

SUPPORTING STATEMENT FOR INFORMATION COLLECTION

UNITED STATES DEPARTMENT OF AGRICULTURE (USDA)

ANIMAL AND PLANT HEALTH INSPECTION SERVICE (APHIS)

VETERINARY SERVICES (VS)

CENTERS FOR EPIDEMIOLOGY AND ANIMAL HEALTH (CEAH),

NATIONAL ANIMAL HEALTH MONITORING SYSTEM (NAHMS)

NAHMS POULTRY 2010

**SUPPORTING STATEMENT FOR INFORMATION COLLECTION BY THE
CENTERS FOR EPIDEMIOLOGY AND ANIMAL HEALTH (CEAH),
NATIONAL ANIMAL HEALTH MONITORING SYSTEM (NAHMS)¹
OMB NUMBER 0579-XXXX
NAHMS POULTRY 2010 STUDY**

January 2010

A. JUSTIFICATION

This submission is a request for approval to initiate the National Animal Health Monitoring System's (NAHMS) Poultry 2010 study, an information collection by the Animal and Plant Health Inspection Service (APHIS). The study will consist of 3 components (see 3 objectives below). Objective 1 will consist of a company-level questionnaire and a farm-level questionnaire administered to chicken primary breeder and multiplier flocks. Objective 2 will consist of an on-farm questionnaire for turkey grower flocks as well as biologic sampling on a subset of farms. For the third objective, case studies will be conducted in four cities² to estimate the size of urban chicken ownership in these cities. A questionnaire addressing health and management practices will be administered by APHIS-designated data collectors to chicken owners in the four cities.

The collection will support the following objectives:

1. Describe the structure of commercial poultry industries, including interactions among poultry industry segments, movements, and biosecurity practices. Describe farm-level practices for chicken primary breeder and multiplier flocks. Identify critical factors for exclusion of disease (such as *Mycoplasma*).
2. Estimate the prevalence and investigate risk factors associated with clostridial dermatitis (cellulitis/gangrenous dermatitis) on turkey grower farms.
3. Estimate the size of the urban chicken ownership population in four U.S. cities. Describe bird health, movement, and biosecurity practices of urban chicken flocks.

The information collected through the Poultry 2010 study will be analyzed and organized into descriptive reports. Several information sheets will be derived from this report and disseminated by APHIS to producers, stakeholders, academia, veterinarians, and other interested parties. Participation in this study is voluntary; it is up to the individual company representative or urban resident to decide whether or not it is desirable to participate.

¹ The National Animal Health Monitoring System is responsible for collecting national data on animal health and productivity from voluntary participants.

² Denver, Los Angeles, Miami, New York

1. Explain why the collection of this information is necessary.

Collection and dissemination of animal health data and information is mandated by 7 U.S.C. § 391, the Animal Industry Act of 1884,³ which established the precursor of APHIS, Veterinary Services, and the Bureau of Animal Industry. Legal requirements for examining and reporting on animal disease control methods were further mandated by 7 U.S.C. § 8308 of the Animal Health Protection Act, “Detection, Control, and Eradication of Diseases and Pests,” May 13, 2002³.

Collection, analysis, and dissemination of livestock and poultry health information on a national basis are consistent with the APHIS mission of protecting and improving American agriculture’s productivity and competitiveness. In connection with this mission, the NAHMS program includes periodic national commodity studies to investigate animal health related issues and examine general health and management practices used on farms. These studies are driven by industry and stakeholder interest, and information collected is not available from any other source on a national basis. Information about health and management practices on U.S. poultry operations is useful to the poultry industry as well as many Federal and State partners.

NAHMS staff has completed a needs assessment which was a collaborative effort with producers, researchers, extension veterinarians, Federal and State personnel, and clinicians. Information gathered was used to determine the study objectives.

National Surveys Providing Baseline Information

The Poultry 2010 study is part of an ongoing series of NAHMS studies on the US poultry population. The first NAHMS poultry study was NAHMS Layers 1999. The objectives of that study were to describe biosecurity and management practices used in the US layer industry, and to identify risk factors associated with *Salmonella enteritidis* in layer flocks.

Poultry 2004 was the second national monitoring activity focusing on the US poultry population. Data were collected on the health and management of three distinct components of the nontraditional poultry industry: backyard poultry flocks, gamefowl flocks and live-bird markets.

