Mississippi State Department of Health

Mississippi Morbidity Report

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Tobacco Smoke, Health Effects and Treatment Options for Mississippians

Introduction: The adverse health effects of smoking have been well documented. In addition to the numerous cancers linked directly to smoking, smoking also increases the risk of developing coronary heart disease. Cigarette smokers are 2-4 times more likely to develop heart disease than nonsmokers. Coronary heart disease is the leading cause of death in both the U.S. and in Mississippi.

Smoking during pregnancy has also been linked to adverse maternal and fetal outcomes, including an increased risk of premature rupture of membranes, placental abruption and previa, premature delivery, and low birth weight infants. Smoking before and during pregnancy is the single most preventable cause of illness and death among mothers and infants.

Secondhand smoke (SHS) exposure is also associated with adverse health outcomes. Nonsmokers exposed to SHS at home or work have a 25-30% increased risk of developing heart disease, and relatively small exposures to SHS can have a rapid effect on the heart and vascular system leading to an increased risk of cardiac events, including acute myocardial infarction (AMI). In pregnancy, SHS exposure can also increase the risk of low birth weight infants by 20%.

According to the most recent data available from the Behavioral Risk Factor Surveillance System (BRFSS), the prevalence of smoking in adults >18 years of age in Mississippi in 2007 was 23.9% compared to 19.8% in the U.S. This trend has been stable in Mississippi since 1998. Prevalence data on smoking during pregnancy are collected through the Pregnancy Risk Assessment Monitoring System (PRAMS), a surveillance system in which Mississippi and thirty-six other states participate. The prevalence of smoking in the third trimester of pregnancy was14.4% in Mississippi in 2006 compared to13% in 2004 for all participating states.

Tobacco use cessation has immediate as well as long-term benefits, reducing risks for diseases and improving health for all smokers. According to the Centers for Disease Control and Prevention, it is more beneficial for people to stop at early ages but there are benefits for all ages. One year after quitting, the risk of coronary heart disease is cut by half and is nearly the same as a nonsmoker's risk after fifteen years. The risk of stroke is reduced to that of a nonsmoker after five to fifteen years of cessation and the risk for lung cancer is reduced by half ten years after quitting. It is estimated that 20 percent or more of low birth-weight births could be prevented by eliminating smoking during pregnancy. Therefore, healthcare providers should also provide pregnant smokers assistance in quitting throughout the pregnancy.

Funding is provided for the ACT Centers and the Mississippi Tobacco Quitline from the Health Care Expendable Trust Fund, through the Mississippi State Department of Health (MSDH), Office of Tobacco Control,, as part of the state's tobacco prevention and control efforts. The following offers a brief discussion of Mississippi's smoking cessation capacity and the clinical approach to smoking cessation. An excerpt from a recent CDC report discussing reduced hospitalizations for AMI after one city implemented a smoke-free ordinance is included on the back-flap of this report.

Mississippi Cessation Capacity: Intensive tobacco use treatment services are available to Mississippi residents through the ACT Center for Tobacco Treatment, Education and Research (ACT Center) at the Jackson Medical Mall, ACT Center hospital-based clinics in 15 communities around the state, and ACT

Center university-based treatment clinics at Jackson State University, Mississippi State University, University of Mississippi and University of Southern Mississippi, and the Mississippi Tobacco Quitline. ACT Center clinics provide free face-to-face tobacco cessation counseling and prescription and/or over the counter medications. Additional information regarding this program is available on the ACT Center's website (http://actcenter.umc.edu) or by calling 601-815-1180. Clinic appointments do not require a physician referral.

The Mississippi Tobacco Quitline is a telephone tobacco cessation counseling service for Mississippians and offers up to eight weeks of over the counter nicotine replacement therapy (patch or gum) free to medically eligible callers. The Quitline utilizes specialized counseling protocol for treating pregnant tobacco users. For additional information, contact the Quitline at 1-800-QUIT NOW (1-800-784-8669) or www.quitlinems.com.

Clinical Cessation Approach for Medical Practice: The National Cancer Institute's 5 A's curriculum, Ask, Advise, Assess, Assist and Arrange, is recommended in the Public Health Service Guideline (2008). Utilizing the 5 A's approach at each visit, healthcare providers ask patients to disclose their tobacco use status. If the patient is a tobacco user, the healthcare provider advises them to quit and assesses their readiness to quit. Assistance is provided if the patient is ready to quit, such as prescribing nicotine replacement therapy, providing information about the Quitline or one of the ACT Center treatment clinics. As indicated, referrals are made to a cessation program meeting the unique needs of the patient.

In summary, increased awareness of the devastating impact on smoking and health is needed. Healthcare providers must make a concerted effort to call attention to the toll of tobacco use on the health of their patients.

