



Bobby Jindal  
GOVERNOR

# STATE OF LOUISIANA DEPARTMENT OF HEALTH AND HOSPITALS Louisiana Morbidity Report

Louisiana Office of Public Health - Infectious Disease Epidemiology Section

P.O. Box 60630, New Orleans, LA 70160 - Phone: (504) 219-4563

<http://www.dhh.louisiana.gov/offices/reports.asp?ID=249&Detail=7428>

Infectious Disease Epidemiology Main Webpage

<http://www.infectiousdisease.dhh.louisiana.gov>



Alan Levine  
SECRETARY

September - October 2008

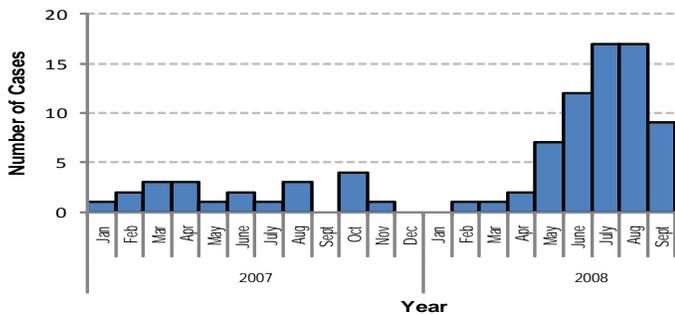
Volume 19 Number 5

## Pertussis Update Louisiana, 2008

Julie Hand MSPH

In June, 2008 an alert was sent to all hospitals and Infectious Disease physicians regarding the number of pertussis cases reported in the state between January and June, 2008. At that time, eleven pertussis cases had been reported which was a slight increase as compared to the same time period in 2007. Since that alert, fifty-five additional cases have been reported bringing the total case number to sixty-six. (Figure 1)

**Figure 1:** Pertussis cases reported by month  
Louisiana - January, 2007-September, 2008



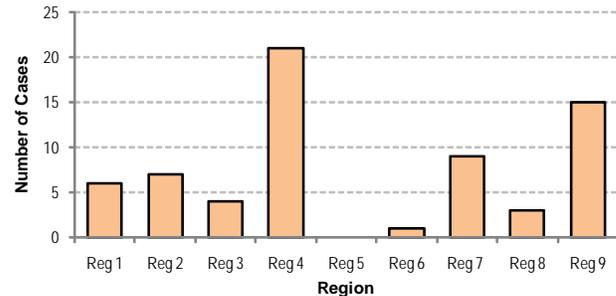
Pertussis (Whooping Cough) is an acute bacterial disease caused by *Bordetella pertussis*. Humans are the only known host. Pertussis does not have a seasonal pattern. Currently, there is a resurgence of pertussis in the U.S. with no clear explanation for this increase. Even with the large increase we are experiencing, Louisiana still has fewer cases and a lower rate of disease than other southern states. Pertussis is an epidemic disease with two to five year cycles. Immunization has reduced the total number of cases but has not changed the cycles, suggesting that immunization controls the disease but not the propagation of infection in the

human population.

An epidemiological investigation is conducted each time a case of pertussis is reported, resulting in chemoprophylaxis recommendations and active surveillance among high-risk contacts. Six epidemiological links have been discovered among twelve of the reported cases. Ten cases were household contacts, two were daycare contacts. The remaining fifty-four cases were sporadic.

The geographical distribution shows some areas of the state with a higher number of reported cases. (Figure 2)

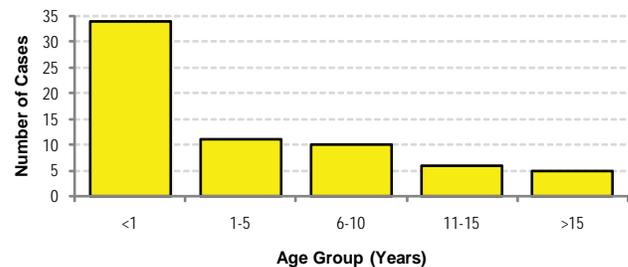
**Figure 2:** Pertussis cases reported by region\*  
Louisiana, January-September, 2008



\*Cases are assigned to region based on residence. Refer to the map on Page 7

Age distribution shows that pertussis is still affecting children more than adults, especially those under one year of age. However, there is a higher number of cases among older children and adults than seen in Louisiana in previous years. (Figure 3)

**Figure 3:** Age distribution among pertussis cases reported  
Louisiana, January-September, 2008



### Contents

Pertussis Update - Louisiana, 2008.....	1
Methamphetamine Events - Louisiana, 2004-2006.....	2
Adult Lead Poisoning Document for Healthcare Providers.....	2
Achieving Appropriate Weight Gain During Pregnancy Requires More Than Education - Louisiana, 2001-2004.....	5
Herpes Zoster in Children Less Than Five Years of Age.....	5
Announcements.....	6

Epidemiological investigations revealed several areas in which many health care providers were unfamiliar with current recommendations by the Centers for Disease Control and Prevention (CDC) and the American Academy of Pediatrics:

- 1) placement of patients suspected to have, or diagnosed with, pertussis under droplet precautions in hospital settings
- 2) administration of chemoprophylaxis to exposed healthcare workers plus clinical monitoring or exclusion of exposed health-

Continued on Page 4

# Methamphetamine Events - Louisiana, 2004-2006

Xiaoping Nie, PhD; Collette Stewart-Briley, MSPH; Dianne Dugas, MSW MPH, LuAnn White, PhD DABT

## Introduction

Methamphetamine, also known as 'meth', is a stimulant illegally made from pseudoephedrine and other inexpensive ingredients readily purchased at pharmacies and stores. The process for manufacturing meth mixes and heats several chemicals that often produce extremely hazardous fumes and/or fires or explosions. The hazardous substances generated frequently injure first responders, innocent bystanders and children in nearby neighborhoods. Also, the process creates hazardous sites that must be remediated. To curb the growing meth abuse problem, the Louisiana legislature passed bill SB-24 which took effect on Aug 15, 2005, to restrict the purchase of key ingredients used to manufacture the drug.

