HEALTHIEST WISCONSIN 2010 HEALTH PRIORITY:

EXISTING, EMERGING, AND RE-EMERGING COMMUNICABLE DISEASES

WISCONSIN PUBLIC HEALTH COUNCIL
STATE HEALTH PLAN COMMITTEE

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Outline

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- Results and Recommendations
  - Outcome
  - Data Discussion
  - Recommendations for Healthiest Wisconsin 2020 (HW2020)
Existing, Emerging, and Re-emerging Communicable Diseases

Four objectives:

1. Statewide Communicable Disease Surveillance and Response
2. Vaccine Preventable Diseases and Immunization
3. Food Borne and Water Borne Disease Control
4. Antimicrobial Resistance
Objective 1 – Surveillance and Response

1a: By 2010, at least 85 percent of communicable disease reports will be received by the local or state public health agency within the timeframe specified by HFS 145.04(3)(a) and HFS 145.04(3)(b)

Performance as of 2008: Of cases reported on the Wisconsin Electronic Disease Surveillance System (WEDSS) during 2008 with analyzable date data, 15 percent of Category one diseases were reported within 24 hours, and 16 percent of Category two diseases were reported within 72 hours.

Performance Status: Improved
Objective 1 – Surveillance and Response

Data Discussion

- Early 2009: Approximately 30 percent of local health departments (LHDs) were using WEDSS and the ELR function
- As of 7/1/2009: 40 percent of LHDs were using WEDSS, covering 80 percent of the Wisconsin population

Limitations:

- Cases with no date of diagnosis
- Initial report by telephone to LHDs
- Technical issues at originating laboratory
- Few providers submitting reports
Objective 1 – Surveillance and Response

**Recommendation for HW2020:** Mandated reporters, both public and private, that fail to report in the required time frame need to be educated on a case-by-case basis. Individual interventions, such as this, are routinely occurring for time sensitive disease cases. Concern for educational interventions needs to continue in the future.
Objective 1 – Surveillance and Response

1b: By 2010, 100 percent of local health departments will have documented capacity to respond to outbreaks of communicable disease as defined in HFS 140.

Performance as of 2004(5): Based on formal reviews of all 94 LHDs, all were found compliant.¹

Performance Status: Achieved
Objective 2 - Immunization

2a: By 2010, at least 90 percent of Wisconsin residents under two years of age will be fully immunized in accordance with current Advisory Committee on Immunization Practices (ACIP) recommendations.

Performance as of 2008: 83.7 percent 4:3:1:3:3:1 series complete coverage.

Performance Status: Improved
Objective 2 - Immunization

Data Discussion

- 2002-2008: 4:3:1:3:3:1 series complete coverage of WI children under two years of age increased from 67.5 percent to 83.7 percent.
- Despite overall success, pockets of low immunization remain throughout the state.
Objective 2 - Immunization

**Recommendations for HW2020:** The new objective, reflecting 2010 Objective 2a should mirror the vaccine and age parameters used in the NIS: By 2020, at least 90 percent of WI residents aged 19 to 35 months will be fully immunized as defined and measured by the NIS or another national or state tool. The expected level of coverage remains the same, and the “or” phrase permits the use of some method other than the NIS to measure progress. Specific attention needs to be given to areas of low immunization.
Objective 2 - Immunization

2b: By 2010, at least 97 percent of Wisconsin school-age residents will be fully immunized in accordance with current ACIP recommendations.

Performance as of 2007 (Pre-K through 12): There has been some variation from year to year from 2000 through 2007; however, the average percentage of students meeting minimum requirements did not change substantially ².

Performance as of 2008 (Kindergarteners): Percentage of kindergarteners having received 4:4:2:3:1 series has remained in the low 80s ².

Performance Status: No Progress
Data Discussion

Vaccine compliance influenced by many factors:

- Increase in nonmedical exemptions for children, kindergarten through grade 12 (0.8 percent in 1992-1993 school year to 3.1 percent during 2005-2006 school year)
- Milwaukee Public Schools computer system change (2003-2004 school year) – no vaccination data
- Phase-in of varicella requirement to include high school students in 2005
Objective 2 - Immunization

**Recommendations for HW2020:** The new objective, reflecting 2010 Objective 2b should specify compliance with immunization requirements, as opposed to immunization coverage, which means having either the required immunization dates or an immunization waiver on file: By 2020, at least 95 percent of Wisconsin kindergarteners will be compliant with DHS 144 immunization requirements, as determined by the Wisconsin Kindergarten Assessment ².

An additional objective is suggested as well, targeted to adolescents: By 2020, at least 75 percent of Wisconsin residents aged 11-12 years will have received all of the doses of vaccine that the ACIP recommends for adolescents, as measured by the WIR. Note: Currently, less than 50 percent children, age 11 to 18 in Wisconsin have received one of the vaccines in the current adolescent platform, so the suggested target of 75 percent may be difficult to achieve ².
Objective 2 - Immunization

2c: By 2010, at least 90 percent of Wisconsin residents 65 years of age and older and individuals with chronic health conditions will be fully immunized in accordance with current ACIP recommendations.

