2014 Communicable Diseases Spring Seminar
June 2014
Immunization Program Update

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Outline

- 317 Vaccine Policy Change
- Deputization
- Mass Clinic Exercises
- Mumps Update
- Measles Update

Section 317 Policy Change

- Went into effect October 1, 2012.

- No longer appropriate for Section 317 vaccine to be used for routine vaccination of children, adolescents and adults who have public or private insurance that covers vaccination.

CDC: Questions Answered on Vaccines Purchased with 317 Funds.
http://www.cdc.gov/vaccines/imz-managers/guides-pubs/qa-317-funds.html

Section 317 Policy Change (Cont.)

- Section 317-funded vaccines *can still* be used to vaccinate:
  - Newborns with birth dose of hepatitis B prior to discharge.
  - Infants of hepatitis B-infected women and household or sexual contacts of hepatitis B-infected individuals.
  - Uninsured or underinsured adults.
  - Individuals seeking vaccines during public health response activities (e.g., post-exposure prophylaxis, disaster relief, mass vaccination exercises).
  - Individuals in correctional facilities and jails.

CDC: Questions Answered on Vaccines Purchased with 317 Funds.
http://www.cdc.gov/vaccines/imz-managers/guides-pubs/qa-317-funds.html

Section 317 Policy Change: Effect on Local Health Departments (LHDs)

- In the year preceding the policy change (October 2011-September 2012), Wisconsin LHDs provided 126,809 non-influenza immunizations to 56,347 distinct clients aged birth through 18.
- In the year after the policy change (October 2012-September 2013), Wisconsin LHDs provided:
  - 70,382 non-influenza immunizations to 30,341 distinct clients aged birth through 18.
  - -44 percent change in the number of non-influenza immunizations provided by LHDs, compared to the year prior.
  - -46 percent change in the number of clients aged birth through 18 seen by LHDs for immunization services, compared to the year prior.

