

# The LABryinth

## Indiana State Department of Health Laboratories Newsletter

### Summertime Brings Increased Rabies Activity

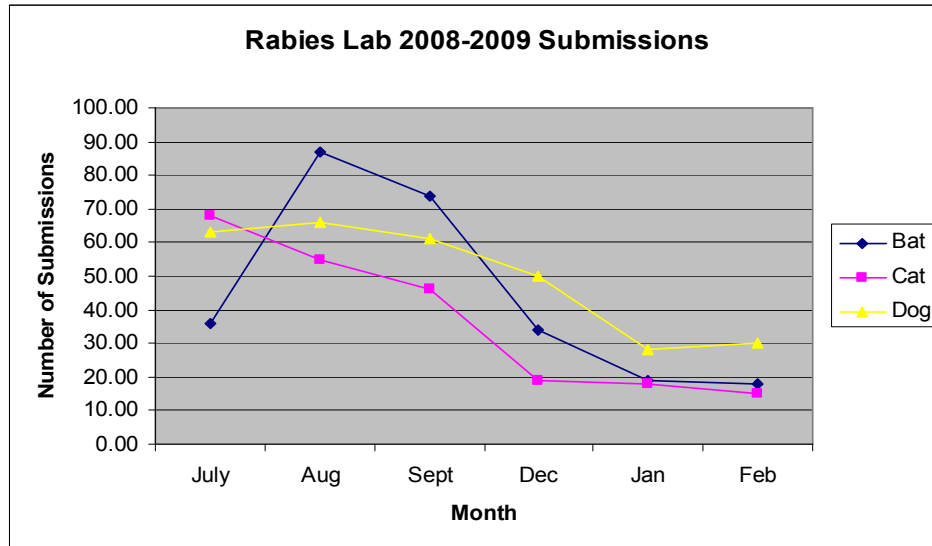
By Rhonda Stidham, Rabies Microbiologist

Summertime is typically a time of increased activity in general. Picnics, sports, gardening, festivals and such, draw people outdoors more often as the weather warms during the summer months. Animals also are more active. More dogs are being walked outside and more tomcats are out roaming for females. In the wild, animals are coming out of hibernation, foraging for food, mating, and having offspring. All this increased activity means more interaction between humans and animals which leads to more animal bites. As a result, the rabies lab has an increase in animal

submissions for rabies testing during the summer months. The rabies lab has averaged over 1300 animal submissions per year over the last couple years. Dogs, bats, and cats constitute most of the animals submitted for testing. We do test other animals: skunks, raccoons, cows, horses, and goats, just to name a few, but by far we receive more dogs, cats and bats than anything else. The chart below gives an idea of the numbers of submissions in the summer versus the winter.

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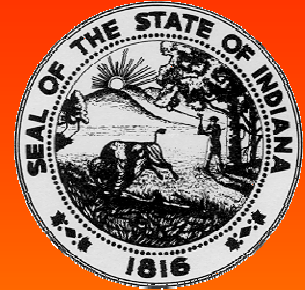
**Rabies Lab 2008-2009 Submissions**



#### Follow these tips for a safe, rabies-free summer!



- In winter, bat-proof your home. This way, when spring-time comes, bats won't be able to find your attic as a welcome nursery for birthing their offspring.
- Observe wild animals from a distance! Never feed wild animals! Skunks and raccoons are commonly seen during the summer camping trips. Care must be taken to avoid being bitten by them.
- Avoid being bitten by stray cats and dogs. To avoid the spread of rabies, these unwanted animals should be captured by animal control and handled at their facilities.
- Vaccinate your pets and livestock! In Indiana, the law stipulates that all pet cats, dogs, and ferrets must be vaccinated against rabies.



### Indiana State Department of Health Laboratories

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State Health Commissioner

Loren L. Robertson, M.S.  
Deputy State Health Commissioner

Judith Lovchik, Ph.D.  
Assistant Commissioner  
& ISDH Lab Director

*Our Mission: The Indiana State Department of Health Laboratories partners with other public health agencies to provide timely and accurate information needed for surveillance and outbreak investigations to protect and improve Hoosier*

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**Summertime Brings Increased Rabies Activity (continued)**

**Did you know that :**

Since 2006, 2 people in Indiana has died from rabies. (Source: ISDH)

Rabies kill about 55,000 people a year mostly in Asia and Africa.

