



Turbulent Tide:

Two members from the Volusia County Health Department's Epidemiology Strike Team participated in a regional, multi-county, preparedness exercise in May called Turbulent Tide. The event was held in Osceola County and exercised the health department's ability to investigate and mitigate disease outbreaks in shelters setup for storm evacuees. Environmental Health and Nursing Strike Teams also participated in the exercise. This was a timely event because hurricane season started on June 1.

Hepatitis Awareness Month

On May 20, 2010, the Volusia County Health Department (VCHD) offered free Hepatitis A, B, & C testing and vaccinations at all sites as well as at the Flagler County Health Department in Bunnell. During the event, 50 clients were tested and 49 were vaccinated. Additionally, the Hepatitis Prevention Coordinator visited local substance abuse facilities to educate and inform the residents about Hepatitis A, B, & C, the importance of early detection with a blood test, and the need for vaccination against Hepatitis A & B. Staff also visited the homeless coalition's Bridge of Hope program and vaccinated 47 individuals against Hepatitis A & B. They returned in June to administer the second dose of the three part vaccination series.

By Rebecca Beaman

National HIV Testing Day

The CDC estimates that 250,000 of the one million people living with HIV/AIDS in the United States are unaware of their status. National HIV Testing Day was established in 1995 to engage the nation to promote early diagnosis and HIV testing. In observance of this day, the Area 12 AIDS Program Office provided free rapid HIV testing to all health department sites in Volusia and Flagler Counties on June 25, 2010. Free testing was also provided at the 2010 Community Health and Safety Fair at the Dickerson Community Center in Daytona Beach.

By Leah Coughlin



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EPI~LOG

Volusia County Health Department Office of Disease Control April - June 2010

Some Disease Control staff wear blue on June 18 in recognition of Men's Health Month.



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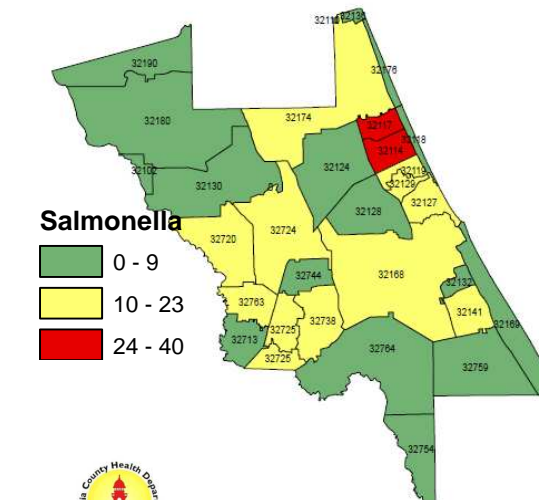
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Spotlight on *Salmonella*

Salmonellosis is a gastrointestinal infection caused by the bacteria *Salmonella*. This bacteria is most often associated with undercooked food (particularly chicken), reptiles, and pets. Proper cooking and storage of foods in addition to frequent hand washing can prevent transmission of this bacteria.

In 2009, there were 305 confirmed/probable cases of Salmonellosis reported in Volusia County, or 60 cases per 100,000 population. This was a significant increase compared to the previous 5 years and was nearly twice the state rate of 35 cases per 100,000 population in 2009. Other Central Florida counties also experienced similar heightened rates in 2009.



Salmonella
0 - 9
10 - 23
24 - 40

Most cases occurred in the summer and fall months and 43% of cases were under 4 years old. Over 7% of cases reported eating undercooked eggs or having kitchen contamination and 4% reported exposure to reptiles or farm animals. Most of the reported cases had an unknown serotype.

According to the Centers for Disease Control and Prevention (CDC), *Salmonella* serotypes Enteritidis, Typhimurium, and Newport account for about half of culture-confirmed *Salmonella* isolates reported by public health laboratories to the National Salmonella Surveillance System. Resistance to at least five antimicrobial agents is common in *S. Typhimurium* and *S. Newport* strains resistant to at least 7 antimicrobial agents (MDR-AmpC) have been identified in isolates from humans.

