

# Epidemiology Newsletter

## Health Service Region 8 (HSR 8)

This newsletter aims to provide valuable information to our stakeholders that aid in notifiable conditions reporting for prevention and control of disease outbreaks. It is a collaboration of DSHS HSR 8, San Antonio Metropolitan Health District, Comal County Health Department, Medina County Health Unit, and Victoria City-County Health Department.



Spring 2015

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### Multistate outbreak of *Listeria monocytogenes* linked to Blue Bell Ice Cream; Recommendation to test patients at increased risk of invasive listeriosis who have compatible symptoms

Healthcare providers should test patients who have fever and other symptoms consistent with listeriosis, are at increased risk of invasive listeriosis, and may have been exposed to *Listeria* through a potentially contaminated product. Diagnostic testing should include cultures of blood and other specimens, such as cerebrospinal fluid, as indicated by the clinical presentation.

People at high risk for invasive listeriosis include pregnant women, adults 65 and older, and people with weakened immune systems. The incubation period for invasive *Listeria* infection is typically a few days to one month, but can be up to 70 days. Symptoms may include fever and muscle aches, sometimes preceded by diarrhea and other gastrointestinal symptoms.

Persons who have consumed any recalled Blue Bell Creameries products are at risk of exposure. Exact product descriptions and codes for recalled products can be found at [http://cdn.bluebell.com/the\\_little\\_creamery/press\\_releases/broken-arrow-expands-recall](http://cdn.bluebell.com/the_little_creamery/press_releases/broken-arrow-expands-recall). Additional products not subject to the recall but made at the company's Oklahoma facility might also potentially pose a risk. Blue Bell brand products made at the Oklahoma facility can be identified by checking for letters "O," "P," "Q," "R," "S," and "T" following the "code date" printed on the bottom of the product package.

Healthcare providers and laboratories should promptly report confirmed listeriosis cases to their local health department:

- **For those in Bexar County: San Antonio Metropolitan Health District (210) 207-8876**
- **For all others: DSHS, Health Service Region 8 at (210) 949-2000 or (210) 949-2121**

All *Listeria monocytogenes* isolates should be sent to the DSHS laboratory.

DSHS has finalized a plan with Blue Bell requiring the company to take specific steps before it can sell ice cream to the public. Among the list of requirements, Blue Bell must conduct trial runs of each production line that consistently test negative for *Listeria monocytogenes* before ice cream from those lines can be sold. The company will also test ice cream, ingredients and equipment for *Listeria* and let state health inspectors review all results.

Information about the *Listeria* outbreak linked to Blue Bell Ice Cream is available at:

CDC: <http://www.cdc.gov/listeria/outbreaks/ice-cream-03-15/index.html>

FDA: <http://www.fda.gov/Food/RecallsOutbreaksEmergencies/Outbreaks/ucm438104.htm>

DSHS: <https://www.dshs.state.tx.us/default.shtm>

**DSHS HSR 8**  
7430 Louis Pasteur Drive  
San Antonio, TX 78229-4509  
Phone: 210-949-2000  
**Public Health Emergencies or Immediately Reportable Diseases: 210-949-2121**

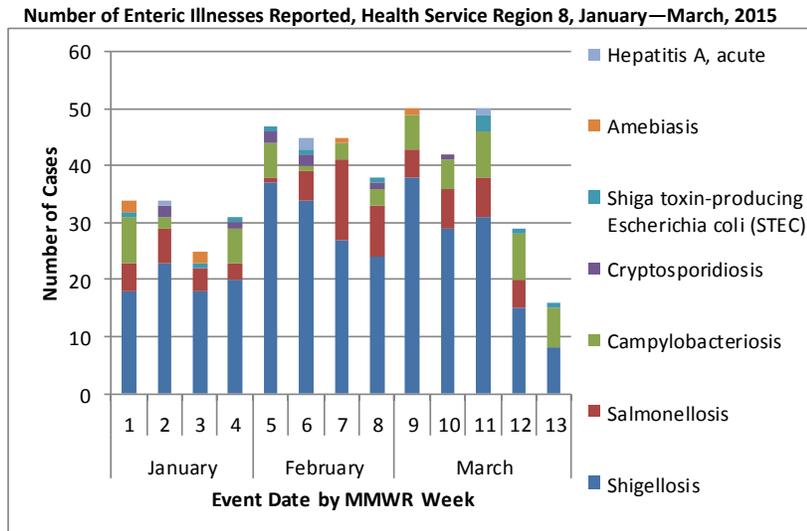
**San Antonio Metropolitan Health District**  
332 W Commerce Street  
San Antonio, TX 78205  
Phone: 210-207-8876