The Small Enterprise Chicken study was the third NAHMS poultry study. The objectives of that study were to describe biosecurity and management practices on commercial chicken operations with fewer than 20,000 chickens.

For objectives 1 and 2 of the NAHMS Poultry 2010 study, 56 companies were selected for participation: 24 egg layer companies, 14 broiler companies, 10 turkey companies, and 8 breeder companies. These 56 poultry companies account for approximately 84 percent of broiler meat, 71 percent of layers, and 72 percent of turkeys slaughtered (see Appendix A). For objective 3, 4 large cities were chosen to provide geographic coverage, as well as anticipated populations of long-term and new chicken owners. This data collection effort will provide information about this growing chicken-owning phenomenon which may have public health and commercial poultry health implications.

³ United States Code § 391, and 7 U.S.C. § 8308 are available upon request.

2. Indicate how, by whom, and for what purpose the information is to be used. Indicate the actual use the Agency has made of the information received from the current collection.

Data collected, analyzed, and interpreted will be disseminated to a wide variety of constituents.⁴ Producers will use the information to compare their operation's animal health and productivity with other operations nationally. Producer groups and veterinarians will use information derived from analyses to improve preventive measures and information outreach efforts. Pharmaceutical and biologics companies will use the information to plan and develop research and marketing strategies for their products. Extension veterinarians will use the information to identify diseases and disease trends. State and Federal officials, responsible for regulatory veterinary medicine, will use the information to gain a more complete picture of animal health as a basis for program planning and to direct research priorities. State and Federal officials will use the data to make scientifically based decisions. Public health officials will use the information to estimate the magnitude of health conditions which affect public health. Research scientists will use the information to define current and future animal health issues and direct research programming. Veterinary and agricultural students will use these data to determine the occurrence, potential risk factors, and cost of animal disease as a foundation for training in health management, animal welfare, nutrition, and environmental impacts. The benefit to the industry from the Poultry 2010 study is the availability of scientifically valid national estimates of health and management practices of the Nation's poultry industry.

APHIS will use the data collected to:

- Establish national production measures for producer, veterinary, and industry reference
- Predict or detect national trends in disease emergence and movement
- Address emerging issues
- Examine the economic impact of health management practices
- Provide estimates of both outcome (disease or other parameters) and exposure (risks and components) variables that can be used in analytic studies in the future by APHIS
- Provide input into the design of surveillance systems for specific diseases
- Provide parameters for animal disease spread models.

Poultry 2010 Study Data Collection Forms

⁴ A complete list of publications using NAHMS poultry data is available on the Web at <http://nahms.aphis.usda.gov>

NAHMS-235, Company Questionnaire, will be completed by company veterinarians or representatives to collect data on the industry structure, including bird movements and company biosecurity policy. A unique NAHMS identification number will be assigned to each company. The respondent may choose to complete the questionnaire either on-line or via a paper version which (without producer contact information such as name or address) will be returned to NAHMS in Fort Collins, CO, for data entry and validation.

NAHMS-236, Breeder Questionnaire, will be completed by a company or consulting veterinarian, service person, or other company personnel to collect data on management practices relating to poultry health, bird movement, and biosecurity practices. The respondent may choose to complete the questionnaire either on-line or via a paper version which (without producer contact information such as name or address) will be returned to NAHMS in Fort Collins, CO, for data entry and validation.

NAHMS-237, Turkey Questionnaire, will be completed by a company or consulting veterinarian or other company personnel to collect data on farm management practices relating to potential risk factors for clostridial dermatitis in turkeys. The paper questionnaire will be returned (without producer contact information such as name or address) to NAHMS in Fort Collins, CO, for data entry and validation.

NAHMS-239, Company Agreement, will be presented to participants in the clostridial dermatitis biological sampling. This form is intended to increase the participant's understanding of the study focus, highlight confidentiality safeguards, and explain participation requirements. The form will be signed by the participant and an APHIS representative. One copy of this agreement will be retained by the participant and one copy will be retained by APHIS.