## Methods

To address the public health issues associated with meth manufacture, the Louisiana Hazardous Substance Emergency Events Surveillance (HSEES) program of the Louisiana Department of Health and Hospitals (LDHH), Office of Public Health (OPH), reviewed Louisiana State Police (LSP) notifications for methamphetamine laboratories and reports on meth laboratory seizures in Louisiana from the U.S. Department of Justice, Drug Enforcement Administration (DEA), El Paso Intelligence Center (EPIC). EPIC collects data voluntarily reported by local and state law enforcement officials through the National Clandestine Laboratory Seizure Report.

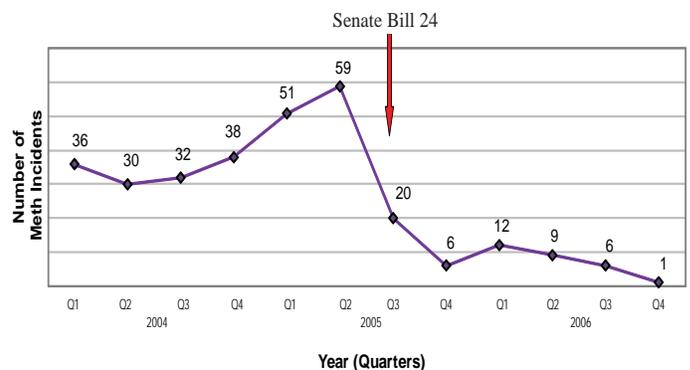
A review of reported methamphetamine lab seizures in Louisiana from January, 2004 to December, 2006 was conducted

based on reports from EPIC and LSP. The records in each system were examined and duplicates eliminated. For this time period, EPIC contained 252 reports (127 events in 2004; 108 in 2005; 17 in 2006), and LSP had sixty-two reports (18 in 2004; 31 in 2005; 13 in 2006). Of the sixty-two LSP meth events, ten did not have sufficient information and were not included; the total events used from LSP were fifty-two. Comparison of EPIC and LSP found four duplicate meth events (2 from 2005; 2 from 2006). The combined events from EPIC and LSP after duplicates were eliminated totaled 300 events between 2004 and 2006 (annual totals were 136 in 2004, 136 in 2005 and 28 in 2006).

## Results

Examining the meth events by year, the number of events decreased substantially during the second half year of 2006. (Figure 1)

**Figure 1:** Number of reported meth events by quarter Louisiana, 2004-2006



## Adult Lead Poisoning Document for Healthcare Providers



A detailed, web-based document recently developed by OPH/SEET provides healthcare professionals with current and accurate information about lead exposure and toxicity among adults.

Topics include: occupational and non-occupational exposure sources, toxicity and susceptible populations, OSHA medical monitoring guidelines for construction and general industry, blood lead result standards (OSHA, ACGIH and CDC), and reporting adult lead poisoning cases to OPH/SEET. Louisiana state law requires the reporting of all cases of adult lead poisoning to OPH/SEET. The document also contains links to relevant, self-instructed continuing education courses and the recent medical management of adult lead exposure guidelines put forth by the Association of Occupational and Environmental Clinics. The document is available at [www.seet.dhh.louisiana.gov](http://www.seet.dhh.louisiana.gov) under Heavy Metal Surveillance.

For more information, contact Michelle Lackovic by email at [mlackovi@dhh.la.gov](mailto:mlackovi@dhh.la.gov) or call (504)219-4518.

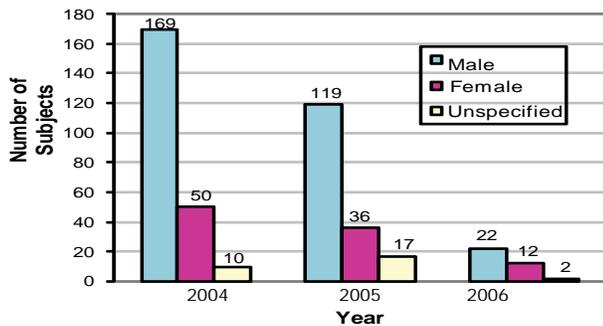
This dramatic decline coincided with the enactment of the Louisiana law, Senate Bill 24, which required pharmacies and other stores to monitor over-the-counter ingredients used in the man-

Louisiana Morbidity Report	
Volume 19 Number 5	September-October 2008
The Louisiana Morbidity Report is published bimonthly by the Infectious Disease Epidemiology Section of the Louisiana Office of Public Health to inform physicians, nurses, and public health professionals about disease trends and patterns in Louisiana. Address correspondence to Louisiana Morbidity Report, Infectious Disease Epidemiology Section, Louisiana Department of Health and Hospitals, P.O. Box 60630, New Orleans, LA 70160.	
<i>Assistant Secretary, OPH</i>	<i>M. Rony Francois, MD MSPH PhD</i>
<i>State Epidemiologist</i>	<i>Raoult Ratard, MD MPH</i>
<i>Editors</i>	<i>Susanne Straif-Bourgeois, PhD MPH Theresa Sokol, MPH Rosemarie Robertson, BS MT(C) CNMT</i>
<i>Layout &amp; Design</i>	<i>Ethel Davis, CST</i>

ufacture of meth. The decline in the number of reported meth events corresponded with the enactment of the new law. The number of reported meth events remains at the lower levels since the fourth quarter of 2005.

