



Adolescent Assessment Methods Using KIDSNET Data

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Rhode Island Department of Health

Rhode Island Adolescent Immunization Policies



- ☆☆ Universal Vaccine Policy for <19 year olds
- ☆☆ Since 2009 7th Grade School Regulations for Tdap, 2nd dose Varicella, and Menactra
- ☆☆ Pending Public Hearing School Regulations for HPV and 2nd dose Menactra for Fall 2014
- ☆☆ High School Vaccinate Before you Graduate (VBYG) all public school districts
- ☆☆ Pilot VBYG in select Middle Schools
- ☆☆ State HPV Vaccine made available for males prior to routine recommendation

NIS - Trends of Vaccination Coverage Among Adolescents 13-17 Years of Age Rhode Island, 2008-2012



Vaccine	2008	2009	2010	2011	2012	State Goal
1+ Tdap	41.6	60.1	79.5	87.5	94.0	90.0 (HP 80%)
1+ MenACWY	62.6	75.7	83.5	88.9	94.3	90.0 (HP 80%)
1+ HPV (females)	54.7	68.3	73.0	76.1	73.7	90.0
3+ HPV (females)	31.4	51.7	55.1	56.8	57.7	80.0
1+ HPV (males)	--	--	--	24.6	55.2	N/A
3+ HPV (males)	--	--	--	--	17.7	N/A
2+ Varicella/no dx	60.3	70.5	85.3	83.1	93.3	90.0
2+ MMR	96.3	96.9	97.0	96.6	97.0	90.0
3+ Hep B	98.4	93.8	93.6	95.6	94.3	90.0

-- Data Not Available

Data Source: CDC. National Immunization Survey – Teen, 2008-2012

Adolescent Assessment in Rhode Island



☆☆Goals

- ☆☆ Improve Adolescent Immunization Coverage Rates
- ☆☆ Improve the Completeness and Accuracy of KIDSNET data

☆☆Methods for Improvement

- ☆☆ AFIX
- ☆☆ Immunization Report Cards – Practices
- ☆☆ School Regulations

Adolescent AFIX

☆☆ Practice Selection

- ☆☆ Primary Care sites scheduled for AFIX

☆☆ KIDSNET Input criteria

- ☆☆ Cohort 13 and 14 years old as of 12/31
- ☆☆ Vaccines: 3HPV, 1Tdap, 1 Mening
- ☆☆ All adolescents in cohort or sample of 60
- ☆☆ Common assessment age: 13th birthday

☆☆ Process

- ☆☆ Preliminary assessment shared with provider
- ☆☆ Practice identifies data corrections
- ☆☆ Final assessment reviewed at AFIX visit
- ☆☆ Supplemented with Missing Immunization Report



Practice Reports - Coverage



Report Run: **Thursday, September 26 2013 04:53:45 PM**

Practice Id: **1164**

Practice Name: **PEDIATRIC CLINIC**

Age from: **13 years**

Age up to: **15 years**

As Of: **12/31/2012**

Coverage Assessment Report

Criteria met before the **13 year birthday**

Coverage Combination	# of Children	%
dap (1), Mening (1), HPV (3): 1:1:3	14	23%
Coverage Combination (Males only)	5	17%
Coverage Combination (Females only)	9	30%
Coverage Combination (Excluding HPV)	44	73%

Components of coverage rate:

dap (1): 1	46	77%
lening (1): 1	45	75%
HPV (3): 3	14	23%
HPV (3): 3 (Males only)	5	17%
HPV (3): 3 (Females only)	9	30%

Total Children in the Selected Age Group:	367
Total Children from Age Group Reviewed:	60
(30 Male; 30 Female)	

Forward any corrections by sending a copy of the child's immunization record or identify if the child has left your practice. Please notify:

KIDSNET

Rhode Island Department of Health

3 Capitol Hill

Providence, RI 02908

PHONE 401-222-4220



Adolescent AFIX Results 2012

Practices with >20 in Cohort N=66
Percent as of 13th Birthday

	1 TdaP	1 Mening	3 HPV Female
$\geq 90\%$	39%	29%	0%
$\geq 80\%$	56%	50%	0%
$\geq 70\%$	80%	71%	3%
$\geq 60\%$	88%	88%	8%
$< 60\%$	12%	12%	92%

Adolescent Report Cards



☆☆ Practice Selection

- ☆☆ All Primary Care sites with >20 children in cohort

☆☆ KIDSNET criteria

- ☆☆ 4 Categories: Community Health Center, small, medium or large adolescent cohort
- ☆☆ Cohort 13 - 17 years olds
- ☆☆ Vaccines: 2MMR, 3HepB, 2 Varicella, 1Tdap, 1Mening, 3 HPV, 3HPV Female, 3HPV Male
- ☆☆ Point in time assessment
- ☆☆ Practice rates compared to Top Performing Practice in Category and Statewide

☆☆ Process

- ☆☆ Mailed to Providers
- ☆☆ Mailing - Cover letter, Pediatric, Adolescent, and Lead Screening Report Cards and Understanding Your Coverage Report Card
- ☆☆ Tdap coverage highlighted

