

# Swine HEALTH REPORT

A National Institute for Animal Agriculture Publication

Spring 2003

## APHIS Dedicates New Emergency Operations Center

A state-of-the-art facility that will significantly improve the Animal and Plant Health Inspection Service' (APHIS) capability to coordinate responses to animal and plant health emergencies was officially dedicated on April 3.

Located at USDA's Veterinary Services headquarters in Riverdale, Md., the emergency operations center (AEOC) will serve as the national command and coordination center for APHIS emergency programs' disaster management.

According to Dr. Joseph Anelli, director of emergency programs for USDA, APHIS, Veterinary Services, the center can be used in both routine and emer-

gency situations. "During an emergency, the AEOC can support 40 or more personnel and operate 24 hours a day, seven days a week," said Anelli. "When an emergency operation is not underway, the AEOC facilities will be used to monitor and report on international and domestic surveillance of pest pathogens and disease conditions of concern and to conduct advanced training."

The AEOC will be used through all phases of an emergency, from initial situation assessment through response coordination and support and then to wrap-up phases.

The AEOC features advanced technology that allows AEOC team members to communicate with field personnel and USDA leadership. Communications capabilities include video teleconferencing, advanced computer interfaces, geographical information system mapping, and a strong multimedia component.

"Teams working in the AEOC now have a greatly enhanced ability to collect, analyze, and disseminate information, enabling them to meet any animal or plant health emergency with a well-orchestrated and technologically advanced emergency response," said Anelli. He said national response management teams can direct necessary resources and communicate with appropriate



*Deputy Secretary of Agriculture Jim Moseley dedicated the APHIS Emergency Operations Center on April 3rd. The center is able to coordinate with USDA and the Department of Homeland Security. Behind Moseley in this photo, screens show the center's multi-site video teleconferencing capabilities. His remarks were broadcast to three remote locations which could be seen by attendees throughout the center.*

stakeholders by coordinating with other federal, state, and international organizations, including the Department of Homeland Security.

The spatial layout of the AEOC provides both large gathering areas and private workspaces. The Center for Intelligence Collection is a large, open space that includes the projection area and 21 emergency operation stations. The Leadership Incident Coordination Center is used for assembling and briefing key leadership. Another room is dedicated to receiving and storing classified information. A briefing

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## Pork Board, USDA Offer Tips for Protecting Food Supply

With the nation's "threat" level having been heightened in recent times, producer groups have joined with federal agencies in sounding an alert to producers and urging increased biosecurity measures be implemented to protect against foreign animal diseases.

In March, and again in May, the Department of Homeland Security increased the threat level to "orange", or high status.

"This is a time when everyone needs to do their part for the good

of the cause," said Hugh Dorminy, a producer from Russellville, Ark., and president of the National Pork Board. "Biosecurity and security are always important for pork producers. Now is a great time to evaluate protocols on the farm so we can make sure prevention and response plans are in place."

The following tips can help ensure homeland security for the nation's food:

- Report any unusual health situation to your local veterinarian or state animal health official.
- Be alert and aware of suspicious activities surrounding food and agriculture operations and report any suspicious activities to local law enforcement.
- Update emergency phone numbers.
- Consider inspecting all vehicles entering facilities and operations and escorting all visitors.
- Increase surveillance around

facilities and consider restricting public events, such as tours and lectures.

The emergency programs staff at USDA, APHIS, Veterinary Services has issued a list of symptoms swine producers should be looking for, including rising temperatures; ruptured vesicles; sticky, foamy, stringy saliva; reduced feed consumption; lameness with reluctance to move; abortions, and low conception rates. Such symptoms should be reported to the local veterinarian.

Additional biosecurity information is available on the Internet at [www.aphis.usda.gov/vs](http://www.aphis.usda.gov/vs). The Pork Checkoff program administered by the National Pork Board also offers Biosecurity and Security Guides to assist producers in developing protocols to further protect their operations. This information is available on the Internet at [www.porkboard.org](http://www.porkboard.org) or by calling 800-456-PORK.



