



PURCHASE DISTRICT HEALTH DEPARTMENT NEWSLETTER

Fall 2009



Flu 2009

The normal seasonal flu season runs from around October until after January. However, starting in April 2009, flu cases uncharacteristically started occurring throughout the United States. These cases were found to be linked to the novel A H1N1 strain, commonly referred to as "swine flu."

On June 11, the World Health Organization (WHO) declared the novel A/H1N1 to be a pandemic. The Kentucky Department for Public Health raised the flu activity level from regional to widespread on September 18.

In many ways, this novel strain of flu is similar to the seasonal flu. The symptoms appear the same; however, some persons with H1N1 may have gastrointestinal symptoms (vomiting and diarrhea) in addition to any flu-like illness.

The 2009 novel H1N1 flu strain is being monitored for changes in virulence. At this time, the 2009 novel H1N1 flu strain is no more virulent than seasonal flu strains. Therefore, precautions should be similar to those taken for seasonal flu. Flu, both seasonal and H1N1, is a virus that usually causes discomfort in ill persons which persists for about 3-7 days. Symptoms may include fever, coughing, sneezing, breathing difficulties, and/or loss of appetite. Although most flu cases are mild, some cases do result in death. An estimated 36,000 deaths occur annually for seasonal flu.

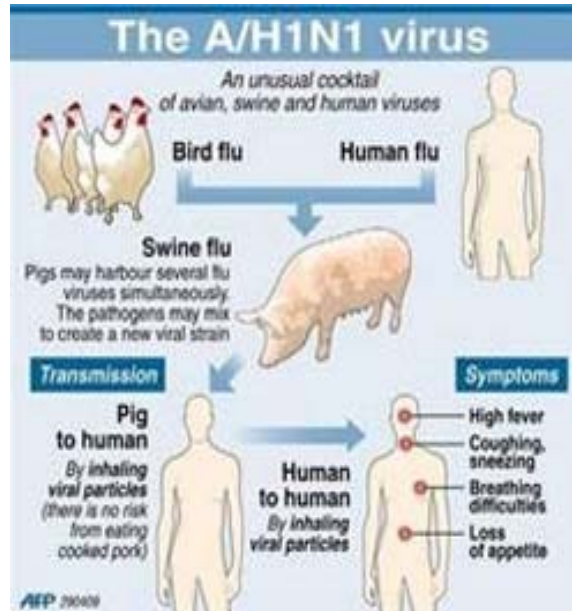
Because of this unique season where two strains of flu persist, this count is expected to be higher. That is why it is important to be aware of prevention and treatment options.

The best prevention is to wash your hands with soap and water, use alcohol-based hand sanitizer (60-70% ethyl alcohol) when soap and water are unavailable, and cough or sneeze into a tissue then dispose of that tissue. If a tissue is unavailable, cough or sneeze into your elbow. Also, seasonal flu vaccine are recommended as soon as possible as they take about two weeks to take affect.

New Epidemiologist Hired

A new epidemiologist, Brandi Earp, was hired by the Purchase District Health Department. As of June 29, 2009, she replaced Mary Tooms, who now works with the Kentucky Department for Public Health's tobacco program. Brandi is based in the Mayfield District Office, but also regularly reports to Marshall County. She serves Ballard, Calloway, Carlisle, Fulton, Hickman, Graves, Marshall, and McCracken Counties.

Brandi is from west Tennessee originally and still has family there. She has completed all course-work for a Master of Public Health degree at University of Kentucky's Public Health program. She is currently in the progress of finalizing a capstone paper and presentation pertaining to a case-control study of *Acinetobacter*.



Above is a diagram pertaining to the transmission and symptoms of the novel A/H1N1 virus.

A hotline is available to the public for asking questions about H1N1:

1-877-843-7727

Keep up to date on the latest flu information in general, and watch to see when H1N1 vaccine will be available for you. Vaccine Information Statements for seasonal and 2009 H1N1 vaccines can be found at

www.immunize.org/vis.

