



State Health Officer Bimonthly Webcast

Karen McKeown

State Health Officer

June 6, 2014



Agenda

- Welcome and Announcements
- Burden of HCV Report
- Healthy Brain Initiative
- TB Program Overview
- Communicable Diseases Update



Announcements: July Health Events

- [Fireworks Safety Month](#), June 1 - July 04
- [International Group B Strep Awareness Month](#)
- [Juvenile Arthritis Awareness Month](#)
- [National Cleft & Craniofacial Awareness & Prevention Month](#)
- [World Hepatitis Day](#), July 28



Announcements: August Health Events

- [Children's Eye Health and Safety Month](#)
- [National Breastfeeding Month](#)
- [National Immunization Awareness Month](#)
- [World Breastfeeding Week](#), August 1 – 7
- [National Health Center Week](#), August 10 – 16



Announcements: Local Health Department Personnel Changes

- Linda Walter, Health Officer for the Washington County Health Department, retired on May 30.
- Nicole Hunger is the new Health Officer for the Buffalo County Department of Health and Human Services.
- Mary Dorn is the new Health Officer for Outagamie County Health and Human Services.
- Sue Nett has retired as the Health Officer for the City of Menasha Health Department. Todd Drew is the interim Health Officer.



Announcements: Central Office Personnel Changes

- Georgia Cameron, Southeastern Regional Office Director, will retire on July 3, 2014.
- Mark Wegner is now the Chief Medical Officer for the Office of Health Informatics (OHI).



Burden of Hepatitis C Report: Planning an Epidemiologic Profile

Sheila Guilfoyle

Viral Hepatitis Prevention Coordinator

Bureau of Communicable Diseases and
Emergency Response



What Is an Epidemiologic Profile?

- The viral hepatitis epidemiologic profile will be used to:
 - Provide epidemiologic data to a variety of settings.
 - Public health
 - Linkage to care
 - Prevention settings
 - Integrate data.
 - Disseminate findings on the burden of viral hepatitis in Wisconsin.
 - Highlight viral hepatitis as a public health issue.
 - e.g., HCV in young injection drug users in rural areas of Wisconsin.
 - Assist in prioritization of planning and prevention of viral hepatitis.
 - State, local jurisdictions and community health partners.
 - Describe and document disparities in HCV.
 - Determine where to target limited testing and vaccine resources.



Data Sources

1. Wisconsin Electronic Disease Surveillance System
 - HCV surveillance data, 2000-2013
2. Rapid Antibody Test Pilot Data
 - HCV test result
 - Risk data from outreach and harm reduction sites, 2012-2013
3. Wisconsin Hospital Inpatient Discharges
 - Health care burden in acute, non-federal hospitals
 - Economic data
4. Wisconsin Vital Records
 - Mortality burden from death certificate data
5. Organ Procurement and Transplantation Network
 - Liver transplants in Wisconsin related to HCV
6. HCV Protease Inhibitor Prescribing Data
 - Indicator of HCV treatment in Wisconsin

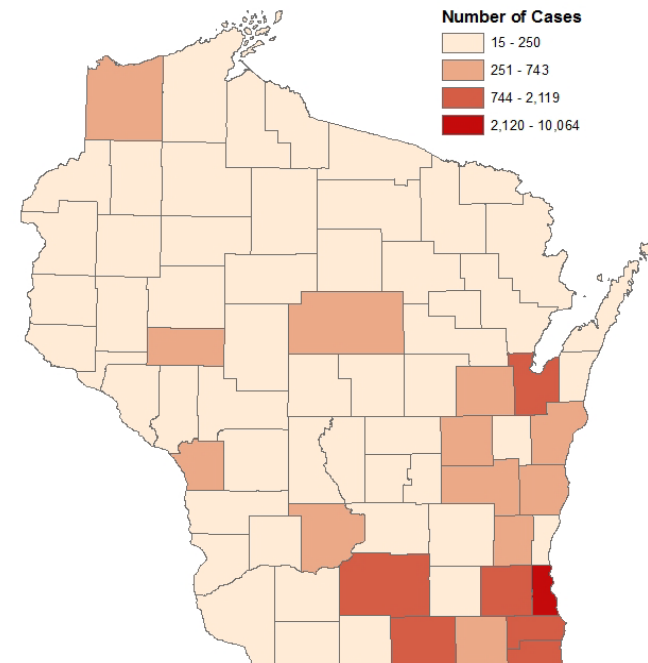


Scope of Disease in Wisconsin: Where

- There are 35,300 *known* HCV infections in people living in Wisconsin.
 - CDC estimates 1.6% of population is living with HCV, or approximately 91,520 in Wisconsin.
- The majority of people with HCV live in the southeastern (52%) and southern (16%) regions of the state.
- Number reported has remained stable since 2006.
- On average, 2,445 infections have been detected each year.

Prevalent HCV Cases in Wisconsin*

*2013 Data. Cases reported from the Department of Corrections and the Federal Correctional Institution are not shown.

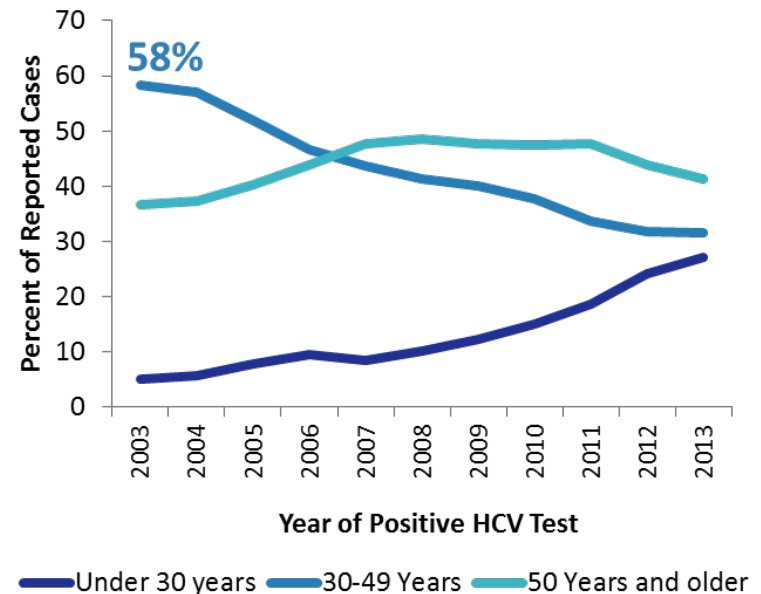




Scope of Disease in Wisconsin: Who

- Most (58%) of newly reported in 2013 and total known living with HCV (65%) are male.
- The largest group (41%) of newly reported in 2013 are aged 50 and older. **However, new reports in young adults have increased five-fold since 2003.**
- Average age of those reported and living with HCV is 45 years.

Percent of HCV Infections, by Age, Wisconsin, 2003-2013



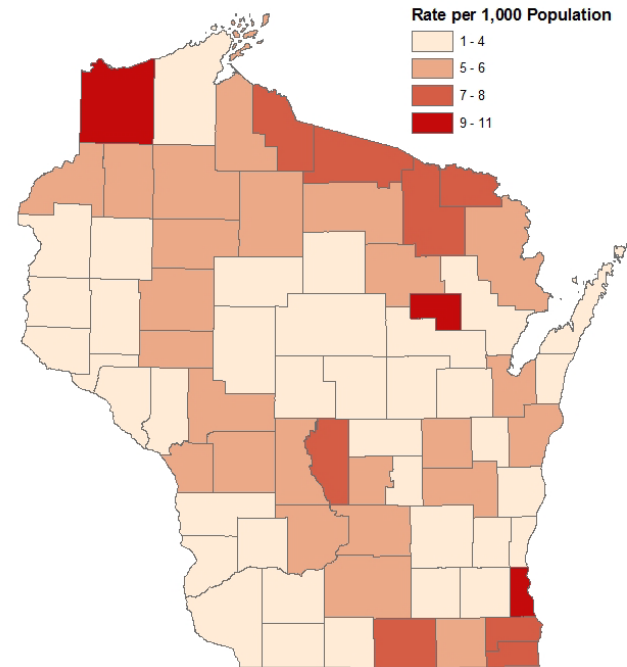


Scope of Disease in Wisconsin: Disparities

- HCV disproportionately impacts the northern and southeastern counties: the highest **rates** of people living with HCV and new infections are found in these areas.

Rate of Prevalent HCV Cases, Wisconsin, 2013*

*Cases reported from the Department of Corrections and the Federal Correctional Institution are not shown.