Among 300 meth events, 225 resulted in arrests of 437 subjects (of these, 310 (71%) were male, 98 (22%) were female and 29 (7%) were unidentified). Paralleling the decline in meth events, the number of suspects involved also decreased yearly, with the sharpest decrease in 2006. (Figure 2)

**Figure 2:** Suspects involved in the reported meth events by gender and year - Louisiana, 2004-2006



Only EPIC reports had the date of birth of those arrested (of the 437 arrested, 405 had birth information). People under forty years of age (76%) were more likely to engage in illegal meth activities. (Figure 3)

**Figure 3:** Suspects involved in the reported meth events by age Louisiana, 2004-2006

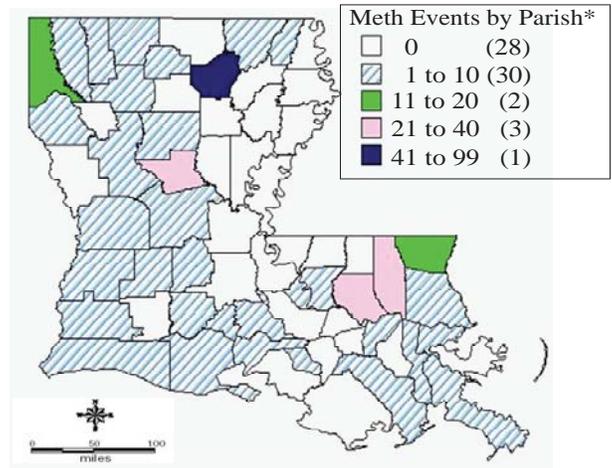
Age	Number	Percent	Rate/100,000 Population*
Under 20	20	4.9	1.7
20-29	108	32.1	20.5
30-39	167	39.5	24.8
40-49	92	17.5	11.7
50-59	32	5.7	4.8
Older Than 60	6	0.2	0.1
<b>Total</b>	<b>405</b>	<b>100**</b>	

\* Post-Katrina population figures used  
 \*\* Not equal to 100 due to rounding

Among 300 reported meth events, methamphetamine was seized in 119 (40%) events, with quantities ranging from trace amount to 227 grams. Ninety-eight events (33%) required clean up by Hazmat companies. Fifty-two children in twenty-nine events (10%), forty law enforcement officers in eleven events (4%), and sixty-nine uninvolved adults in nine events (3%), were exposed to toxic substances. Weapon seizures were reported in fourteen events (5%).

From January, 2004 to December, 2006, Ouachita Parish had the highest number of reported meth events (total of 99 or 33%) in Louisiana. Other parishes reporting higher numbers of meth events were Tangipahoa (35 or 12%), Grant (25 or 8%) and Livingston (24 or 8%). The ten parishes with the most events accounted for 82% of the reported meth events. Nine of the top ten parishes are located in northern Louisiana or on the Northshore of Lake Pontchartrain; Calcasieu Parish is the only parish located in south Louisiana among the top ten parishes. (Figure 4)

**Figure 4:** Distributions of meth events by Parishes Louisiana, 2004-2006



\* Based on 2004-2006 EPIC Report and LSP Report

These reports demonstrated that meth labs were more often located in rural areas (126 events or 50%). The number in rural areas increased from 2004 (47%) to 2006 (65%), while commercial/industrial location percentage decreased from thirty-six percent in 2004 to six percent in 2006. For the three-year period, a vehicle (85 or 34%) was the most frequent seizure location, followed by family dwelling (82 or 33%), and open air (53, or 21%). However, the frequency of vehicles being seized as a meth lab location decreased sharply from forty-three percent in 2004 to six percent in 2006.

**Recommendations**

Based on this descriptive data, it is recommended that agencies:

1. Collect data on health effects for first responders, children, uninvolved adults and suspects who were being treated either on scene or at hospitals because of exposure to meth-related hazards; this data is not currently available, but is highly recommended for future collection.
2. Records of meth site locations should be made accessible to the public to inform apartment renters and home buyers of potential meth-related hazardous.
3. Enhance coordination for reporting meth events among local, state and federal law enforcement agencies. Of the 300 reported meth events, only four appeared in both the EPIC and LSP report. This reflects the need to enhance the cooperation and coordination among federal, state and local agencies in reporting meth events.

For references or more information, please contact Dr. Nie at (225) 342-3279 or email [xnie@dhh.la.gov](mailto:xnie@dhh.la.gov)

## Pertussis .....Continued from Page 1

care workers until treatment regimen is completed

3) administration of chemoprophylaxis to household and other close contacts of pertussis cases

4) school exclusion for children diagnosed with pertussis until the treatment regimen is completed.

Investigation case reports also illustrate some instances where the pertussis diagnosis was initially missed, creating an opportunity for further spread of the disease. (Table 1)

**Table 1:** Pertussis investigation case reports  
Louisiana, June-July, 2008

**Case #1**

June 1	<ul style="list-style-type: none"> <li>Four month old presents to ER</li> <li>Chief complaint: coughing and gagging with two episodes of coughing until choking and turning blue</li> <li>Admitted to pediatric unit - admit diagnosis: choking, apnea</li> <li>RSV negative</li> <li>Chest X-ray impression: poor expansion of lungs cannot exclude acute interstitial process</li> </ul>
June 4 AM	<ul style="list-style-type: none"> <li>Discharged to home - discharge diagnosis: perihilar pneumonitis, treated with IM Rocephin</li> </ul>
June 4 PM	<ul style="list-style-type: none"> <li>Presents to another hospital ER- chief complaint: spells of coughing until stops breathing</li> <li>Impression: Admit, start Azithromycin, collect pertussis test</li> </ul>
June 5	<ul style="list-style-type: none"> <li>Pertussis PCR positive</li> </ul>