Section 317 Policy Change: Effect on Wisconsin

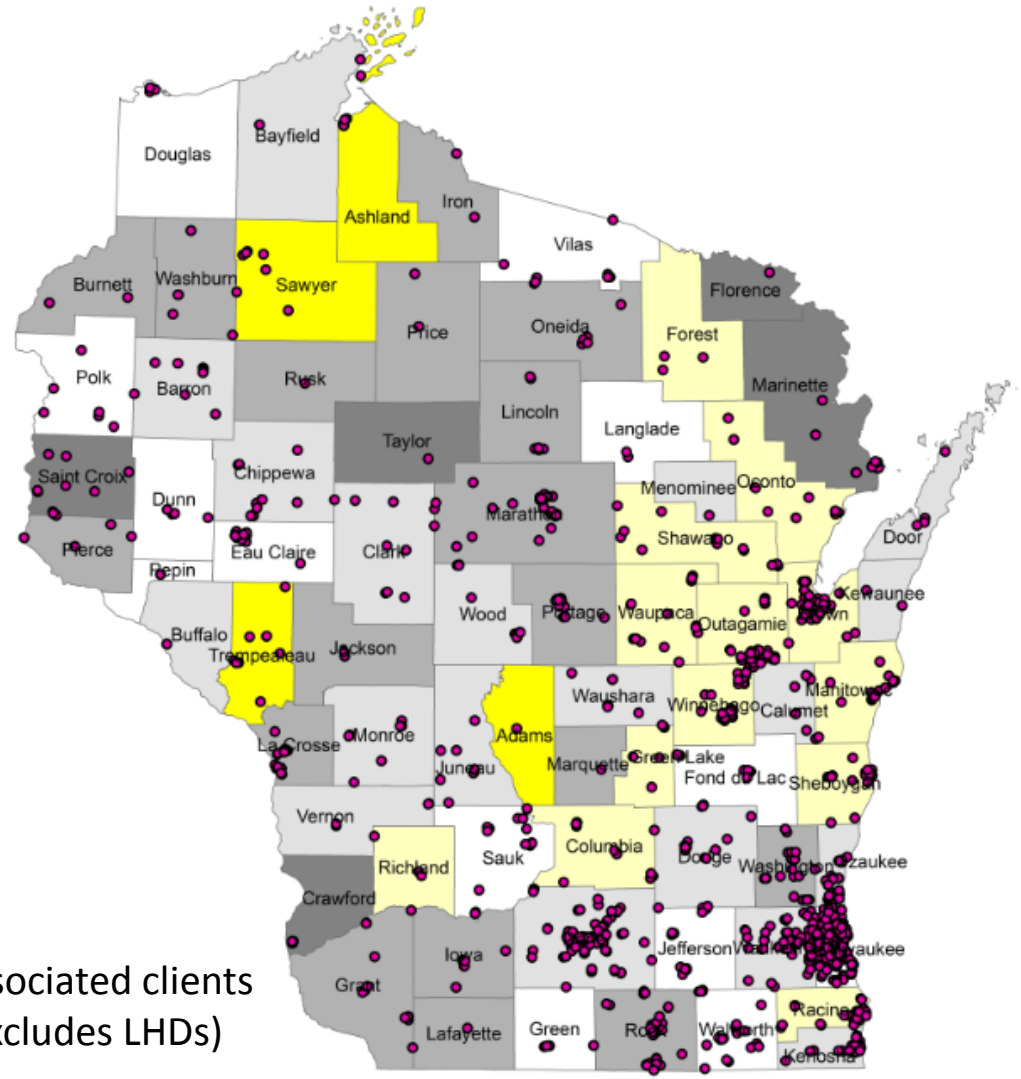
- Wisconsin Immunization Registry (WIR) data was used to estimate the effect of the Section 317 Policy Change on Wisconsin clients aged birth through 18.
- From the year preceding the policy change (October 2011-September 2012) to the year after the policy change (October 2012-September 2013), there was:
  - A -1 percent change in the number of non-influenza immunizations provided to clients aged birth through 18.
  - No change in the number of clients aged birth through 18 seen for immunization services by Wisconsin providers (public and private).

Section 317 Policy Change: Effect on Wisconsin Regions

Region	Percent change* in immunizations provided to clients aged 0 through 18 (excludes influenza)	Percent change* in number of clients aged 0 through 18 seen for immunization services
Northeastern	+2%	+3%
Northern	-4%	-3%
Southeastern	-2%	-1%
Southern	-2%	0%
Western	-4%	-1%

*Compares data provided to the WIR for immunizations given October 2011-September 2012 (pre-317 policy change) to data provided for immunizations given October 2012-September 2013 (post-317 policy change).

Percent Change in the Number of Immunizations Provided to the WIR, Clients Aged 0 Through 18, Wisconsin, October 2011-September 2012 vs. October 2012-September 2013



%ChangeImms

- <-10%
- -10% to -5%
- -5% to -1%
- -1% to 1%
- 1% to 5%
- >5%

WIR provider with associated clients aged 0 through 18 (excludes LHDs)

Wisconsin School Immunization Law Compliance

	2010-11	2011-12	2012-13	2013-14
Meets Minimum	90.8%	91.9%	92.6%	92.3%
In Process	1.3%	1.1%	0.8%	0.6%
Medical Waiver	0.5%	0.4%	0.3%	0.4%
Religious Waiver	0.2%	0.2%	0.2%	0.2%
Personal Conviction Waiver	3.8%	3.8%	4.0%	4.3%
Behind Schedule	3.1%	2.2%	1.8%	1.9%
No Record	0.4%	0.3%	0.3%	0.4%

Adolescent Immunization Coverage Rates for 13-18-Year-Olds by Individual Antigen and Region, 2013

- Data Source: WIR Benchmark Reports (clients assigned by county of residence)
- Birth date range: 1/1/1995-12/31/2000

Region	HPV (1+)	HPV (3+)	MCV4 (1+)	Tdap (1+)
Northern	36.1%	20.0%	68.6%	83.0%
Northeastern	34.3%	19.2%	66.9%	82.1%
Southern	38.7%	22.0%	60.7%	77.6%
Southeastern	36.0%	17.7%	65.1%	74.4%
Western	33.7%	18.3%	58.8%	76.9%
Wisconsin	35.9%	19.1%	64.1%	77.6%

- Individual county rates will be posted on the Wisconsin Immunization Program website homepage near the 24-month coverage rates.