## Swine Health Report

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## APHIS Dedicates New Emergency Operations Center

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room, with seating for 25 to 30 people, can be used to assemble stakeholder groups. It can also serve as a training classroom. There are also conference rooms and a number of individual offices.

"AEOC team members are trained in incident command system procedures of emergency management and now have an enhanced ability to keep leadership informed of the status of emergencies," said APHIS Administrator Bobby Acord. "Having this world-class facility to coordinate and support emergency response helps APHIS to provide leadership during national emergencies and greatly enhances our ability to work with partners."

### AEOC At-a-Glance

- Development of AEOC started in September 1999.
- The size of the center is 8,800 square feet.
- It is supported by a 400-kilowatt generator as an emergency power source.
- It features four, 65-inch rear projection screens, 40 high-resolution computers, and global positioning system time-zone clock displays.
- The AEOC was designed at a cost of \$87,321. Construction cost was \$587,626. The advanced electronics systems cost \$2.6 million.

# The North Carolina Emergency Management Experience

## An Interview With Thomas McGinn III, DVM

Dr. Thomas McGinn III is the director of the Emergency Programs Division for the North Carolina Department of Agriculture and Consumer Services. A pioneer in the use of Geographic Information Systems for animal health management, he is active on the Federal level in activities such as Crimson Sky. This was an exercise that simulated the government's course of action in case of a bioterrorism event.

Dr. McGinn, who serves as a director for the National Institute for Animal Agriculture, shared his experiences with emergency animal disease management in the following interview.

*Q. It appears that teamwork is a repeated theme when discussing response to animal emergency situations. Is that the case, and if so, how do you foster teamwork between various stakeholders?*

A. I think the whole idea of getting results depends on first beginning with rapport. Then, develop alignment, then agreement and then you get results. You cannot shortcut this process. Developing rapport begins with being a "missionary" in other agencies. This means one has to live among them, understanding their objectives, concerns and motivations. One other thing I would add is that relationships are forged through the pursuit of common interests. One must find the common ground.

*Q. Was there a significant event, such as Hurricane Floyd, that sparked the development of the emergency animal programs in North Carolina?*

A. Really, our Emergency Programs Division was developed after the threat of Foot and Mouth Disease escalated globally. Hurricane Floyd primed North Carolina to be concerned about animal emergencies. It also showed us that animal emergencies would be bigger than any one agency's ability to respond. If Agriculture was going

to take the lead, it had to develop a division that addressed these concerns specifically. Our Emergency Programs Division is responsible for all hazards, including animal, pesticide, plants, fairs, fertilizers, laboratories, research farms, and so on.

*Q. What have been the keys to getting as much budget, priority and attention as you have been able to bring to the emergency animal health programs in North Carolina?*

A. Secretary Veneman supported Commissioner Meg Scott Phipps in designating specialty crop money for Foot and Mouth Disease preven-



Dr. Tom McGinn

tion. We hired experts in threat assessment with military backgrounds, in order to understand and communicate the risks in the agricultural production and supply arena. We also converted positions once used for pseudorabies and brucellosis eradication to the more pressing issues of our day, namely agriculture being part of the critical infrastructure of our country.

*Q. What advice do you have for other states that may be trying to get up to speed in setting up their emergency animal programs?*

A. Broaden your stakeholder base by communicating how a disaster will impact them economically, legally and socially. Then, build a team, build a plan and exercise.

*Q. What have been your observations from participating in exercises such as Crimson Sky?*

A. We all have our oars in the water, and are pulling as hard as we

can. We just need bigger oars. We need to be before Congress for additional dollars for education, research, detection, diagnostics, surveillance, preparedness and response. I am very impressed with the Department of Defense, USDA, Public Health, FEMA and many private, state and local agencies and organizations for their dedication and preparedness. National exercises tell us we are going to need all the resources we can seamlessly assemble to address these emerging threats.