**Comal County Health Department**  
178 E Mill Street, Suite 210  
New Braunfels, Texas 78130  
Phone: 830-221-1150

**Medina County Health Unit**  
3103 Avenue G  
Hondo, Texas 78861  
Phone: 830-741-6191

**Victoria City-County Health Department**  
2805 N. Navarro  
Victoria, Texas 77901  
Phone: 361-578-6281

## Enteric Illnesses



Event Date is defined as, in hierarchical order: onset date, diagnosis date, report to county date, report to state date, date investigation created.

## Shigellosis

The Texas Department of State Health Services (DSHS), Health Service Region 8 (HSR8) continues to see an increase of shigellosis cases and outbreaks in the region over the past six months. Shigellosis cases are primarily identified in children of school and day-care age, but there are community-wide outbreaks affecting people of all ages. Shigellosis is highly contagious. *Shigella* bacteria are spread from person-to-person or through contaminated food or water.

### Recommendations for Treatment

1. Obtain stool for culture and sensitivities on any patient suspected of having shigellosis,
2. Begin empiric antibiotic treatment in patients who have severe disease, other medical risk factors, or are likely to spread disease, especially school-age children and food service workers.
3. Anti-motility drugs are not recommended and may prolong illness.

If cultures are performed, ensure sensitivities match antibiotic therapy.

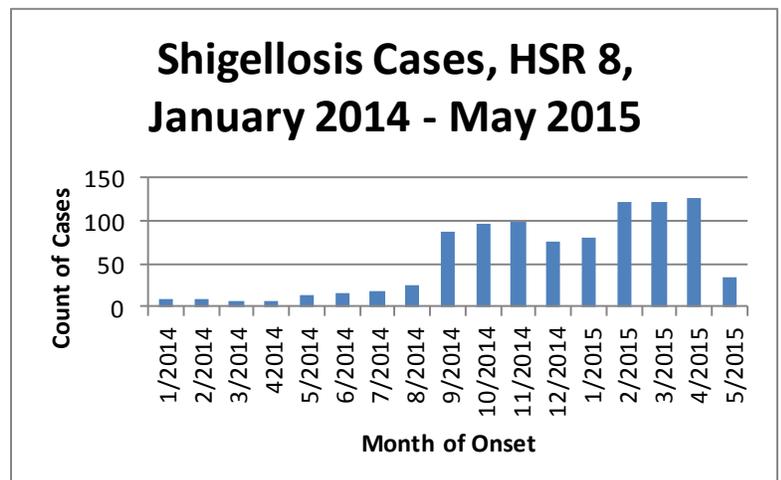
Multidrug-resistant shigellosis is increasing in the United States. Resistance to traditional first-line antibiotics like ampicillin and trimethoprim-sulfamethoxazole is common. Reports of resistance to the two antibiotics (ciprofloxacin and azithromycin) most commonly used to treat shigellosis is increasing. In the specimens tested for susceptibilities in Texas DSHS, HSR 8 since January 2014, 62.9% of *Shigella* were resistant to trimethoprim-sulfamethoxazole, 3.5% of *Shigella* were resistant to ampicillin, and 1.3% were resistant to ciprofloxacin. Azithromycin testing is not routinely done.

In February 2015, CDC reported decreased susceptibility to azithromycin in men who have sex with men (1). Nonsusceptible isolates exist but are not usually identified because there are no clinical laboratory guidelines for azithromycin susceptibility testing. Clinicians should be aware that MSM and HIV-positive persons with shigellosis might be infected with *Shigella* strains with reduced susceptibility to azithromycin.