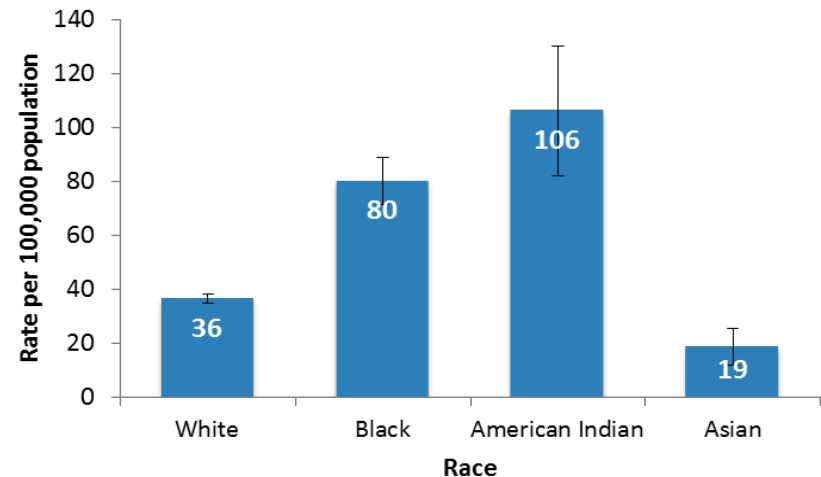




Scope of Disease in Wisconsin: Disparities

- HCV disproportionately impacts minorities.
- Although Blacks make up only 7% of Wisconsin's population, they comprise 16% of prevalent HCV cases.
- In 2013, the rate of new HCV reports in Blacks was **twice** that of Whites and the rate in American Indians was almost **three times** that of Whites.

HCV reported cases per 100,000, by race, Wisconsin, 2013

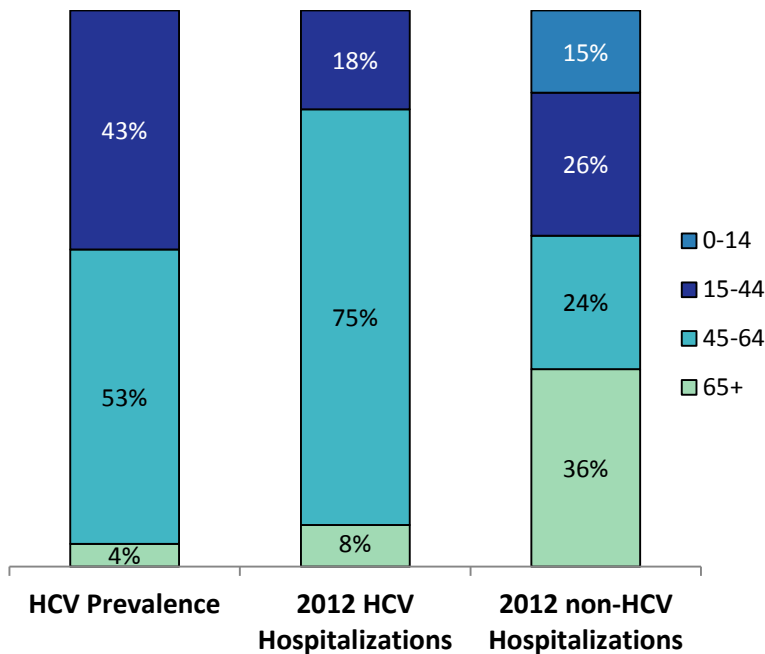


Error bars show 95% confidence intervals for the rate. Rates were not calculated for Multiple race (n=14) or Other race (n=18) due to small sample size. Race was unknown in 285 reports (14%).



Scope of Disease in Wisconsin: Baby Boomers

Age of Reported HCV Cases and HCV Hospitalizations, Wisconsin, 2012

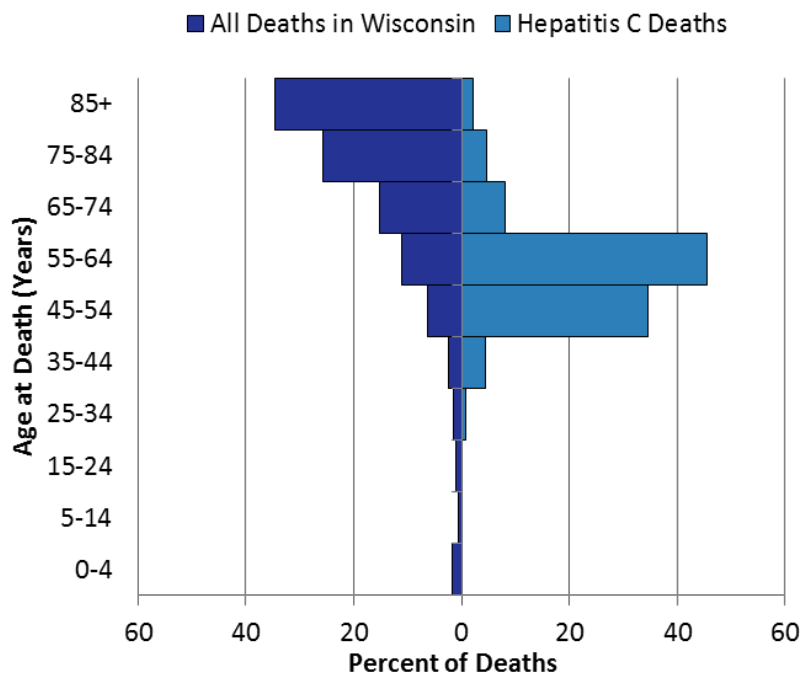


- In 2012, persons aged 45-64 years were 28% of the population in Wisconsin but accounted for:
 - 53% of the reported prevalent HCV cases and
 - 75% of HCV hospitalizations.
- The percent of hospitalizations for HCV in persons aged 45-64 is **three times** that of hospitalizations for other causes in this age group.



Scope of Disease in Wisconsin: Baby Boomers

Age Distribution of Deaths,
Wisconsin, 2009-2011

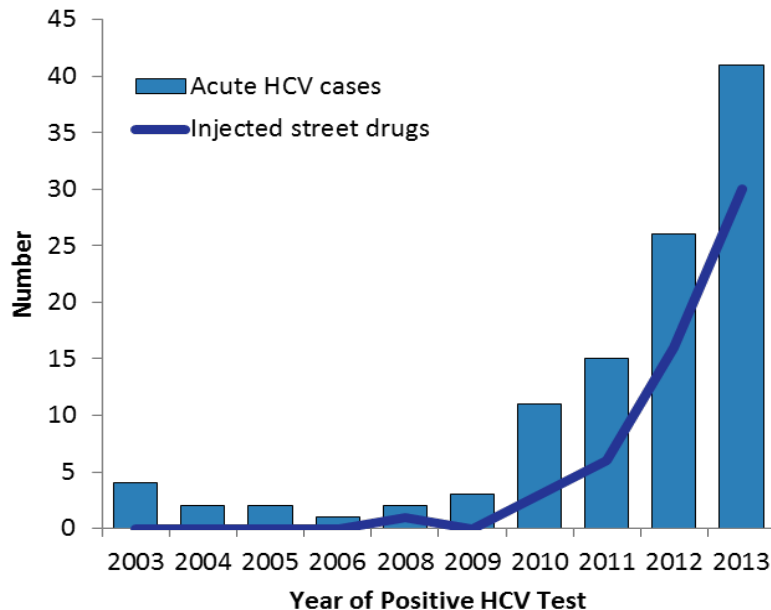


- 80% of HCV deaths occurred in persons aged 45-64 years.
- The median age of death related to HCV was 57 years.
- The median age of death from other causes was 79 years.
- On average, those who had a death related to HCV died **22 years younger** than those who died of other causes.