*Q. What would you identify as your biggest moments of success so far, and what remain as the biggest obstacles and challenges for emergency animal health planning?*

A. My biggest moment of success is the public-private partnership that we have been able to build in North Carolina. The State Animal Response Team (SART) is becoming a model for the country, and we are proud of that fact. A public-private partnership brings to bear the best of both sectors. I am also very proud to be the Deputy Team Leader of VMAT-3, and have had the privilege to serve my country at the site of the World Trade Center.

*Q. How did events of Sept. 11 change your approach, if at all?*

A. Standing in the pit of "Ground Zero" seared in me the desire to protect our nation, and the vulnerability of our country to those who seek to do us harm. We are learning how to think like our enemies so as to reduce the probability of being a target. As I watched fallen firefighters being pulled from the rubble, I was awestruck by how many different states, agencies and persons from all walks of life would devote all its resources and efforts on behalf of each and every one of us. What I realized is that these same Americans are depending on us to bring together all of these same resources to protect their food production and supply.

# PMWS a Priority for National Pork Board

Several diseases have either emerged or re-emerged in the last 15 years in the United States and abroad, including Porcine Reproductive and Respiratory Syndrome virus (PRRS), numerous strains of swine influenza, *E. coli* F18, *Salmonella* DT104, *Erysipelas rhusiopathiae*, and a group of porcine circovirus-associated diseases.

Dr. Eric Neumann, director of swine health information and research at the National Pork Board, says circovirus — or PCV-2 — associated diseases in swine have been recognized in many countries around the world, including the U.S. and the United Kingdom. Speaking before the Emerging Diseases Committee during the 2003 annual meeting of the National Institute for Animal Agriculture (NIAA) in April, Neumann said the most well known PCV-2 associated clinical diseases have been termed Postweaning Multi-systemic Wasting Syndrome (PMWS) and Porcine Dermatitis and Nephropathy Syndrome (PDNS).

"Many believe that these clinical syndromes are the same in the U.K. and the U.S.," said Neumann. "However, distinct clinical differences do exist, raising the issue as to whether the diseases exist in the U.S. at all or if they simply differ in their significance in the respective countries."

Neumann said PMWS primarily affects nursery pigs six to 12 weeks of age in the U.K. But, in the U.S., PMWS is more frequently associated with finishing or older nursery pigs 10 to 16 weeks of age.

The U.K. mortality rate associated with PMWS and PDNS has been described in the 20-40 percent range, while three to 10

percent is typical in the U.S. and Canada, he said.

Britain's Meat and Livestock Commission estimate the two syndromes cost its swine industry \$31 million in 2001. "The U.K. has clearly experienced a much severe form of PMWS, and at a higher prevalence than the U.S.," said Neumann.

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The National Pork Board, in conjunction with USDA, sponsored a study trip to the U.K. last November in an effort to further understand the differences between the U.S. and U.K. in regard to the prevalence and severity of PMWS. The weeklong trip involved a "cross-functional team" of veterinarians, producers, epidemiologists, pathologists and clinicians.

The relationship between PDNS and PMWS is far from understood, said Neumann. "Some producers and veterinarians adamantly believe PMWS infection on a farm begins with an outbreak of PDNS but that it would disappear or 'change into' very classical PMWS over a period of months,"

he said. "Others are convinced of the opposite sequence of events." Rarely do both syndromes show up in the same pig, but occasionally both syndromes can be represented in an affected group, he said.

Many other diseases seem to occur concurrently with PMWS, said Neumann. Both PRRS and *M. hyoneumoniae* infections are common respiratory pathogens. Systemic infections including PRRS, *H. parasuis*, and *S. suis* are also present. The frequency of enteric infections occurring along with PMWS is unknown but is apparent in some groups. Reproductive failure associated with PCV-2 in the U.K. has been suggested but is not thought to be a frequent event, Neumann said.

"Researchers in the U.S. and elsewhere have produced convincing evidence that PCV-2 alone can cause the lesions and clinical signs commonly seen in PMWS," said Neumann. "However, we also know that many farms in the U.S. and the U.K. are positive for the PCV-2 organism but don't show the classical clinical signs of the disease. Clearly, there must be more to the story than simply being PCV-2 positive." He said one theory is that additional risk factors must be present in order for clinical signs of PMWS to appear.

