

**Health Priority: Existing, Emerging, and Re-emerging Communicable Diseases
Objective 4: Antibiotic and Antimicrobial Resistance (Logic Model)**

Long-term (2010) Subcommittee Outcome Objective: Ensure that the use of antibiotics and antimicrobials is appropriate.

4a: By 2010, at least 95 percent of medical antibiotic usage in Wisconsin will be appropriate according to generally accepted medical standards of practice.

4b: By 2010, at least 90 percent of poultry and livestock producers in Wisconsin will adhere to generally accepted standards for antibiotic feed supplementation.

Long-term outcome objective updated as of: Sept 2004

Inputs	Outputs		Outcomes		
	Activities	Participation/ Reach	Short-term 2002-2004	Medium-term 2005-2007	Long-term 2008-2010
<p>Time and effort of state public health staff.</p> <p>State funding of survey research costs to assess current antibiotic use practices in health care delivery and food animal husbandry.</p> <p>State funding of management information systems and laboratory capacity adequate to conduct surveillance and assessment of antibiotic resistance occurring in health care delivery and agricultural settings.</p> <p>An adequate statutory and legal base for</p>	<p>The Division of Public Health and its partner organizations will conduct a statewide survey and assessment of existing surveillance and monitoring activities for pathogens resistant to antibiotics, and identify critical gaps.</p> <p>The Division of Public Health and the State Laboratory of Hygiene will develop a program of technical assistance and proficiency testing for clinical laboratories doing antibiotic susceptibility analyses to ensure the accuracy and reliability of that testing.</p> <p>The Division of Public Health and its partner organizations will conduct a statewide survey and assessment of actual practices in uses of antibiotics in health care facilities consistent with established standards of practice.</p>	<p>Division of Public Health</p> <p>State Laboratory of Hygiene</p> <p>Wisconsin Association of Homes and Services for the Aging</p> <p>Wisconsin Association of Health Plans</p> <p>State Medical Society of Wisconsin</p> <p>Pharmacy Society of Wisconsin</p> <p>Major health systems and multi-specialty medical clinics in Wisconsin</p>	<p>By December 31, 2004, a coordinated state surveillance plan for monitoring patterns of antimicrobial resistance in microorganisms that pose a threat to public health will be developed, adopted by the Division of Public Health, and implemented. The plan will specify activities to be conducted at state and local levels; define the roles of participants; promote the use of standardized methods; and provide for timely dissemination of data to interested parties (e.g., public health officials, clinicians, researchers).</p> <p>Needed core capacities at state and local levels will</p>	<p>By January 31, 2005, 100 percent of Wisconsin health care facilities will have infection control policies and procedures reflecting accepted standards of practice to address prevention of transmission of antibiotic resistant infections within their facilities.</p> <p>By March 31, 2006, the Department of Health and Family Services will enter into a written agreement with the Department of Agriculture, Trade and Consumer Protection and the Department of Natural Resources to establish a joint interagency initiative to monitor and control the transmission of antimicrobial resistant disease pathogens to</p>	<p>All commercial meat and other animal food products for human consumption sold in Wisconsin will have legal standards for unacceptable antibiotic residues, and there will be an ongoing testing and surveillance program of animal food products for antibiotic residues.</p>