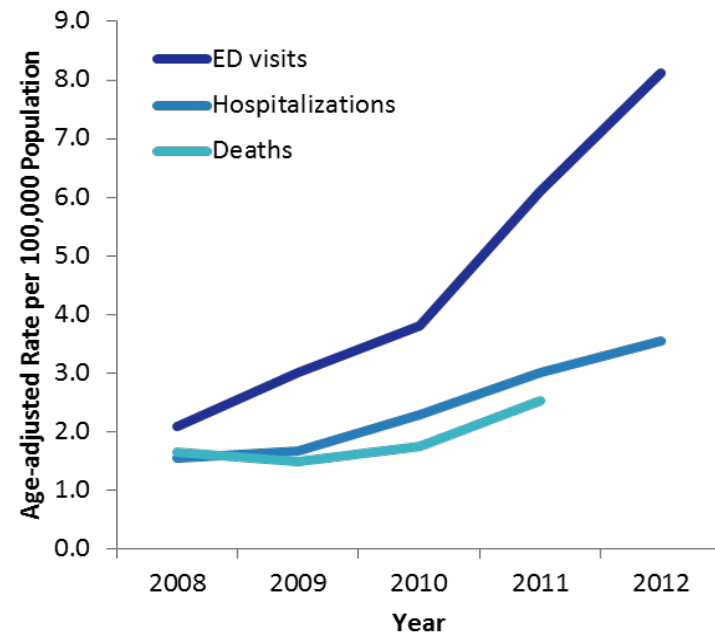


Scope of Disease in Wisconsin: Persons with Injection Drug Use (PWID)

Reported Acute HCV Cases, Wisconsin, 2003-2013



Rates of Heroin Overdoses and Deaths, Wisconsin, 2008-2012*



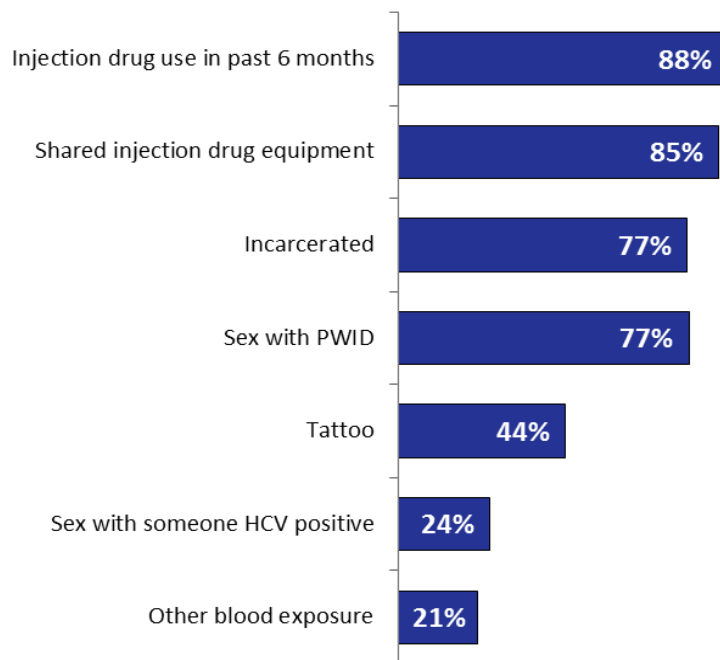
*Source: Wisconsin hospital inpatient database, Wisconsin emergency department visit database, and Wisconsin resident death certificates, Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services. Rates were age-adjusted using the United States Standard 2000 population.



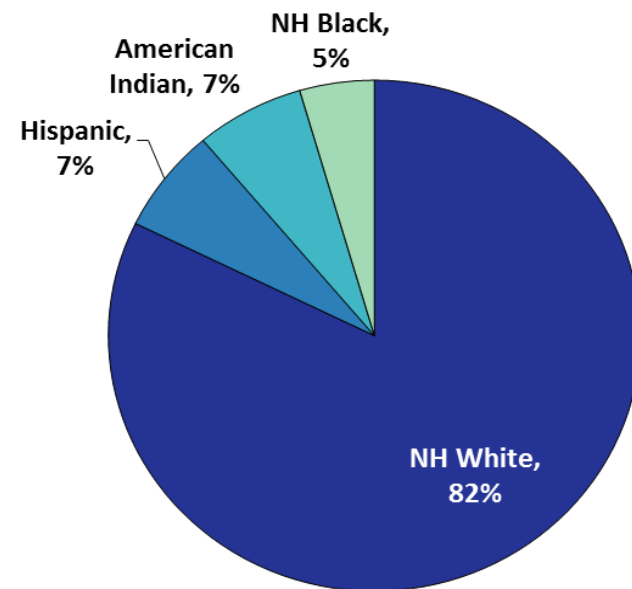
Scope of Disease in Wisconsin: HCV Positive Persons with Injection Drug Use

Data from HCV rapid test participation, conducted at outreach sites in Wisconsin during 2011-2013. Data are limited to PWID.

Reported Risk Behavior



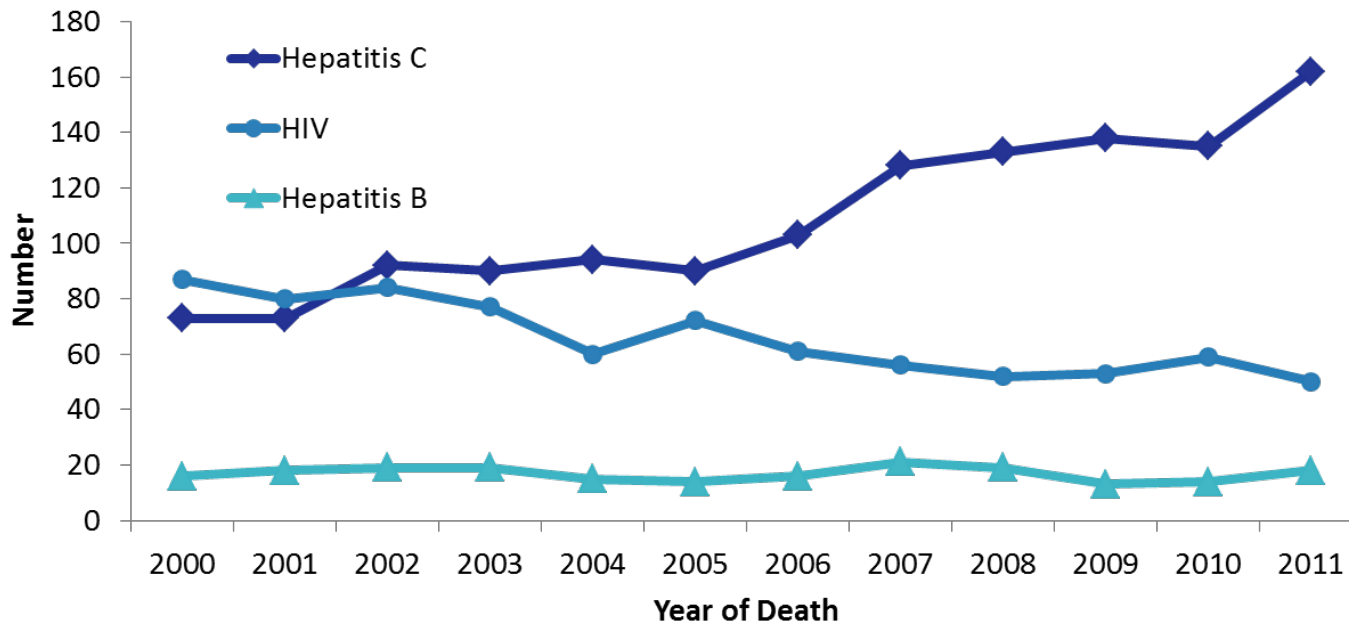
Race/Ethnicity





Mortality Trends

Deaths Associated with Hepatitis C, Hepatitis B and HIV:
Wisconsin, 2000-2011



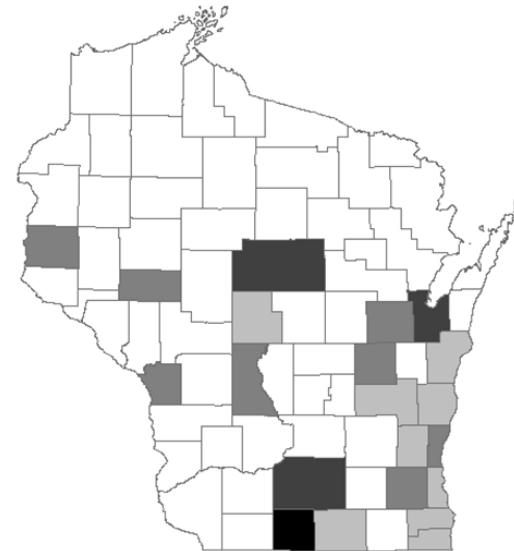


Opportunity for Treatment

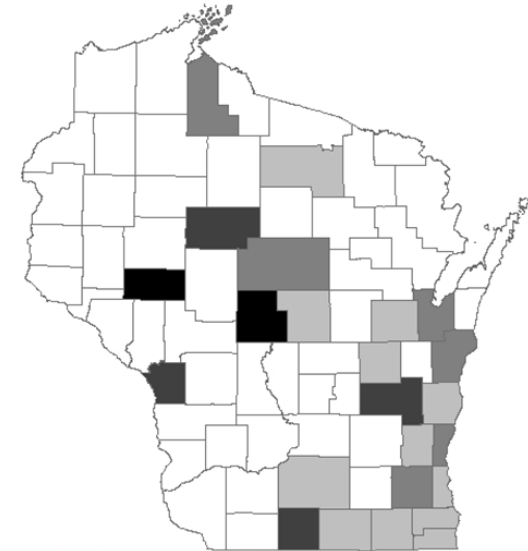
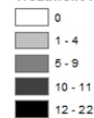
There is a lack of HCV prescribers for the northern counties where rates of new and prevalent infections are high.