Performance as of 2007 (WI residents age 65 and older): 74.1 percent influenza vaccine coverage of Wisconsin adults aged ≥ 65 years (17.2 percent increase from 1995). 69.4 percent pneumococcal vaccine coverage of Wisconsin adults aged ≥ 65 years (33.6 percent increase from 1995)\(^2\).

Performance as of 2010 (WI residents with chronic health conditions): Data are not available to measure progress towards this objective.

Performance Status (WI residents age 65 and older): Improved

Performance Status (WI residents with chronic health conditions): Unknown
Objective 2 - Immunization

Data Discussion

Neither the National Behavioral Risk Factor Surveillance Survey (BRFSS), nor any other national tool measures broad vaccine coverage among persons with chronic health conditions.
Objective 2 - Immunization

**Recommendation for HW2020:** The new objective, reflecting 2010 Objective 2(c) should focus strictly on one age group, the elderly age 65 and older, and should specify that coverage for vaccines included in the BRFSS will be the ones measured: By 2020, at least 90 percent of Wisconsin residents 65 years of age and older will be fully immunized in accordance with current ACIP recommendations as measured by the BRFSS or other state or federal assessment tool \(^3\). Additional vaccines are recommended by the ACIP that should be included in the BRFSS and in HW2020 \(^2\).

Immunization review should be included as part of chronic disease management as well.
Objective 3 – Food Borne and Water Borne Disease Control

3a: By 2010, the incidence of E. coli O157:H7 infection will be 3 per 100,000 or less.

Performance as of 2008: 2.7 per 100,000 (decrease from 6.8 per 100,000 in 2000)

Performance Status: Achieved
Objective 3 – Food Borne and Water Borne Disease Control

3b: By 2010, the incidence of salmonellosis will be 8 per 100,000 or less.

Performance as of 2008: 13.2 per 100,000

Performance Status: No Progress

Note: Incidence of 14.3 per 100,000 in 2000 used as the baseline for comparison
Objective 3 – Food Borne and Water Borne Disease Control

3c: By 2010, the incidence of shigellosis will be 4 per 100,000 or less.

Performance as of 2008: 9.6 per 100,000

Performance Status: No Progress

Note: The incidence of 14 per 100,000 in 2007 was primarily due to the shigellosis outbreak in the Milwaukee area. Prior to this incident, incidence of shigellosis decreased from 6.3 per 100,000 in 2000 to 4.3 per 100,000 in 2006.
Objective 3 – Food Borne and Water Borne Disease Control

3d: By 2010, the incidence of campylobacteriosis will be 11 per 100,000 or less.

Performance as of 2008: 22.5 per 100,000

Performance Status: No Progress
Objective 3 – Food Borne and Water Borne Disease Control

3e: By 2010, the incidence of hepatitis A will be 1 per 100,000 or less.

Performance as of 2008: 0.6 per 100,000 (decrease from 2 per 100,000 in 2000) ④

Performance Status: Achieved

Note: Lower rates of Hepatitis A attributed to widespread use of hepatitis A vaccine, universally recommended in 2005①
Objective 3 – Food Borne and Water Borne Disease Control

**Recommendations for HW2020:** As incidence rates for salmonellosis, shigellosis, and campylobacteriosis have not been reduced over the past 10 years, these objectives should be retained. However, implementation plans will require scrutiny and perhaps innovative strategies. Supportive advocacy for systems that improve efficiency for pathogen detection is needed as well.

Following CDC recommendations, include *Listeria monocytogenes* among the microbial pathogens tracked by Healthiest Wisconsin 4.
Objective 4 – Antimicrobial Resistance

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

Performance as of 2010: Data are not available to measure progress towards this objective.

Performance Status: Unknown

Note: Resources not available to evaluate the effect of guidelines, workshops, and other efforts to reduce antibiotic use.
Objective 4 – Antimicrobial Resistance

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

**Performance as of 2010:** Data are not available to measure progress towards this objective.

**Performance Status:** Unknown
Objective 4 – Antimicrobial Resistance

Data Discussion

- Antibiotic use in animals and residue levels is regulated federally
- USDA Food Safety and Inspection Services (FSIS) head the National Residue Testing Program (NRTP), which tests for residue in tissues and eggs. Both random and inspector-generated samples are collected, and information is available to states to target state milk testing efforts.\(^1\)
Objective 4 – Antimicrobial Resistance

**Recommendations for HW2020:** The state of Wisconsin needs to support continued effort of antibiotic and antimicrobial control at the national level, just as it has for HA MRSA prevention.

The American Public Health Association (APHA) and the American Nurses Association (ANA) have made policy proposals to enact legislation that would restrict the use of antibiotics among well livestock populations. The state of Wisconsin needs to support the effort at the national level. Consistent with APHA and ANA, the Public Health Council should study this topic and consider future recommendations.
References