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<p>antibiotic use control activities.</p> <p>The cooperative commitment of private health care providers and partner organizations to actively participate in antibiotic use and best practice activities.</p>	<p>The Division of Public Health will employ or assign and support one or more dedicated personnel positions, under the direction of the Chief Medical Officer and State Epidemiologist for Communicable Diseases, to provide liaison and technical assistance to appropriate health care facilities on avoidance and control of antibiotic resistance in their institutions.</p> <p>The Division of Public Health will enlist the Wisconsin Health and Hospital Association, The Wisconsin Association of Homes and Services for the Aging, Wisconsin Association of Health Plans, the State Medical Society of Wisconsin, the Pharmacy Society of Wisconsin, the major health systems and multispecialty medical clinics in Wisconsin, the Catholic Health Association of Wisconsin, the University of Wisconsin Medical School, the Medical College of Wisconsin, and the Wisconsin chapters of the appropriate medical specialty academies, in an initiative to develop and promote a statewide surveillance plan and standards of practice for use of antibiotics and</p>	<p>Catholic Health Association of Wisconsin</p> <p>University of Wisconsin Medical School</p> <p>Hospital and clinical laboratories</p> <p>Medical group practices</p> <p>Institutional infection control practitioners</p> <p>Medical infectious disease</p> <p>The Medical College of Wisconsin</p> <p>Wisconsin Dental Association</p> <p>Wisconsin chapters of the appropriate medical speciality academies</p> <p>Department of Health and Family Services Secretary</p>	<p>be defined and supported. The plan will coordinate, integrate, and build on existing disease surveillance infrastructure. The plan will specifically address the need to ensure the quality and reliability of drug susceptibility testing procedures and resultant data and measures to improve the surveillance for antibiotic resistance in agricultural settings. All surveillance activities will be conducted with respect for patient and institutional confidentiality.</p>	<p>humans through food or water.</p> <p>By March 31, 2006, Wisconsin citizens will demonstrate on health status surveys an understanding of the appropriate and inappropriate uses of antibiotics in medical treatment and of antimicrobials in personal and domestic hygiene. By January 31, 2007, 95 percent of antibiotic prescriptions for selected conditions, including otitis media and respiratory</p>	

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	<p>antimicrobials in the delivery of health care.</p> <p>The Division of Public Health and State Laboratory of Hygiene will jointly develop the expanded capacity to electronically gather, use, and pool existing data on antibiotic resistance from hospitals, laboratories, and medical practice groups.</p> <p>The Division of Public Health and the State Laboratory of Hygiene will establish an initiative to promote the use of rapid bacterial diagnostic testing methods to guide antibiotic prescribing practices in outpatient treatment by clinicians of acute infectious diseases.</p> <p>The Division of Public Health will convene staff, and support a state workgroup of health facility infection control practitioners, physicians, and laboratorians with expertise in the field of infectious diseases and antibiotic resistance to periodically meet to review the scientific literature in this area and to issue recommendations and information briefs to state health care providers.</p>	<p>Wisconsin Legislature</p> <p>Department of Agriculture, Trade, and Consumer Protection</p>		<p>infection, will be written only after the presence of a bacterial pathogen has been confirmed by laboratory analysis.</p> <p>By December 31, 2006, 90 percent of Wisconsin health care facilities will have guidelines and policies reflecting accepted standards of practice to curtail inappropriate antibiotic usage.</p>	

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	<p>infection control and electronic data management to serve as liaison with the State Laboratory of Hygiene and staff to the workgroup for activities shown below.</p> <p>The Division of Public Health, the State Laboratory of Hygiene, and the Department of Agriculture, Trade, and Consumer Protection will develop a sampling and sentinel surveillance program to test meat and other animal food samples from retail grocery and restaurant food establishments for antibiotic residues.</p> <p>The Division of Public Health, the State Laboratory of Hygiene, and the Department of Natural Resources will develop a sampling and sentinel surveillance program to test groundwater and other environmental indicators of animal waste and agricultural runoff for the presence of antimicrobial resistant disease pathogens.</p> <p>The Department of Health and Family Services and the Department of Agriculture, Trade, and Consumer Protection interagency workgroup will establish an interagency workgroup to review the scientific literature on potential human health problems from the addition of antibiotics to animal feeds; to develop state policies, and if indicated, draft state legislation, to address identified problems.</p>				

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	<p>The Division of Public Health professional staff will research and prepare a briefing paper for the Department of Health and Family Services Secretary and the Legislature on the costs and benefits of controlling antibiotic use in animal feeds.</p>				