**Case #2**

June 19	<ul style="list-style-type: none"> <li>Six week old presents to pediatrician</li> <li>Chief complaint: cough and congestion; lips turning purple with congestion caught in throat</li> <li>RSV negative</li> <li>Diagnosis: Upper Respiratory Infection treated with Amoxicillin and Prednisone</li> </ul>
June 20 AM	<ul style="list-style-type: none"> <li>Returns to pediatrician</li> <li>Chief complaint: wheezing</li> <li>Diagnosis: Upper Respiratory Infection</li> </ul>
June 20 PM	<ul style="list-style-type: none"> <li>Presents to ER</li> <li>Chief complaint: fever, shortness of breath, cough, congested, episode of choking on mucus</li> <li>Chest x-ray normal</li> <li>Discharged in two hours</li> <li>Diagnosis: Upper Respiratory Infection and Reflux</li> </ul>
June 24	<ul style="list-style-type: none"> <li>Follow-up to pediatrician from ER visit</li> <li>Impression: possible pertussis</li> <li>Sent to hospital for admission</li> </ul>
June 27	<ul style="list-style-type: none"> <li>Pertussis PCR positive</li> </ul>

**Case #3**

July 3	<ul style="list-style-type: none"> <li>Three-month old presents to pediatrician</li> <li>Chief complaint: low-grade fever, runny nose, groggy</li> <li>Diagnosis: Head cold, given saline drops</li> </ul>
July 8	<ul style="list-style-type: none"> <li>Returns to pediatrician</li> <li>Chief complaint: runny nose, fever, fussy, loss of appetite</li> <li>Diagnosis: Head cold</li> </ul>
July 10	<ul style="list-style-type: none"> <li>Returns to pediatrician</li> <li>Chief complaint: coughing, episodes of turning blue and not breathing</li> </ul>

	<ul style="list-style-type: none"> <li>Pediatrician does not have a diagnosis – sends patient to Hospital ER</li> <li>Presents to ER</li> <li>Chief complaint: apnea</li> <li>Assessment: Apnea and cyanosis</li> <li>Admitted to pediatric service</li> <li>Workup to rule out seizure disorder, Chest x-ray, placed on apnea monitor</li> </ul>
July 11	<ul style="list-style-type: none"> <li>Patient transferred to PICU with worsening cough and apnea spells</li> <li>Coughing episodes paroxysmal in nature and bradycardia with periods of cyanosis</li> <li>Pertussis test ordered; patient placed on droplet precautions</li> <li>Zithromax started</li> </ul>
July 14	<ul style="list-style-type: none"> <li>Pertussis PCR positive</li> </ul>

During the epidemiological investigation, another case of pertussis was discovered. These two cases resulted in prophylaxis recommendations for approximately sixty-five people including healthcare workers and daycare contacts.

**Case #4**

March 26	<ul style="list-style-type: none"> <li>Three-week old infant presents to the ER for vomiting and coughing</li> <li>Discharged following a normal chest x-ray and nebulizer treatment</li> <li>Discharge diagnosis: RSV Bronchiolitis</li> </ul>
April 14	<ul style="list-style-type: none"> <li>Infant presents to the hospital for overnight observation for reflux</li> <li>Discharged on Prevacid</li> </ul>
April 23	<ul style="list-style-type: none"> <li>Admitted due to cough and choking episodes</li> </ul>
April 25	<ul style="list-style-type: none"> <li>Transferred to another hospital</li> </ul>
April 26	<ul style="list-style-type: none"> <li>Patient transferred to PICU due to apnea episodes lasting up to sixty seconds</li> <li>Pertussis test ordered</li> </ul>
May 1	<ul style="list-style-type: none"> <li>Pertussis culture positive</li> </ul>
May 3	<ul style="list-style-type: none"> <li>Discharged home</li> </ul>

**Case #5**

June 9	<ul style="list-style-type: none"> <li>One month old infant presents to pediatrician for cough</li> </ul>
June 12	<ul style="list-style-type: none"> <li>Infant presents to ER</li> <li>Chief complaint: nasal congestion, trouble breathing and wheezing</li> <li>Impression: Cough with early viral upper respiratory infection</li> <li>Discharged with orders to continue using saline drops and to see physician or return to ER if fever develops</li> </ul>
June 15	<ul style="list-style-type: none"> <li>Admitted to hospital by pediatrician</li> <li>Admit diagnosis: choking episodes with hypoxemia; rule out reflux</li> <li>Normal chest x-ray</li> <li>Transferred to another hospital</li> </ul>
June 16	<ul style="list-style-type: none"> <li>Nasal swab collected for pertussis</li> </ul>
June 17	<ul style="list-style-type: none"> <li>Pertussis PCR positive</li> </ul>
June 19	<ul style="list-style-type: none"> <li>Discharged home</li> </ul>

For references or more information, please call Julie Hand at (504)219-4563 or email [jhand@dhh.la.gov](mailto:jhand@dhh.la.gov) or visit our website at <http://www.dhh.louisiana.gov/offices/page.asp?id=249&detail=6481>

# Achieving Appropriate Weight Gain During Pregnancy Requires More Than Education - Louisiana, 2001-2004

Lyn Kieltyka, PhD MPH; Dionka Pierce, MPH; Ashley Chin, PhD MPH MA; Tri Tran, MD MPH

In 1999, thirty-three percent of Louisiana women did not gain enough weight during pregnancy according to the 1990 Institute of Medicine recommendations. The high percent of pregnant women who didn't gain enough weight coupled with the association between inappropriate weight gain during pregnancy and LBW (low birth weight) delivery resulted in a state-wide billboard campaign in 2001. (Figure 1)

**Figure 1:** Billboard campaign for appropriate weight gain during pregnancy Louisiana, 2001



However, updated monitoring of appropriate weight gain during pregnancy in Louisiana has not continued. Low birth weight (< 2,500 grams) deliveries in Louisiana reached 11.5% in 2005.

