark J. Ernst, D.V.M. State Veterinarian, Illinois Department of Agriculture, Bureau of Animal Health and Welfare
- "Wildlife Health Update," Jeffrey M. Levengood, Ph.D., Illinois Natural History Survey, Prairie Research Institute, Department of Comparative Biosciences, College of Veterinary Medicine, Department of Natural Resources and Environmental Sciences, ACES, University of Illinois
- "INDICATOR: From Disease Surveillance to One Health Monitoring," Ian Brooks, Ph.D., National Center for Supercomputing Applications, University of Illinois

## **August 2013 Summit Student Poster Presentations**

- Food-borne illness risk factor violations and bacterial load in restaurant food preparation areas. Eisenbart V, Johnson Y, Myint M, Liles P, Roberts J.
- Investigation of antibiotic resistance in turtles and fish from Salt Creek and Busse Woods with varying exposure to outflow from a wastewater treatment plant. Deutsch CJ, Langan J, Mitchell M, Maddox C, Herrmann JA, Meahan T.
- A model of an avian-human influenza outbreak at Lincoln Park Zoo, Chicago. DeBaene K, Herrmann JA, Nadler Y, Johnson YJ, O'Hara M, Sorley E.
- Temporal and spatial distribution of blastomycosis cases in humans and dogs in Illinois (2001-2007). Herrmann JA, Kostiuk SL, Dworkin MD, Johnson YJ.
- Carriage of coagulase negative methicillin resistant Staph. Spp. in horses as a risk factor for nasal carriage of MRS by human handlers. Mathewson A, Johnson YJ, Myint M, Herrmann JA.
- Genetic and phenotypic analysis of E.coli isolates obtained from cattle production sites and resident and free-living wild birds. Burdorf K, Johnson YJ, Myint S, Herrmann JA, Wheeler E.
- Predictors of success of Salmonella foodborne outbreak investigations in the US. Davis H, Lance S, Lynn T, Miller G.
- Risk assessment of Hemorrhagic Disease exposure in cattle in Illinois. Goel V, Herrmann JA, O'Hara M.
- The effects of socioeconomic status on rabies vaccine rates in domestic animals in Indiana. McNamara K, House J.