

Connecting Scientists, Public Agencies and the Media – Identifying Communication Challenges

Beth Lautner, D.V.M., M.S.
Director, National Veterinary Services Laboratories
Veterinary Services, Animal and Plant Health Inspection Service



Safeguarding Animal Health





Center for Veterinary Biologics (CVB), APHIS

National Animal Disease Center (NADC), ARS

National Veterinary Services Laboratories
(NVSL), APHIS

Together we meet the national needs for animal health
research, diagnosis, and product evaluation.





NCAH

National Centers for Animal Health





Low containment animal facility--2009



Phase 1 laboratory facility--2004



High containment animal facility--2007

NVSL Mission

- To safeguard U.S. animal health and contribute to public health by ensuring that timely and accurate laboratory support* is provided by a nationwide animal health diagnostic system.
 - Reference and confirmatory laboratory for USDA

FY10 – > 62,000 submissions and 500,000 tests

* Includes both domestic and foreign animal diseases

NVSL Activities

- Conduct diagnostic testing
- Supply reference reagents to other laboratories
- Provide training in diagnostic techniques and conduct proficiency testing of other laboratories
- Coordinate the National Animal Health Laboratory Network
- Conduct developmental projects to improve diagnostic techniques
- Participate in World Organization for Animal Health (OIE) Collaborating Centre for the Diagnosis of Animal Diseases and Vaccine Evaluation in the Americas – CVB, ISU
- Serve as OIE reference laboratory
 - high pathogenicity avian influenza, anthrax, pseudorabies, bluetongue, contagious equine metritis, equine encephalomyelitis, equine infectious anemia, leptospirosis, Newcastle disease, vesicular stomatitis and West Nile encephalitis
- Serve as FAO reference center for vesicular diseases, classical swine fever, African swine fever

Overview

- **Introduction**
- Avian Influenza Communication Plans
- pH1N1 Communication Plans
- Diagnostic Communication Challenges

- ProMED
- 24-7 news cycle
- Social media **twitter**

Backyard bird biosecurity video, starring The Chicken Whisperer and an as of yet unnamed chicken: <http://bit.ly/c9Cy9w>

1,281,710,676,000.00 via web

The AZ Dept. of Agriculture has confirmed Vesicular Stomatitis Virus in horses on a premises in Cochise Co. (PDF)

<http://bit.ly/9L3hWH>

USDA and Rabies Task Force to distribute oral rabies vaccine baits across Cape Cod, MA to eliminate rabies in raccoons

<http://bit.ly/9zcFL3>

1,272,653,920,000.00 via web

**it's not the
BIG that eat
the SMALL
...it's the FAST
that eat
the SLOW**

How to Use Speed as a Competitive Tool in Business

Jason Jennings and
Laurence Haughton



Safeguarding Animal Health

Factors Associated with Increased Public Concern

- Catastrophic potential
- Unfamiliar
- Decision processes not understood
- Lack of personal control
- Involuntary exposure
- Delayed effects
- Children at risk
- Risk to future generations
- Lack of trust in institutions
- Much media attention
- Previous history
- Unclear benefits
- Potentially irreversible effects
- Origins caused by human actions (vs. acts of nature)

Covello, 1989

What Do We All Know About Communication

- Build relationships and partnerships with stakeholders before an issue breaks
- Prepare messages and strategies in advance – message maps
- Gain support and cooperation from all partners as cross-cutting strategies are developed
- Collaborate and coordinate with other agencies and credible sources
- Meet the needs of the media and other critical audiences (public, Congress, stakeholders, etc)
- Be open, transparent and honest
- Admit what we simply do not know – talk about what we are doing to address what we don't know
- Speak with compassion, concern and empathy
- Provide regular updates

Overview

- Introduction
- **Avian Influenza Communication Plans**
- pH1N1 Communication Plans
- Diagnostic Communication Challenges

Avian Influenza

USDA's Primary Communications Focus

- USDA Office of Communications Highly Pathogenic Avian Influenza Incident Communications Plan
 - Educating the media and public
 - ❖ complexities of avian influenza as a disease among birds, and
 - ❖ planned methods of communication in the event of an outbreak.

Spotlights

USDA Key Messages for Avian Influenza

Educating the media and the public about the complexities of avian influenza as a disease among birds is one of USDA's primary communications objectives.

As part of this effort, USDA, in partnership with the Department of Health and Human Services, Department of the Interior, and Department of Homeland Security, have developed three scenarios in the event of a detection and/or outbreak of highly pathogenic avian influenza in the United States.