"The National Pork Board has identified the issues of disease surveillance and detection of emerging diseases — specifically PMWS — as important priorities for Pork Checkoff," said Neumann. "We will continue to fund work in these areas and help to support U.S. swine producers in their need to maintain farms with the highest standards of health."

## AASV Elects 2003-2004 Officers



Dr. Rick Sibbel, Ankeny, Iowa, was installed as president of the American Association of Swine Veterinarians

during the association's annual meeting in March in Orlando, Fla. He succeeds Dr. Lisa Tokach of Abilene, Kan. Dr. John Waddell of Sutton, Neb., ascended to president-elect. Elected as vice president was Dr. Tom Gillespie of Rensselaer, Ind.

Sibbel, a 1979 graduate of the Iowa State University College of Veterinary Medicine, is a technical services manager at Schering-Plough Animal Health. Since beginning his career in industrial veterinary medicine in 1986, he has helped develop several new animal health vaccines.

Sibbel is a recognized leader in

the use of vaccines to manage and eradicate swine diseases, serving as an adviser to many state and regional regulatory agencies. From 1979-1986, Sibbel was the co-owner of a veterinary practice in O'Neill, Neb.

"Assuming the role of president of the AASV is humbling and yet very exciting," said Sibbel. "Our organization will have a key role in many issues involving veterinary medicine and veterinary education as we sort through changing dynamics in society and the role of food animal veterinarians in safeguarding the food supply. Sibbel said his agenda would be geared toward continued delivery of the association's legacy of "balanced, scientifically-based leadership."

In addition to his leadership responsibilities at AASV, Sibbel currently serves as vice chairman of the board of the National Institute for Animal Agriculture, and is active in the American Veterinary Medical Association.

## AASV Honors Outstanding Members

At its annual meeting in Orlando, Fla., March 8-11, the American Association of Swine Veterinarians honored a select group of veterinarians for achievements that have made a mark on the profession and swine industry.

The Howard Dunne Memorial Award, in recognition of significant contributions and outstanding service to AASV and the swine industry, was presented to Dr. Robert Friendship of Guelph, Ontario.

The Meritorious Service Award, in recognition of consistent service to the association's members, officers and staff, was presented to Dr. Tim Trayer of Denver, Penn.

The Swine Practitioner of the Year Award, in recognition of an unusual degree of service to veterinary clients, was presented to Dr. Ron Brodersen of Hartington, Neb.

## VS "Safeguarding Animal Health in 2002" Report Now on the Web

USDA's Animal and Plant Health Inspection Service's Veterinary Services (VS) has made available its annual report for fiscal year 2002. The report highlights VS activities in domestic detection and surveillance, exclusion, international information, response, regional highlights, and communications and outreach.



VS is charged with protecting the \$100 billion-a-year livestock industry from foreign and domestic animal diseases and supports USDA's efforts in opening new markets for U.S. animal products.

The report, Safeguarding Animal Health in

2002, is available on the Internet at [www.aphis.usda.gov/vs](http://www.aphis.usda.gov/vs).

## USAHA Announces 2003 Annual Meeting

The 107th annual meeting of the U.S. Animal Health Association will be held Oct. 9-16 in San Diego, Calif. As in past years, the meeting will be held in conjunction with the 46th annual meeting of the American Association of Veterinary Laboratory Diagnosticians.

Topics that will be discussed include the continuing threat of bioterrorism, animal disease surveillance, the ability to trace the movement of animals, implementation of a national animal health laboratory network and a special session on international agricultural trade.

For registration and hotel information, call (804) 285-3210 or log on to [www.usaha.org](http://www.usaha.org).

# Nebraska, South Dakota Declared PRV Free

Nebraska Department of Agriculture Director Merlyn Carlson recently announced that Nebraska is officially recognized as being free of pseudorabies virus (PRV).

