Mississippi State Department of Health

Mississippi Morbidity Report

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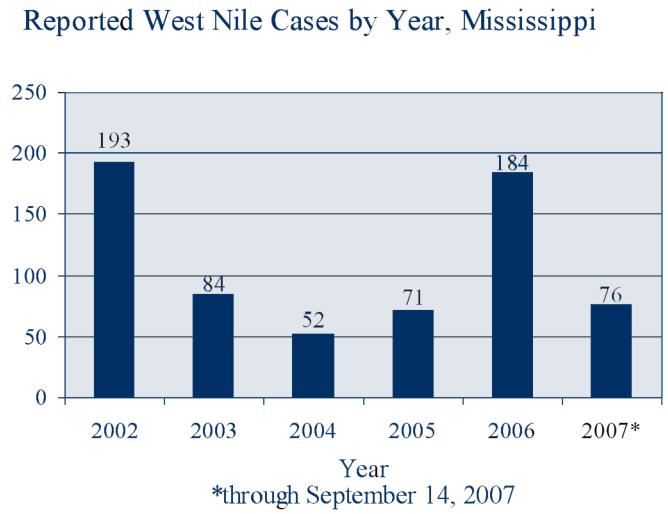
West Nile Surveillance

West Nile virus (WNV) looks like it's here to stay in Mississippi. In 2001, the first evidence of WNV infection was reported in Mississippi, in a horse. Since then there have been human cases every year (Figure 1). The mean age of reported cases has been close to 50 years each year. Every county except Issaquena has had some evidence of WNV reported (positive mosquito pools, birds, horses or humans).

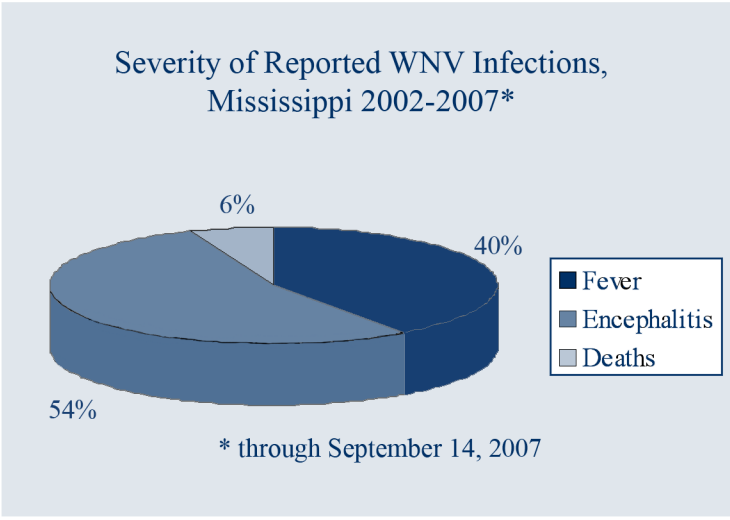
Figure 1



WNV is transmitted predominantly by Culex quinquefasciatus (the southern house mosquito) in this state. This mosquito breeds in standing water which contains large amounts of organic material.

Most infected individuals have no symptoms. Ten to 20% have West Nile fever, which may include fever, headache, sore throat, myalgia, fatigue, and occasionally a transient rash and lymphadenopathy. About one infected person in 150 will have severe disease involving the central nervous system. These patients may present with symptoms ranging from those compatible with aseptic meningitis to encephalitis (Figure 2). With the most severe disease, there may be an alteration of consciousness, which may progress to coma. Focal neurologic deficits, tremors and movement disorders also have been noted. West Nile poliomyelitis, a flaccid paralysis syndrome associated with WNV infection, occurs, albeit uncommonly.

