PIJAC ZOONOSES COMMITTEE

INTRODUCTION

PIJAC has long recognized the importance of preventing the transmission of diseases from pets to people. In the early 2000s the concept of a collaboration between PIJAC and the Centers for Disease Control and Prevention (CDC) arose, oddly enough, at an American Kennel Club meeting in Oregon. Fred Angula, DVM, who headed CDC’s Division of Foodborne Illness at the time, was serendipitously in attendance, which led to a conversation with Marshall Meyers on zoonotic transmission of *Salmonella*. Shortly thereafter Board Member Jim Seidewand, in response to publicized cases of reptile-borne *Salmonella*, proposed a proactive approach to customer outreach to stem disease transmission from handling reptiles. Marshall approached Dr. Angula about a potential collaboration. The result was a poster designed to provide customers and store staff with simple steps to prevent salmonellosis, with a heightened focus on young children that are particularly susceptible to complications from *Salmonella*. The partnership resulted in “Practice Safe RHEX - Reptile Handling Excellence,” which was formatted as a full-size poster, and “Reptile Handling Steps,” a letter-size version for space-limited stores. The print run of 100,000 posters each was distributed to retail stores as well as to schools and state public health officials. The poster was endorsed by several state public health departments, some of which provided letters of support that PIJAC circulated to retailers within those states. Some states enacted regulatory requirements to display the poster or similar materials in stores.

A monkeypox outbreak in 2003 was linked to pet prairie dogs that had been exposed to infected rodents imported from Ghana; 47 confirmed or probable cases were reported in six states. This led to health measures by CDC and other agencies, including a ban on the importation of certain African rodents. PIJAC worked with CDC to help develop interim guidance for pet owners, pet shop employees, animal handlers, and animal control officers.

In 2005, three fatal cases of Lymphocytic Choriomeningitis (LCM) resulted from organ transplants. The organ donor had contracted the illness from an infected hamster, one of the rodent hosts for this viral disease. Marshall Meyers, Thomas Edling, DVM (PETCO Animal Supplies), and Nick Saint-Erne, DVM (Petsmart), worked with the CDC to produce a care sheet for distribution at retail stores to prevent further cases.
To respond to these incidents, PIJAC established a Rapid Response network among its member live animal and product distributors to forward PIJAC health alerts to all of their customers. This process was quick, efficient and cost-effective. During a follow-up conference call, the FDA documented its effectiveness: to their surprise, every pet store and veterinary office had received a PIJAC alert.

Building on the groundwork laid by these efforts, PIJAC convened its Zoonoses Committee in 2013. In large measure, the Zoonoses Committee is charged with implementing a Memorandum of Understanding between PIJAC and the CDC that creates a partnership “to combine efforts in educating a large audience of pet industry stakeholders.” Specific tasks outlined in the MOU include

a. providing educational material for retailers and the public
b. developing best management practices for retailers, breeders and distributors
c. developing web-based educational resources
d. improving communication during a zoonotic outbreak.

The MOU is effective for three years (executed June 14, 2013) and is scheduled for review prior to renewal in 2016.

The Zoonoses Committee consists of experts from different segments of the pet industry, veterinary medicine and public health, assisted by PIJAC staff and consultants.

David Alderton - MA (Cantab.), UK-based author and veterinarian

Keith Davenport - Ornamental Aquatic Trade Association Ltd (OATA)

Thomas Edling, DVM, MSpVM, MPH Vice President, Veterinary Medicine, PETCO Animal Supplies

John Mack - President, Reptiles by Mack

Laura (Peach) Reid - President, Fish Mart

Joni Scheftel, DVM, MPH; State Public Health Veterinarian, Minnesota Department of Health

Bob Likins – Director, Government Affairs, PIJAC

Scott Hardin – Science Advisor, PIJAC

ACCOMPLISHMENTS

Pet Industry Health Alerts – Information on current and emerging zoonotic disease outbreaks are posted on PIJAC’s website and other social media outlets, as well as directly to PIJAC members via email. Alerts are also disseminated to state public health veterinarians, the World Pet Association (WPA), the American Pet Products Association (APPA), and the Pet Industry Distributor’s Association (PIDA) for distribution to their membership. Health Alerts are
developed from information provided by the CDC or via website link to their updates. To date, Pet Industry Health Alerts have been issued for outbreaks of Canine Influenza, *Salmonella Muenchen*, *Salmonella Typhimurium* linked to frozen feeder rodents, and *Salmonella Cotham* linked to Bearded Dragons. As a follow-up to this communication, PIJAC staff have developed draft Standard Operating Procedures for broader dissemination of information to “provide a framework for PIJAC’s Zoonoses Committee and staff to rapidly, accurately and consistently respond to zoonotic events in the pet trade.” The first draft of these SOPs are under review.