Distribution of HCV Treatment Prescribers and Gastroenterologists per 1,000 HCV Prevalent Cases*, 2012

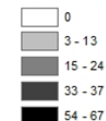
*Cases reported from the Department of Corrections and the Federal Correctional Institution are not shown.



Treatment Prescribers per 1,000 HCV Cases



Gastroenterologists per 1,000 HCV Cases





Next Steps

- Complete the burden report.
- Launch report in July.
- Disseminate the report to our partners.
- Solicit comments and feedback.



Acknowledgements

- Karen McKeown, RN, MSN
State Health Officer and Division Administrator
- James Vergeront, MD
Director, Wisconsin AIDS/HIV Program
- Lauren Stockman, MPH
HCV Epidemiologist
- Andrea Benoit, Research Analyst
- Association of State and Territorial Health Officials
(ASTHO)



Healthy Brain Initiative

Cindy Musial, CHES

Section Chief

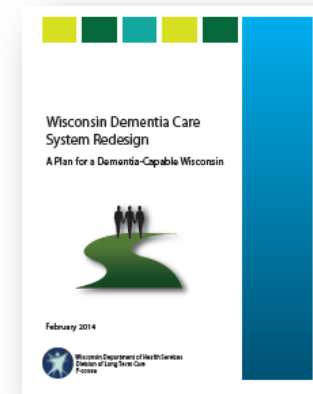
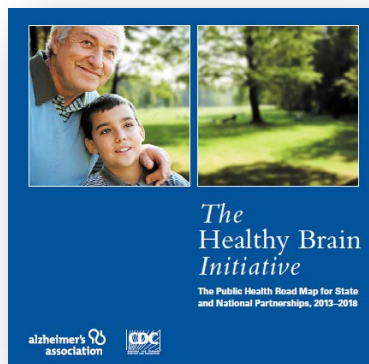
**Chronic Disease Prevention
and Cancer Control**

Bureau of Community Health Promotion

Healthy Brain Initiative

One-year grant (April 1, 2014 to March 31, 2015) from the National Association of Chronic Disease Directors

- The Healthy Brain Initiative Road Map
- Wisconsin Dementia Care System Redesign





Partners

- Division of Public Health
- Division of Long Term Care
- Alzheimer's Association of Southeastern Wisconsin
- AARP Wisconsin



Goal

- Engage state and local public health in addressing dementia as a public health issue.

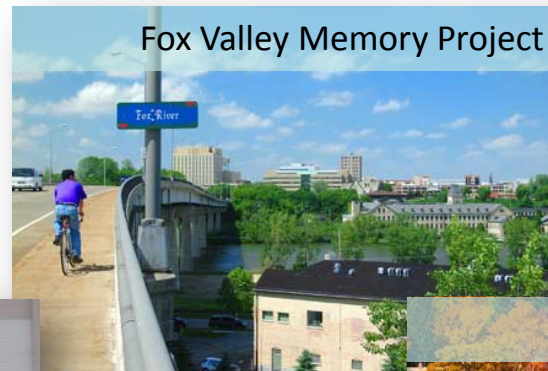
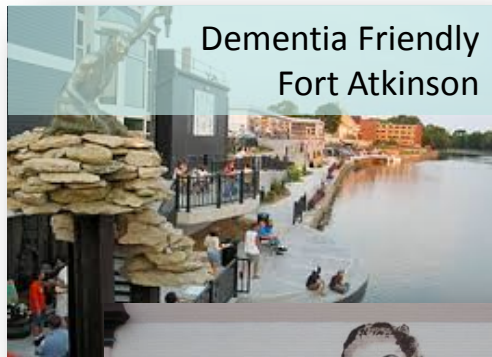
“We must capitalize on state efforts to coordinate public health chronic disease programs and include cognitive health in that larger picture.”

Sharon Moffatt, RN, BSN, MSN
Association of State and Territorial Health Officials

-The Healthy Brain Initiative – Road Map, page 32

Objective 1

- Create partnerships with existing dementia-friendly community initiatives in Wisconsin.



Objective 2

- Create and distribute a Wisconsin-specific dementia-friendly community toolkit.





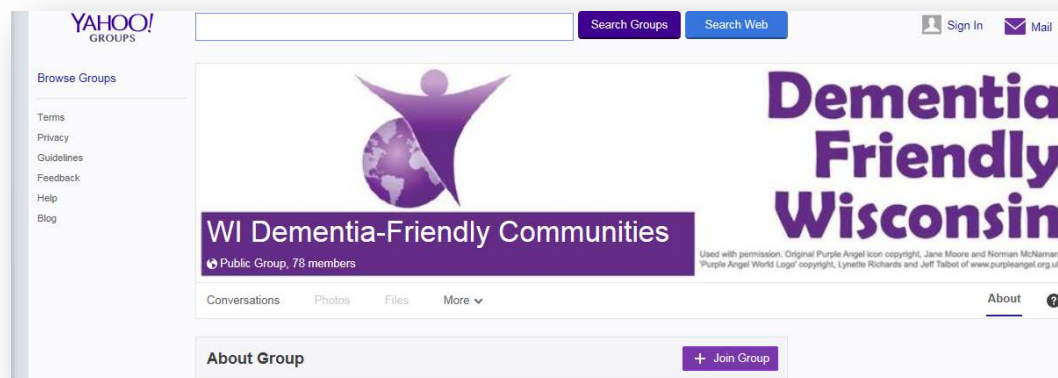
Objective 3

- Conduct education efforts for the involvement of local public health in dementia-friendly community efforts.



Next Steps

- Project Coordinator
- Dementia-Friendly Communities listserv at:
https://groups.yahoo.com/neo/groups/Dementia_Friendly_Communities_WI/info





Contact:

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TB Program Overview

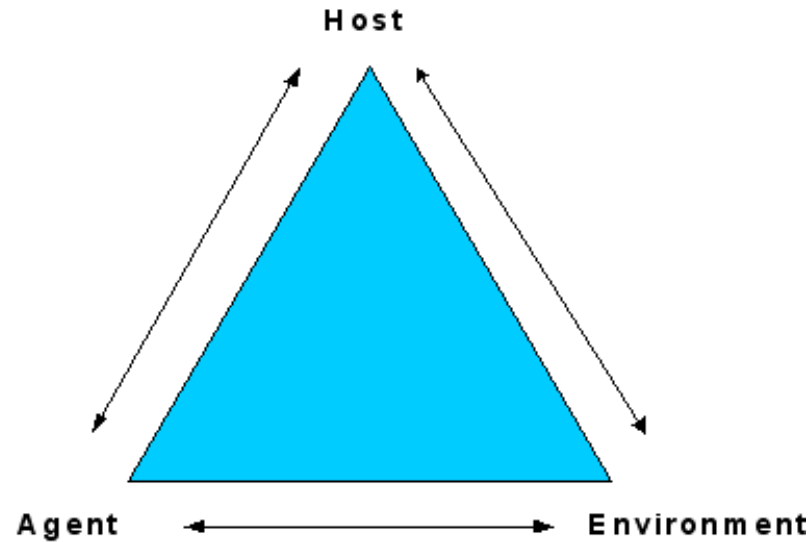
Philip Wegner RN, MPH

TB Nurse Consultant

**Bureau of Communicable Diseases and
Emergency Preparedness**



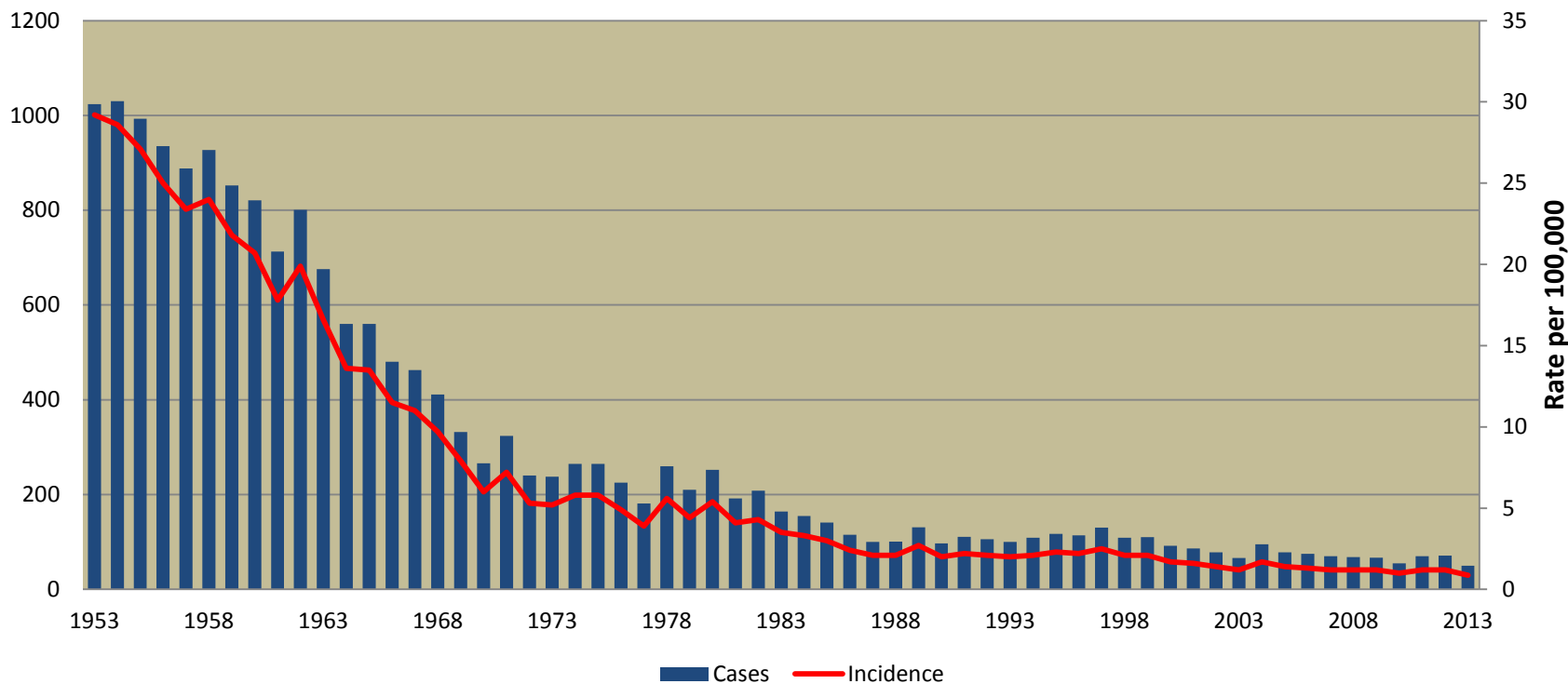
Cases and Epidemiology



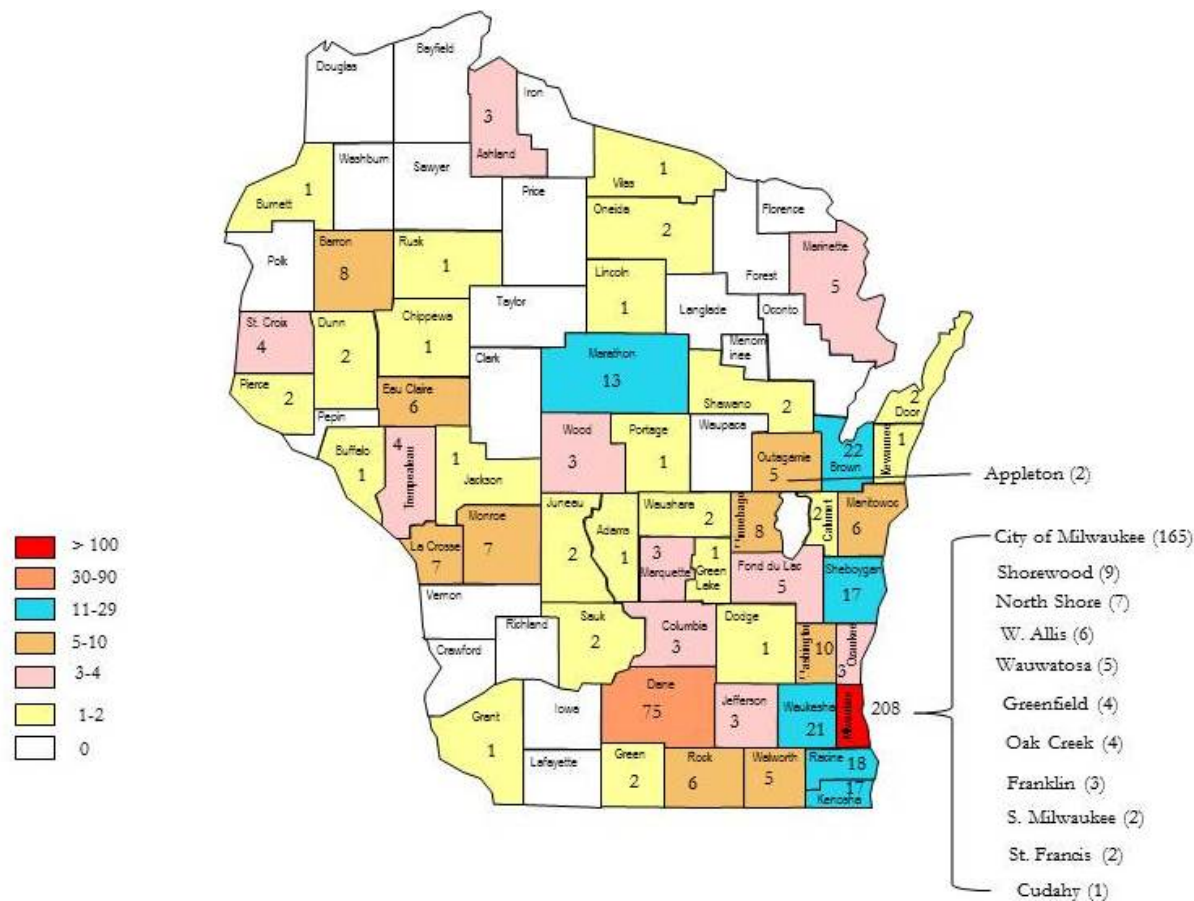


Wisconsin TB Epidemiology

TB Cases & Rates for Wisconsin, 1953-2013

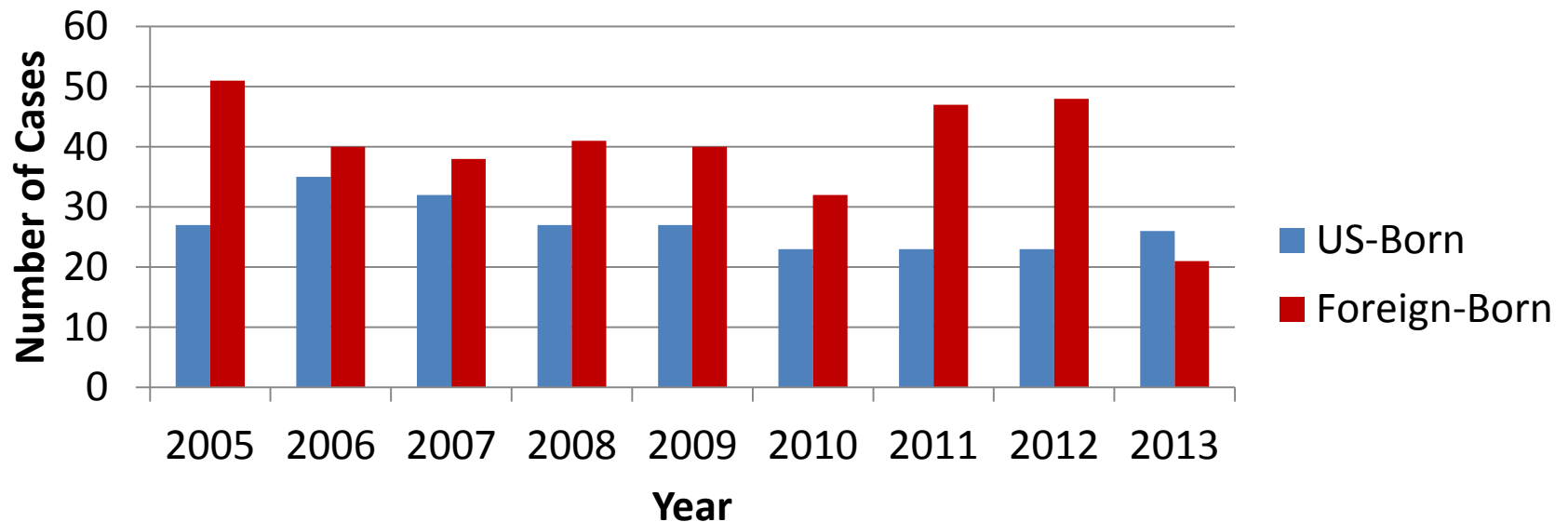


TB Cases in Wisconsin, 2006-2013





Number of TB Cases in U.S.-Born vs. Foreign-Born Persons Wisconsin, 2005-2013





Department of Health Services



TB News



Drug Shortage

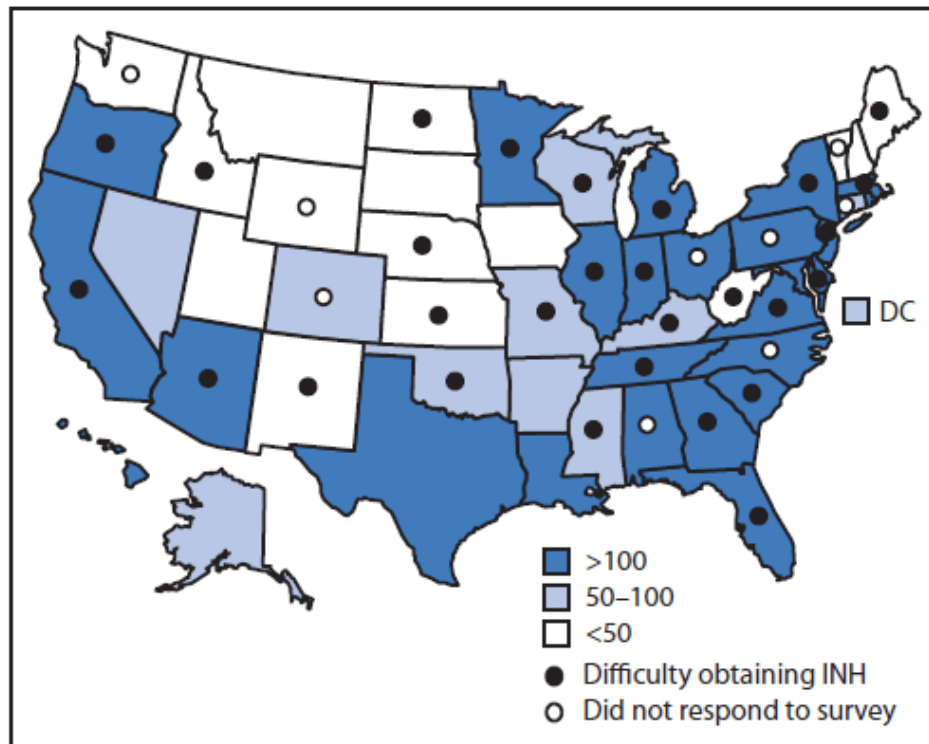
Second-line Drugs Affected –began in 2010

- ❑ Amikacin
- ❑ Capreomycin
- Cycloserine
- ❑ Clofazamine
- ❑ Ethionamide
- ❑ Shortage of raw materials
- ❑ Company change
- ❑ Manufacturing halted
 - Restricted use by FDA
 - IND/IRB for each patient
- ❑ Short expiration date



Drug Shortage of INH

States reporting difficulty obtaining isoniazid (INH) during 2012-2013 and state tuberculosis case counts in 2011 – National TB Controllers Association survey, United States *



* CDC MMWR: Impact of Shortage of First-Line Antituberculosis Medication on TB Control May 25, 2013, vol.62(20).



Drug Shortage of INH

- ❑ Shortage finally abated in late 2013 and is now no longer an issue nationally.
- ❑ Wisconsin State TB Program prioritized patients in need of INH – cases first, close contacts second and high-risk third (everyone else encouraged to use only rifampin).
- ❑ Wisconsin also used a compounding pharmacy that could obtain INH raw material in the interim.
- ❑ In the end suppliers caught up to demand and there is no longer a shortage.



Shortage of Tuberculosis Testing Material

- Purified Protein Derivative (PPD) Tuberculin Skin Testing Antigen (TST) Solutions Shortage*
 - ❑ Out of production from late 2012 - April 2013
 - ❑ Resumed production in May 2013
 - ❑ Reported normal production in January 2014

Tubersol (Sanofi
Pasteur Limited)

