

# Development of Immunization Report Cards to Support Michigan's Immunization Program

Cristi Bramer, MPH

Michigan Department of Community Health,

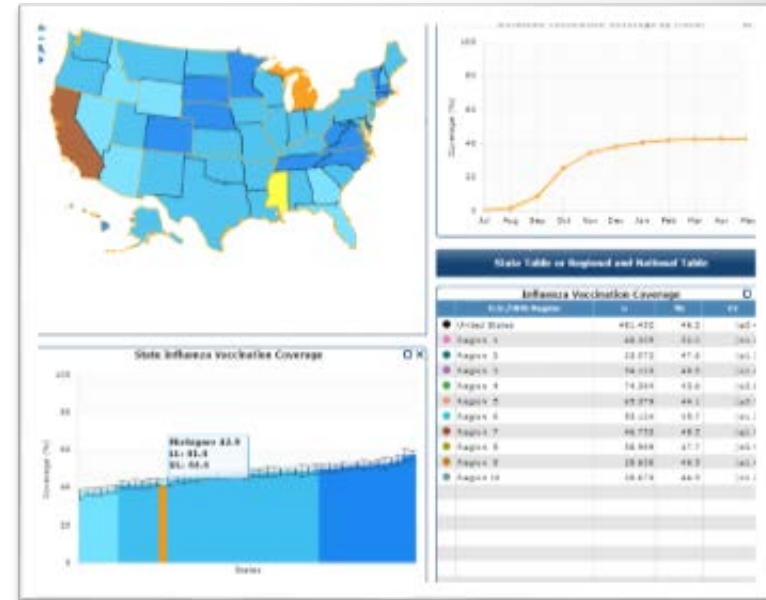
Division of Immunization

AIRA Meeting, April 2015

# Michigan's Status in National Surveys

- National surveys are routinely conducted to assess vaccination coverage
  - National Immunization Survey (NIS), National Health Interview Survey (NHIS), Behavioral Risk Factor Surveillance System (BRFSS), National Flu Survey
- Michigan uses these data to measure progress and identify areas for improvement.

Flu Vaccination Coverage Estimates by State, 2013-14 Flu Season, All Persons 6mos+



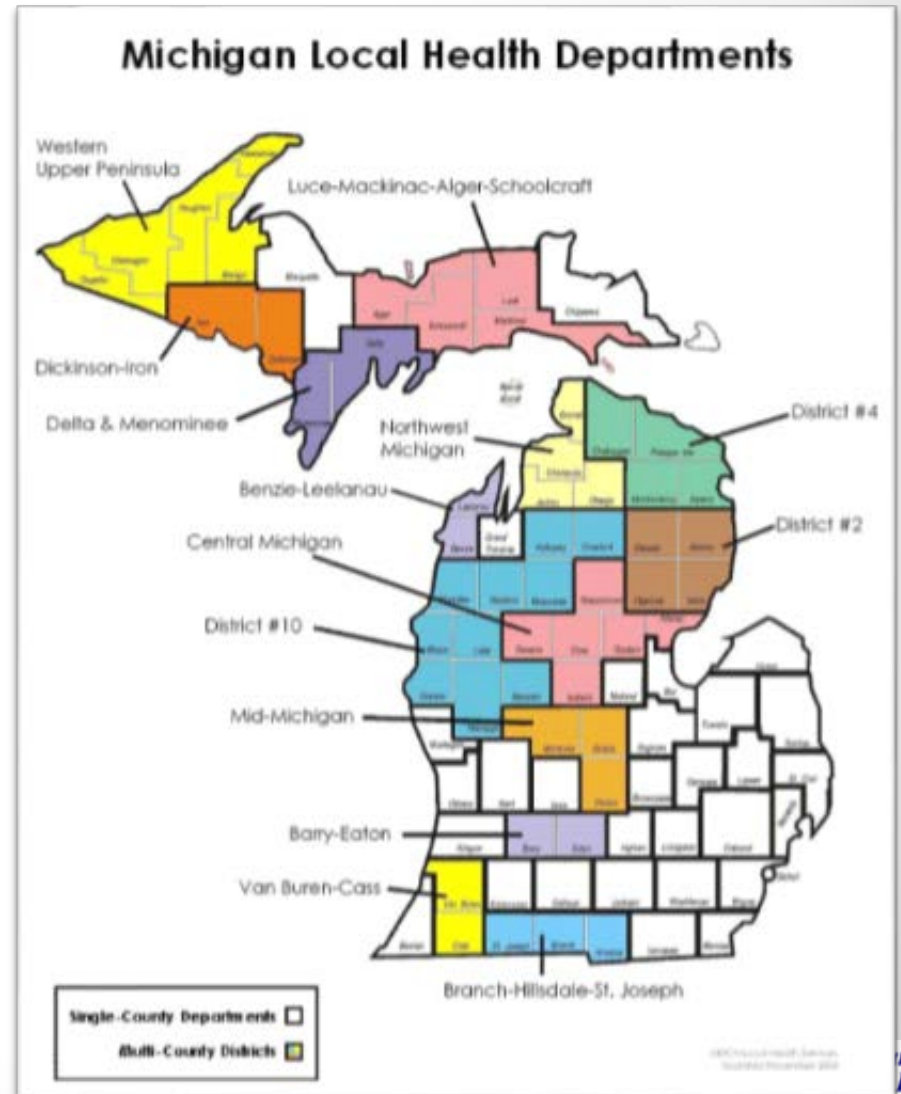
<http://www.cdc.gov/flu/fluview/index.htm>