Rabies is almost always fatal after symptoms appear. There are only 6 known cases of people who survived rabies.

World Rabies Day is observed on September 28th.

(Source: Wikipedia.org)

As the chart indicates, we receive greater numbers of dogs, bats, and cats in July, August, and September than in December, January, and February. This increase in animal submissions typically results in an increase in rabies positive test results as well. Although Indiana has not seen a rabies positive cat or dog since 1984 and 1989, respectively, we do see rabies positive bats.

In the 2008-2009 fiscal year, the rabies lab received 399 bats. Twenty-three of these were found positive for rabies. In the 2009-2010 fiscal year, 397 bats were received and 51 of these tested positive. Most of these rabid bats were found during the summer months. For example, in referring to the above chart, eighteen bats were submitted in February; none of which tested positive. But in August, eighty-seven bats were submitted; three of which tested positive.

Although the numbers aren't drastically higher, there is still an overall increase in non-bat submissions in the summer months versus the winter months. With this in mind, it is important to protect yourself from any

unwelcome animal exposure such as a bite or scratch.



For additional info on rabies, visit these links:

<http://www.in.gov/isdh/20518.htm>

<http://www.in.gov/boah/2337.htm>

<http://www.cdc.gov/rabies/>

**July 2010 Food Emergency Response Network (FERN) National Training Conference –Minneapolis, Minnesota**  
By Thomas Cronau and Jane Smith



**Apple on a shaker being prepared for surface deposition analysis**

The Food Emergency Response Network (FERN) held its National Training Conference (NTC) June 29 – July 1, 2010 in Minneapolis, Minnesota. The FERN mission is to integrate the nation's food-testing laboratories at the local, state, and federal levels into a network that is able to respond to emergencies involving biological, chemical, or radiological contamination of food. The FERN structure is organized to ensure federal and state inter-agency participation and cooperation in the formation, development, and operation of the network.

The Conference was attended by more than 420 local, state, and federal representatives. Representing the Indiana State Department of Health (ISDH) Laboratories in Minneapolis were Robin Burner for Chemistry; Hesham Elgaali; Ph.D. for Microbiology; and Jane Smith for Radiochemistry. The conference included general sessions for all attendees,

followed by breakout sessions focusing on the specific analytical discipline (Food Chemistry, Food Microbiology, and Radiochemistry) or focus based upon Regional issues and topics. Indiana is assigned to the FERN Central Region along with 14 other States.

One highlight of the opening general session was a presentation by Shaun Kennedy of the National Center for Food Protection and Defense, A Homeland Security Center of Excellence, University of Minnesota. He described how complex our food supply is and how vulnerable it is due to many factors. These factors include, but are not limited to, insufficient inspection of food imports and inadequate enforcement of the current applicable regulations. Many of our processed and manufactured foods contain many ingredients, any of which could be the means or vehicle of contaminating the finished

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**FERN National Training (continued)**

product with a chemical, radiochemical, or microbiological agents. State and Federal Cooperative effort such as the Food Emergency Response Network (FERN) are part of the answer to these problems.