"This is wonderful news for Nebraska and the swine industry to be declared pseudorabies free. Nebraska has been battling this extremely contagious swine disease for 22 years," said Carlson.

The designation means that every swine herd in Nebraska is now considered negative for PRV, an extremely contagious virus that causes reproductive and respiratory problems, including

abortion, stillbirths, and even occasional death losses in breeding and finishing hogs.

"This designation is something that we have worked hard to achieve," said state veterinarian Dr. Larry Williams. "While pseudorabies vaccinations are not mandatory, we still encourage producers to voluntarily vaccinate high risk animals to help ensure that Nebraska remains pseudorabies free."

Nebraska ranks seventh nationally in total pig production.

Also, receiving Stage V, or free, status recently was the state of South Dakota. South Dakota has

avoided PRV infection in its swine herds since 1996 other than imported swine.

**In other news,** Pennsylvania has been conducting surveillance testing after discovering one infected animal earlier this year. According to Dr. Adam Grow, senior staff veterinarian with USDA's Animal and Plant Health Inspection Service, extensive testing has not revealed additional infection in that state.

Officials in South Carolina, however, haven't been as fortunate, recently depopulating three hog operations that tested PRV positive. Texas and Hawaii animal health officials have also depopulated hog operations in recent months. Dr. Grow said each of these cases appear to be connected to exposure to wild feral pigs infected with PRV.

## Iowa Reaches Stage IV Status in Fight with Pseudorabies

Iowa Secretary of Agriculture Patty Judge recently announced that the USDA has assigned Stage IV status to Iowa following a review of the Iowa Pseudorabies Program Status Stage IV application.

"This is tremendous news for Iowa and our fourteen year battle to rid Iowa of the swine disease Pseudorabies," Judge stated.

This designation means that:

- Every swine herd in Iowa is now considered negative for PRV .
- Testing requirements will be relaxed, allowing for greater movement of swine into, out of, and within the state.
- Vaccination will no longer be mandatory but will still be highly recommended.
- Surveillance testing will continue throughout the state and is required to maintain this status.

Pseudorabies is a disease of swine that is extremely contagious and causes reproductive and respiratory problems.

In 1989, Iowa had over 4,000 infected swine herds, the highest

in the nation. Pseudorabies eradication efforts began in 1989 in Iowa's known infected counties and grew into a statewide effort by 1993.

State Veterinarian John Schiltz stated, "We will remain vigilant and statewide surveillance must be continued for a period of one year, after which time the Department of Agriculture will apply for Stage V status, which would declare Iowa Pseudorabies free."

Secretary Judge concluded, "I want to thank Iowa's Pork Producers, our veterinarians, our Pseudorabies Advisory Board and the outstanding staff of the Ag. Department's Animal Industry Bureau for their hard work and dedication. This fight is nearly over and we are looking forward to that time, a year from now hopefully, when we will be able to declare that Iowa is Pseudorabies free."

Iowa leads the nation in pork production and the pork industry pumps over \$3.1 billion into Iowa's economy each year.

## IDEXX Announces New Application for PRV Test Kits

IDEXX Laboratories, Inc. Production Animal Services division recently announced the launch of a second application to the HerdChek® Pseudorabies Virus gpI ELISA test kit for the detection of antibodies to pseudorabies virus (PRV) in swine serum. Now the test kit can also be used with swine meat juice (exudate) samples.

The original USDA-licensed kit was approved for the detection of antibodies against PRV in serum samples only. After significant sam-

## NIAA Recognizes Taft's Contributions in PRV Eradication



Craig Taft (l) receives plaque from Jim Leafstedt in recognition of father's efforts.

At the annual recognition banquet of the National Institute for Animal Agriculture on April 8 in Cincinnati, Ohio, Arnold C. Taft, DVM, was memorialized by his

pling at US swine abattoirs, IDEXX conducted extensive research to also validate meat juice samples. When meat juice samples are used, this test kit can be used for surveillance in detecting pseudorabies infection in swine on a post-mortem basis.