* CDC: Extent and Effects of Recurrent Shortage of Purified-Protein Derivative Tuberculin Skin Test Antigen Solution –United States, MMWR December 13, 2013, vol.62(49).



Shortage of Tuberculosis Testing Material

CDC Recommended:

1. Substitution of IGRA* blood testing in place of TST.
2. Allocate TST supplies to priority indications as determined by public health authorities.
3. Substitute Aplisol for Tubersol (which also was in short supply due to the increased demand).

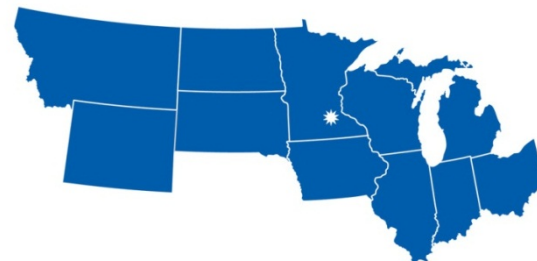
Wisconsin State TB Program used the opportunity to encourage risk-based screening and testing.

*IGRA – Interferon Gamma Release Assay



Medical Consultation

- ❑ New Regional TB Medical Consultation Center (RTMCC)
- ❑ Mayo Center for Tuberculosis
- ❑ Education/Training/Consultation



Phone: 855-360-1466

E-mail: tbcenter@mayo.edu

<http://centerfortuberculosis.mayo.edu/>



Department of Health Services



Outbreaks and Events



TB Morbidity (2007-2013)

| Year | Number of TB Cases in U.S. | Number of TB Cases in Wisconsin | Number of TB Cases in Sheboygan |
|------|----------------------------|---------------------------------|---------------------------------|
| 2007 | 13,278 | 70 | 0 |
| 2008 | 12,895 | 68 | 3 |
| 2009 | 11,528 | 67 | 0 |
| 2010 | 11,171 | 55 | 0 |
| 2011 | 10,517 | 70 | 1 |
| 2011 | 9,945 | 71 | 3 |
| 2013 | 9,588 | 50 | 10 |

data source: CDC, <http://www.cdc.gov/mmwr/pdf/wk/mm6311.pdf>, Wisconsin DPH, CDC, Trends in TB – United States, 2013, MMWR, March 21, 2014.

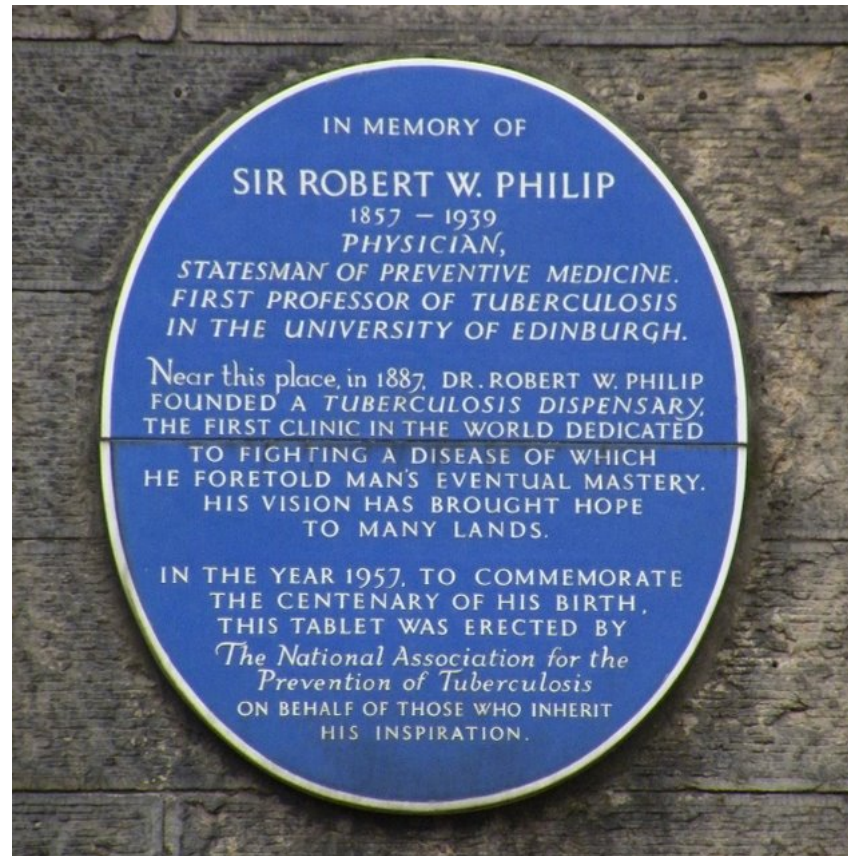


Review of Outbreak

- ❑ April 11, 2013
 - Patient A living in Sheboygan diagnosed with TB.
 - Later found to have MDR-TB.
- ❑ April – May 2013
 - Additional cases detected among members of extended family.
- ❑ May – June 2013
 - Sheboygan County activated its emergency operation center.
 - Wisconsin DPH requested epidemiological assistance from CDC Epi-Aid.
 - TB Nurse Consultants deployed to Sheboygan.
 - Borrowed personnel from other jurisdictions.
 - Appealed to the state for additional funding to deal with the situation
- ❑ June 2013 – present
 - Ongoing outbreak monitoring and case management.