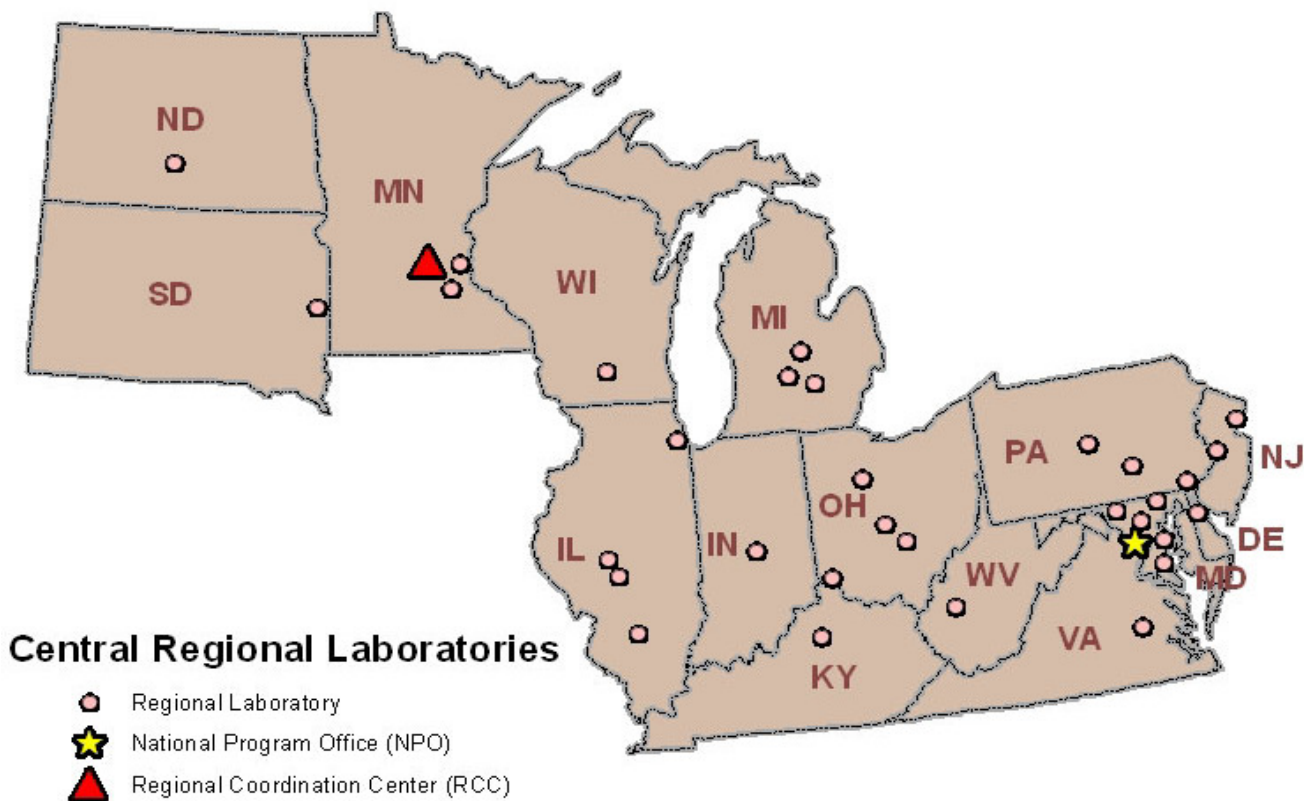
Another highlight of the conference was the report on the Radiochemistry exercise held in March, entitled Menu 2010. Pam Mackill, FDA WEAC (Winchester Engineering and Analytical Center), presented information gathered during the Menu 2010 Exercise to the entire FERN community. The exercise was considered both a great success and a real learning experience. One of the Radiochemistry FERN Section's primary goals is to put together a group of rapid methods that can be used during a food emergency. The Menu 2010 Exercise proved to the FERN Community there is much work yet to be done. FDA WEAC will be preparing a gross alpha/gross beta Performance Evaluation Sample before the end of 2010. Planning has already begun on a Menu 2012 and Menu 2015 exercise.

The regional breakout sessions provided a forum for the FDA and USDA Project Officers to update and interact with the State laboratories assigned to them. It also provided valuable face-to-face networking opportunities for the attendees with their counterparts in the other labs participating in the FERN

Central Region Breakout sessions based on the analytical discipline (Chemistry, Radiochemistry, Food Microbiology) were also conducted. The presentations describing the activities of the Federal and State FERN participants gave the attendees insight into what the Federal (FDA, USDA) investigators were currently focusing on and what was being considered for the future. These sessions were more of a technical nature and provided a forum for discussions among the "experts" in the field who are developing the methods of food analysis and those analysts that are using them. This valuable exchange of knowledge occurred in all three of the analytical discipline assigned breakout sessions and all three ISDH attendees benefited greatly in their area of expertise. Next year's conference has already been planned for next summer in Portland, Oregon.

Visit this link for more information on the FERN program:  
<http://www.fernlab.org>

**FERN Central Region Laboratories**



## What's Happening at ISDH Labs?

### 2010 Influenza Detection and Subtyping Training Course- Atlanta, GA

This June 30th thru July 1st, Lyndsey Hensler attended the Influenza Detection and Subtyping: FDA-Cleared rRT-PCR Flu Panel Assays (Seasonal and 2009 H1N1) Training Course in Atlanta, GA. The course was conducted and funded by the CDC, APHL, and NLTN. The course covered clinical, epidemiology, testing and analytical aspects of both seasonal and pandemic influenza testing. Lecture and hands on training was included in the course. It also clarified the Seasonal Influenza testing panel kit designed and distributed by the CDC as well as introduced their new FDA-Cleared Influenza 2009(H1N1)pdm testing panel kit being released in late July.