In addition to LBW, infants born weighing more than 4,000 grams (macrosomia) are at increased risk for subsequent morbidity. Identification of factors associated with inappropriate weight gain may help guide future program development.

Louisiana Pregnancy Risk Assessment and Monitoring System (PRAMS) data linked with birth records from 2001 to 2004 was used to evaluate weight gain during pregnancy according to pre-pregnancy weight status based on body mass index (BMI). Institute of Medicine recommendations were used to categorize pregnancy weight gain into under, appropriate and over-gaining. (Table 1)

**Table 1:** Institute of Medicine recommendations for weight gain during pregnancy - U.S.A., 1990

Pre-pregnancy BMI and Weight Status	Recommended Weight Gain
< 19.8 kg/m <sup>2</sup> : underweight	28-40 lbs
19.8 – 26 kg/m <sup>2</sup> : normal weight	25-35 lbs
26 – 29 kg/m <sup>2</sup> : overweight	15-25 lbs
> 29 kg/m <sup>2</sup> : obese	15 lbs

Relationships between LBW / macrosomic singleton birth outcomes and pregnancy weight gain were evaluated, followed by an analysis identifying factors associated with inappropriate pregnancy weight gain (over and under gaining). SAS-callable SUDAAN was used to evaluate relationships with chi-square tests and multinomial logistic regression.

Nearly forty percent of women included in analyses were African-American, forty-seven percent were unmarried, fifteen percent were under twenty years of age, twenty-seven percent were over the age of thirty years and fifty-seven percent had completed twelve years or less of education. Approximately eight percent of women reported having a prior LBW delivery, five percent had hypertension, two percent had diabetes and fourteen percent smoked cigarettes during the last trimester of pregnancy. Nearly half of the women reported a pre-pregnancy BMI in the normal range, with sixteen percent being under weight and twenty-three percent obese.

Only thirty-three percent of Louisiana women achieved appropriate weight gain during pregnancy, while twenty-three percent under-gained and forty-four percent over-gained. After controlling for race, age, pre-pregnancy weight status, third trimester cigarette smoking, maternal hypertension, previous LBW birth and gestation

*Continued on Page 6*

## Herpes Zoster in Children Less Than Five Years of Age Louisiana, 1999-2004

Diego Lara, MD-MPH Candidate

### Background

Herpes zoster (HZ), also known as shingles, is a vesicular skin eruption characterized as being unilateral and within a dermatome, often on the face. A HZ eruption can generally last seven to ten days and is often associated with pain in the affected region; the eruption can be so extreme that it can take the skin up to four weeks to heal. HZ is a sporadic disease caused by the reactivation of latent varicella zoster virus (VZV) that lies dormant in the dorsal root ganglia. As VZV is the same virus that causes chickenpox, the vast majority of people have dormant VZV present. Herpes zoster can occur at any point; however, it is most prevalent in the sixth decade of life, with an incidence of five to ten cases per 1,000 persons. It is not known what causes the reactivation of the disease, but a significant risk factor is an immunocompromised state, especially for HIV positive individuals, patients with lymphoma and patients with hematopoietic stem cell replacement.

Herpes zoster in children is a much milder disease than in

adults. It generally lasts a shorter period (1 to 2 weeks total) and is associated with less pain. As with adults, immunocompromised children can have much more complicated course including disseminated cutaneous or visceral disease as well as a chronic course.

Previous studies have estimated the incidence of HZ in children with one study describing the epidemiology of hospitalization of children with HZ. This investigation uses hospital discharge data to estimate the incidence of hospitalization of children under five with HZ and to describe the epidemiologic characteristics of these children.

### Methods

Records from the Louisiana Hospital Inpatient Discharge Database (LAHIDD) for the years 1999 to 2004 were searched. Diagnoses were coded using the International Classification of Diseases, Ninth Revision (ICD 9).

### Results

There were a total of twenty-five admission records for twenty-three individual patients admitted during the period (composed of: 2 infants; 6 one-year olds; 7 two-year olds; 5 three-year olds; 5 four-year olds). The racial makeup of the group was five African-Americans, four Whites, one Other and fifteen Unknowns.

*Continued on Page 6*

## Achieving Appropriate Weight...Continued from Page 5

at present delivery, failure to gain enough weight during pregnancy was associated with double the chance of having a LBW delivery (OR=1.9, 95% CI [CI]=1.4,2.6). Over-gaining weight during pregnancy was protective for LBW (OR=0.5, CI=0.4, 0.8) but a risk for macrosomia (OR=1.7, CI=1.3, 2.3). (Table 2)

Table 2. Adjusted odds ratios of low birth weight and macrosomia Louisiana, 2001-2004