The scenarios are:

Scenario 1 - Highly Pathogenic Avian Influenza Detection in the United States - File Size 105 KB (PDF)

Scenario 2 - Highly Pathogenic H5N1 Avian Influenza Detection in Wild Birds - File Size 94 KB (PDF)

Scenario 3 - Highly Pathogenic H5N1 Avian Influenza Detection in Commercial Poultry - File Size 100 KB (PDF)

Each of these scenarios contains a series of key questions and answers about animal health, guidance for the public, as well as a summary of the actions USDA would take in the event of a highly pathogenic avian influenza detection in the United States.

Media Campaign

- Briefed national TV networks and national radio about USDA's communications strategy
- Held media tours of wild bird testing (AK & flyways)
- Media tour of USDA's NVSL in Ames - world reference diagnostic laboratory for avian influenza
- Developed educational materials

Public Outreach Campaigns



- Avian Influenza: Protecting the United States. USDA Preparations and Response
- Avian Influenza: Protecting U.S. Agriculture – Imports of Legal Birds and Bird Products
- Keep Bird Flu Out of the United States – poster
- Television and radio public service announcements
 - Biosecurity for Birds
 - Smuggling
 - Food Safety



Safeguarding Animal Health

International Campaign

- International Communications Strategy
 - Multi-lateral work with United Nations' Food & Agriculture Organization and the World Organization for Animal Health
 - USDA work via bilateral forums
 - Multi-lateral work with IICA (Inter-American Institute for Cooperation on Agriculture)
 - Multi-lateral work with Canada and Mexico through the North American Plan for Avian and Pandemic Influenza

AI MEDIA EXPERIENCE

Wild Bird Surveillance

- National Interagency Wild Bird Plan
- August 2006: Michigan mute swans – apparently healthy (LPAI H5N1 North American)
 - Technical briefing
 - Press release with confirmatory test results 7-10 days later
- Initial media interest with 1st detection

NEWS RELEASE

United States Department of Agriculture • Office of Communications • 1400 Independence Avenue, SW
Washington, DC 20250-1300 • Voice: (202) 720-4623 • Email: oc.news@usda.gov • Web: <http://www.usda.gov>

Release No. 0294.06

Contact:
USDA Press Office (202) 720-4623
DOI Press Office (202) 208-6416

CONFIRMATORY TESTS BEING CONDUCTED ON MICHIGAN WILD BIRD SAMPLES

WASHINGTON, August, 14, 2006-The U.S. Departments of Agriculture and Interior today announced that routine surveillance has indicated the presence of H5 and N1 avian influenza subtypes in samples from two wild mute swans in Michigan, but testing has ruled out the possibility of this being the highly pathogenic H5N1 strain that has spread through birds in Asia, Europe and Africa. Test results thus far indicate this is low pathogenicity avian influenza, which poses no threat to human health.

AI MEDIA EXPERIENCE

Wild Bird Surveillance

- No media interest after initial confirmatory results
- Issued a total of 11 press releases announcing presumptive positive & confirmatory results in six states
- October 2006, changed announcement protocol for USDA and Department of Interior to posting apparently healthy bird sample results on the Internet

NEWS RELEASE

United States Department of Agriculture • Office of Communications • 1400 Independence Avenue, SW
Washington, DC 20250-1300 • Voice: (202) 720-4623 • Email: oc.news@usda.gov • Web: <http://www.usda.gov>

Release No. 0429.06

Contact:
Angela Harless, USDA (202) 720-4623
DOI Press Office (202) 208-6416

JOINT USDA AND DOI NEWS RELEASE: CONFIRMATORY AVIAN INFLUENZA TESTS COMPLETE ON OHIO DUCK SAMPLES
New Public Notification Protocol Announced

WASHINGTON, Oct. 26, 2006 - The U.S. Departments of Agriculture and Interior today announced final test results, which confirm that no avian influenza virus was found in samples collected earlier this month from wild Northern pintal ducks in Ohio.

Because these LPAI H5N1 detections are common and pose no threat to human health, USDA and DOI are transitioning to a new method of notifying the public. In an effort to maintain transparency, USDA and DOI will post all future suspected LPAI H5N1 detections on the Internet. DOI will maintain a list of all such routine detections as part of the National Highly Pathogenic Avian Influenza Early Detection Data System (HEDDS). The low path H5N1 detection list can be accessed at <http://wildlifedisease.nhii.gov/ai/LPAITable.pdf>. A link also will be available on USDA's avian influenza Web page at <http://www.usda.gov/birdflu>. In the event of a presumptive H5N1 test result involving a large number of sick or dead birds, or other circumstances that suggest the possibility of a highly pathogenic virus, USDA and DOI will issue a news release or conduct a technical briefing to notify the media and the public.



