Assessment of Public Health Veterinarians Regarding the Sale, Display, and Exhibition of "Exotic" Animals

OSTLTS Generic Information Collection Request
OMB No. 0920-0879

Supporting Statement – Section A

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Section A – Justification

1. Circumstances Making the Collection of Information Necessary

Background

This data collection is being conducted using the Generic Information Collection mechanism of the OSTLTS Survey Center (OSC) – OMB No. 0920-0879. The respondent universe for this data collection aligns with that of the OSC. Data will be collected from state and local public health veterinarians acting in their official capacities.

This data collection is authorized by Section 301 of the Public Health Service Act (42 U.S.C. 241).

Although pets provide many benefits to humans, they can pass disease to their human companions. Zoonoses are diseases passed from animal to human and include bacterial infections such as *Escherichia coli* and *Salmonella*, parasites such as *Giardia lamblia* and *Cryptosporidium* spp, and viruses such Lymphocytic Choriomeningitis (LCMV).[1]

It is estimated that 1.2 million persons are infected with *Salmonella* each year in the U.S.[2] Clinical signs of salmonellosis include diarrhea, fever, and abdominal cramps beginning 12 to 72 hours after infection. The illness usually lasts 4 to 7 days, and most people recover without treatment. However, in some people the diarrhea may be so severe that the patient needs to be hospitalized. In rare cases, *Salmonella* may spread from the intestines to the blood stream, and then to other body sites causing death unless the person is treated promptly with antibiotics. The elderly, infants, and those with impaired immune systems are more likely to have severe illness.[3]

Humans may be exposed to *Salmonella* from a variety of sources, the most common being through food[2]; however, it has been estimated that 11% of human salmonellosis is attributable to animal contact.[4] *E. coli* infections are also acquired through animal contact, most often during visits to pettings zoos. A wide variety of animals can carry *Salmonella* bacteria, shedding the bacteria in their feces thereby contaminating their habitats (e.g. tank water, cage bedding). These animals include, but are not limited to reptiles (lizards, snakes and turtles)[5—18]; amphibians (toads and frogs)[13, 19- 23]; live poultry (chickens, chicks, ducks, ducklings, turkeys, and various pet bird species)[24-34] dogs[35]; cats [35,36]; rodents, including pets and those used as live or frozen reptile feed (mice, rats, and hamsters)[37-41]; and farm animals (horses, cattle, sheep, goats, and pigs.[42-46] Exposure may occur in private settings such as homes, or in public settings such as pet stores, schools, summer camps, feed stores, or petting zoos. During 2011-2013 over 300 people were infected with *Salmonella* due to illegally acquired turtles with a shell length less than 4 inches. Since the 1990s, 1367 people have been infected with *Salmonella* due to live poultry exposure. During 2012 greater than 60 people were infected with *E. coli* O157:H7 at the North Carolina state fair; one child died as a result of his *E. coli* infection.

Reptiles and amphibians are popular pets with many families. Turtles, frogs, iguanas, snakes, geckos, horned toads, salamanders, and chameleons are colorful, quiet, and often kept as pets. Reptiles and amphibians can carry and shed *Salmonella* bacteria even when they appear healthy and clean.[47] Studies conducted during 1996--1997 determined that approximately 74,000 *Salmonella* infections each year in the United States resulted from reptile and amphibian exposure.[13] Past investigations include illness in children linked to snakes, iguanas, and bearded dragons.[5-11, 14, 17, 18] Live or frozen rodents, which can also be infected with *Salmonella,* are frequently fed to carnivorous snakes and amphibians.[37-41] Backyard poultry flocks are also becoming more popular, and the number of human infections linked to contact with these birds has increased.[24-34]

Between 1996 and 2010, approximately 150 human infectious disease outbreaks involving animals in public settings were reported to CDC.[48] Venues which allow the public to have direct or indirect

contact with animals result in millions of human-animal interactions each year. These venues may include, but are not limited to, events such as state or county fairs, petting zoos (permanent or traveling), swap meets and exotic animal expositions, pet or feed stores, zoological parks, and educational farms open to the public. Past outbreaks of human enteric illness associated with animal settings include *Escherichia coli* O157:H7[49-53], *Salmonella*[54], and *Cryptosporidium*[55]. Some states, such as North Carolina[56] have enacted laws designed to reduce the public risk of exposure to animal diseases in public settings.