# Background - MCIR

- Michigan Care Improvement Registry (MCIR)
  - A state-wide, population based IIS
    - Implemented in 1998 for health care providers to track children's vaccination
    - Continually populated since 1994 with birth records
    - Required reporting within 72 hours of administration for children aged less than 20 years
  - Expanded to adults in 2006
    - Strongly encouraged reporting for adult vaccinations
- As of March 2015:
  - Over 112 million immunization records for 9.15 million persons
- Various reports created using MCIR data
  - Profile reports, workbooks, flu vaccination summaries

# Background - Michigan

- 9.8 million people
  - Wayne county: 1.8 million
  - Keweenaw county: 2,215
- 83 counties and the City of Detroit make up 45 Local Health Departments



# Report Card Development

- MCIR data provides opportunity to compare county level data
  - Summarize data and existing reports in one place
- Internal MDCH group discussed key data measures
- Presented the idea and received feedback from
  - Michigan Advisory Committee on Immunizations (MACI)
  - Immunization Action Plan Coordinators
  - Michigan Association for Local Public Health (MALPH)
- Quarterly report cards
- SAS 9.3 code developed
  - Macros utilized
  - DDE code used
-

**COUNTY QUARTERLY IMMUNIZATION REPORT CARD**

Data as of: December 31, 2014

**Dickinson**

	2013 Census	MCIR	Diff.	%
Total	26,098	25,710	388	1
Adults (20yrs+)	20,277	19,090	1,187	5
Children (0-19yrs)	5,821	6,620	-799	-13

Michigan is ranked 24th for 4313314

[coverage \(2013 NIS data\)](#)

**Your County Immunization Rank**  
n = 84

<b>43133142 Coverage:</b> (19-35mos)	<b>33</b>
<b>1323213 Coverage:</b> (13-17 Years)	<b>29</b>
<b>Waivers:</b> (Kindergarten, 6th grade & Other)	<b>43</b>
<b>Flu Coverage :</b> (6months through 17 yrs)	<b>10</b>

**Dickinson Immunization Sites**

	Count	(%)
<b>Active MCIR Immunization Sites</b>	29	
Reported in the last 6 months	23	79
<b>Active Vaccines for Children (VFC) Sites</b>	5	
Reported in the last 6 months	5	100
Influenza Sentinel Sites (Reg. Reporters)	0	