In April 2015, CDC released a report on international travelers bringing *Shigella sonnei* bacteria resistant to ciprofloxacin to the United States and spreading it to others who have not traveled (2). Ciprofloxacin-resistant *Shigella sonnei* bacteria resistant sickened 243 people in 32 states and Puerto Rico between May 2014 and February 2015.

1) <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6306a4.htm>

2) [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6412a2.htm\\_cid=mm6412a2\\_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6412a2.htm_cid=mm6412a2_w)



## Vaccine Preventable Illnesses

### Mumps Health Advisory

There were eight students at the University of Texas-Austin recently diagnosed with mumps. As a reminder, mumps symptoms include parotitis (swollen or tender salivary glands), orchitis (swollen or tender testicles), low grade fever, malaise, and/or myalgia. Many people do not have any symptoms.

Mumps is spread through respiratory droplets. The incubation period can be as long as 25 days, but is typically 14-18 days. People with mumps are infectious three days before to five days after the onset of parotitis. Infected persons without symptoms of mumps may still be able to transmit the virus. While vaccination against mumps is the best protection against mumps infection, vaccinated individuals may still become infected. Anyone diagnosed with mumps or suspected of having mumps should stay home for the five days after the onset of parotitis.

Please consider mumps as a diagnosis for any patients presenting with parotitis, orchitis, or other unexplained glandular swelling. The best diagnostic tool for mumps is molecular detection via RT-PCR of mumps RNA from a buccal swab. Serological testing for mumps can be challenging in vaccinated individuals. A negative IgM result does not rule out mumps infection in vaccinated persons. Mumps testing is widely available commercially and through the DSHS Laboratory.

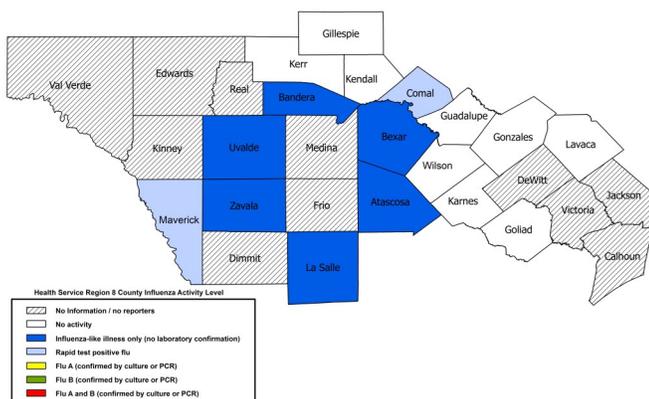
**In Texas, *suspicion* of mumps is required to be reported.  
Do not wait for laboratory confirmation to report mumps suspects.  
Mumps reports should be made to:**

- For those in Bexar County: San Antonio Metropolitan Health District (210) 207-8876
- For all others: DSHS, Health Service Region 8 at (210) 949-2000 or (210) 949-2121

In the United States, the only vaccine currently available that protects against mumps is called MMR (measles, mumps, rubella). Adults born before 1957 are generally considered immune to mumps. All adults born in 1957 or later should have documentation of at least 1 dose of MMR unless medically contraindicated or there is laboratory evidence of immunity. A routine second dose of MMR vaccine, administered at least 28 days after the first dose, is recommended for adults who are postsecondary education students, healthcare personnel, or those who plan to travel internationally. Persons vaccinated before 1979 with either killed mumps vaccine, or vaccine of unknown type, who are at high risk (healthcare personnel) should be considered for revaccination with two doses of MMR vaccine.