While federal laws do exist prohibiting the sale, importation, and transportation of certain animals, more often than not these laws are for the protection of native species, not human health.[56-58] State laws vary regarding the types of "exotic" animals that can be sold, transported, or kept as pets. In 1975 the FDA enacted a ban to prevent the sale of turtles with a carapace (shell length) of less than 4"; this is the only ban placed on the sale of a previously popular species kept as a pet in order to protect human health.[59] This law is repeatedly violated however, and this assessment will provide a better understanding state and local abilities to prevent the sale of small turtles, independent of the FDA ban. **(Attachment A: References**)

CDC continues to conduct investigations into outbreaks of salmonellosis linked to reptiles, small turtles and live poultry, and recently investigated outbreaks involving captive frogs and both live and frozen rodents used as reptile feed. During 2012 greater than 50% of the enteric bacterial outbreaks investigated by CDC were zoonotic in nature. It is therefore important to assess the state and local regulations and policies regarding the sale, display or exhibition of these "exotic" animals. The data collected under this assessment will assist CDC in better understanding state and local health department's abilities to: confiscate animals during an outbreak of human illness associated with the animal, provide education to consumers, and regulate animal entrance to certain facilities such as daycares and nursing homes. All information gathered from this data collection will be useful to CDC and other federal agencies during investigations of animal-related human illness.

Privacy Impact Assessment

Overview of the Data Collection System – The data collection system consists of an instrument built through the MR Interview platform. MR Interview is a component of IBM SPSS Data Collection suite of tools that allow users to develop surveys/data collection instruments for use on-line and manage the data post data collection. It allows for very complex data collection efforts (complex branching, etc.). A link to the instrument will be sent to each potential respondent, along with an introductory email and instructions to contact CDC should they not be the appropriate person to respond to the instrument. Sending a link personalized to each potential respondent will allow the respondent to stop and save their responses should they need to tend to other duties or research their answers (**see Attachment B –Data Collection Instrument: word version and Attachment C – Data Collection Instrument: Screenshots).**

State and local (county-level) public health department veterinarians (i.e., state public health veterinarians, or SPHV) will be queried regarding regulations concerning the sale, display, or exhibition of certain animals in their jurisdiction. Targeted respondents include public health veterinarians from all 50 state health departments, 7 local health departments (Los Angeles County, Philadelphia, New York City, Chicago, Houston, the District of Columbia and Seattle-King County), as well as Puerto Rico and the 8 Texas health regions.

The data collection instrument will be administered via the internet and the data returned to CDC as a SAS file. The instrument was pilot tested by 5 public health professionals. Feedback from this group was used to refine questions as needed, ensure accurate programming and skip patterns, and establish the estimated time required to complete the instrument.

Items of Information to be Collected – There are a total of 44 potential questions on the instrument. Skip patterns are built into the instrument to allow tailoring so that respondents are only asked certain questions based on their answers to previous questions. There are 14 core questions that will be asked of all respondents. There are an additional 29 sub-questions that may or may not be asked, based on respondent answers to the core questions. There are 15 questions which utilize Likert type responses, 6 yes/no questions, 13 open-ended questions asking for further details to prior responses (e.g., to provide web links to regulations or to better detail regulations), and 10 check-box questions.

Identification of Website(s) and Website Content Directed at Children Under 13 Years of Age – The data collection system involves using a web-based instrument. Respondents will be sent a link directing them to the online assessment (i.e., not a website). No website content will be directed at children.

2. Purpose and Use of the Information Collection

The data collected under this assessment will assist CDC in better understanding state and local health department's abilities to: confiscate animals during an outbreak of human illness associated with the animal, provide education to consumers, and regulate animal entrance to certain facilities such as daycares and nursing homes. All information gathered from this data collection will be useful to CDC and other federal agencies during investigations of animal-related human illness.

