

PUBLIC HEALTH MATTERS

Volume 2

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SALMONELLA

Salmonellosis is an infection with bacteria called *Salmonella*. Most persons infected with *Salmonella* develop diarrhea, fever, and abdominal cramps 12 to 72 hours after infection. The illness usually lasts 4 to 7 days, and most persons recover without treatment. However, in some persons, the diarrhea may be so severe that the patient needs to be hospitalized. In these patients, the *Salmonella* infection may spread from the intestines to the blood stream, and then to other body sites and can cause death unless the person is treated promptly with antibiotics. The eld-

erly, infants, and those with impaired immune systems are more likely to have a severe illness.

Salmonella is actually a group of bacteria that can cause diarrheal illness in humans. They are microscopic living creatures that pass from the feces of people or animals to other people or other animals. There are many different kinds of *Salmonella* bacteria. *Salmonella* serotype Typhimurium and *Salmonella serotype Enteritidis* are the most common in the United States. *Salmonella* germs have been known to cause illness for over 100 years. They were discovered by an American scientist named Salmon, for whom they are named.

Salmonella live in the intestinal tracts of humans and other animals, including birds. *Salmonella* are usually transmitted to humans by eating foods contaminated with animal feces. Contaminated foods usually look and smell normal.

TIPS FOR CONSUMERS

- ✓ Consumers should not eat any peanut butter or peanut-containing products that have been recalled.
 - ✓ Consumers who have recalled products in their homes should discard those products.
 - ✓ Consumers also should avoid eating products made with peanut butter or peanut paste if they are unsure whether these products have been recalled. National brands of jarred peanut butter sold in grocery stores have not been implicated in this outbreak.
 - ✓ Persons with pets should know that certain pet foods and pet treats can contain peanut butter, including dog biscuits and bird food.
 - ✓ To determine whether a product has been recalled, consumers can search the list of recalled products at the Food and Drug Administration (FDA) website <http://www.fda.gov/oc/opacom/hottopics/salmonellatyph.html> or telephone the consumer hot line number on the product packaging to get information directly from the product manufacturer.
 - ✓ Consumers without Internet access can telephone 10=800-CDC-INFO (1-800-232-4636), 24 hours a day, 7 days a week, for product recall information from the FDA website and for other information on salmonellosis.
 - ✓ Persons who think they might have become ill from eating peanut butter or peanut-containing products should consult their health-care providers. Infants, elderly persons, and persons with impaired immune systems are more likely than others to develop severe illness.
- Source: CDC

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PEANUT BUTTER HAS BEEN LINKED TO SALMONELLA

Symptoms of salmonella infection are diarrhea, fever, and abdominal cramps beginning 12 to 72 hours after infection. Illness usually lasts four to seven days. Most people recover without treatment, but severe infection may occur when salmonella bacteria spread from the intestines into the bloodstream.



<http://www.frilabo.pt/fems/images/stories/Salmonella.jpg>

BRAZORIA COUNTY–REPORTABLE DISEASES

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Reportable Diseases													
Bacterial Meningitis													0
Campylobacteriosis													0
Chlamydia	3												3
Cryptosporidiosis	1												1
Gonorrhea	2												2
Hepatitis A, acute													0
Hepatitis B, acute													0
Hepatitis B, chronic	6												6
Hepatitis C, acute													0
Hepatitis C, chronic	22												22
HIV Infection, Adult	1												1
Legionellosis													0
Lyme Disease													0
Mumps													0
Pertussis													0
Salmonellosis	2												2
Shigellosis	1												1
Streptococcus pneumoniae, invasive	1												1
Streptococcal disease, invasive	1												1
Syphilis	2												2
Varicella (Chicken Pox)	7												7
West Nile Virus													0

NATIONAL ELECTRONIC DISEASE SURVEILLANCE SYSTEM

The National Electronic Disease Surveillance System (NEDSS) is a program developed by the CDC to help monitor the number and distribution of certain illnesses and conditions in the United States. Local health departments use this tool to provide information to the CDC. The Brazoria County

PHEP Team keeps track of the number of local cases that are reported to us and the data is entered into NEDSS. The recent Salmonella outbreak is a good example of NEDSS at work. The CDC is "collaborating with public health officials in many states and the FDA to investigate a multi-

-state outbreak of human infection due to Salmonella." (Center for Disease Control and Prevention). The CDC is notified by local health departments through NEDSS of cases of Salmonella that are seen on a local level in hospitals, private physicians offices and clinics.

This information is gathered to determine if there is an outbreak of disease. The state of Texas requires 59 illnesses and a handful of other conditions be reported. Information in this newsletter reflects the information received from our reporting partners.

FINGERPRINTING BACTERIA

Finding bacteria in a sample is important for understanding the cause of illness. When microbiologists find disease-causing bacteria, they send them to a laboratory for DNA fingerprinting. Laboratories use high-tech equipment to make the DNA fingerprints. Creating a DNA fingerprint is a way for scientists to learn exactly which type of bacteria is making a person sick. Bacteria have unique fingerprints just like people do. Each type of bacteria has unique DNA which makes up a pattern of bands called a fingerprint.

