Mississippi State Department of Health
Mississippi Morbidity Report

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Reportable Diseases and Surveillance

Public health surveillance is the "ongoing, systematic collection, analysis and interpretation of outcome-specific data essential to the planning, implementation and evaluation of public health practice, closely integrated with the timely dissemination of these data to those who need to know." The system requires a good, close working relationship between the public and private sectors to be effective.

One method by which public health surveillance is performed is through disease reporting. The Mississippi reportable disease surveillance system is used to direct many prevention activities in the state. Class 1 disease reports, in general, necessitate investigation and follow-up from public health. For example, all reported suspected tuberculosis cases are investigated to locate close contacts, and determine whether they are infected with *Mycobacterium tuberculosis*. Isoniazid (INH) is provided free of charge for appropriate contacts. Some high risk contacts, such as children and those who are HIV infected, are provided directly observed latent TB infection therapy. All cases, with very few exceptions, are also provided directly observed therapy free of charge. Another example is that reported cases of syphilis are interviewed to determine who their sexual contacts are, and the contacts are provided penicillin prophylaxis and testing.

The reportable disease surveillance system is also used to detect outbreaks and generate appropriate interventions, to estimate the magnitude of a health problem, and follow its trends over time. It is used to establish priorities, plan and evaluate intervention strategies and to feed back relevant information to health care providers and to the public.

In Mississippi, the authority to implement the reportable disease surveillance system is given in State Statute 41-23-1, which requires, "Every practicing or licensed physician, or person in charge of a hospital, health care facility, ….., or laboratory, shall report immediately to the Executive Officer of the State Board of Health or to other authorities as required by the State Board of Health every case of such diseases as shall be required to be reported by the State Board of Health. Such reporting shall be according to procedures, and shall include such information about the case, as shall be required by the State Board of Health." This requirement does not violate the HIPAA Privacy Rule, as the rule "expressly permits disclosures without individual authorization to public health authorities authorized by law to collect or receive the information for the purpose of preventing or controlling disease, injury or disability including but not limited to public health surveillance, investigation and intervention."

In Mississippi, the list of reportable diseases and conditions must be approved by the Mississippi State Board of Health. At its March, 2008, meeting, the Board of Health approved several changes to the Rules and Regulations Governing Reportable Diseases and Conditions. The following is a summary of these changes:

Class 1 (reported within 24 hours)

As antibiotic resistance among pathogenic bacteria becomes a greater concern, vancomycin-intermediate *Staphylococcus aureus* (VISA) and vancomycin-resistant *Staphylococcus aureus* (VRSA) infections have been made Class 1 diseases. This will allow MSDH to evaluate the magnitude of the problem, and provide this information back to health care providers.

Influenza-associated pediatric mortality (<18 years) was added temporarily earlier this year, and has now been added permanently to the list of Class 1 diseases. Influenza vaccine has been recommended for young children for several years, and is being encouraged for all children, adolescents and adults who want to reduce their risk of influenza. This addition allows MSDH to follow the trends in pediatric influenza deaths, to see if the vaccine recommendations have had the desired effect.

Class 2 (reported within one week of diagnosis)

The tick-borne disease, ehrlichiosis was added to the list of Class 2 diseases, to assure that appropriate surveillance regarding vector-borne diseases in the state are complete.

Class 3 (laboratory reporting within one week of test completion)

Cases of acute hepatitis C are reportable within one week of diagnosis. Laboratories are required to report, and they often do not have the additional information necessary to determine if a case is acute or chronic, therefore, they have been reporting all hepatitis C positive laboratory results. Class 3 diseases are those that are reportable by laboratories only. To have an idea of the total burden of disease, and to get consistent reporting from all laboratories, we have made hepatitis C infection a Class 3 condition. The consistent collection and analysis of these data will allow us to have a better understanding of the prevalence of this infection in the state.

All lead testing has also been added to the list of Class 3 diseases, as a way to have a more comprehensive view of the screening that is occurring in the state, and to have data to inform our prevention program regarding proportion of lead levels found to be elevated in different areas of the state.

Class 4 (cancer reporting within six months of diagnosis)

The UMMC based Statewide Cancer Registry, which comprises the Class 4 category of reportable diseases, will keep the list of reportable conditions required by the National Program of Cancer Registries, and therefore by the Cancer Registry, on their website, so that as this list changes (predominantly coding changes) it can be updated immediately, without having to change the regulations (http://mcr.umc.edu). Additionally, the time frame in which cancers are to be reported was changed from quarterly to every 6 months. Class 4 diseases are largely reported through hospital based cancer registries.

The reportable disease surveillance system relies on physicians, hospitals and laboratories reporting to have meaningful data to analyze and provide back to providers and the public. We are grateful for your contributions, and encourage you to continue.