TB Dispensary





Chapter 252

Communicable Diseases

252.10 Public health dispensaries.

[252.10\(1\)](#) (1) A local health department may request from the department certification to establish and maintain a public health dispensary for the **diagnosis and treatment of persons suffering from or suspected of having tuberculosis**. Two or more local health departments may jointly establish, operate and maintain public health dispensaries. The department shall certify a local health department to establish and maintain a public health dispensary if the local health department meets the standards established by the department by rule. The department of health services may withhold, suspend or revoke a certification if the local health department fails to comply with any rules promulgated by the department. The department shall provide the local health department with reasonable notice of the decision to withhold, suspend or revoke certification. The department shall offer the local health department an opportunity to comply with the rules and an opportunity for a fair hearing. Certified local health departments may contract for public health dispensary services. If the provider of those services fails to comply, the department may suspend or revoke the local health department's certification. The department may establish, operate and maintain public health dispensaries and branches in areas of the state where local authorities have not provided public health dispensaries.



TB Dispensary

- ❑ Purpose: ensure all persons in Wisconsin with suspected or confirmed TB infection or disease receive appropriate evaluation, treatment and monitoring, regardless of insurance availability.
- ❑ Uses state revenue tax funds to reimburse local health departments for medical management of TB cases, suspects, contacts and latent infection.
- ❑ Conditions:
 - Good standing with latest public health review
 - Established Medical Assistance provider number and billing practices in place
 - Must use WEDSS electronic disease surveillance program



Resources

- ❑ Medicaid Targeted Case Management
 - Benefit for all MA patients for coordination of services
- ❑ Tuberculosis Related Medicaid
 - Eligibility related to income, assets, and TB status
 - Outpatient services, including DOT
- ❑ Public Health TB Dispensary Program
 - specified services provided by dispensary certified health departments



Public Health TB Dispensary- Covered Services (DHS 145.13)

- For at-risk population: Tuberculin skin testing, medical evaluation, chest x-ray, sputum specimen collection

- For persons with active tuberculosis disease (in addition to the above):
 - Directly observed therapy
 - Case management
 - Collection of serologic specimens



Steps to TB Dispensary Approval (DHS 145.12)

- ❑ Request dispensary approval (call Norma Denbrook, 608-261-6388).
- ❑ LHD meets with TB Program, DPH regional office, local providers.
- ❑ Submit dispensary plan and budget.
- ❑ Approval of request and signing of Memorandum of Understanding.



Important Dispensary Details

- ❑ Reimbursement at MA rate.
- ❑ Maximums apply (exceptions made with prior approval).
- ❑ Compliance with legal requirements and national standards.
- ❑ Approval for five years, contract for one year.
- ❑ Payer of last resort - must determine MA non-eligibility first.



Communicable Diseases Update

Tom Haupt, MS

Respiratory Epidemiologist

Bureau of Communicable Diseases and
Emergency Response



ENHANCED RESPIRATORY VIRUS SURVEILLANCE, WISCONSIN 2014

Wisconsin Division of Public Health, Bureau of Communicable Diseases and Emergency Response

| Respiratory Virus | Middle East Respiratory Syndrome (MERS CoV) | Influenza A H5N1 | Influenza A H7N9 |
|---|--|--|---|
| Criteria for Testing | | | |
| Exposure Events/Countries* | <ul style="list-style-type: none"> History of travel from the Arabian Peninsula**** or neighboring countries; OR A close contact** to a symptomatic person with the above risk factor. | <ul style="list-style-type: none"> Return from an area where H5N1 infection has been detected** or where H5N1 viruses circulate in animals: OR A close contact*** to a symptomatic person with the above risk factor; OR Persons with unprotected exposure to H5N1 virus in a laboratory setting. | <ul style="list-style-type: none"> Return from China; OR A close contact*** to a symptomatic person with the above risk factor. |
| Exposure Timeline | Within 14 days prior to illness onset | Within 10 days prior to illness onset | Within 10 days prior to illness onset |
| Signs and Symptoms | <p>All three of the following criteria must be met:</p> <ul style="list-style-type: none"> Fever ($\geq 100.4^{\circ}\text{F}$) Cough Suspicion of pulmonary parenchymal disease (e.g., pneumonia or acute respiratory distress syndrome based on clinical or radiological evidence of consolidation) | <p>Two or more of the following:</p> <ul style="list-style-type: none"> Fever Cough Sore throat Rhinorrhea Nasal congestion Body aches | <p>Two or more of the following:</p> <ul style="list-style-type: none"> Fever Cough Sore throat Rhinorrhea Nasal congestion Body aches |
| Specimens to be collected and submitted to the Wisconsin State Laboratory of Hygiene | <p>Preferred</p> <ul style="list-style-type: none"> Lower respiratory tract specimen such as (induced) sputum, bronchoalveolar lavage, bronchial wash, or tracheal aspirate <p>Secondary</p> <ul style="list-style-type: none"> NP swab or stool | <p>Preferred</p> <ul style="list-style-type: none"> Nasopharyngeal (NP) swab <p>Secondary</p> <ul style="list-style-type: none"> Oropharyngeal (OP) swab | <p>Preferred</p> <ul style="list-style-type: none"> Nasopharyngeal (NP) swab <p>Secondary</p> <ul style="list-style-type: none"> Oropharyngeal (OP) swab |

* At the discretion of DPH, exposure to similar events or countries in the vicinity of those specifically named may be approved for testing.

** List of countries with H5N1: http://www.who.int/influenza/human_animal_interface/EN_GIP_20131210CumulativeNumberH5N1cases.pdf.

*** Close contact is defined as providing care for the ill patient, or having similar close physical contact; or staying at the same place (e.g. living with, or visiting the patient when the patient was ill).

**** Countries considered in the Arabian Peninsula and neighboring countries include: Bahrain, Iraq, Iran, Israel, Jordan, Kuwait, Lebanon, Oman, Palestinian territories, Qatar, Saudi Arabia, Syria, the United Arab Emirates (UAE), and Yemen.



Lyme Disease Update

Christopher Steward

Senior Research Analyst

**Bureau of Communicable Diseases and
Emergency Response**



Review of 2012 Change in Reporting

- The implementation of the current Lyme disease case definition in 2008 and the increased use of electronic reporting resulted in an unsustainable surveillance system that created challenges for public health agencies and reporters of diseases throughout Wisconsin.