See the following for more information on flu:

<http://content.nejm.org/cgi/content/full/NEJMra0904322>

<http://www.cdc.gov/flu/weekly/>

<http://www.cdc.gov/h1n1flu/>

<http://flu.gov/>

<http://healthalerts.ky.gov/Pages/default.aspx>

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Special points of

Interest:

- Health Ed. gearing up for new project
- Discouraging wild animals as pets
- *Shigella* as a particular concern in schools
- Selected diseases since 2005 for Purchase District and Marshall County

Health Education to pursue new project: “Know Your Numbers”

The Health Education division of PDHD is involved with a project through the Cardiovascular Coalition of Western Kentucky.

The project is referred to as “Know Your Numbers,” and it will be focusing on professionals from certain fire departments and hospital auxiliary groups.

Throughout a six month period, participants will be having their blood pressure checked monthly, and they will be provided with health education and nutrition advice.

“Know Your Numbers” will be a campaign to study the effects of health education on blood pressure, with a goal to initiate healthy, productive behaviors for cardiovascular health.

The project is part of a joint effort among PDHD, Western Baptist Hospital, KY-Department for Public Health, and the University of Louisville to improve health outcomes related to the incidence of cardiovascular disease in the region.

Rabies Awareness: Local and Worldwide

September 28, 2009 was a day of awareness for World Rabies Day. More information on rabies may be reviewed at: <http://www.cdc.gov/rabies/> and <http://www.worldrabiesday.org/>.

In the United States, reported indigenously acquired human rabies cases have decreased since World War II due to stray animal control and improved canine vaccination programs. Most cases since are due to wild animals, which is why it is so important that people not have wild animals as pets and to participate in having your domestic pets vaccinated for rabies in the case of exposure to wild animals.

In the case of animal exposure (bite, lick, or other contact with a potentially rabid animal), raccoons, skunks, foxes, and most other carnivores and bats are considered rabid unless laboratory tested as negative. The post-exposure prophylaxis (PEP) for exposure to dogs, cats, and ferrets depends on the disposition of the animal. Consult public health officials if the dog, cat, or ferret has escaped or is otherwise questionable. Squirrels, hamsters, guinea pigs, gerbils, chipmunks, rats, mice, other small rodents, rabbits, and hares are almost never require PEP, but also consult public health officials in the case of exposure to these animals because these and similar animals should be considered individually. “Human Rabies Prevention-United States, 2008: Recommendations of the Advisory Committee on Immunizations.” *MMWR* (Vol. 57, RR-3).

The United States had 1,974 and 1,624 cumulative animal rabies cases for 2008 and 2009, respectively. For Kentucky, the cumulative rabies cases in animals for 2008 and 2009 as of June 28, 2008 and July 4, 2009 are 16 and 29, respectively. An increase in the number of reported animal exposures requiring PEP has been seen in the Purchase District. As the summary table below displays, the counts of PEP treatment are 2, 10, 18, and 16 for 2006, 2007, 2008, and 2009* respectively. Counts for animal exposures requiring PEP in 2009 are through September 11; previous years are complete years of data. Assuming a population of 195,301 for the district, these numbers equate to incidence rates of 0.001, 0.05, 0.09, and 0.08 (per 1,000 persons), respectively, for 2006, 2007, 2008, and 2009.* No cases of human rabies has been reported in the district. Only seven cases of animal rabies have been reported in the district since 2005.

	2006	2007	2008	2009*
Reported Cases	2	10	18	16
Incidence Rates (per 1,000)	0.001	0.05	0.09	0.08

Shigella, a Reminder for 2009 Safety

An outbreak of *Shigella* occurred in 2008, greatly increasing from previous years reported. Purchase District has had some reporting of *Shigella* this year.