The USDA has licensed the test PRV gpI Antibody Test Kit to include both types of samples. The new test kit with serum and meat juice as sample types is available for sale to those laboratories that have been approved by the National Veterinary Services Laboratory (USDA) for testing swine meat juice samples.

peers for his contributions towards the successful eradication of pseudorabies virus (PRV) in the United States.

Dr. Taft, 74, who served as national PRV program coordinator for USDA, APHIS, Veterinary Services, passed away on Dec. 30, 2002, after a courageous battle with pulmonary fibrosis. He served in that position from 1991 until the time of his death.

"It is our privilege to honor the memory of Dr. Taft," said

### Jim Leafstedt Receives NIAA President's Award

James Leafstedt was honored during the National Institute for Animal Agriculture's Annual Recognition Banquet in April in Cincinnati, Ohio with the President's Award, recognizing the Outstanding Committee Chairperson of the Year.

NIAA President and Chief Executive Officer Glenn N. Slack presented the award to Leafstedt, citing exemplary leadership and dedication to NIAA and the NIAA Pseudorabies (PRV) Eradication Task Force.

Leafstedt is credited with pro-

James Leafstedt, chairman of NIAA's Pseudorabies Eradication Task Force and a pork producer from Alcester, SD. "To eradicate a disease from commercial swine production in the entire country is quite a noteworthy and seldom-accomplished task."

On Jan. 14, 2002, Dr. Taft witnessed the national eradication effort reach a historic milestone when the number of PRV cases in the U.S. reached zero.

"Slowly, but surely, with his steady and optimistic guidance, we reduced those infected and quarantined herds until last year we reached zero infection," said Leafstedt. "Soon, we hope to be able to declare (the nation's) commercial swine production 'free' of pseudorabies."

On hand to represent the Taft family and receive the recognition was Dr. Taft's son, Craig. In making the presentation, Leafstedt said, "We wish to present this plaque to his son and the entire family so they may always know the appreciation of NIAA and the pork industry."

viding leadership in the development of a post-eradication plan for pseudorabies virus in the United States and a framework document for addressing infection in feral swine populations. He has been a staunch advocate for continued surveillance measures to locate any remaining vestiges of PRV infection in the U.S.

On Jan. 14, 2002, a major milestone was reached of "zero" known infected herds in the U.S.

The Alcester, SD, pork producer represents the National Pork Board.

# Task Force Addresses Feral Swine Issues

Animal health officials and industry representatives comprising an ad-hoc committee appointed by the National Institute for Animal Agriculture (NIAA) met in Tampa, Fla. recently to address concerns of feral swine infected with pseudorabies (PRV) and other diseases coming into contact with commercial hog operations.

NIAA charged the ad-hoc committee with developing guidelines that can be used to evaluate the content of a state's feral swine activities and programs. According to James Leafstedt, a South Dakota pork producer and chairman of the NIAA Pseudorabies Eradication Task Force, the purpose of such evaluations will be to help protect domestic swine herds from dis-

eases such as PRV. "We intend to provide the National PRV Control Board with more detail in assessing states' PRV status in light of feral swine populations and the threat posed to commercial swine operations."

The Tampa meeting resulted in a framework document that Leafstedt said is designed to pose several questions and areas of assessment to assist states in evaluating the adequacy of its management of the feral/commercial swine interface. The framework also gives the control board suggestions for evaluation of a state's status after consideration of their unique feral/commercial swine interface situations.

Leafstedt said the document

was presented to the NIAA Pseudorabies Eradication Task Force at an April meeting in Cincinnati, Ohio and was endorsed with only slight modification. It will be presented to the United States Animal Health Association Committee on Pseudorabies in October for further consideration and endorsement.

The U.S. swine industry reached zero infection in January 2002 following a decade-long battle to eradicate PRV from the domestic swine herd. Leafstedt said that the only long-term threat to achieving complete elimination of the disease is re-infection from feral swine. Recent cases of PRV infection in swine herds have pointed to exposure to feral swine.

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