The fingerprints that scientists use to identify bacteria are called

PFGE patterns. PFGE stands for Pulsed-Field Gel Electrophoresis. Scientists find bacterial fingerprints by cutting the bacteria's DNA into tiny pieces and then placing them on a gel, which is a flat slab of gelatin. When scientists send electricity through the gel, the DNA pieces separate. Small pieces of DNA get carried farther down the gel than bigger pieces. This process creates a banding pattern or "fingerprint". After scientists at the public health laboratories have made a bacterial fingerprint, they share pictures of it with the PulseNet team. The PulseNet team is an important part of disease detection. They match up bacterial fingerprints from differ-

ent states. This helps the team know if a person is getting sick from the same food borne bacteria as someone else.

Once the PulseNet team has found DNA fingerprints that look the same, they make a dendrogram, or bacteria family tree. Bacteria that are closely related sometimes come from the same place. The dendrogram lets PulseNet find all the bacteria that are closely related using their PFGE fingerprints. This helps the PulseNet team work with epidemiologists to find the source of an outbreak.

Source: Center for Disease Control and Prevention



NATIONAL INCIDENT MANAGEMENT SYSTEM

The National Incident Management System or *NIMS*, was started in March, 2004 by the Department of Homeland Security to establish a management template for dealing with events that allows agencies,

both public and private, to work together seamlessly when dealing with incidents. Being *NIMS* compliant is now a requirement of all responders in an event.

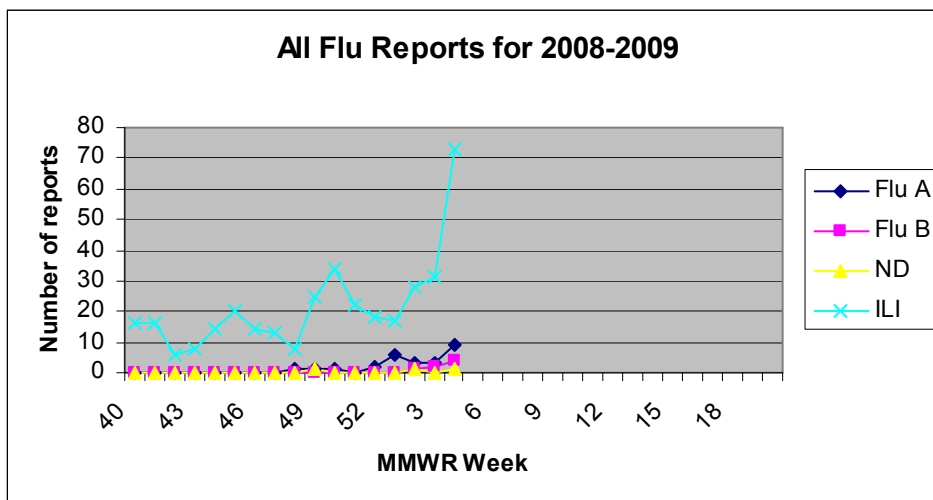
Independent study *NIMS* training can be found online through the FEMA Website:

<http://training.fema.gov/IS/crslist.asp>

**WOULD YOU
LIKE TO BE A
VOLUNTEER
REPORTER FOR
INFLUENZA?**

CONTACT
Jan Prejean, RN
979-8964-1166

Brazoria County participates in conducting influenza surveillance by reporting the estimated level of influenza activity to the state and CDC every week during flu season (October to May). Influenza activity levels are reported as no activity, sporadic, local, regional, or widespread.



How to Determine A Cold vs The Flu		
Cold	Symptoms	Flu
People with a cold will sneeze more often but not enough to be a reliable sign.	Sneezing	Many people catch the flu from sick people coughing and sneezing.
Mostly Uncommon	Headaches	High Probability
High Probability	Sore Throat	Not Common
Uncommon	Fever	High Probability
Not Usually	Chills	Probability
Minor Aches/Pains	Aches	Severe Aches/Pains
A few days	Development	Very Quickly
Mild	Tired Feeling	Severe
Hacking with mucus	Coughing	Cough/(little mucus)
Usually Common	Clogged Nose	Not Common
Mild	Chest Discomfort	Severe

<http://birdflu.secrets.com/How%20to%20determine%20the%20flu%202020.gif>

**Brazoria County Health
Department Emergency
Preparedness**

432 East Mulberry
Angleton, Texas 77515

Phone: 979-864-1166
Fax: 979-864-1501
Email: volunteer@brazoria-county.com

PHEPT STAFF

Health Authority—Leo O’Gorman, MD,
MPH
Director—Jo Mapel, RN, BSN, MPH
Disease Surveillance—Jan Prejean, RN
SNS Coordinator—David Stroud

We’re on the web
www.brazoria-county.com

TRAINING OPPORTUNITIES

TRAINING ON THE WEB

FUSIONS: e-learning about Public Health Emergency Planning and Preparedness. This is a great site for information.

www.FTV360.com

Centers for Disease Control and Prevention
Public Health Planning and Preparedness

<http://emergency.cdc.gov>

Texas Department of State Health Services
Public Health Planning and Preparedness

<http://www.dshs.state.tx.us/preparedness/>

**CONTACT US FOR MORE
INFORMATION ON HOW YOU
CAN HELP US BE PREPARED**

979-864-1166

VOLUNTEER@BRAZORIA-COUNTY.COM

POD SQUAD

**BECOME A
MEMBER OF
THE POD
SQUAD**