**How do your Immunization Measures Rank among Michigan's 83 Counties + Detroit (n=84)**

Measure	Dickinson (MCIR)	% Diff.*	D-Iron (MCIR)	MI Avg (MCIR)	US Average 2013 NIS	Your County Rank	HP 2020 Goal
<b>19 through 35 months</b>							
	%		%	%	%	No.	
Birth Dose Hep B coverage	84.6	-0.5	85.2	79.3	74.2	21	85%
4313314 coverage†	73.9	-2.0	73.9	73.9	72.6	54	80%
43133142 coverage†	53.1	-0.5	52.9	50.1	-	33	-
2+ Hep A	55.6	0.7	55.0	52.0	54.7	32	85%
4+ DTaP	79.7	-2.6	79.0	78.4	92.7	43	90%
4+ PCV	85.1	0.0	84.4	84.9	82.0	52	90%
WIC coverage (4313314)	83.1	-4.7	82.4	79.5	69.1	31	-
Medicaid coverage (4313314)	79.8	-0.9	80.2	76.2	-	42	-
<b>13 through 17 years</b>							
<b>2013 NIS Teen</b>							
132321 coverage‡	72.5	0.2	73.7	65.3	-	38	-
1323213 coverage‡	25.6	0.8	25.1	19.1	-	29	-
1+ Tdap	78.6	0.0	78.9	71.7	86.0	32	80%**
1+ MCV4	78.9	0.3	79.2	71.9	77.8	29	80%**
3+ HPV (Females)	35.8	0.3	34.5	26.9	37.6	27	80%**
3+ HPV (Males)	17.7	1.5	17.8	13.7	13.9	33	-
Mening. Up-to-date (17 yrs)	35.2	-1.5	34.0	36.9	-	64	-
<b>Adults (Census Denominators)</b>							
<b>2013 NHIS</b>							
1+ Tdap (19-64yrs)	37.7	1.7	34.4	31.1	17.2	21	-
PPSV (65+ yrs)	27.0	1.9	27.6	28.1	59.7	51	90%
1+ Zoster (60+ yrs)	20.0	1.7	17.7	17.5	24.2	36	30%
<b>2013-14 Flu Season</b>							
1+ Flu (6mos through 17yrs)	Dickinson		Dick-Iron	MI Avg	US Flu Avg	Rank	HP2020
1+ Flu (6mos through 17yrs)	38.9	3.0	36.7	32.6	56.6	10	70%
Complete 2nd dose (6mo-8yrs)	58.2	5.8	56.7	50.3	-	21	-
1+ Flu (18yrs+)	27.7	5.1	25.9	18.0	41.5	14	70%
<b>School/CC Immunization Reports</b>							
School Completion (Feb '14)	Dickinson		Dick-Iron	MI Avg	Dickinson	Dickinson	Rank
School Completion (Feb '14)	89.5	4.0	90.2	90.7	-	-	58
Percent Waived (K+6+O)	6.1	-1.1	5.7	6.3	Kindgrtn: 7.1%	6 grd: 4.5%	43
Child Care Completion (Oct '13)	85.9	-	87.9	87.0	-	-	65
Percent Waived	2.2	-	2.2	3.6	-	-	36

\* % difference in the county since the last report card; Flu data shows difference between seasons; School and CC diff. between annual reports

† 4313314(2): 4 DTaP, 3 Polio, 1 MMR, 3 Hib, 3 HepB, 1 Varicella, 4 PCV, (2 HepA)

‡ 132321(3): 1 Tdap, 3 Polio, 2 MMR, 3 HepB, 2 Var, 1 MCV4, (3 HPV-Males & Females)

\*\* The adolescent Healthy People 2020 age group is 13 through 15 yrs and the goal is 90% for PPSV for persons 65 and older.