Maternal Characteristics		Low Birth Weight	Macrosomia	Reference
		OR, 95% CI	OR, 95% CI	
Race	Black	2.0, 1.6-2.7*	0.5, 0.3-0.6*	White
Pre-pregnancy Weight Status Based on BMI	Underweight	1.9, 1.3-2.6*	0.7, 0.5-1.1	Normal Weight
	Overweight	1.4, 0.9-2.1	0.9, 0.6-1.4	
	Obese	1.6, 1.1-2.3*	1.2, 0.9-1.7	
Weight Gain During Pregnancy	Under-gain	1.9, 1.4-2.6*	0.9, 0.8-1.3	Appropriate Gain
	Over-gain	0.5, 0.4-0.8	1.7, 1.3-2.3*	
Maternal Age (Years)	< 20	1.6, 1.1-2.3*	0.5, 0.3-0.8*	25-34
	20-24	1.1, 0.8-1.5	0.7, 0.5-0.9*	
	35+	1.3, 0.8-2.2	1.0, 0.7-1.5	
Blood Pressure (BP)	Hypertension	3.7, 2.2-6.1*	1.2, 0.7-2.2	Normal BP
Smoking/last Trimester	Yes	1.8, 1.3-2.6*	0.6, 0.4-0.9*	No
Previous LBW	Yes	2.0, 1.3-3.1*	0.6, 0.3-1.1	No
Preterm Birth	Yes	28.7, 22.0-37.4*	0.05, 0.01-0.22*	No

\* Statistically significant

After controlling for race, age and education, the only factor statistically associated with under-gaining weight during pregnancy was the pre-pregnancy BMI category, whereas several factors were associated with over-gaining weight during pregnancy, including the pre-pregnancy BMI category, hypertension and smoking before or during pregnancy (Table 3)

Table 3. Adjusted odds ratios of weight gain during pregnancy Louisiana, 2001-2004

Maternal Characteristics		Under-gain Weight	Over-gain Weight	Reference
		OR, 95% CI	OR, 95% CI	
Race	Black	1.4, 1.2-1.7*	0.9, 0.8-1.1	White
Pre-pregnancy Weight Status Based on BMI	Underweight	1.3, 1.1-1.6*	0.5, 0.4-0.6*	Normal Weight
	Overweight	0.5, 0.4-0.7*	2.3, 1.9-2.8*	
	Obese	1.7, 1.3-2.2*	7.7, 6.2-9.5*	
Maternal Age (Years)	< 20	0.9, 0.7-1.2	1.4, 0.1-1.7	25-34
	20-24	1.1, 0.9-1.3	1.2, 1.0-1.4	
	35+	1.4, 1.1-1.9*	0.9, 0.7-1.2	
Maternal Education (Years)	<12	1.5, 1.2-1.9*	1.1, 0.9-1.4	>12
	12	1.3, 1.0-1.5	1.1, 1.0-1.4	
Blood Pressure (BP)	Hypertension	0.8, 0.5-1.3	1.8, 1.2-2.6*	Normal BP
Smoking Before Pregnancy	Yes	1.3, 0.9-1.7	0.6, 0.4-0.7*	No
Smoking/last Trimester	Yes	1.0, 0.7-1.4	1.8, 1.3-2.4*	No
Previous LBW	Yes	0.8, 0.6-1.1	1.3, 1.0-1.6	No

\* Statistically significant

Furthermore, although eighty-two percent of women reported receiving counseling on appropriate weight gain in 2004, there was no statistical association between receipt of provider counseling and weight gain during pregnancy.

In conclusion, two-thirds of Louisiana women failed to gain the recommended amount of weight during pregnancy despite over eighty percent receiving weight gain counseling. Weight gain during pregnancy is significantly associated with poor birth outcomes, and three modifiable risk factors for inappropriate weight gain, pre-preg-

nancy BMI, hypertension and smoking, were identified. Although fewer women under-gained in more recent years than in the late 1990s, it is clear that Louisiana still has considerable progress to make towards women gaining an appropriate amount of weight during pregnancy. Further investigation is required to understand why so few women gain the appropriate amount of weight during pregnancy. Interventions beyond media education and current provider education will be required to effectively address adequate weight gain during pregnancy in Louisiana. Programs addressing pre-pregnancy BMI and smoking may provide opportunity for improvement.

For references or more information, please contact Dr. Lyn Kieiltyka (504) 219-4566 or email [rlkielty@dhh.la.gov](mailto:rlkielty@dhh.la.gov).

### Herpes Zoster...Continued from Page 5

There were eighteen female admissions (72%) and seven male admissions (18%). Both of the multiple admitted patients were female. The mean age of all patients was 2.2 years old with a standard deviation of 1.26 years. The mean age for females was 2.0 years and the mean age for males was 2.7 years; there was no significant difference between the average ages ( $p = 0.209$ ).

The incidence density rate over the five-year period for both sexes combined was 1.16 cases of hospitalization with herpes zoster for 100,000 person-years. Census data from 2000 for children under five years of age was used as the denominator. The total incidence density for boys was 0.86 cases per 100,000 person-years. The total incidence density for girls was 2.3 cases per 100,000 person-years.

There were eighteen patients classified as immunocompetent and seven classified as immunocompromised. Of the immunocompetent children, thirteen were female and five were male. Of the immunocompromised children, five were female and two were male.

A patient admitted with herpes zoster is much more likely to be female than male (OR 2.6, 95% CI: 1.1-6.2). However, females were not at a higher risk of being immunocompromised (RR 1.0, 95% CI: 0.7-1.9), nor were they more likely to be admitted on an emergency basis (RR 1.0, 95% CI: 0.7-1.9). This difference based on gender has been well described in literature.

Studies have not found a change in the incidence of herpes zoster with relation to VZV vaccine. However, a Shingles Prevention Study found that vaccination of older adults results in decreased incidence of HZ and less severe disease in older adults. While this may not be true for children, it is a possibility that could not be assessed in our population because of our lack of access to the patients' immunization records. Further, studies in children with leukemia show that vaccinated children are at less risk for HZ compared to children whom had chicken pox. This shows that the vaccine virus may be less likely to reactivate than the wild type VZV.