Safeguarding Animal Health

Communications Tools

- B-roll footage
- Digital video discs (DVDs)
- Fact Sheets



USDA FACT SHEET

United States Department of Agriculture • Office of Communications • 1400 Independence Avenue, SW
Washington, DC 20250-1300 • Voice: (202) 720-4623 • Email: oc.news@usda.gov • Web: http://www.usda.gov

Release No. 0296.06

Contact:
USDA Press Office (202) 720-4623

AVIAN INFLUENZA Low Pathogenic H5N1 vs. Highly Pathogenic H5N1 Latest UPDATE July 23, 2007

There are two types of avian influenza (AI) that are identified as H5N1. A difference exists in the virus classification; one is low pathogenic (LPAI) and the other is highly pathogenic (HPAI). Pathogenicity refers to the ability of the virus to produce disease.

- Questions and Answers

USDA Q&As

United States Department of Agriculture • Office of Communications • 1400 Independence Avenue, SW
Washington, DC 20250-1300 • Voice: (202) 720-4623 • Email: oc.news@usda.gov • Web: http://www.usda.gov

Release No. 0458.05

Contact:
USDA Press Office (202) 720-4623

Questions and Answers: Avian Influenza March 2007

The Biology of Avian Influenza

Q. What is avian influenza?

A. Avian influenza (AI)—the bird flu—is a virus that infects wild birds (such as ducks, gulls, and shorebirds) and domestic poultry (such as chickens, turkeys, ducks, and geese). There is flu for birds just as there is for humans and, as with people, some forms of the flu are worse than others.

AI viruses are classified by a combination of two groups of proteins: the hemagglutinin or H proteins, of which there are 16 (H1-H16), and neuraminidase or N proteins, of which there are 9 (N1-N9). Based upon these two groups of proteins, there are 144 different characterizations of the virus.

Overview

- Introduction
- Avian Influenza Communication Plans
- **pH1N1 Communication Plans**
- Diagnostic Communication Challenges

pH1N1 Communications

- USDA included in conference calls with CDC same day U.S. reported 2 cases to WHO
- Multi-Agency Coordination Group formed as lead for USDA
- Adapted and developed new pandemic messaging to fit event
- Previous pandemic planning assumed that disease outbreak would be in animals...not people
- Messaging focus shifted to protecting the U.S. swine herd from sick humans
- Meeting series held with stakeholders: federal agencies including public health agencies, state animal health and public health officials, research institutes, public health organizations, veterinary groups, producer organizations

pH1N1 Communications

- Significant trade actions taken and economic effect on pork industry due to human illness before any finding in U.S. swine

USDA STATEMENT

United States Department of Agriculture • Office of Communications • 1400 Independence Avenue, SW
Washington, DC 20250-1300 • Voice: (202) 720-4623 • Email: oc.news@usda.gov • Web: <http://www.usda.gov>

Release No. 0142.09

Contact
Chris Mather (202) 257-8446

STATEMENT FROM SECRETARY VILSACK ON CANADA DETECTION OF H1N1 IN ALBERTA SWINE

May 2, 2009

"I received word this afternoon that Canadian Food Inspection Agency (CFIA) officials have tentatively confirmed that swine from a herd in Alberta, Canada, have tested positive for the H1N1 strain currently causing illness in humans. A Canadian carpenter who had been in Mexico, upon return, was exhibiting flu-like symptoms, did work on the Alberta farm, and subsequently the family and swine on the farm became ill.

USDA NEWS RELEASE

United States Department of Agriculture • Office of Communications • 1400 Independence Avenue, SW
Washington, DC 20250-1300 • Voice: (202) 720-4623 • Email: oc.news@usda.gov • Web: <http://www.usda.gov>

Release No. 0149.09

Contact
Chris Mather, USDA (202) 720-4623
Meagan Murdoch, Office of the Honourable Gerry Ritz (613) 759-1059

Secretary Vilsack and Minister Ritz re-affirm Support for Pork Industry

WASHINGTON, May 5, 2009 - Canada's Agriculture Minister Gerry Ritz and United States Agriculture Secretary Tom Vilsack today re-affirmed that all appropriate steps are being taken to protect public health and strengthen the pork industry in both countries.