A final report/manuscript will be prepared and cleared. Data will be presented to external partners via meetings such as CSTE (Council of State and Territorial Epidemiologists) and the AVMA Convention (American Veterinary Medical Association).

Privacy Impact Assessment

Potential respondents will receive the assessment based on their job title, therefore the potential respondent pool is known. Employees of state and local public health agencies will be speaking from their official roles. Respondents are asked provide their state/locality because it is important to CDC know which jurisdictions have which laws and regulations during outbreak investigations. However, any reporting of data outside of CDC will only contain an aggregate of all responses.

3. Use of Improved Information Technology and Burden Reduction

Data will be collected via a web-based instrument, allowing respondents to complete and submit their responses electronically. This method was chosen to reduce the overall burden on respondents. By utilizing an online system and reactive skip-patterns the instrument was designed to collect the maximum information utilizing the minimum number of questions (i.e., limited to 14 core and 29 sub-questions).

Data will be collected using the IBM SPSS Data Collection (mrInterview system), Version 5.6. Invitation emails will be distributed to potential respondents via email. Each email contains a unique Uniform Resource Locator (URL) that is specifically tailored to each potential respondent. Upon clicking the URL, respondents access the IBM SPSS Data Collection system and a customized assessment instrument via a secure internet connection through their web browser. Established connections are secured with the Transport-Layer-Security protocol (TLS 1.0), and all communication

between CDC systems and client computers are secured with a FIPS 140-2 approved encryption algorithm [e.g. Advanced Encryption System (AES) 256]. Data is entered by respondents directly into web-based forms served up by a series of servers which are virtually and physically secured onsite at the US Centers for Disease Control and Prevention in Atlanta, GA. For security reasons, the exact security infrastructure of the system cannot be disclosed to third parties. Once entered, data is stored in a tightly controlled Enterprise SQL Server 2005 database, maintained by the CDC's Information Technology Services Office (ITSO). All systems employed in the collection and transit of data to and from CDC and respondent computers in this study are redundantly configured to ensure continued operation in the event of a single outage or server failure. In addition, all systems employed in this study have been reviewed by and received a Certification and Accreditation C&A) an Authority to Operate (ATO) letter from the CDC's Office of the Chief Information Security Officer (OCISO).

4. Efforts to Identify Duplication and Use of Similar Information

A literature search did not identify any recent data collections or publications addressing this information. Attempts to catalogue this information via web searches for each state/locality's laws have not been successful as laws change and websites are frequently outdated. Partners such as The Council of State and Territorial Epidemiologists (CSTE) do not have this information.

5. Impact on Small Businesses or Other Small Entities

No small businesses will be involved in this data collection.

6. Consequences of Collecting the Information Less Frequently

This request is for a one time data collection. There are no legal obstacles to reduce the burden.

- Current regulations will not be fully cataloged and understood
- CDC and federal partners will not understand the difficulties faced by our state and local public health partners when attempting to control animal-related outbreaks in humans.
- Not understanding the state and local laws, as well as which agency holds the authorities in each locality, can hinder timely and comprehensive outbreak investigations. By better understanding which agency regulates animal sale and display, CDC can more quickly involve the appropriate authorities during an investigation.

7. Special Circumstances Relating to the Guidelines of 5 CFR 1320.5

There are no special circumstances with this information collection package. This request fully complies with the regulation 5 CFR 1320.5 and will be voluntary.

8. Comments in Response to the Federal Register Notice and Efforts to Consult Outside the Agency

This data collection is being conducted using the Generic Information Collection mechanism of the OSTLTS Survey Center (OSC) – OMB No. 0920-0879. This data collection is being conducted using the Generic Information Collection mechanism of the OSTLTS Survey Center (OSC) – OMB No. 0920-0879. A 60-day Federal Register Notice was published in the Federal Register on October 22, 2010, Vol. 75, No. 204; pp. 65353-54. Two comments were received from the Association of State and Territorial Health Officials (ASTHO), and the National Association of County and City Health Officials (NACCHO).