*Habitat Stickers* – simple, concise signs that can be attached to cages and tanks in pet stores. The stickers provide advice on properly handling animals and their habitats to reduce the risk of zoonotic infection and cover the major pet groups sold at retail. All stickers are available for download at the [PIJAC website](http://www.pijac.org).
Healthy Herp Handling Poster – an update to PIJAC’s “Practice Safe RHEX” poster that was distributed to pet stores nationwide to reduce Salmonella transmission by reptiles. Like its predecessor, “Healthy Herp Handling” employs a cartoon motif as an educational aid to adults in reducing the chance of illness in young children, a group more susceptible to infection and more likely to experience complications. The essential information conveyed remains largely unchanged, but the title emphasizes the positive (Health). To date, 10,000 posters have been printed with 5100 distributed via “Pets in the Classroom.” The remaining 4900 were retained by PIJAC to distribute directly to veterinarians, retailers and professional and trade associations. Additionally, Dr. Edling presented the poster to the National Association of State Public Health Veterinarians (NASPHV). Other potential distribution outlets are the Association of Reptile and Amphibian Veterinarians (ARAV), American Animal Hospital Association (AAHA) and American Veterinary Medical Association (AVMA). The poster is available for download in high and low resolution at the PIJAC website, and CDC has a link from the Publications portion of the “Healthy Pets Healthy People” section of their website.
Zoonotic Disease Prevention Series for Retailers - The target audience for these flyers is retail store staff. The initial flyers focused on diseases carried by companion animals other than dogs and cats and provides information on vectors, symptoms and treatment, and preventive measures for Salmonellosis, Rat Bite Fever, Psittacosis/Avian Chlamydioidosis, Ringworm, Atypical Mycobacteriosis, and Lymphocytic Choriomeningitis (LCMV). All flyers are available for download by retail stores at the PIJAC website. Currently the Committee is developing information addressing zoonoses of dogs and cats. Along with a general summary of relatively common zoonotic diseases of dogs and cats, specific flyers for toxoplasmosis, Giardia and MRSA are under review.

Best Management Practices – PIJAC’s recommendations for best practices for the feeder rodent industry include recommendations to minimize the risk of transmission of three zoonoses to production staff as well as remedial measures in the event of a zoonotic outbreak. These BMP were updated in July 2015 to include additional recommendations for (a) prevention of Salmonella contamination of frozen and live rodents; (b) identifying shipments of rodents to facilitate traceback in the event of an associated zoonotic outbreak; and (c) labeling frozen rodents to advise consumers on the risk of contracting a zoonotic illness. Additionally, PIJAC’s Retail Store Best Management Practices (nearing completion) advise store personnel on safeguarding public health through hygienic practices and address the risk of contracting salmonellosis and psittacosis.

Animal Care sheets – The Committee has begun revising PIJAC’s Animal Care Sheets to include information on specific zoonotic diseases associated with the various animals, along with advice on prevention. Draft revisions of care sheets for mice and rats, guinea pigs, parrots, snakes, lizards, turtles, and saltwater aquaria are under review.

CDC Interaction – CDC staff participate periodically in Zoonoses Committee conference calls. In addition, CDC provided review and input for the “Healthy Herp Handling” poster and some of the flyers in the “Zoonotic Disease Prevention Series for Retailers.” PIJAC Zoonoses Committee members worked closely with CDC to deliver a consistent
public health message (a) during an April 2014 outbreak of *Salmonella* Cotham associated with bearded dragons, resulting in the first Pet Industry Health Alert; (b) during a *Salmonella* Typhimurium outbreak in May 2014 associated with frozen mice. In 2015 CDC formed a Zoonosis Education Committee, with PIJAC’s Zoonoses Committee members Thomas Edling and John Mack attending an initial meeting May 5 in Atlanta. The CDC effort is working on outreach materials targeting *Salmonella*, LCMV and Rat Bite Fever, with review and input from PIJAC.

Outreach Initiatives – The Zoonoses Committee recognizes a need for an improved curriculum on zoonotic diseases in medical and public health colleges. Increasing knowledge of zoonotics among physicians and public health professionals is consistent with the One Health concept that links human health with that of animals and the environment. Thomas Edling discussed this with NASPHV at their annual meetings. Dr. Edling also presented the “Healthy Herp Handling” poster to and briefed NASPHV attendees on Zoonoses Committee activities.

Updated 2/3/16