NPPC Calls For Accurate Reporting On Influenza

Des Moines, Iowa, May 1, 2009 -

Noting that the U.S. pork industry is nearing the brink of financial disaster, the National Pork Producers Council today called for accurate reporting on the recent influenza outbreak.

NPPC urged U.S. pork producers and others involved in the pork industry to address influenza outbreak misinformation, which already has exacerbated an economic crisis in the pork industry.

Much of the media has referred to the current influenza as "swine" flu despite the fact that the flu virus is not of pig origin, is not in the U.S. pig herd and never has been found in pigs anywhere in the world. Additionally, the World Health Organization, World Organization for Animal Health, the Centers for Disease Control and Prevention and the U.S. Departments of Agriculture, Health and Human Services and Homeland Security have said this is not "swine" flu. They are calling it Influenza A or H1N1 flu.

"We strongly urge the media to accurately report about the H1N1 flu virus and the safety of pork consumption," said NPPC CEO Ival Dierna. "Inaccurate media reports are negatively affecting U.S. pork producers and the reputation of U.S. pork as a quality and safe product. That's hurting producers economically and threatening U.S. pork export markets.

USDA STATEMENT

United States Department of Agriculture • Office of Communications • 1400 Independence Avenue, SW
Washington, DC 20250-1300 • Voice: (202) 720-4623 • Email: oc.news@usda.gov • Web: <http://www.usda.gov>

Release No. 0154.09

Contact
Office of Communications (202) 720-4623

Statement by Canadian Minister of Agriculture and Agri-Food Gerry Ritz, U.S. Secretary of Agriculture Tom Vilsack, and Mexican Secretary of Agriculture, Livestock, Rural Development, Fisheries and Food Alberto Cardenas

May 6, 2009

"We would like to express our deepest sympathies for the victims of the current outbreak of H1N1 human influenza and emphasize that our governments are doing everything they can to bring the outbreak under control.



China Lifts H1N1-Related Ban On U.S. Pork

Washington, D.C., March 19, 2010 -

The United States and China have reached an agreement to reopen the Chinese market to U.S. pork imports, action that should help struggling U.S. pork producers, said the National Pork Producers Council. Pork trade will resume immediately since both sides finalize export documentation.

The Asian nation implemented closed its market to U.S. pork in late April in the wake of an outbreak in humans of novel H1N1 influenza, which the media misnamed "swine" flu.

"This is great news for U.S. pork producers," said NPPC President Sam Carney, a pork producer from Atter, Iowa. "China is one of our biggest markets, so being able to ship pork there is extremely important to the U.S. pork industry, which has been hurting economically for more than two years now.

"With the lifting of the H1N1 ban on U.S. pork, we will focus on the remaining impediments to exporting U.S. pork to China," Carney said.

The U.S. pork industry shipped nearly 400,000 metric tons of pork worth nearly \$690 million to China/Hong Kong in 2008, making it the No. 3 destination for U.S. pork. Last year, U.S. pork exports to China/Hong Kong were down by 38 percent, falling to just under \$427 million.

In October, at the conclusion of the annual U.S.-China Joint Commission on Commerce and Trade meeting, China announced that it would rescind its pork import ban. Since then, NPPC has worked closely with the Obama administration to pressure the Chinese to actually lift their ban and begin accepting U.S. pork imports.

NPPC is continuing to urge the administration to press China to address a number of other trade-related issues that limit U.S. pork imports. Among those issues are China's ban on U.S. pork produced with ractopamine – an FDA-approved feed additive that improves efficiency in pork production – subsidies China provides to domestic pork producers and a value-added tax it imposes on imports.

pH1N1 Communications

- Similar process to avian influenza for notification

USDA NEWS RELEASE

United States Department of Agriculture • Office of Communications • 1400 Independence Avenue, SW
Washington, DC 20250-1300 • Voice: (202) 720-4623 • Email: oc.news@usda.gov • Web: <http://www.usda.gov>

Release No. 0514.09

Contact:
Angela Harless (202) 720-4623

USDA CONFIRMS 2009 PANDEMIC H1N1 INFLUENZA VIRUS PRESENT IN MINNESOTA FAIR PIG SAMPLE

Agriculture Secretary Vilsack: "U.S. Pork Is Safe to Eat"

WASHINGTON, Oct. 19, 2009 - Agriculture Secretary Tom Vilsack today announced that USDA's National Veterinary Services Laboratories (NVSL) has confirmed the presence of 2009 pandemic H1N1 influenza virus in a pig sample collected at the Minnesota State Fair submitted by the University of Minnesota. Additional samples are being tested.