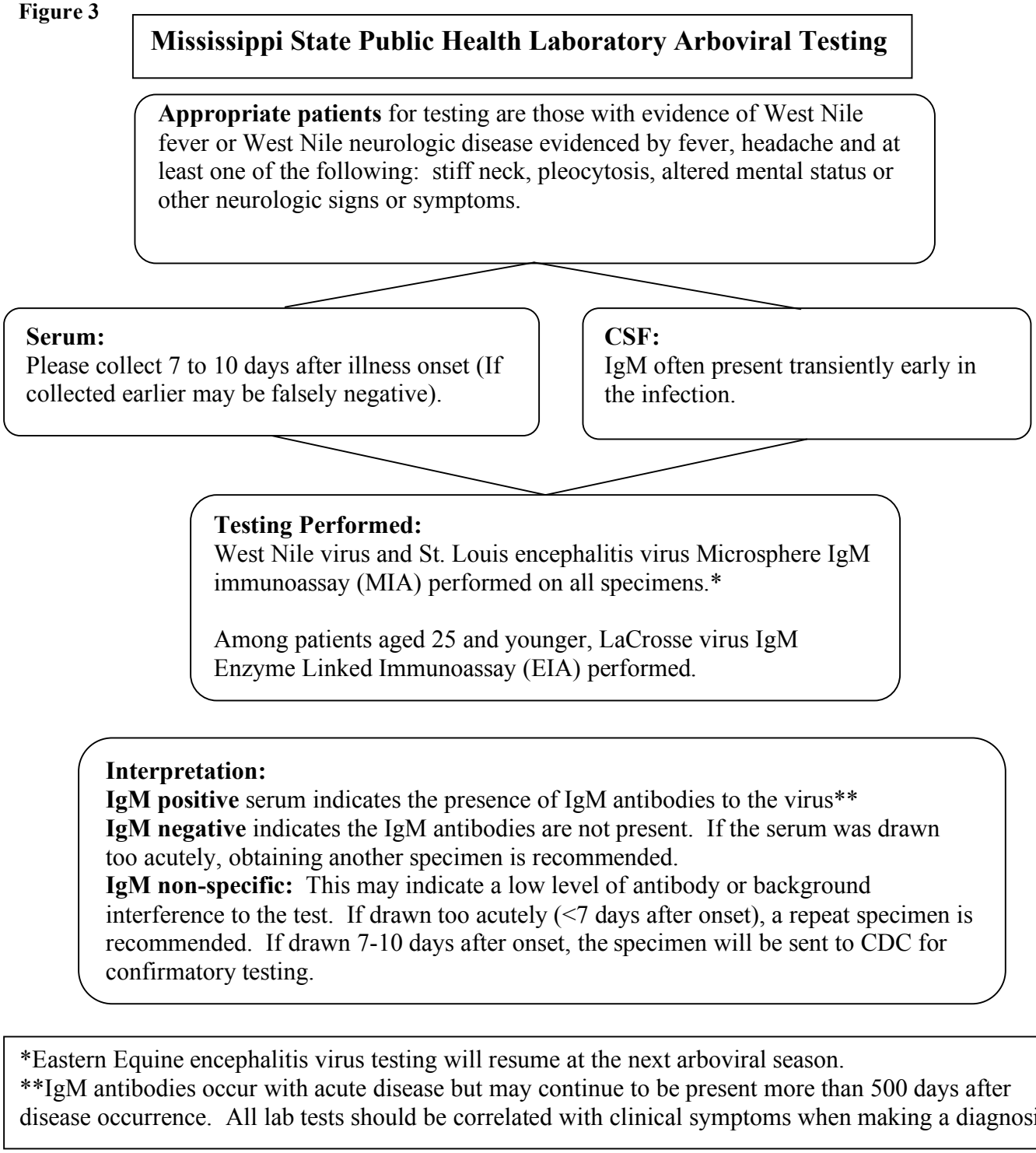
Figure 2



Diagnosis is not simple, as the range of signs and symptoms are common and usually indistinguishable from those caused by other viruses. The Mississippi Public Health Laboratory offers testing which is outlined in Figure 3.

All cases of arboviral infection are reportable to the Mississippi State Department of Health (During working hours call: 601-576-7725 in the Jackson area and 1-800-556-0003 outside the Jackson area. After hours, weekends and holidays call: 601-576-7400).