Deputization

VFC Deputization Application

CDC Form

States justify need and apply for **authorization** for deputization of specified providers

CDC Application Review

CDC reviews applications and **authorizes deputization** based on application successfully presenting need

TIME LINE: CDC provides response within 60 days of receipt of application.

CDC Approval

Resubmission

States whose applications Require more information, may edit applications based on CDC feedback and resubmit.

State Deputization MOU

CDC Template

Once approved, States create MOUs with proposed deputized providers.

CDC Template must be used with no modifications.

CDC Review of State Deputization MOU

MOUs altering any language Of the CDC Deputization Template will not be approved.

Exception Note: Section 2d may be modified with specified limited exceptions language as outlined in VFC Deputization FAQs.

Annual Requirement

Annual VFC Re-Enrollment Form

CDC Form

All VFC providers MUST complete the CDC Re-enrollment Form.

VFC providers ***who are also deputized in their state*** must also submit their Reports as defined in §2f of the MOU.

Annual Deputization MOU Update

CDC Form

Deputization MOUs are expected to update annually to reflect current deputized providers.

This does not need to be submitted to CDC but should be kept current.

Awardees must report aggregated deputization data through the VFC Management Survey.

Mass Clinic Exercises

- In 2013, 29 LHDs held mass clinic exercises administering influenza vaccine.
- Anticipate 44 in 2014.
- Not limited to influenza vaccine.
- Doses given in a series must be under a mass clinic scenario.

Current Status of Tdap Cocooning Program

- Currently have 46 facilities participating.
- All sites order vaccine through the Wisconsin Immunization Registry (WIR).
- Are strongly encouraged to enter the data into the WIR.
- Need to report quarterly (de-identified data). Administered 24,763 doses of Tdap between Sept. 1, 2011 and Mar. 31, 2014.
- 24 facilities are administering to contacts other than the mother.

Mumps

Mumps

- Acute viral illness
- Respiratory transmission of the virus
  - Similar to influenza
- Incubation period of 14-18 days (range 7-21 days)
- Infectious two days before to five days after onset of parotitis (swelling of parotid glands)

Mumps

- Non-specific prodrome of myalgia, malaise, headache, low-grade fever.
- Parotitis occurs, either one or both sides, usually accompanied by tenderness and pain.
- Symptoms decrease after one week and usually resolve after 10 days.

Complications

• CNS involvement	15 percent of clinical cases
• Orchitis pubertal	20-50 percent of post-males
• Pancreatitis	2-5 percent
• Deafness	1/20,000
• Death/Average	One per year (1980-1999)

Immunity to Mumps

- Individuals born before January 1, 1957, are generally considered immune (except for health care workers, international travelers and college students).
- All others need at least one dose of mumps-containing vaccine (usually MMR).
- In some settings, ACIP may recommend two doses.
- Serologic proof of immunity is acceptable.