2009 PANDEMIC H1N1 INFLUENZA PRESUMPTIVE AND CONFIRMED RESULTS January 19, 2010

Sample Information					USDA National Veterinary Services Laboratories PRESUMPTIVE POSITIVE TEST RESULTS		USDA National Veterinary Services Laboratories CONFIRMATORY TEST RESULTS	
Date Sample Collected	Species	Sample Source ¹	No. of Samples	State	POSITIVE Matrix PCR ²	POSITIVE N1 PCR ³	VIRUS ISOLATION ⁴	GENETIC SEQUENCING ⁵
Aug/Sept 2009	Swine	CDC-funded research project at State Fairs; clinically healthy swine	6	MN	YES	YES	YES	2009 Pandemic H1N1
Aug/Sept 2009	Swine	CDC-funded research project at State Fairs; clinically healthy swine	5	MN	YES	3/5 Positive 2/5 Negative	YES-1, NO-4	2009 Pandemic H1N1
Aug/Sept 2009	Swine	CDC-funded research project at State Fairs; clinically healthy swine	1	SD	YES	YES	NO	N/A
10/5/09	Ferret	Clinically ill pet ferret following exposure to human with influenza-like illness	1	OR	YES	YES	YES	2009 Pandemic H1N1
10/22/09	Swine	USDA swine surveillance	4	IN	YES	YES	YES	2009 Pandemic H1N1
10/30/09	Cat	Clinically ill cat following exposure to human with influenza-like illness	1	IA	YES	YES	YES	2009 Pandemic H1N1



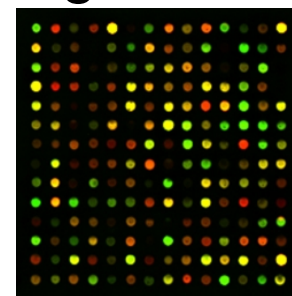
Safeguarding Animal Health

Overview

- Introduction
- Avian Influenza Communication Plans
- pH1N1 Communication Plans
- **Diagnostic Communication Challenges**

Diagnostic Communication Challenges

- Surveillance programs with screening tests have inconclusive and false positive results – what, when and how do you communicate?
- New diagnostic technologies can identify novel agents or new hosts with unknown significance
- Access to new technologies
 - Penside tests
 - Home diagnostic testing



Discovery of Swine as A Host for the *Reston Ebolavirus*

- In 2008, domestic swine in the Philippines, experiencing unusually severe outbreaks of porcine reproductive and respiratory syndrome (PRRS), were discovered to host *Reston Ebolavirus* (REBOV).
 - Identified at FADDL and confirmed at CDC.



Responses to Discovery of Swine as A Host for *Reston Ebolavirus*

- Philippines BAI, immediately stopped international trade of pork products.
- The FAO, OIE, and WHO sent a team to the Philippines to advise and assist on public health recommendations and control of the infected swine. Dr. Bill White of NVSL/FADDL among team members.
- The CDC tested 141 individuals and found some seroconversion
- Surveys of two affected farms revealed circulating virus on farm A.
- The CDC has since returned to the Philippines to investigate fruit bats as a possible reservoir.

BBC NEWS

Concern over Ebola virus in pigs.

A form of Ebola virus has been detected in pigs for the first time, raising concerns it could mutate and pose a new risk to humans.

The new discovery – in the Philippines – is featured in the journal *Science*.



Story from BBC NEWS:
<http://news.bbc.co.uk/go/pr/fr/-/2/hi/health/8143823.stm>
 Published: 2009/07/10 10:14:08 GMT
 © BBC MMIX



Summary

- Words Matter - recognize importance of communication specialists as part of the team
- Develop a communication strategy to relay information/consistent messaging
- Establish direct lines of communication at all levels (local, state, national, international) of One Health partners
- Coordinate and collaborate with public health, other stakeholders and partners in communications yet stay in area of expertise
- Recognize One Health issues will bring new partners and media to the table – for example, financial and public health reporters in addition to agriculture reporters
- Appreciate and use new social media methodologies

"Precision of communication is important, more important than ever, in our era of hair trigger balances, when a false or misunderstood word may create as much disaster as a sudden thoughtless act."

- James Thurber

"Communication works for those who work at it."

- John Powell

Acknowledgements

- Angela Harless, USDA Office of Communications
- Ed Curlett, APHIS Legislative and Public Affairs
- Dr. Will Hueston, University of Minnesota