Figure 3



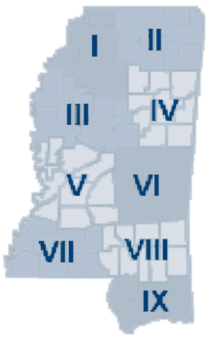
*Eastern Equine encephalitis virus testing will resume at the next arboviral season.
**IgM antibodies occur with acute disease but may continue to be present more than 500 days after disease occurrence. All lab tests should be correlated with clinical symptoms when making a diagnosis.

References:
http://www.cdc.gov/ncidod/dvbid/westnile/clinicians/clindesc.htm#fever accessed 9/12/07

Submitted by Mary Currier, MD, MPH, Interim State Epidemiologist, MSDH and Director of Medical Education, Department of Medicine at UMMC.

Dear Colleagues,
Please let us know if you would like to receive the MMR by email or by US Postal Service. Please respond by email to mailto:mmr@msdh.state.ms.us and include your name, and email address or preferred physical address. Alternatively you may respond by calling 1(877)978-6453 with your information.

Thank you,
Mary Currier, MD, MPH
Interim State Epidemiologist



Mississippi
Provisional Reportable Disease Statistics
August 2007

		Public Health District									State Totals*			
		I	II	III	IV	V	VI	VII	VIII	IX	August 2007	August 2006	YTD 2007	YTD 2006
Sexually Transmitted Diseases	**Primary & Secondary Syphilis**	0	0	1	0	2	0	1	1	1	6	6	71	42
	Total Early Syphilis	1	0	2	0	8	0	2	1	3	17	31	271	143
	Gonorrhea	46	37	75	48	180	64	51	69	62	632	934	5498	4963
	Chlamydia	186	116	225	127	442	133	136	161	143	1669	1964	14673	12749
	HIV Disease	1	8	2	7	23	1	4	7	10	63	60	429	420
Myco-bacterial Diseases	**Pulmonary Tuberculosis (TB)**	1	1	0	2	7	0	1	0	2	14	7	71	60
	Extrapulmonary TB	0	0	1	0	0	0	0	0	1	2	1	8	5
	Mycobacteria Other Than TB	3	5	4	2	5	6	2	1	1	29	17	168	132
Vaccine Preventable Diseases	**Diphtheria**	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pertussis	0	0	9	1	0	55	0	0	1	66	6	152	25
	Tetanus	0	0	0	0	0	0	0	0	0	0	0	0	0
	Poliomyelitis	0	0	0	0	0	0	0	0	0	0	0	0	0
	Measles	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mumps	0	0	0	0	0	0	0	0	0	0	0	1	2
Viral Hepatitis	**Hepatitis A (acute)**	0	0	0	0	0	0	0	1	0	1	0	7	5
	Hepatitis B (acute)	0	0	0	0	1	0	0	0	1	2	1	19	9
	Hepatitis C (Non-A, Non-B)	0	0	0	0	0	0	0	0	0	0	0	4	3
Enteric Diseases	**Salmonellosis**	4	15	1	7	33	7	5	11	15	98	111	530	451
	Shigellosis	2	0	4	0	80	1	2	8	15	112	12	378	52
	Campylobacter Disease	2	0	0	0	0	0	0	0	3	5	11	96	64
	E. coli O157:H7/HUS	0	0	0	1	0	0	0	0	0	1	5	5	7
Other Conditions of Public Health Significance	**Meningococcal Infections**	0	0	0	0	0	0	0	0	0	0	2	10	4
	Invasive *H. influenzae* Disease	0	0	0	0	0	0	0	1	0	1	0	7	10
	RMSF	0	0	0	0	1	0	0	0	0	1	1	7	4
	West Nile Virus	1	0	5	1	23	4	0	5	2	41	86	66	138
	Lyme Disease	0	0	0	0	0	0	0	0	0	0	0	0	3
	Animal Rabies (bats)	0	0	0	0	1	0	0	0	0	1	0	1	4

* Totals include reports from Department of Corrections and those not reported from a specific District

** Temporarily not available