Mumps in the U.S., 2014

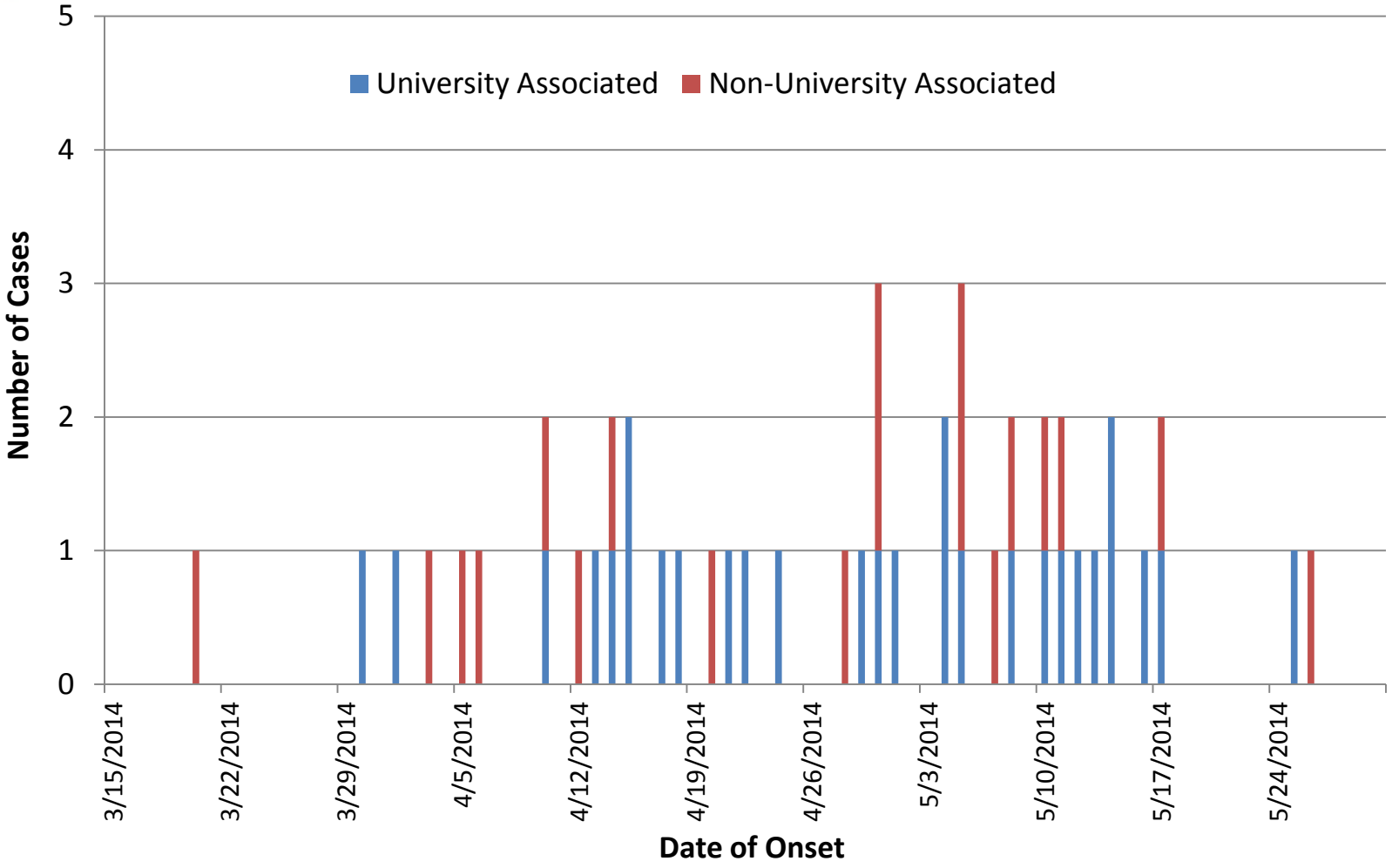
- As of May 5, 2014, nearly 400 cases reported to CDC by 18 states.
  - Outbreaks in New York City and Ohio.
- 50 percent of cases aged 15-24.