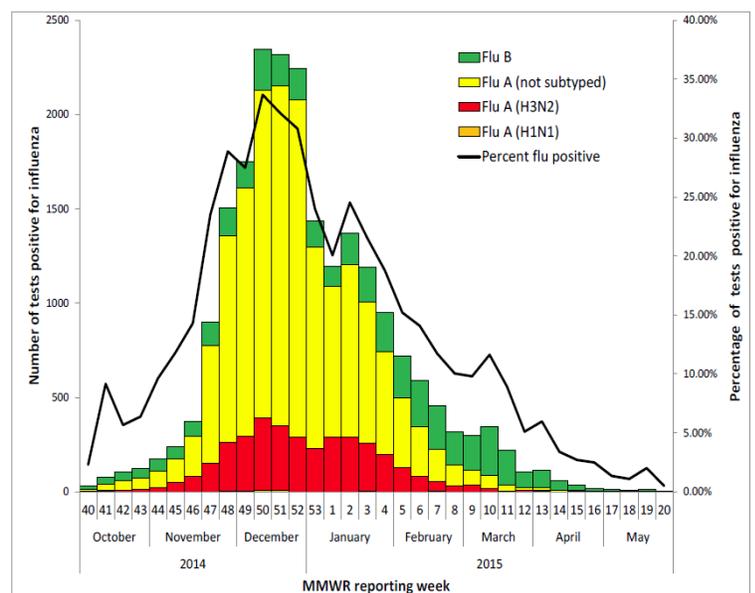
## Influenza Surveillance

### Week 20 HSR 8 Influenza Activity Map



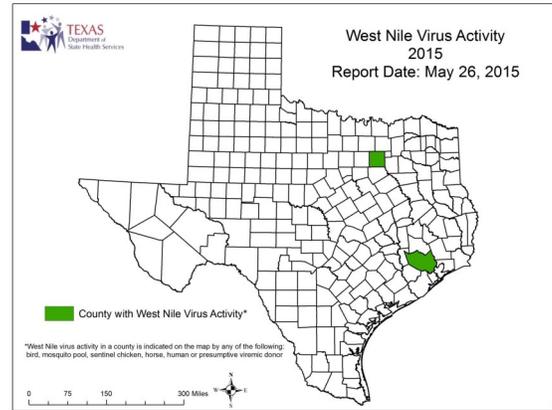
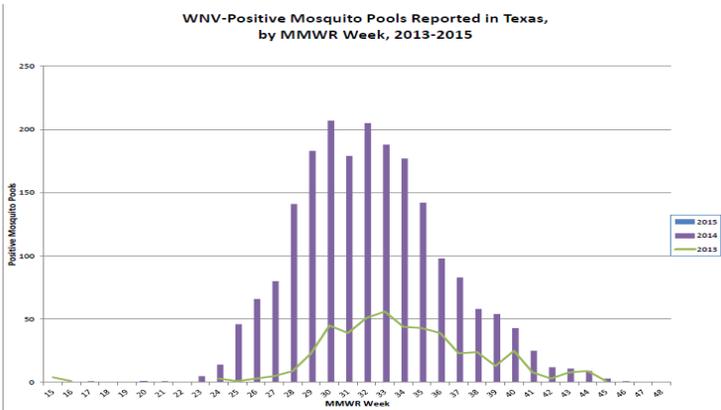
Highlighted areas indicate the highest level of influenza activity detected by county.

**Laboratory Surveillance: Number and Percentage of Tests (Antigen, Culture, PCR) Positive for Influenza by Type and Subtype Reported by Texas Laboratories, 2014-2015 Season**



## Arboviral Surveillance

### Texas Counties Reporting any West Nile Virus Activity, January 1—May 23, 2015



### Human Arbovirus Summary, Texas and HSR 8, January 1 - May 23, 2015

Virus	Fever		Neuroinvasive		Hemorrhagic Fever		Total (Human)		Deaths		PVD‡	
	State	HSR 8	State	HSR 8	State	HSR 8	State	HSR 8	State	HSR 8	State	HSR 8
Chikungunya*	7						7					
Dengue*	3						3					
Eastern Equine Encephalitis												
Saint Louis Encephalitis												
West Nile			1				1					
<b>Total Reports</b>	<b>10</b>		<b>1</b>				<b>11</b>					

\*All reported cases are imported.

‡PVD - Presumptive viremic blood donors are people who had no symptoms at the time of donating blood through a blood collection agency, but whose blood tested positive when screened for the presence of West Nile virus. Unless they meet the case reporting criteria, they are not counted as a case for official reporting purposes and are not included in the "total reports" column.