Contributed by: Mary Currier, M.D., MPH

References available on request / 2008 Reportable Disease List Enclosed

Bed Bugs Bounce Back

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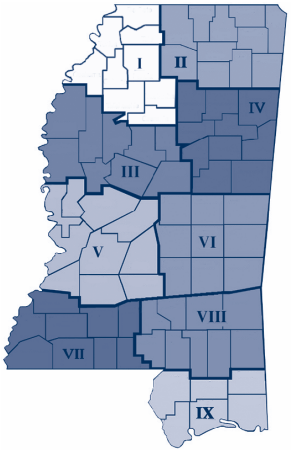
Jerome Goddard

The saying, “Sleep tight, don’t let the bed bugs bite,” was commonly repeated in the U.S. during the early- to mid-1900’s. However, the subject of the rhyme, bed bugs, nearly disappeared for about 50 years and most people (even entomologists) have never seen/encountered the bloodsucking pests. That has suddenly changed. There has been a tremendous resurgence of bed bug populations in the U.S. and elsewhere. This communication is a heads-up to physicians to be aware of this trend and to include bed bug bites in the differential diagnosis in cases of mysterious insect biting. (Continued on back)



Mississippi
Provisional Reportable Disease Statistics
May 2008

		Public Health District									State Totals*			
		I	II	III	IV	V	VI	VII	VIII	IX	May 2008	May 2007	YTD 2008	YTD 2007
Sexually Transmitted Diseases	Primary & Secondary Syphilis	3	2	3	0	7	1	1	0	4	21	5	56	47
	Total Early Syphilis	4	7	5	0	21	1	1	2	10	51	30	139	184
	Gonorrhea	44	28	69	36	130	56	30	43	33	469	585	2768	3384
	Chlamydia	124	110	190	95	406	127	99	141	122	1414	1441	7427	9346
	HIV Disease	6	9	2	4	12	3	6	8	7	57	54	254	265
Myco-bacterial Diseases	Pulmonary Tuberculosis (TB)	0	0	0	0	4	0	0	0	2	6	8	31	37
	Extrapulmonary TB	0	0	0	0	1	0	0	0	1	2	0	8	3
	Mycobacteria Other Than TB	0	0	2	0	9	3	1	4	6	25	13	107	86
Vaccine Preventable Diseases	Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pertussis	0	0	0	0	0	0	1	0	0	1	5	33	19
	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	0	0
Viral Hepatitis	Hepatitis A (acute)	0	0	0	0	0	0	1	0	0	1	2	1	6
	Hepatitis B (acute)	0	0	0	0	1	0	0	0	0	1	4	14	11
	Hepatitis C infection	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Enteric Diseases	Salmonellosis	1	9	1	2	24	9	1	11	7	65	85	186	198
	Shigellosis	1	3	3	3	23	5	2	0	1	41	36	208	122
	Campylobacter Disease	1	1	0	0	0	2	0	2	1	7	10	34	40
	E. coli O157:H7/HUS	0	0	0	0	0	0	0	0	0	0	1	2	2
Other Conditions of Public Health Significance	Invasive Meningococcal Disease	0	0	1	0	0	0	0	1	0	2	3	9	8
	Invasive *H. influenzae* b Disease	0	0	0	0	0	0	0	1	0	1	0	2	0
	RMSF	0	0	0	0	0	0	0	0	0	0	4	1	5
	West Nile Virus	0	0	0	0	1	0	0	0	0	1	1	4	4
	Lyme Disease	0	0	0	0	0	0	0	0	0	0	0	0	0
	Animal Rabies (bats)	0	0	0	0	0	0	0	0	0	0	0	1	0

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

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Bed Bugs Bounce Back (continued)

Bed bugs are about 5 mm long (adults), flattened like a tick or cockroach, and chestnut-colored. They are plenty big enough to see. Immatures are much smaller and may be yellowish or white. They live in cracks and crevices near places where humans sleep or rest, including behind headboards, along the cords of mattresses, and under box springs. Bed bugs are tenacious pests, only feeding on blood, which may live a year or so without a blood meal. The MSDH only rarely received reports of bed bug infestations in hotels over the past 20 years. Dr. Goddard, MSDH staff entomologist, remembers only one or two cases until 2005. Since then, there have been 8 reported cases in hotels in Mississippi. The most recent, occurring in a relatively new and nice hotel, involved at least 7 rooms. The MSDH inspector who made the investigation reported bed bugs as "everywhere" in the rooms and that the situation was "horrible." As far as is known, bed bugs do not transmit disease organisms, however, their bite lesions may be pruritic, papular, urticarial, and sometimes accompanied by systemic symptoms.

Contributed by Jerome Goddard, Ph.D., Medical Entomologist

References available upon request