[Reference the FAQs for additional definition including information on 1+, 2+ and 3+.](#)



# County Population Summary

	<b>Census</b>	<b>MCIR</b>	<b>Difference (%)</b>
<b>Total</b>	281,723	238,438	43,285 (15%)
<b>Adults (20yrs+)</b>	208,295	157,209	51,086 (24%)
<b>Children (0-19yrs)</b>	73,428	81,229	-7,801 (-10%)

- Provide census and MCIR population data to show how closely they align
  - Encourages updating MOGE status
  - Encourages entering adult immunization data

# County Immunization Providers

	Count
<b>Active MCIR Immunization Providers</b>	118
Reported in last 6 months	88 (74.5%)
<b>Active VFC Providers</b>	7
Reported in the last 6 months	7 (100%)
<b>Influenza Sentinel Sites (Reg. Reporters)</b>	2

- “Active” Immunizing providers
  - Excludes child cares and schools
  - No read-only sites
- Flu Sentinel sites: providers enrolled in the Outpatient Influenza-like Illness Network (ILINet)



# Childhood Data

## How do your Immunization Measures Rank among Michigan's 83 Counties + Detroit (n=84)

Measure	County (MCIR)	% Diff.*	LHD (MCIR)	MI Avg (MCIR)	US Average <a href="#">2013 NIS</a>	Your County Rank	<a href="#">HP 2020</a> Goal
<b>19 through 35 months</b>	%		%	%	%	No.	
Birth Dose Hep B coverage	79.4	-0.7	78.7	79.3	74.2	48	85%
4313314 coverage†	76.4	-2.1	74.4	73.9	72.6	37	80%
43133142 coverage†	50.3	2.4	44.4	50.1	–	45	–
2+ Hep A	52.0	2.7	45.6	52.0	54.7	44	85%
4+ DTaP	78.8	-1.9	77.5	78.4	92.7	50	90%
4+ PCV	85.8	-0.7	84.7	84.9	82.0	46	90%
WIC coverage (4313314)	80.1	-2.4	78.4	79.5	69.1	46	–
Medicaid coverage (4313314)	77.8	-0.3	73.7	76.2	–	53	–

# Adolescent Data

Measure	County (MCIR)	% Diff.*	LHD (MCIR)	MI Avg (MCIR)	US Average <u>2013 NIS</u> Teen	Your County Rank	<u>HP 2020</u> Goal
<b>13 through 17 years</b>							
132321 coverage‡	76.1	1.2	71.6	65.3	–	20	–
1323213 coverage‡	23.1	2.0	21.3	19.1	–	41	–
1+ Tdap	81.3	0.5	78.8	71.7	86.0	17	80%**
1+ MCV4	81.0	0.8	78.7	71.9	77.8	17	80%**
3+ HPV (Females)	32.4	1.5	30.8	26.9	37.6	41	80%**
3+ HPV (Males)	15.5	2.3	15.0	13.7	13.9	49	–
Mening. Up-to-date (17 yrs)	45.9	0.0	42.5	36.9	–	21	–

# Adult and Influenza Data

Measure	County (MCIR)	% Diff.*	LHD (MCIR)	MI Avg (MCIR)	US Average 2013 NHIS	Your County Rank	<a href="#">HP 2020</a> Goal
<b>Adults (Census Denominators)</b>							
1+ Tdap (19-64yrs)	35.1	1.7	33.1	31.1	17.2	29	-
PPSV (65+ yrs)	37.0	1.8	34.4	28.1	59.7	20	90%
1+ Zoster (60+ yrs)	17.3	1.0	21.5	17.5	24.2	49	30%
<b>2013-14 Flu Season</b>				MI Avg	<a href="#">US Flu Avg</a>	Rank	HP2020
1+ Flu (6mos through 17yrs)	32.8	4.0	32.8	32.6	56.6	31	70%
Complete 2nd dose (6mo-8yrs)	53.1	6.7	49.7	50.3	-	32	-
1+ Flu (18yrs+)	23.5	6.9	22.0	18.0	41.5	33	70%

# School and Childcare Data

School/CC Immunization Reports	County	LHD	MI Avg	County	County	Rank
School Completion	91.8	91.5	90.7	-	-	27
Percent Waived (K+6+O)	5.4	5.5	6.3	Kindgtn: 4.6%	6 grd: 4.6%	34
Child Care Completion	87.4	85.5	87.0	-	-	51
Percent Waived	2.3	3.1	3.6	-	-	41