For references or more information call (504)219-4563 or email [rratard@dhh.la.gov](mailto:rratard@dhh.la.gov)

## Announcements

Updates: Infectious Disease Epidemiology Webpage  
<http://www.infectiousdisease.dhh.louisiana.gov>

ANNUAL REPORTS: Comparison of Rates in Louisiana & Other Southern States; Pertussis

EPIDEMIOLOGY MANUAL: Brucellosis; Enterococcus-Vancomycin-resistant (VRE)

LOUISIANA MORBIDITY REPORT: Index 1980

VETERINARY INFORMATION: Equine Antimicrobial Sensitivity Profiles & Trends -2007; Feline Antimicrobial Sensitivity Profiles & Trends -2007; Multidrug Resistance-2007

WEST NILE VIRUS: LA Arbovirus Surveillance Summary-2008

**July - August, 2008**

Table 1. Disease Incidence by Region and Time Period

DISEASE	HEALTH REGION									TIME PERIOD					
	1	2	3	4	5	6	7	8	9	Jul-Aug 2008	Jul-Aug 2007	Jan-Aug Cum 2008	Jan-Aug Cum 2007	Jan-Aug % Chg*	
<b>Vaccine-preventable</b>															
Hepatitis B	Cases	0	0	0	1	0	0	0	0	4	5	17	55	71	-22.5
	Rate <sup>1</sup>	0	0	0	0.2	0	0	0	0	1.0	0.1	0.4	1.3	1.6	NA*
Measles	Cases	0	0	0	0	0	0	0	0	0	0	1	0	NA*	
Mumps	Cases	0	0	0	0	0	0	0	0	0	0	1	1	NA*	
Rubella	Cases	0	0	0	0	0	0	0	0	0	0	0	0	NA*	
Pertussis	Cases	2	1	1	7	0	0	3	0	6	20	4	38	14	171.4
<b>Sexually-transmitted</b>															
HIV/AIDS	Cases <sup>2</sup>	14	10	2	3	1	1	4	5	3	43	200	501	779	-35.6
	Rate <sup>1</sup>	1.4	1.7	0.5	0.6	0.4	0.3	0.8	1.4	0.7	1.0	4.6	11.5	17.8	NA*
Gonorrhea	Cases	283	211	71	249	33	103	369	216	55	1590	2455	6495	8044	-19.3
	Rate <sup>1</sup>	27.0	35.0	19.0	45.0	12.0	34.0	71.0	61.0	13.0	37.0	54.9	145.3	180.0	NA*
Syphilis (P&S)	Cases	21	17	6	21	4	6	29	13	11	128	65	286	228	25.4
	Rate <sup>1</sup>	2.0	3.0	2.0	4.0	1.4	2.0	6.0	4.0	3.0	12.0	1.5	6.4	5.1	NA*
<b>Enteric</b>															
Campylobacter	Cases	0	0	1	5	1	1	3	0	3	14	25	62	76	-18.4
Hepatitis A	Cases	0	0	0	0	0	0	0	0	0	0	8	9	23	-60.9
	Rate <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	0.2	0.2	0.5	NA*
Salmonella	Cases	27	21	24	64	26	5	7	22	50	246	227	613	540	13.5
	Rate <sup>1</sup>	2.6	3.7	6.4	12.4	9.7	1.6	1.4	6.3	13.0	5.7	5.3	14.2	12.5	NA*
Shigella	Cases	4	26	6	44	14	2	12	0	19	127	84	441	356	23.9
	Rate <sup>1</sup>	0.4	4.6	1.6	8.5	5.2	0.7	2.4	0	4.9	2.9	1.9	10.2	8.3	NA*
Vibrio cholera	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	NA*
Vibrio, other	Cases	3	0	1	0	2	0	0	0	3	9	9	32	22	45.5
<b>Other</b>															
<i>H. influenzae (other)</i>	Cases	0	0	0	0	0	0	0	0	0	0	1	7	4	NA*
<i>N. Meningitidis</i>	Cases	1	0	0	0	0	0	0	0	1	2	2	17	24	-29.2

1 = Cases Per 100,000

2=These totals reflect persons with HIV infection whose status was first detected during the specified time period. This includes persons who were diagnosed with AIDS at time HIV was first detected.

Due to delays in reporting of HIV/AIDS cases, the number of persons reported is a minimal estimate. Data should be considered provisional.

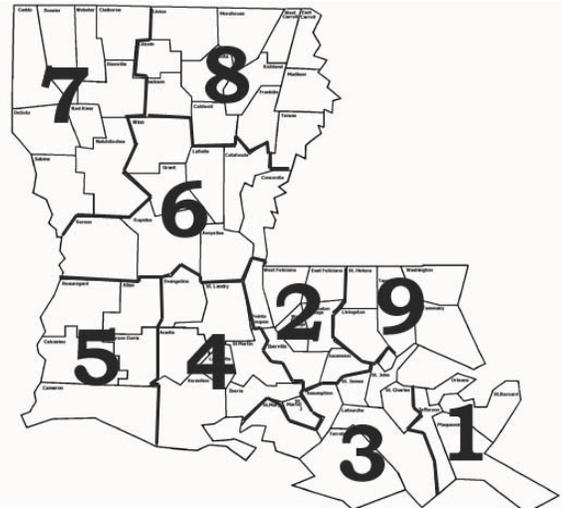
\* Percent Change not calculated for rates or count differences less than 5

Table 2. Diseases of Low Frequency (January-August, 2008)

Disease	Total to Date
Legionellosis	6
Lyme Disease	1
Malaria	2
Rabies, animal	5
Varicella	16

Table 3. Animal rabies (July-August, 2008)

Parish	No. Cases	Species
East Baton Rouge	1	Bat



LAC 51:11.105: The following diseases/conditions are hereby declared reportable with reporting requirements by Class:

**Class A Diseases/Conditions - Reporting Required Within 24 Hours**

Diseases of major public health concern because of the severity of disease and potential for epidemic spread-report by telephone immediately upon recognition that a case, a suspected case, or a positive laboratory result is known; [in addition, all cases of rare or exotic communicable diseases, unexplained death, unusual cluster of disease and all outbreaks shall be reported.