NAHMS-240, Clostridial Dermatitis Sample Collection Record, will be used by company personnel to collect biologic samples. Each farm will be visited up to 5 times at weekly intervals. Two types of samples will be collected: poultry litter, and tissue samples from individual turkeys. The form will collect information on the animals and barns from which samples are being collected. The samples will be shipped to the USDA National Veterinary Services Laboratories (NVSL) and/or the diagnostic Laboratory at the University of Arizona. Tissue will be analyzed using culture and histopathology, and litter will be analyzed using Clostridial spore counts. The form will be returned to NAHMS for data entry and validation and a copy will be retained by the data collector to facilitate validation. Results of the testing will be returned to the producers.

NAHMS-241, Urban Chicken Prevalence Record, will be administered by a private survey company via contract to collect information on ownership of chickens in an urban environment, and attitudes about chickens in urban settings. The survey company will administer the questionnaire by mail with a second mailing to non-responders and follow-up phone calls to non-responders to both mailings. The survey company will enter and validate data collected and provide the data file to NAHMS in Fort Collins, CO.

NAHMS-238, Urban Chicken Questionnaire, will be administered to chicken owners at feed stores that sell chicken feed via personal interview by an APHIS-designated data collector, or

will be distributed by an APHIS-designated data collector for self-administration at the feed store. The questionnaire will collect information on health and management practices of urban chicken operations. The form will be returned to NAHMS for data entry and validation and a copy will be retained by the data collector to facilitate validation.

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Respondents of forms NAHMS-235 and 236 will have the option of completing the company and breeder surveys via a web-based instrument. [NOTE: this is in development and an IC Change will be requested once it is completed.] The other forms will be paper only.

4. Describe efforts to identify duplication.

Literature searches for existing data relevant to the Poultry 2010 study have been performed. Available data were reviewed and compiled from all known sources. Sources reviewed include cooperative State research, private industry and professional publications, diagnostic laboratories, other Federal and State agencies, the American Association of Avian Pathologists (AAAP), and universities. Personnel from Federal agencies and academia were consulted in their areas of expertise to identify potential duplication. No other entity/source is collecting and analyzing this type of information on the health of the U.S. poultry industry on a national scale.

5. If the collection of information impacts small business or other small entities, describe the methods used to minimize burden.

These surveys are designed to collect the minimum amount of data required from a minimum number of producers with poultry and urban residents to ensure statistically and scientifically valid data. Industry and producer input is solicited to ensure that information collected is relevant and timely. The 56 companies being surveyed are all large companies. This is a voluntary study; it is at the discretion of the individual company representative or urban resident to decide whether or not it is desirable to participate.

6. Describe the consequences to Federal program or policy activities if the collection is not conducted or conducted less frequently, as well as any technical or legal obstacles to reducing burden.

The type and quality of data collected by NAHMS is unique; no other entity is collecting this type of information in the U.S.

Without this type of data, the ability to detect trends in management, production, and health status, either directly or indirectly, would be reduced or nonexistent. The possibility of assessing the reduction of risk to human health from foodborne pathogens and zoonotic diseases due to management changes based on NAHMS data would also be nonexistent. Furthermore, the ability to respond to international trade issues involving the health status and production practices of the U.S. poultry population would be severely reduced, potentially impacting the global marketability of animals, meat, and byproducts. Disease spread models would not have the necessary parameters to predict more accurately the spread of an outbreak.

7. Explain any special circumstances that would cause an information collection to be conducted in a manner inconsistent with the general information collection guidelines in 5 CFR 1320.5.

This information collection is consistent with guidelines established in 5 CFR 1320.5.

8. Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting form, and on the data elements to be recorded, disclosed, or reported. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, soliciting comments on the information collection prior to submission to OMB.

The Agency's notice of information collection activity was announced in the Federal Register on Tuesday, June 23, 2009, pages 29657-29658. One comment was received indicating strong support for this study.

Examples of poultry experts who were consulted:

Dr. Jose A. Linares, Resident Director, TVMDL, Poultry Diagnostic Laboratory, PO Box 84, 1812 Water St., Gonzales, TX 78629, 830-672-2834.

Dr. Kate Barger, President Association of Primary Breeder Veterinarians, Cobb-Vantress Inc., PO Box 1030, Siloam Springs, AR 72761, 479-549-2846

Dr. John Smith, Chair, USAHA Transmissible Diseases of Poultry Committee, Fieldale Farms, GA, 706-776-6032.

This information collection (both Parts A and B) were reviewed by OMB Statistician Brian Harris-Kojetin. Brian OK'd the collection after CEAH made suggested changes recommended by Brian following a conference call on January 7, 2010.