### 2010 National Tuberculosis Course- Atlanta, GA

The 2010 National Tuberculosis (TB) Conference was held in Atlanta, Georgia from June 21-24, 2010. It had two parts: Laboratory Aspects and TB Controller Aspects. Topics in the laboratory section included 1) Regulatory Issues, 2) Safety Practice, 3) Data Utilization, 4) Direct Detection of TB and 6) Real Life TB Case Studies. The theme for the TB Controller Aspects was "Innovate to Accelerate: On the Move to Eliminate TB". Successful TB Control stories including effective Laboratory and TB Controller collaborations were shared by the meeting speakers.

Dr. Liu represented ISDH TB Laboratory and ISDH TB Control Program and presented a poster which was titled "Development of Laboratory Data-Based Tuberculosis Sputum Collection and Testing Algorithm". The poster presentation was well received by the participants.

Despite the flight delays, the humid and hot weather in Atlanta, the trip was certainly worthwhile.

### 2010 Calicinet Conference- Atlanta, GA

Ed Simpson recently attended the Calicinet National Conference at the CDC in Atlanta, Georgia. Calicinet is a network of laboratories in the US that participate in a national database designed to monitor Caliciviruses, Norovirus being the best-known example. These viruses commonly cause gastroenteritis among other symptoms and are thought to be responsible for up to 50% of all foodborne outbreaks of gastroenteritis in the US. Calicinet monitors outbreaks through a sequence database that tracks the mutations in circulation. With this database they can provide epidemiologists and healthcare officials with information to aid in their investigation and response. The ISDH is looking forward to cooperating with the CDC and enhancing its surveillance capabilities with the completion of the Calicinet certification process.

### Congratulations to our ISDH Laboratories Employees!

Listed below are the 2009 recipients of our years of service awards. Thank you for sticking around for so long, and many more happy years to come!

**5 years**—Aukisha Dillard, Renee Dreher, Bart Janssens, Aaron Bolner, Mary Hagerman, Cynthia Thomas, Lixia Liu, Jessica Gentry, Curt Reder

**10 years**—Babu Maharjan, Tuyet Dao, Michael Cross, Nicole Sims

**15 years**—Mark Zelner, Pradip Patel

**20 years**—Bill White, Engra Castiglione, Sharon Garrett, Mark Widdifield

**25 years**—Bharatkumar Patel, Michael Oberthur, Edwin Hartle

**30 years**—Philip Zillinger, Jon Radosevic

### Special Thanks to Renee Dreher

Renee Dreher worked at ISDH and was the first editor for the LABryinth newsletter from 2009 to 2010. She recently transferred to Department of Finance, where she now works as the grants coordinator. Congratulations, Renee, on your new job and big thanks for your hard work on the LABryinth!

### Fun Corner

What do you call a mushroom who likes to party?



*Fun-gus*

### ISDH Laboratory Employee Spotlight:

#### David Baize



Where does the money for ISDH go? How can the laboratory afford the equipment and reagents needed to perform the tests? That is where David Baize comes in. He works with the Office of Management & Budget and the laboratory management to

give overview and direction of the financial affairs of the ISDH laboratories. He is in charge of tracking revenues and expenditures, especially from grants and fees. He also provides guidance to the account clerks and administration at the laboratory on policies, billings, tracking expenditures, and equipment maintenance and replacement. His work is split between the laboratories and the office at Vital Records.

David graduated from IU Bloomington, and is originally from Louisville, Kentucky. Prior to working for ISDH, he worked for the Bureau of Motor Vehicles. He is married to Kim. He enjoys working in his garden, going out for a morning jog, and watching sports on TV.

### The LABryinth

The LABryinth is published bi-monthly by the editorial staff of Indiana State Department of Health Laboratories.

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[www.in.gov/isdh/24567.htm](http://www.in.gov/isdh/24567.htm)