### First Case of West Nile Virus Reported in Texas

DSHS has reported the state’s first case of West Nile illness in 2015, a case of West Nile neuroinvasive disease in a person from Harris County. A total of 379 cases (6 fatal) were reported in Texas in 2014. With the increase of rain and flooding this year, providers should be aware of the possibility of an increase in arboviral illnesses. Though the majority (up to 80%) of individuals that contract West Nile virus will have no symptoms at all, the rest usually develop West Nile fever. Symptoms of West Nile fever include headaches, fever, nausea, aches, and fatigue. A very small number of cases will develop West Nile neuroinvasive disease, which is life-threatening. Symptoms of West Nile neuroinvasive disease are neck stiffness, disorientation, coma, tremors, convulsions, muscle weakness and paralysis.

### Recommendations for WNV Testing

Laboratory diagnosis for arboviral infections is generally accomplished by testing serum or plasma to detect virus, viral nucleic acid, or virus-specific immunoglobulin (Ig) M and neutralizing antibodies.

WNV-specific IgM antibodies are usually detectable 3 to 8 days after onset of illness and persist for 30 to 90 days, but longer persistence has been documented. Therefore, positive IgM antibodies occasionally may reflect a past infection. If serum is collected within 8 days of illness onset, the absence of detectable virus-specific IgM does not rule out the diagnosis of WNV infection, and the test may need to be repeated on a later sample. The presence of WNV-specific IgM in blood or CSF provides good evidence of recent infection but may also result from cross-reactive antibodies after infection with other flaviviruses or from non-specific reactivity. All positive results should be confirmed by neutralizing antibody testing of acute- and convalescent-phase serum specimens.

Please contact your local health department for assistance in submitting specimens for testing.

- For those in Bexar County: San Antonio Metropolitan Health District (210) 207-8876
- For all others: DSHS, Health Service Region 8 at (210) 949-2000 or (210) 949-2121

## Region 8 Notifiable Conditions Report, January - March, 2015\*

	Atascosa		Bandera		Bexar		Calhoun		Comal		De Witt		Dimmit		Edwards		Frio		Gillespie	
	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015
Amebiasis					1	5														
Botulism, infant	1																			
Campylobacteriosis	1	3	1		34	22		2	2	3		1					1	1	2	2
Chagas, chronic indeterminate					1															
Chikungunya non-neuroinvasive disease																				
Chlamydia	60	40	5	4	2322	2909	28	16	71	88	18	27	16	14	1	2	27	18	17	12
Creutzfeldt-Jakob Disease																				
Cryptosporidiosis			1		6	4	2			1										
Cyclosporiasis					2															
Gonorrhea	6	4			593	887	4	8	9	9	7	3	3	1			4	8	1	3
Haemophilus influenzae, invasive																				
Hepatitis A, acute					3	3				1										
Hepatitis B, acute					1	1			1											
Hepatitis C, acute					2															
Hepatitis E, acute																				
Legionellosis					3	2														
Leishmaniasis					1															
Malaria						1														
Multidrug-resistant organisms (MDRO)		1				23				1										
Mumps						1														
Pertussis					23	20			2	1										1
Salmonellosis	3			1	41	42	1		6	1							1		1	10
Shiga toxin-producing Escherichia coli (STEC)					3	6	1													
Shigellosis	1	14	3	1	16	217	1	3		12		1						1		1
Spotted Fever Rickettsiosis					1	2														
Streptococcus pneumoniae, invasive disease (IPD)			1		37	46			2	5		1					1		1	2
Streptococcus, invasive Group A	2				12	6			5											
Streptococcus, invasive Group B		2			23	50	1		1									1	1	
Syphilis					236	217			6	1			1		1			3		
Tuberculosis	2				13	18											2			2
Typhus fever-fleaborne, murine						4														
Varicella (Chickenpox)	1	1	2		18	27			1									3		
Vibriosis, other or unspecified										1										
Yersiniosis				1		1					1									