YOUR PRACTICE GRADE

PERCENT OF 13-17 YEAR OLDS WITH 1 Tdap		
YOUR PRACTICE	LARGE PRIMARY CARE PRACTICE AVERAGE	STATEWIDE PRACTICE AVERAGE
95	77	75

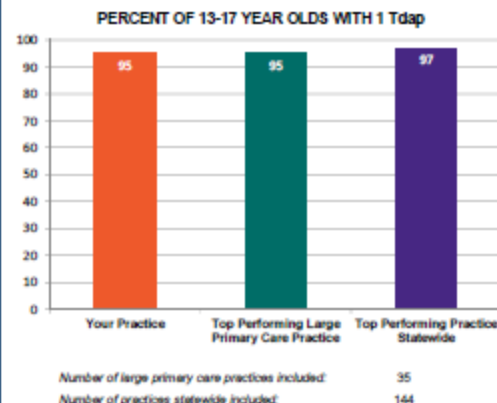
GRADING SCALE

A = 90-100%
 B = 80-89%
 C = 70-79%
 D = 60-69%
 F = 0-59%

YOUR 1 Tdap COVERAGE GRADE

A

TOP PERFORMING PRACTICES



VACCINATION COVERAGE

VACCINE	FEMALE AND MALE PATIENTS						FEMALE ONLY	MALE ONLY
	2 MMR	3 HepB	2 Varicella	1 Tdap	1 Menactra	3 HPV	3 HPV	3 HPV
% IN YOUR PRACTICE	97	96	84	95	97	41	53	27
GRADE	A	A	B	A	A	F	F	F

DATA SOURCE Rhode Island KIDSNET Immunization Data, April 30, 2013.

VACCINATION IN RHODE ISLAND With the exception of HPV, which is recommended at age 11-12 years, the vaccinations listed above comprise the 7th grade entry standards for Rhode Island and are monitored by the Department of Health. Rhode Island has had some of the highest adolescent vaccination rates in the country recently, according to the National Immunization Survey. However, KIDSNET data reveals dramatic variation in the vaccination rates within the state.

ABBREVIATIONS

MMR	Measles, Mumps, Rubella
HepB	Hepatitis B
Tdap	Diphtheria, Tetanus, acellular Pertussis
Menactra	Meningococcal conjugate
HPV	Human papilloma virus

(Additional definitions and formulas on reverse)

DID YOU KNOW? KIDSNET web-based reports are the most efficient way to track vaccination coverage for children in your practice. Practice-specific reports can be generated at <https://kidsnet.health.ri.gov>. To learn more about KIDSNET, please contact Janet Limoges at 222-7681 or Janet.Limoges@health.ri.gov



UNDERSTANDING YOUR ADOLESCENT IMMUNIZATION COVERAGE REPORT CARD

PURPOSE

The Rhode Island Immunization Program has two main goals: to ensure that

1. All children in Rhode Island are appropriately vaccinated
2. The data are reported in KIDSNET so that data can be shared and used to provide the best coordinated care

The purpose of this report is to tell you how well you are vaccinating your patients as currently recorded in KIDSNET, Rhode Island's web-based, integrated child health information system.

DEFINITIONS

Practice Type. Practices are classified into two categories: Health Centers and Primary Care Practices. Primary Care Practices are sub-classified by the primary care adolescent patient population size (patients aged 13-17 years):

- Small Primary Care Practice = 20-99
- Mid-Sized Primary Care Practice = 100-499
- Large Primary Care Practice = ≥500

Data represents the cohort that was 13-17 years old as of 12/31/2012. Any practice with fewer than 20 adolescents in the cohort was removed from the analysis.

PRACTICE TYPE (n = 144)	AVERAGE NUMBER OF CHILDREN PER PRACTICE
Health Center (n = 20)	316
Primary Care Practice (n = 124)	
Small Primary Care (n = 39)	49
Mid-Sized Primary Care (n = 50)	236
Large Primary Care (n = 35)	1,160

Vaccination Coverage. Vaccine coverage is calculated based on vaccines administered as of 12/31/2012.

VACCINATION RATE FORMULAS

The number of adolescents immunized (in the numerator) will vary based on the specified immunization.

YOUR PRACTICE'S Vaccination Coverage = $\frac{\text{Number of adolescents immunized in your practice in the specified birth cohort}}{\text{Total number of adolescents receiving primary care in your practice in the specified birth cohort}} \times 100$

YOUR PRACTICE TYPE'S Vaccination Coverage = $\frac{\text{Number of adolescents immunized in your practice type in the specified birth cohort}}{\text{Total number of adolescents receiving primary care in your practice type in the specified birth cohort}} \times 100$

STATEWIDE Vaccination Coverage = $\frac{\text{Number of adolescents immunized in all practice types in the specified birth cohort}}{\text{Total number of adolescents receiving primary care in all practice types in the specified birth cohort}} \times 100$