CEAH also consulted with the National Agricultural Statistical Service during the preparation of this collection.

9. Explain any decision to provide any payment or gifts to respondents, other than remuneration of contractors or grantees.

Respondents to the feed store urban chicken survey will be offered a \$10 discount on a bag of chicken feed as compensation for their time. Because urban chicken owners are a rare group (less than 1 percent of the urban population), participation rate must be high in order to get a sufficient sample. An incentive is necessary to ensure a high participation rate. Additionally, use of an incentive will decrease the overall cost of implementing the survey by reducing the number of days that feed stores must be visited by APHIS data collectors to complete an adequate number of surveys.

10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation or agency policy.

APHIS will only release study results based on summary estimates from the inference population. Only the designated company representative collecting on-farm data will have knowledge of the participant's identity. All forms, data, and questionnaires will refer to the respondent by a numeric code assigned by NAHMS. This link between participant and numeric code will be destroyed once data collection, entry, validation, and report dissemination are complete. All completed survey forms, without names and other identifying personal information, will be stored securely in a limited-access records vault. In follow-on phases agreed to by respondents, no names, addresses, or other personal information is recorded on the questionnaire, therefore eliminating any connection between completed questionnaires or laboratory results and the respondent's information.

Access to record-level data files is always restricted and these files are only accessible by designated APHIS personnel.

11. Provide additional justification for any questions of a sensitive nature.

There are no questions of a sensitive nature used in this collection activity.

12. Provide estimates of the hour burden of the collection of information.

A. A total of 1,552 burden hours are needed to complete the Poultry 2010 study information collection activity. A detailed burden estimate has been included on the enclosed APHIS 71 Form.

B. Respondent costs: Estimated respondent costs for the information collection proposed are calculated based on a data collection estimate of \$10.91 per hour.⁵ The total respondent cost for the Poultry 2010 study is \$16,932. (1,552 hours * \$10.91).

13. Provide an estimate of the total annual cost burden to respondents or record keepers resulting from the collection of information (do not include any hour burden shown in items 12 and 14).

There are no capital/start-up costs or ongoing operations and maintenance costs associated with this information collection.

14. Provide an estimate of annualized cost to the federal government.

The estimated cost to the Federal Government is \$96,212.54. For more specific information, please see the enclosed APHIS 79 form.

15. Explain the reasons for any program changes or adjustments reported in items 13 or 14 of the OMB form 83-I.

This is a new information collection to investigate current issues and examine management practices of the poultry industry. The information collected through this study will be used by APHIS to establish national production measures, predict or detect national trends in disease emergence and movement, address emerging issues, examine the economic impact of health management practices, provide estimates of both outcome and exposure variables that can be

⁵ NASS Farm Labor, published report for 2006, released November 20, 2009, available upon request.

used in analytic studies in the future, and provide input into the design of surveillance systems and disease models for specific diseases.

16. For collections of information whose results are planned to be published, outline plans for tabulation and publication.

Data collection for objectives 1 and 2 (using Company, Breeder, and Turkey questionnaires) will be conducted from May to August of 2010. Data collection for objective 3 (using Urban Chicken Prevalence Record and Urban Chicken Questionnaire) will be from July to October of 2010. Information from this survey will be summarized immediately following the collection, editing, and cleaning of the data. Data will be entered into a database management system utilizing microcomputers or workstations, and statistical calculations will be performed, e.g., descriptive statistics including frequency distribution, prevalence, and point estimates. Variance measures and confidence intervals for the point estimates will be calculated in order to describe the precision of the descriptive statistics generated. SUDAAN software from RTI will be used to correctly calculate the standard error to account for the complex study design. Standard errors will be published along with the point estimates.

Considerable effort has been placed on reducing the time between the end of data collection and release of a final publication. Publications from this study are expected in early 2011. Hardcopy information from the study will be made available to producers, universities, researchers, practitioners, animal health related industries, Federal agencies, legislators, and any other interested party. Copies of current and past information from NAHMS are available at <http://nahms.aphis.usda.gov>.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.

APHIS is not seeking approval to not display the expiration date for OMB approval on the forms used in this collection.

18. Explain each exception to the certification statement identified under “Certification for Paperwork Reduction Act.”

APHIS is able to certify compliance with all provisions of the Act.