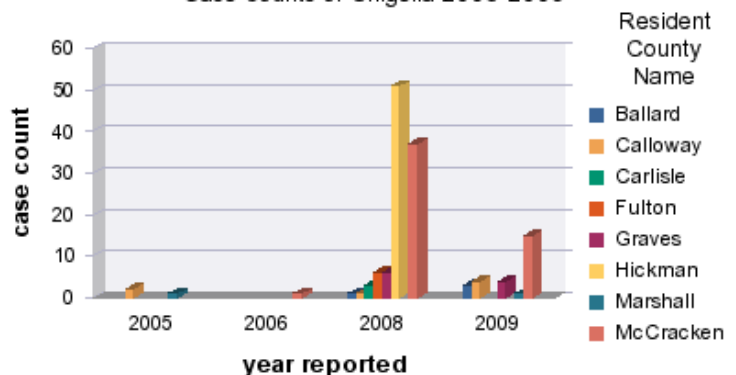
Especially as the school year starts back, it is important to pay special attention to hand hygiene as well as cleaning and disinfection of commonly touched surfaces and items (e.g., keyboards, counters, sinks, children’s toys).

The incubation period for this bacteria is 1-7 days, and it is contagious. Actually, the threshold for the number of organisms for transmission is low, as few as 10 to 200 organisms depending on species of *Shigella*.

Cases of *Shigellosis* in the United States for cumulative counts in weeks ending June 28, 2008 and July 4, 2009 are 8,571 and 7,057, respectively. For Kentucky, these totals are 186 and 125.

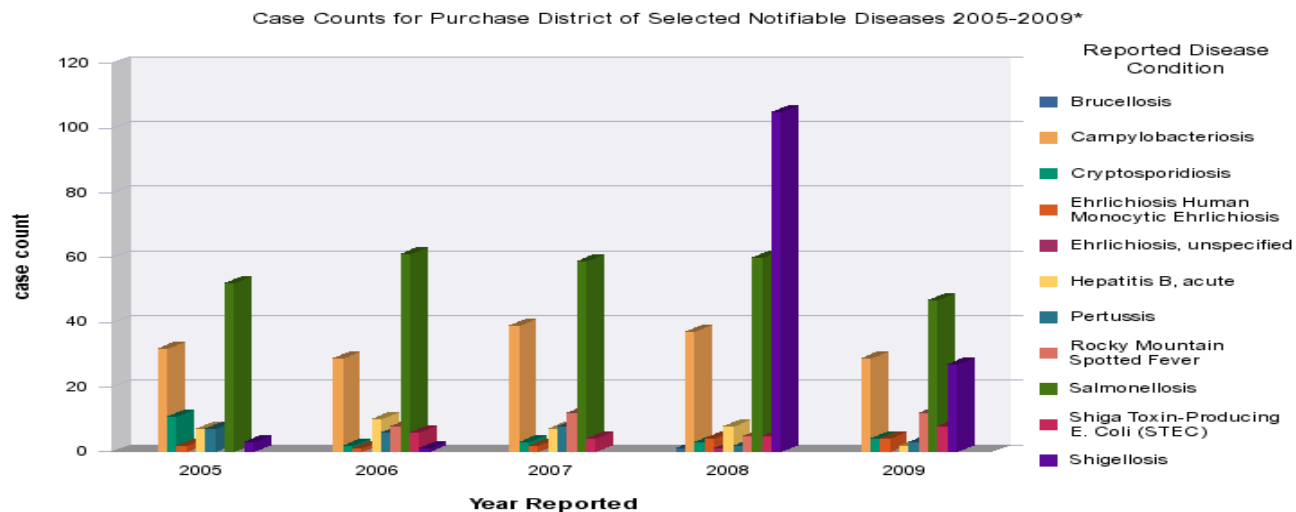
The counts for Purchase in these evaluated time frames are 3, 1, 0, 105, and 27 for 2005, 2006, 2007, 2008, and 2009, respectively. The corresponding incidence rates (per 1,000 persons) are 0.02, 0.01, 0, 0.54, and 0.14. See the table to the right.