\*All data is provisional and subject to change, spaces indicate no cases reported

## Region 8 Notifiable Conditions Report, January - March, 2015\*

	Goliad		Gonzales		Guadalupe		Jackson		Karnes		Kendall		Kerr		Kinney		La Salle		Lavaca	
	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015
Amebiasis									1											
Botulism, infant																				
Campylobacteriosis		1	7	5	3	3			1	2	1	2		1					2	4
Chagas, chronic indeterminate																				
Chikungunya non-neuroinvasive disease																				
Chlamydia	2	3	21	25	95	92	8	15	6	11	12	21	33	17	1	4	4	7	8	8
Creutzfeldt-Jakob Disease				1																
Cryptosporidiosis					1							1							2	1
Cyclosporiasis																				
Gonorrhea	1		8	6	20	15	3	5	4	1	2	3	3	1				1	8	
Haemophilus influenzae, invasive												2								
Hepatitis A, acute																				
Hepatitis B, acute											1	1								
Hepatitis C, acute																				
Hepatitis E, acute																				
Legionellosis	1				1															
Leishmaniasis																				
Malaria																				
Multidrug-resistant organisms (MDRO)					1	1						1								1
Mumps																				
Pertussis		1		5	1					1	1									
Salmonellosis	1	2		3	2				2	1	4		1						1	1
Shiga toxin-producing Escherichia coli (STEC)			1		1								1							
Shigellosis			3		6	1					1									1
Spotted Fever Rickettsiosis																				
Streptococcus pneumoniae, invasive disease (IPD)				6	4						1	1							1	1
Streptococcus, invasive Group A			1	2	1				1		1									
Streptococcus, invasive Group B		1	1	2	2		1			1				1						
Syphilis			1	1	3	2	2		2		1	1	2	4				1		2
Tuberculosis													1							2
Typhus fever-fleaborne, murine				1																
Varicella (Chickenpox)				2	2		4			13		1								
Vibriosis, other or unspecified																				
Yersiniosis					1						2									

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## Region 8 Notifiable Conditions Report, January - March, 2015\*

	Maverick		Medina		Real		Uvalde		Val Verde		Victoria		Wilson		Zavala		Region 8	
	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015
Amebiasis				1													2	6
Botulism, infant																	1	0
Campylobacteriosis	3	1	2	1			1	1			3	2	1	2			65	59
Chagas, chronic indeterminate																	1	0
Chikungunya non-neuroinvasive disease																	0	0
Chlamydia	58	68	21	21	3	2	41	20	71	65	130	118	16	23	13	15	3108	3665
Creutzfeldt-Jakob Disease																	0	1
Cryptosporidiosis												1					12	8
Cyclosporiasis																	2	0
Gonorrhea	7	6	4	2			9	6	18	5	41	30	2	2		2	757	1008
Haemophilus influenzae, invasive																	0	2
Hepatitis A, acute																	3	4
Hepatitis B, acute																	3	2
Hepatitis C, acute																	2	0
Hepatitis E, acute											1						1	0
Legionellosis													1				5	3
Leishmaniasis																	1	0
Malaria																	0	1
Multidrug-resistant organisms (MDRO)			1				1		1		2						2	32
Mumps																	0	1
Pertussis		1	1						1			1	5				29	36
Salmonellosis	3		3	5			3	2			6	3	1	1			79	73
Shiga toxin-producing Escherichia coli (STEC)		3											1				8	9
Shigellosis			1	4			6				1	50	1				34	312
Spotted Fever Rickettsiosis																	1	2
Streptococcus pneumoniae, invasive disease (IPD)		4	1	1					2		1		1		1		52	69
Streptococcus, invasive Group A																	23	8
Streptococcus, invasive Group B	2		1	2								1	1				34	61
Syphilis	5	4	1	1					3	2	2	2		3		1	266	245
Tuberculosis	2	2								2			1				20	27
Typhus fever-fleaborne, murine																	0	5
Varicella (Chickenpox)		2		2			1		5	1	1		1	1	2		34	57
Vibriosis, other or unspecified																	0	1
Yersiniosis																	4	2

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