The map shows where the 2009 cases were distributed in the county. There were no identified outbreaks of Salmonellosis in Volusia County during 2009.

You can help reduce the incidence of Salmonella in Volusia County by educating your patients on the illness and prevention techniques.

By Cassie Lewis & Michelle Nash, MPH



Immunize to Prevent Pertussis

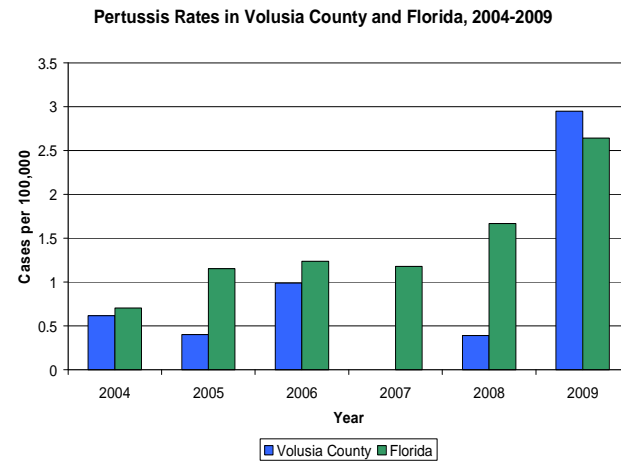
Pertussis is a highly communicable, vaccine-preventable disease that lasts for many weeks and is typically manifested in children with paroxysmal spasms of severe coughing, whooping, and posttussive vomiting. Pertussis is one of the most lethal diseases of infants and young children in non-immunized populations.

According to the Centers for Disease Control and Prevention (CDC), the incidence of pertussis has increased steadily in the United States (U.S.) since the 1980s. Since 2004, the incidence has also increased in Florida and Volusia County.

As shown in the figure, there were 15 cases of pertussis reported in Volusia County in 2009, or 2.9 cases per 100,000 population. That was

slightly higher than the Florida rate of 2.6 cases per 100,000 population (497 cases). Compared to surrounding counties, Volusia had the highest pertussis rate in 2009.

Of the 15 cases reported in 2009, 67% (10) were children \leq 1 year old that had not completed the



first 3 recommended vaccinations. The remaining 5 cases were also eligible for their adult or adolescent booster but had not received it. Only one case was acquired outside the U.S.

Vaccination can prevent the occurrence of pertussis. Refer to the CDC recommended immunization schedule for proper age and dosages for vaccination. These immunizations are available at the Volusia County Health Department (VCHD) for adults and children and they are free for children \leq 18 years old.

By Cassie Lewis & Michelle Nash, MPH

Immunization Schedule

There are four combination vaccines used to prevent diphtheria, tetanus and pertussis: DTaP, Tdap, DT and Td. DTaP and DT are given to children < 7 years old and Tdap and Td are given to older children and adults.

The CDC recommends that children receive 5 doses of the **DTaP** vaccine. One dose each should be given at ages 2, 4, and 6 months and 1 dose between 15-18 months. An additional "booster" shot should be given between 4-6 years old. **DT** does not contain pertussis, and is used as a substitute for **DTaP** for children who cannot tolerate pertussis vaccine.

Td is a tetanus-diphtheria vaccine given to adolescents and adults as a booster shot every 10 years, or after an exposure to tetanus. **Tdap** is similar to Td but also containing protection against pertussis. A single dose of **Tdap** is recommended for adolescents 11 or 12 years of age, or in place of one Td booster in older adolescents and adults age 19 through 64.

Note: Upper-case letters in these abbreviations denote full-strength doses of diphtheria (D) and tetanus (T) toxoids and pertussis (P) vaccine. Lower-case "d" and "p" denote reduced doses of diphtheria and pertussis used in the adolescent/adult formulations. The "a" in DTaP and Tdap stands for "acellular", meaning that the pertussis component contains only a part of the pertussis organism.

For more information, please visit www.cdc.gov/vaccines/vpd-vac/pertussis/default.htm.