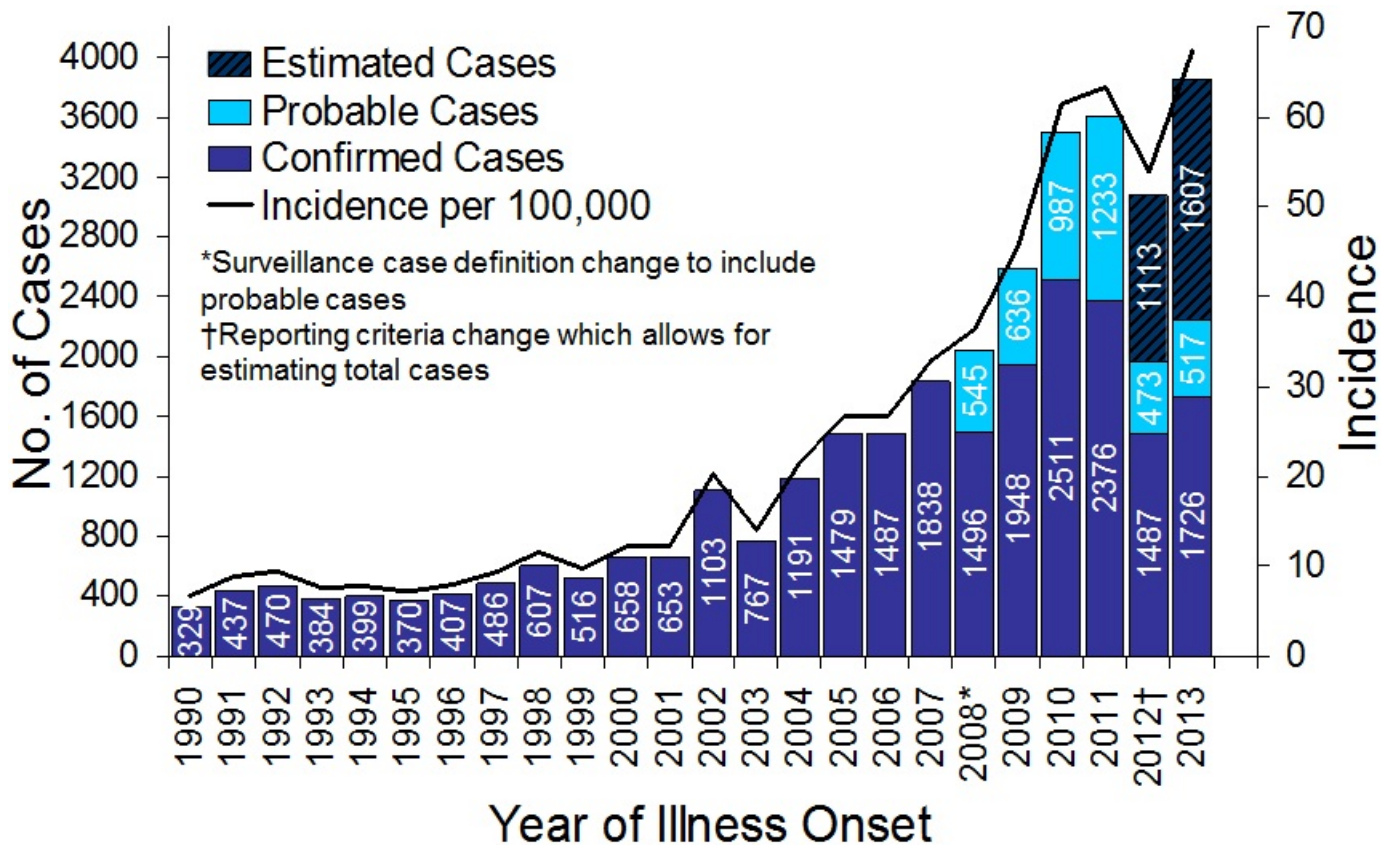


Review of 2012 Change in Reporting

- Required Reporting:
 - Cases of erythema migrans (EM) rash that has been diagnosed by a medical professional and is at least 5 cm in diameter
 - Positive laboratory results
- Optional Reporting:
 - Cases without EM rash
 - Nonessential clinical information

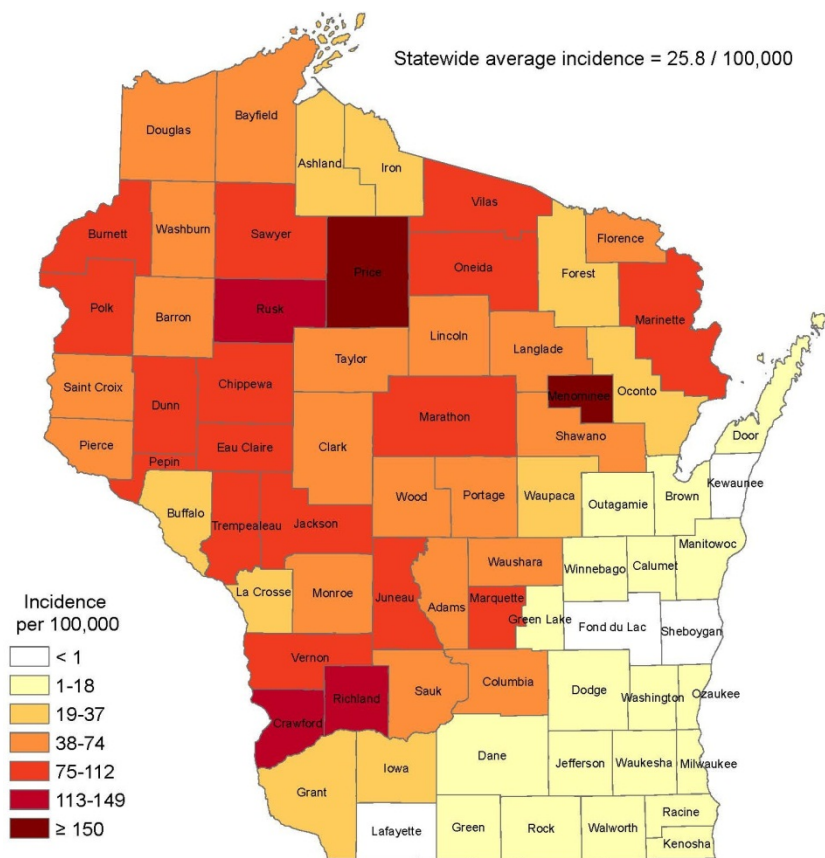


Reported Cases of Lyme Disease



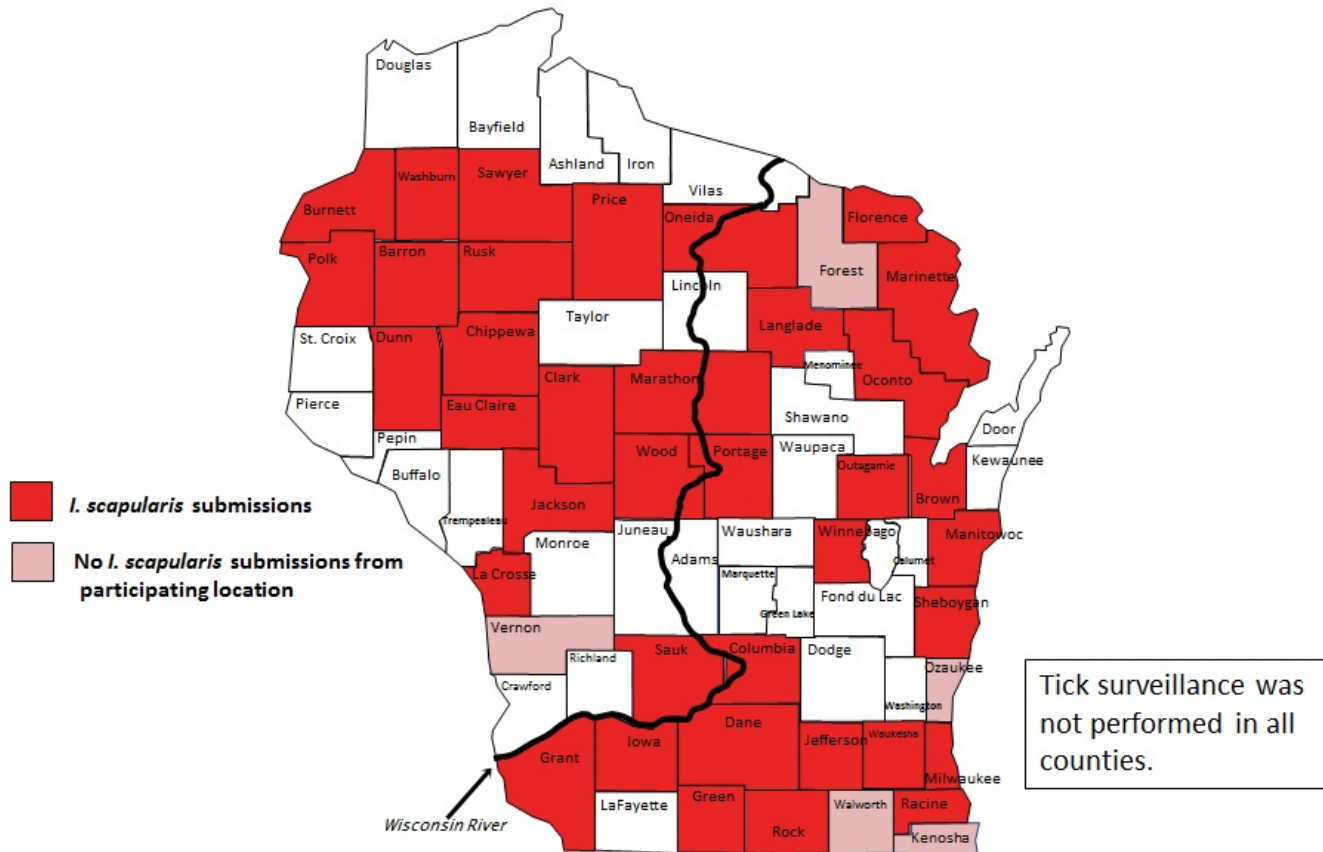


2013 EM Rash Incidence Map





2011-2013 Collected Deer Ticks





Questions?



**Next State Health Officer
Bimonthly Webcast:**

Date to be determined...

Thank you for participating today!