Case counts of Shigella 2005-2009*



	2005	2006	2007	2008	2009
Case Counts	3	1	0	105	27
Incidence Rates (per 1,000)	0.02	0.01	0.00	0.54	0.14

Purchase ADD Selected Reported Diseases 2005-2009*



Incidence Rates of Purchase District for Selected Notifiable Diseases 2005-2009**					
	2005	2006	2007	2008	2009
Brucellosis	0.00	0.00	0.00	0.01	0.00
Campylobacteriosis	0.16	0.15	0.20	0.19	0.15
Cryptosporidiosis	0.06	0.03	0.02	0.02	0.02
Ehrlichiosis Human Monocytic	0.01	0.01	0.03	0.02	0.02
Ehrlichiosis, unspecified	0.00	0.00	0.00	0.01	0.00
Hepatitis B, acute	0.04	0.05	0.04	0.04	0.01
Pertussis	0.04	0.03	0.04	0.01	0.02
RMSF	0.00	0.04	0.06	0.03	0.06
Salmonellosis	0.27	0.31	0.30	0.31	0.24
STEC	0.00	0.03	0.02	0.03	0.04
Shigellosis	0.02	0.01	0.00	0.54	0.14

* All case count data represented in the above graph has been pulled from the reported diseases data in the Kentucky Electronic Public Health Records System (KY-EPHRS). The data represented for 2009 is cumulative year-to-date through October 19.

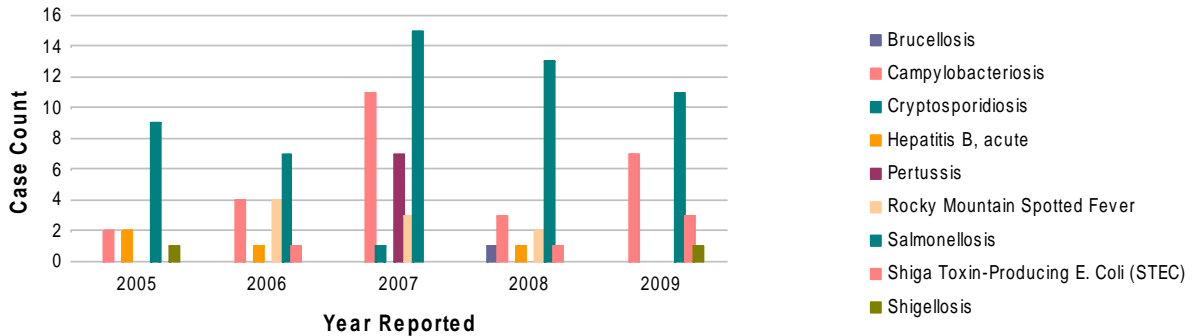
** Incidence rates (per 1,000) can be seen in the table above. This data was calculated from the count data and assumes a population of 195,301 for Purchase A.D.D. and Marshall County combined.

KY-EPHRS is a system that is used among healthcare professionals as an electronic data repository. Currently, the system is primarily used for disease surveillance and reporting.

As seen in the graph and table above, incidence of *Shigellosis* was particularly high in 2008; this increased incidence rate was indicative of an outbreak in the district. Incidence rates for both *Campylobacteriosis* and *Salmonellosis* fluctuate, yet remain some of the most commonly reported diseases.

Marshall County Selected Reported Diseases 2005-2009*

Case Counts for Marshall County Selected Notifiable Diseases 2005-2009*



Incidence Rates of Marshall County Selected Notifiable Diseases 2005-2009**					
	2005	2006	2007	2008	2009
Brucellosis	0.00	0.00	0.00	0.03	0.00
Campylobacter	0.06	0.13	0.35	0.10	0.23
Cryptosporidiosis	0.00	0.00	0.32	0.00	0.00
Hepatitis B, acute	0.06	0.03	0.00	0.03	0.00
Pertussis	0.00	0.00	0.00	0.23	0.00
RMSF	0.00	0.13	0.10	0.06	0.00
Salmonellosis	0.29	0.23	0.48	0.42	0.35
STEC	0.00	0.03	0.00	0.03	0.10
Shigellosis	0.03	0.00	0.00	0.00	0.03

* All case count data represented in the above graph has been pulled from the reported diseases data in the Kentucky Electronic Public Health Records System (KY-EPHRS). The data represented for 2009 is cumulative year-to-date through September 11.

** Incidence rates (per 1,000) can be seen in the table above. This data was calculated from the count data and assumes a population of 31,000 for Marshall County.

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In 2007, Salmonella occurred at an increased level from previous years. However, these cases were not considered an epidemic.

For questions, comments, and suggestions regarding this newsletter, please contact:

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