Cases of Mumps, Wisconsin, 2005-2014

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014[1]
Number of cases	5	842	54	6	8	4	4	8	0	48

[1] Year to date

Confirmed Mumps Cases by Date of Onset, Wisconsin
March 15- June 5, 2014 (n=47)[1]



[1] Not all cases are represented due to most recent cases still under investigation

2014 Mumps Outbreak

- Age Range: 6 months-52 years
- Median Age: 22 years
- 58% are female
- Complications: one case with orchitis, one hospitalized
- Vaccination status of cases:

2 doses of MMR	34 (71%)
1 dose of MMR	1 (2%)
0 doses of MMR	3 (6%)
Unknown	10 (21%)

Mumps Case Investigation

- Appropriate laboratory testing should be done.
- Individual suspected of mumps should be isolated until five days after onset of parotitis or until mumps is ruled out by an appropriate laboratory test.
- Local public health department needs to be notified immediately upon *suspicion* of disease.

Specimens and Testing for Mumps

Polymerase Chain Reaction (PCR) Testing

- Buccal Swabs
  - Preferred specimen
  - Timing of collection: preferably within the first three days, but no later than nine days after parotitis onset
  - Will also allow culturing and genotyping of virus
- Urine
  - Timing of collection: Up to nine days after onset of parotitis
  - *Not* the optimal specimen

Specimens and Testing for Mumps (cont.)

- Acute Serum
  - Timing of collection: as soon as possible after onset
  - If specimen collected within 72 hours of parotitis onset in an unvaccinated person **and** IgM is negative, second specimen recommended (collected between days five to seven after onset of parotitis)
- Convalescent Serum
  - Timing of collection: two to three weeks after acute specimen
  - Used as paired sera
  - Not ideal for rapid identification

Mumps Serology- Issues

- Mumps IgM Serology.
  - High number of false negative results among previously vaccinated persons.
  - False positive results may occur with some commercial assays (especially IFA tests).
- Mumps IgG Serology.
  - False negative results may occur among previously vaccinated persons because acute IgG titers may already be high, which prevents detection of a four-fold rise in IgG titers.
- Therefore, serology is not the test of choice for diagnosis.

Mumps Challenges

- Vaccine efficacy
  - Two doses are shown to be 88 percent effective (range 66-95 percent).
  - One dose is 78 percent effective (range 49-92 percent).
  - A number of U.S. outbreaks in recent years have consisted of greater than 50 percent of individuals who received at least one dose of MMR.
- Diagnostics

Measles

Measles in the U.S., 2014

- As of May 9, 2014, 187 cases were reported.
  - 50 cases were reported for the same time period in 2013.
- 43 cases due to importation from 14 countries.
  - Over half from the Philippines.
- 89 percent were unvaccinated or had an unknown vaccination history.
  - Among the unvaccinated U.S. residents with measles, 80 percent had philosophical objections to vaccination.

Measles Cases, Wisconsin, 2005-2014

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014[1]
Number of cases	2	0	0	6	0	0	2	0	0	2

[1] Year to date

2014 Measles Cases in Wisconsin

- Two confirmed cases.
- Both genotype B3.
- Both reported travel prior to onset of illness.
- Neither individual had received MMR vaccine.
- These cases resulted in over 350 individuals exposed, mainly in the health care setting.
- Individuals were from 18 different counties in Wisconsin and four other states.

Specimens and Testing for Measles

For Polymerase Chain Reaction (PCR) Testing

- Combined Throat and Nasopharyngeal Swabs
  - Timing of collection: preferably within the first 3 days, but no later than 10 days after rash onset.
  - Synthetic swabs in virus transport medium.
  - Will also allow culturing and genotyping of virus.
- Urine
  - Timing of collection: a few days before rash onset to a few days after rash onset.
  - *Not* the optimal specimen.

Specimens and Testing continued

- Acute Serum
  - Timing of collection: as soon as possible after onset
  - If specimen collected within 72 hours of rash onset **and** IgM is negative, second specimen recommended
- Convalescent Serum
  - Timing of collection: two to three weeks after acute specimen
  - Used as paired sera
  - Not ideal for rapid identification

Contact Information

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