For additional information about the Rhode Island Immunization Program, visit www.health.ri.gov/immunization/

For questions related to this immunization report, contact Sue Duggan-Bell at 222-1580 or sue.dugganbell@health.ri.gov



Adolescent Report Card

Results 2013



Practices with >20 in Cohort N=149
Point in Time 13-17 year olds

	1 Tdap	1 Mening	3 HPV Female
≥ 90 %	18%	22%	0%
≥ 80 %	44%	45%	1%
≥ 70 %	64%	66%	3%
≥ 60 %	86%	87%	9%
< 60 %	14%	13%	91%

Comparing Assessments



☆☆ Advantages AFIX

- ☆☆ Measures timeliness - by 13th birthday
- ☆☆ Practices motivated to provide corrected data
- ☆☆ Corrected results reflect “real” rates
- ☆☆ In person opportunity to discuss

☆☆ Advantages Report Cards

- ☆☆ Reach more practices
- ☆☆ Once established less personnel intensive
- ☆☆ Point in time – criteria similar to NIS
- ☆☆ Reflects catch-up efforts
- ☆☆ Rates reflect KIDSNET Data

Comparing Assessments



☆☆☆ Disadvantages AFIX

- ☆☆☆ Staffing limits the number of visits
- ☆☆ Assessment limited to a sample
- ☆☆☆ Practice less concerned with overall completeness and accuracy of KIDSNET data
- ☆☆ Does not reflect catch-up efforts

☆☆☆ Disadvantages Report Cards

- ☆☆ "Real" immunization rates not reflected
- ☆☆ Mailing may be ignored
- ☆☆ Timeliness of immunizations not assessed

Why are KIDSNET rates lower than NIS?



- ☆☆ Motivation Needed to correct data

- ☆☆ Completeness of Data

 - ☆☆ Histories not sent

 - ☆☆ EHR transitions and upgrades

- ☆☆ Accuracy of Data

 - ☆☆ Vaccines connected to wrong codes

 - ☆☆ Inability to add new codes

- ☆☆ Timeliness of Data

 - ☆☆ Closing of Records

 - ☆☆ Non-automated processes

 - ☆☆ Smaller Practices Forget

Teaching CAT data count!

Complete - Accurate - Timely



- ☆☆ To forecast “next doses” correctly
- ☆☆ To coordinate several sources of care
- ☆☆ To meet rules for child care / school entry
- ☆☆ To avoid unneeded vaccine administration
- ☆☆ To investigate / control disease outbreaks
- ☆☆ To receive state-supplied vaccine
- ☆☆ To facilitate a vaccine recall

What next?

☆☆ Update AFIX Process

- ☆☆ Use same age and vaccines as NIS
- ☆☆ TBD: Point in Time or Common age
- ☆☆ TBD: Sample vs Cohort


☆☆ Expand Report Cards

- ☆☆ Provider Report Cards at least annually
- ☆☆ QI Incentives offered to Practices
- ☆☆ Develop School Report Cards
 - ☆☆ 7th Grade – School survey data
 - ☆☆ 7th Grade – KIDSNET data

Child Information -09/16/2013

Name: **SNEEZY D ARAGOM** KIDSNET ID: **6124286**
 Date Of Birth: **02/22/2009** Age: **4y 6m** Gender: **FEMALE**
 KIDSNET Status: **ACTIVE** PCP: **TEST PEDIATRIC PRACTICE**
 Parent/Guardian: **PARENT R ARAGOM** Date of birth: **07/19/1979**

School Requirements:

Kindergarten: 

7th Grade:



For Vaccine Recommendations (scroll right)

Valid Doses	1	2	3	4	5	NEXT DUE
Hepatitis B 3 valid doses	02/23/2009 Hep B Child 0m 1d	05/05/2009 Pediarix 2m 13d	07/15/2009 Pediarix 4m 23d [3]	08/25/2009 Pediarix 6m 3d		End of Series Reached
DTaP 5 valid doses	05/05/2009 Pediarix 2m 13d	07/15/2009 Pediarix 4m 23d	08/25/2009 Pediarix 6m 3d	07/26/2010 DTaP 17m 4d	05/02/2013 Kinrix 4y 2m	Due Future 02/22/2020 - 02/22/2022 Dose BOOSTER
PCV 4 valid doses	05/04/2009 Prevnam 7 2m 12d	07/15/2009 Prevnam 7 4m 23d	08/25/2009 Prevnam 7 6m 3d	07/26/2010 Prevnam 13 17m 4d		End of Series Reached
Polio 4 valid doses	05/05/2009 Pediarix 2m 13d	07/15/2009 Pediarix 4m 23d	08/25/2009 Pediarix 6m 3d	05/02/2013 Kinrix 4y 2m		End of Series Reached
Hib 3 valid doses	05/04/2009 Hib PRP-T 2m 12d	07/15/2009 PedvaxHIB 4m 23d	08/25/2009 Hib PRP-T 6m 3d			Past Due Dose 4
Rotavirus	05/04/2009	07/15/2009	08/25/2009			

Questions/Discussion?



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