Anthrax	Measles (rubeola)	Severe Acute Respiratory Syndrome-associated Coronavirus (SARS-CoV)
Avian Influenza	Neisseria meningitidis (invasive disease)	Smallpox
Botulism	Plague	Staphylococcus Aureus, Vancomycin Intermediate or Resistant (VISA/VRSA)
Brucellosis	Poliomyelitis, paralytic	Tularemia
Cholera	Q Fever ( <i>Coxiella burnetii</i> )	Viral Hemorrhagic Fever
Diphtheria	Rabies (animal and human)	Yellow Fever
Haemophilus influenzae (invasive disease)	Rubella (congenital syndrome)	
Influenza-associated Mortality	Rubella (German measles)	

**Class B Diseases/Conditions - Reporting Required Within 1 Business Day**

Diseases of public health concern needing timely response because of potential of epidemic spread-report by the end of the next business day after the existence of a case, a suspected case, or a positive laboratory result is known.

Arthropod-Borne Neuroinvasive Disease and other infections (including West Nile, St. Louis, California, Eastern Equine, Western Equine and others)	Hemolytic-Uremic Syndrome	Pertussis
Aseptic meningitis	Hepatitis A (acute disease)	Salmonellosis
Chancroid <sup>1</sup>	Hepatitis B (acute illness & carriage in pregnancy)	Shigellosis
Escherichia coli, Shig-toxin producing (STEC), including E. coli 0157:H7	Hepatitis B (perinatal infection)	Syphilis <sup>1</sup>
Hantavirus Pulmonary Syndrome	Hepatitis E	Tetanus
	Herpes (neonatal)	Tuberculosis <sup>2</sup>
	Legionellosis (acute disease)	Typhoid Fever
	Malaria	
	Mumps	

**Class C Diseases/Conditions - Reporting Required Within 5 Business Days**

Diseases of significant public health concern-report by the end of the workweek after the existence of a case, suspected case, or a positive laboratory result is known.

Acquired Immune Deficiency Syndrome (AIDS)	Gonorrhea <sup>1</sup>	Staphylococcal Toxic Shock Syndrome
Blastomycosis	Hansen Disease (leprosy)	Streptococcal disease, Group A (invasive disease)
Campylobacteriosis	Hepatitis B (carriage, other than in pregnancy)	Streptococcal disease, Group B (invasive disease)
Chlamydial infection <sup>1</sup>	Hepatitis C (acute illness)	Streptococcal Toxic Shock Syndrome
Coccidioidomycosis	Hepatitis C (past or present infection)	Streptococcus pneumoniae, penicillin resistant [DRSP], invasive infection]
Cryptococcosis	Human Immunodeficiency Virus (HIV Syndrome infection)	Streptococcus pneumoniae (invasive infection in children < 5 years of age)
Cryptosporidiosis	Listeria	Transmissible Spongiform Encephalopathies
Cyclosporiasis	Lyme Disease	Trichinosis
Dengue	Lymphogranuloma Venereum <sup>1</sup>	Varicella (chickenpox)
Ehrlichiosis	Psittacosis	Vibrio Infections (other than cholera)
Enterococcus, Vancomycin Resistant [(VRE), invasive disease]	Rocky Mountain Spotted Fever (RMSF)	
Giardia	Staphylococcus Aureus, Methicillin/Oxacillin Resistant[ (MRSA), invasive infection]	

**Class D Diseases/Conditions - Reporting Required Within 5 Business Days**

Cancer	Heavy Metal (Arsenic, Cadmium, Mercury) Exposure and/or Poisoning (All ages)	Severe Traumatic Head Injury
Complications of Abortion	Lead Exposure and/or Poisoning (All ages)	Severe Undernutrition (severe anemia, failure to thrive)
Congenital Hypothyroidism <sup>1</sup>	Pesticide-Related Illness or Injury (All ages)	Sickle Cell Disease (newborns) <sup>3</sup>
Galactosemia <sup>3</sup>	Phenylketonuria <sup>3</sup>	Spinal Cord Injury
Hemophilia <sup>3</sup>	Reye's Syndrome	Sudden Infant Death Syndrome (SIDS)

Case reports not requiring special reporting instructions (see below) can be reported by Confidential Disease Case Report forms (2430), facsimile, (504) 219-4522, telephone, (504) 219-4563, or web base at <https://ophrdd.dhh.state.la.us>.

<sup>1</sup>Report on STD-43 form. Report cases of syphilis with active lesions by telephone.

<sup>2</sup>Report on CDC72.5 (f.5.2431) card.

<sup>3</sup>Report to the Louisiana Genetic Diseases Program Office by telephone at (504) 219-4413 or facsimile at (504) 219-4452.

This public health document was published at a total cost of . Seven thousand copies of this public document were published in this first printing at a cost of . The total cost of all printings of this document, including reprints is . This document was published by to inform physicians, hospitals, and the public of current Louisiana morbidity status under authority of R.S. 40:36. This material was printed in accordance with the standards for printing for state agencies established pursuant to R.S. 43:31. Printing of this material was purchased in accordance with the provisions of Title 43 of Louisiana Revised Statutes.

**DEPARTMENT OF HEALTH AND  
HOSPITALS  
OFFICE OF PUBLIC HEALTH  
P.O. BOX 60630 NEW ORLEANS LA 70160**

**PRSR STD  
U.S. POSTAGE  
PAID  
Baton Rouge, LA  
Permit No. 1032**