### Michigan Report Card Data

	Report 1 Dec. 31, 2013	Report 2 March 31, 2014	Report 3 June 30, 2014	Report 4 Sep. 30, 2014	Reort 5 Dec. 31, 2014
<b>19 through 35 months (MCIR)</b>	%	%			
Birth Dose Hep B coverage	79.7	79.7	79.8	79.5	79.3
4313314 coverage	75.1	73.9	74.2	74.2	73.9
43133142 coverage	50.2	48.0	48.9	49.1	50.1
2+ Hep A	52.1	49.9	50.8	51.0	52.0
4+ DTaP	79.7	78.5	78.7	78.6	78.4
4+ PCV	85.9	85.2	85.1	85.0	84.9
WIC coverage (4313314)	82.0	80.2	80.5	80.1	79.5
Medicaid coverage (4313314)	77.9	76.5	76.6	76.6	76.2
<b>13 through 17 years (MCIR)</b>					
132321 coverage	59.1	61.9	63.1	64.4	65.3
1323213 coverage	14.2	15.4	16.6	18.1	19.1
1+ Tdap	68.1	69.6	70.4	71.1	71.7
1+ MCV4	68.2	69.7	70.5	71.2	71.9
3+ HPV (Females)	24.2	24.8	25.6	26.3	26.9
3+ HPV (Males)	7.4	8.6	10.3	12.2	13.7
Mening. Up-to-date (17yrs)	-	33.8	34.6	36.3	36.9
<b>Adults (MCIR num/Census denom)</b>					
1+ Tdap (19-64yrs)	23.8	25.9	28.0	29.5	31.1
PPSV (65+ yrs)	23.3	24.2	24.7	26.0	28.1
1+ Zoster (60+ yrs)	14.3	14.8	15.1	15.9	17.5

# Audience



Birth, Death, Marriage and Divorce Records

Physical Health & Prevention

Pregnant Women, Children & Families

Behavioral Health & Developmental Disability

Health Care Coverage

Statistics and Reports

Providers

Inside Community Health

Public Safety & Environmental Health



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## Local Health Department Map

Click on a county to locate the Local Health Department serving that county.



Or select your county from the following list:

[Alcona](#)  
[Alger](#)

[Gratiot](#)  
[Hillsdale](#)

[Missaukee](#)  
[Monroe](#)

- Local Health Departments
- Providers
- Accessible to the public
- From April 1, 2014 – March 15, 2015: 10,094 website hits

[http://www.michigan.gov/mdch/0,4612,7-132-2942\\_4911\\_4914-321114--,00.html](http://www.michigan.gov/mdch/0,4612,7-132-2942_4911_4914-321114--,00.html)



# Evaluation Survey

- Web-based survey distributed January 2015
- Sent to listserv who receives notifications when the report cards are updated
- 114 respondents
  - 87% Local Public Health
  - 11% State Health Department



# Are the Report Cards Useful?

- 101 (88.6%) of the respondents think the report cards provide a very good (54, 47.4%) or good (47, 41.2%) summary of immunization coverage in Michigan's counties
- 95 (83.3%) strongly agree (42, 36.8%) or agree (53, 46.5%) that ranking the counties provides motivation to increase immunization coverage

# Is there too much *or* missing information?

- 78 (68.4%) think the report card is sufficient as is
  - 23 (20.2%) have no opinion
- Suggested changes
  - Add overall HPV (males and females combined)
  - PCV13 for adults
  - Move waiver information to a different report

# Changes in Immunization Programs

- 43% of the respondents have made changes to their immunization program in response to the report cards
  - Increased patient recall efforts
  - Development of targeted interventions
  - Focus on WIC immunization levels
  - Cleaning up immunization data
  - Use the report cards to motivate providers
  - Increased attention from Board of Health

# Summary

- The MCIR provides a wealth of immunization information.
- The report card effectively summarizes county level immunization data across the lifespan in one place, makes it easy to share, allows counties to compare themselves to each other.
- Our partners find the report cards useful and utilize them to increase immunization coverage levels.

# Questions

Cristi Brammer, MPH

Vaccine-preventable Disease Epidemiologist

MDCH, Division of Immunization

Email: [bramerc@michigan.gov](mailto:bramerc@michigan.gov)

Phone: 517-335-8159