Chlamydia

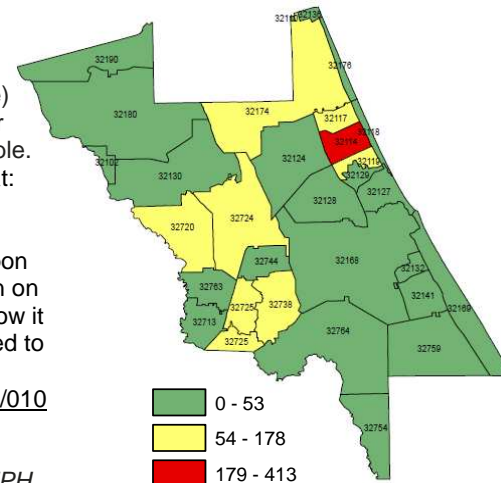
Chlamydia is a common, preventable and treatable sexually transmitted disease that can have severe complications. The incidence of this disease has been increasing in the U.S., Florida, and Volusia County over the past several years. The map illustrates how the 2009 Chlamydia cases were distributed throughout the county.

According to the CDC, annual screening of sexually active women \leq 25 and any woman who has new or multiple sex partners is recommended. Timely treatment of all cases is important. CDC recommended regimens

are Azithromycin (1 g orally in a single dose) or Doxycycline (100 mg orally twice daily for 7 days), but alternate treatments are available. The full treatment guidelines are available at: www.cdc.gov/std/treatment/2006/toc.htm.

It also important to counsel your patients upon diagnosis and provide them with information on Chlamydia infection, how it is treated and how it can be prevented. Cases should be reported to VCHD by using the form found at: www.doh.state.fl.us/chd/volusia/Documents/010710-PractitionerDiseaseReportForm.pdf.

By Michelle Nash, MPH



Volusia County Disease Activity*

Disease Category	2009 Full Year	2010 First Quarter	2010 Second Quarter
Vaccine Preventable			
Pertussis	15	0	2
Varicella	45	6	15
CNS Diseases and Bacteremias			
Creutzfeldt-Jakob disease (CJD)	2	0	0
Haemophilus influenzae (invasive)	8	1	4
Meningitis (bacterial, cryptococcal, mycotic)	8	4	3
Meningococcal disease	2	0	0
Staphylococcus aureus community associated mortality	0	0	0
Streptococcal disease, group A, invasive	6	2	4
Streptococcus pneumoniae (invasive disease)			
Drug resistant	21	14	8
Drug susceptible	23	9	8
Enteric Infections			
Campylobacteriosis	19	0	8
Cryptosporiosis	7	0	1
Cyclosporiasis	1	0	0
Escherichia coli, shiga-toxin producing (STEC)	0	2	0
Giardiasis	20	22	1
Listeriosis	1	0	0
Salmonellosis	305	29	40
Shigellosis	2	4	1
Viral Hepatitis			
Hepatitis A	3	0	0
Hepatitis B, acute	10	1	0
Hepatitis B, chronic	80	29	22
Hepatitis C, acute	2	1	1
Hepatitis C, chronic	533	144	136
Hepatitis E	1	0	0
Hepatitis +HBsAg in pregnant women	11	2	4
Vector Borne, Zoonoses			
Lyme disease	2	0	0
Malaria	1	1	0
Q Fever, acute	0	0	1
Rabies, animal	5	2	2
Rabies (possible exposure)	102	40	31
Rocky Mountain spotted fever	1	0	1
HIV/AIDS			
HIV†	105	20	15
AIDS†	107	17	14
STDs			
Chlamydia	1,611	510	455
Gonorrhea	383	133	139
Syphilis			
Infectious (Primary and Secondary)	15	4	2
Early latent (Infection for <1 year)	25	2	5
Late latent (Tertiary)	10	1	3
Latent, unknown duration	9	0	2
Others			
Carbon monoxide poisoning	1	3	1
Influenza due to novel or pandemic strains	60	3	3
Influenza-associated pediatric mortality	1	0	0
Lead poisoning	4	1	1
Legionellosis	8	0	0
Tuberculosis	6	3	2
Vibriosis	3	0	0

*Includes reported confirmed/probable cases (2010 data is provisional and subject to change).

†Numbers are for Area 12 (Volusia/Flagler).