For more information, contact the Office of Tobacco Control at 601-364-5790.

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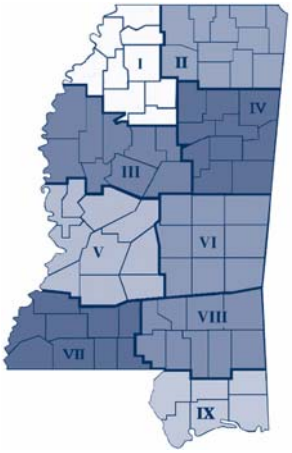
References available on request.



Mississippi
Provisional Reportable Disease Statistics
February 2009

		Public Health District									State Totals*			
		I	II	III	IV	V	VI	VII	VIII	IX	Feb 2009	Feb 2008	YTD 2009	YTD 2008
Sexually Transmitted Diseases	**Primary & Secondary Syphilis**	0	1	1	0	2	1	0	5	10	20	8	26	14
	Total Early Syphilis	1	2	3	0	9	2	2	10	15	44	19	66	36
	Gonorrhea	49	38	72	24	177	56	27	60	48	551	482	1169	1155
	Chlamydia	220	166	252	105	434	153	113	178	136	1757	1214	3466	3005
	HIV Disease	10	6	2	2	25	3	3	8	5	64	51	114	111
Myco-bacterial Diseases	**Pulmonary Tuberculosis (TB)**	2	0	1	0	1	0	1	0	1	6	7	6	9
	Extrapulmonary TB	0	0	1	0	0	0	0	0	0	1	1	1	1
	Mycobacteria Other Than TB	4	0	1	1	11	6	3	3	5	34	10	57	31
Vaccine Preventable Diseases	**Diphtheria**	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pertussis	0	1	1	0	2	0	0	0	0	4	4	13	15
	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
	Hepatitis B (acute)	2	0	0	0	0	1	0	0	0	3	2	7	4
	Invasive *H. influenzae* b disease	0	0	0	0	0	0	0	0	0	0	0	0	0
	Invasive Meningococcal disease	0	0	0	0	0	0	0	0	0	0	0	0	0
Enteric Diseases	**Hepatitis A (acute)**	0	0	0	0	0	0	0	0	0	0	0	2	0
	Salmonellosis	0	0	0	0	0	1	0	3	12	16	18	54	56
	Shigellosis	0	0	0	0	0	0	0	0	1	1	20	5	85
	Campylobacteriosis	0	0	0	0	0	0	0	0	0	0	4	13	14
	E. coli O157:H7/HUS	0	0	0	0	1	0	0	0	0	1	0	1	1
Zoonotic Diseases	**Animal Rabies (bats)**	0	0	0	0	0	0	0	0	0	0	0	0	1
	Lyme disease	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rocky Mountain spotted fever	0	0	0	0	0	0	0	0	0	0	0	1	0
	West Nile virus	0	0	0	0	0	0	0	0	0	0	0	0	0

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

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Excerpted from: Reduced Hospitalizations for Acute Myocardial Infarction After Implementation of a Smoke-Free Ordinance --- City of Pueblo, Colorado, 2002—2006 (CDC, MMWR 2009;51:1373-1377.)

Exposure to secondhand smoke (SHS) has immediate adverse cardiovascular effects, and prolonged exposure can cause coronary heart disease. Nine studies have reported that laws making indoor workplaces and public places smoke-free were associated with rapid, sizeable reductions in hospitalizations for acute myocardial infarction (AMI). However, most studies examined hospitalizations for 1 year or less after laws were implemented; thus, whether the observed effect was sustained over time was unknown. The Pueblo Heart Study examined the impact of a municipal smoke-free ordinance in the city of Pueblo, Colorado, that took effect on July 1, 2003. The rate of AMI hospitalizations for city residents decreased 27%, from 257 per 100,000 person-years during the 18 months before the ordinance's implementation to 187 during the 18 months after it (the Phase I post-implementation period). This report extends that analysis for an additional 18 months through June 30, 2006 (the Phase II post-implementation period). The rate of AMI hospitalizations among city residents continued to decrease to 152 per 100,000 person-years, a decline of 19% and 41% from the Phase I post-implementation and pre-implementation period, respectively. No significant changes were observed in two comparison areas. These findings suggest that smoke-free policies can result in reductions in AMI hospitalizations that are sustained over a 3-year period and that these policies are important in preventing morbidity and mortality associated with heart disease. This effect likely is mediated through reduced SHS exposure among nonsmokers and reduced smoking, with the former making the larger contribution. You may access the full CDC report at:
http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5751a1.htm .