CDC partners with professional STLT organizations, such as the Association of State and Territorial Health Officials (ASTHO), the National Association of County and City Health Officials (NACCHO), and the National Association of Local Boards of Health (NALBOH) along with the National Center for Health Statistics (NCHS) to ensure that the collection requests under individual ICs are not in conflict with collections they have or will have in the field within the same timeframe.

9. Explanation of Any Payment or Gift to Respondents

CDC will not provide payments or gifts to respondents.

10. Assurance of Confidentiality Provided to Respondents

The Privacy Act does not apply to this data collection. Employees of state and local public health agencies will be speaking from their official roles and will not be asked, nor will they provide individually identifiable information.

This data collection is not research involving human subjects.

11. Justification for Sensitive Questions

No information will be collected that are of personal or sensitive nature.

12. Estimates of Annualized Burden Hours and Costs

The estimate for burden hours is based on a pilot test of the instrument by 5 public health professionals. The average time to complete the instrument, including time for reviewing instructions, gathering needed information, and completing the assessment, was 15 minutes (range 10 to 17 minutes). For the purposes of estimating burden hours, the upper time limit from the pilot test (i.e., 17 minutes) was used.

We were unable to locate estimates for the average hourly wage for our veterinary respondents through the Department of Labor (DOL) National Compensation Survey (http://www.bls.gov/ncs/ocs/sp/nctb1349.pdf). Instead we utilized the American Veterinary Medical Association's (AVMA) Report on Veterinary Compensation from 2011 and pulled the information via the AVMA online "Salary Calculator". We selected "State or Local Government", 10-14 years experience and were provided with a yearly salary ranging from $85,000 to $115,000 with a 50th percentile salary of $97,000. Utilizing the 50th percentile salary with 40 hours per work week, we determined an hourly wage of $46.63.

Table A-12: Estimated Annualized Burden Hours and Costs to Respondents – Animal Law Assessment

Type of Respondent	No. of Respondents	No. of Responses per Respondent	Average Burden per Response (in hours)	Total Burden Hours	Hourly Wage Rate	Total Respondent Costs
State Public Health	50	1	17/60	14	$46.63	$652.82

Veterinarian						
Local Public Health Veterinarian	16	1	17/60	5	$46.63	$233.15
TOTALS	**66**	**1**	**17/60**	**19**	**$46.63**	**$885.97**

13. Estimates of Other Total Annual Cost Burden to Respondents or Record Keepers

There will be no direct costs to the respondents other than their time to participate in each assessment.

14. Annualized Cost to the Government

Table A-14: Estimated Annualized Cost to the Federal Government

Staff (FTE)	Average Hours per Collection	Average Hourly Rate	Average Cost
CC O-5/GS-13, veterinary officer Provide questions for instrument; present results to conferences and via a manuscript	30	$36.37	$1091.1
CC O-6/GS-15 veterinary officer design instrument, work with OMB for approvals, serve as point of contact for questions, conduct analysis, present results to conferences and via a manuscript	120	$43.54	$5224.8
Estimated Total Cost of Information Collection			**$6315.90**

15. Explanation for Program Changes or Adjustments

This is a new data collection.

16. Plans for Tabulation and Publication and Project Time Schedule

The data will be collated and verified for completeness and clarity of response. We will analyze results for each question asked, both check-box and open ended. A final report/manuscript will be prepared and cleared through NCEZID. We will present data to external partners, to include FDA and USDA, as requested. We will present data to state partners through meetings such as CSTE.

Project Time Schedule

Action	Timeline
Data collection	1 month to complete
Reminders sent	2 weeks after launch; 1 week prior to close
Data validation and cleaning	2-4 months
Data analysis	2-4 months
Report generated and shared	3-6 months
Data presented at relevant conferences (CSTE, AVMA)	Up to 12 months (dependent on conference dates)

17. Reason(s) Display of OMB Expiration Date is Inappropriate

We are requesting no exemption.

18. Exceptions to Certification for Paperwork Reduction Act Submissions

There are no exceptions to the certification. These activities comply with the requirements in 5 CFR 1320.9.

LIST OF ATTACHMENTS – Section A

Note: Attachments are included as separate files as instructed.

Attachment A – References
Attachment B –Instrument: word version
Attachment C –Instrument: Screenshot