



# CHILDHOOD VACCINATION COMPLIANCE: CIS COMBINATION 3

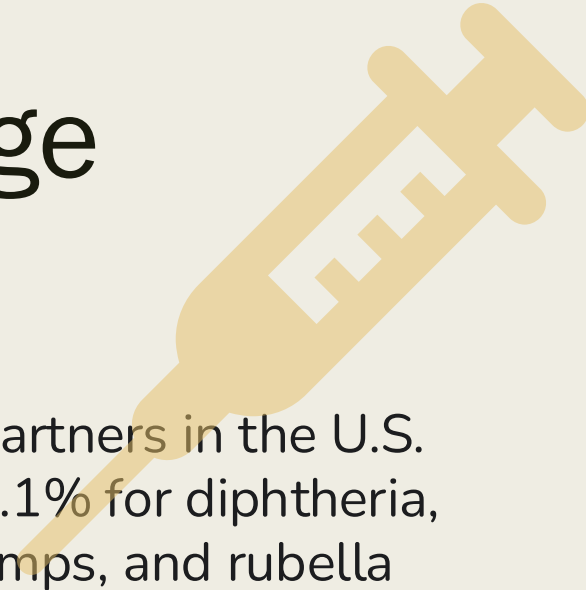
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Population Health Management Clerkship

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# The Problem: Vaccination Coverage



According to the CDC:

- During the 2024-2025 school year, vaccination coverage among kindergartners in the U.S. decreased for all reported vaccines from the year before, ranging from 92.1% for diphtheria, tetanus, and acellular pertussis vaccine (DTaP) to 92.5% for measles, mumps, and rubella vaccine (MMR) and polio vaccine.
- **Coverage with MMR, DTaP, poliovirus vaccine (polio), and varicella vaccine (VAR) decreased in more than half of states, compared with coverage the year before.**
- The number of kindergartners attending school without documentation of completing the MMR vaccine series was about 286,000 during the 2024-2025 school year.

## Exemptions

- During the 2024-2025 school year, exemptions from one or more vaccines among kindergartners in the U.S. increased to 3.6% from 3.3% the year before.
- Exemptions increased in 36 states and DC, with 17 states reporting exemptions exceeding 5%.

# The Benefit of Childhood Vaccination

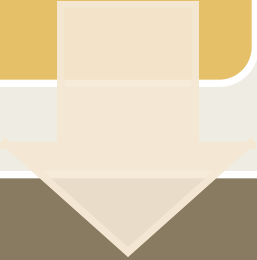
According to the CDC:

About 4 million deaths worldwide are prevented by childhood vaccination every year.

- More than 50 million deaths can be prevented through immunization between 2021 and 2030.
  - By 2030, it is estimated that:
    - Measles vaccination can save nearly 19 million lives.
    - Hepatitis B vaccination can save 14 million lives.

# CIS Combination 3

Healthcare quality measure that tracks the percentage of children who have received seven specific vaccinations by their second birthday.



This information is a part of the Healthcare Effectiveness and Data Information Set (HEDIS) utilized by healthcare plans and other organizations to measure and report on the quality of care they provide

# Pediatric Measures

Identifier	Healthy Louisiana Incentive Measure	Target for Measurement Year 2025
CIS \$\$	Childhood Immunization Status (Combo 3: DTAP, IPV, MMR, HIB, Hepatitis B, VZV, and PCV)	64.72 NCQA Quality Compass 2024 (MY23) Medicaid National 50th percentile (All LOBs [Excluding PPOs and EPOs]: Average) for the year prior to the measurement year
IMA \$\$	Immunizations for Adolescents Evidence-Based Treatment (Combo 2: meningococcal, TDAP/TD, HPV)	34.30 NCQA Quality Compass 2024 (MY23) Medicaid National 50th percentile (All LOBs [Excluding PPOs and EPOs]: Average) for the year prior to the measurement

# Pediatric Measures Specifications: Childhood Immunization Status Combo 3

- **Compliant Population**

- The percentage of children 2 years of age who had four diphtheria, tetanus and acellular pertussis (DTaP); three polio (IPV); one measles, mumps and rubella (MMR); three haemophilus influenza type B (HiB); three hepatitis B (HepB), one chicken pox (VZV); four pneumococcal conjugate (PCV) by their second birthday

- **Total Population**

- Children turning 2 years of age in the calendar year

## Your child needs vaccines as they grow!

### 2025 Recommended Immunizations for Birth Through 6 Years Old

Want to learn more?  
Scan this QR code to find out which  
vaccines your child might need. Or visit  
[www2.cdc.gov/vaccines/childqtz/](http://www2.cdc.gov/vaccines/childqtz/)



VACCINE OR PREVENTIVE ANTIBODY	BIRTH	1 MONTH	2 MONTHS	4 MONTHS	6 MONTHS	7 MONTHS	8 MONTHS	12 MONTHS	15 MONTHS	18 MONTHS	19 MONTHS	20-23 MONTHS	2-3 YEARS	4-6 YEARS
RSV antibody	Depends on mother's RSV vaccine status				Depends on child's health status									
Hepatitis B	Dose 1	Dose 2						Dose 3						
Rotavirus		Dose 1	Dose 2	Dose 3										
DTaP		Dose 1	Dose 2	Dose 3						Dose 4				Dose 5
Hib		Dose 1	Dose 2	Dose 3				Dose 4						
Pneumococcal		Dose 1	Dose 2	Dose 3				Dose 4						
Polio	Dose 1	Dose 2						Dose 3						Dose 4
COVID-19														
Influenza/Flu														
MMR								Dose 1						Dose 2
Chickenpox								Dose 1						Dose 2
Hepatitis A														

#### KEY

- ALL children should be immunized at this age
- SOME children should get this dose of vaccine or preventive antibody at this age
- Parents/caregivers should talk to their health care provider to decide if this vaccine is right for their child

#### Talk to your child's health care provider for more guidance if:

1. Your child has any medical condition that puts them at higher risk for infection.
2. Your child is traveling outside the United States. Visit [www.cdc.gov/travel](http://www.cdc.gov/travel) for more information.
3. Your child misses a vaccine recommended for their age.



FOR MORE INFORMATION  
Call toll-free: 1-800-CDC-INFO (1-800-232-4636)  
Or visit: [www2.cdc.gov/vaccines/childqtz/](http://www2.cdc.gov/vaccines/childqtz/)

# CIS Combo 3

- **DTaP:** 4 doses of Diphtheria, Tetanus, and acellular Pertussis.
- **IPV:** 3 doses of Inactivated Poliovirus.
- **MMR:** 1 dose of Measles, Mumps, and Rubella.
- **HiB:** 3 doses of *Haemophilus influenzae* type B.
- **HepB:** 3 doses of Hepatitis B.
- **VZV:** 1 dose of Varicella (chickenpox).
- **PCV:** 4 doses of Pneumococcal Conjugate.

## What diseases do these vaccines protect against?

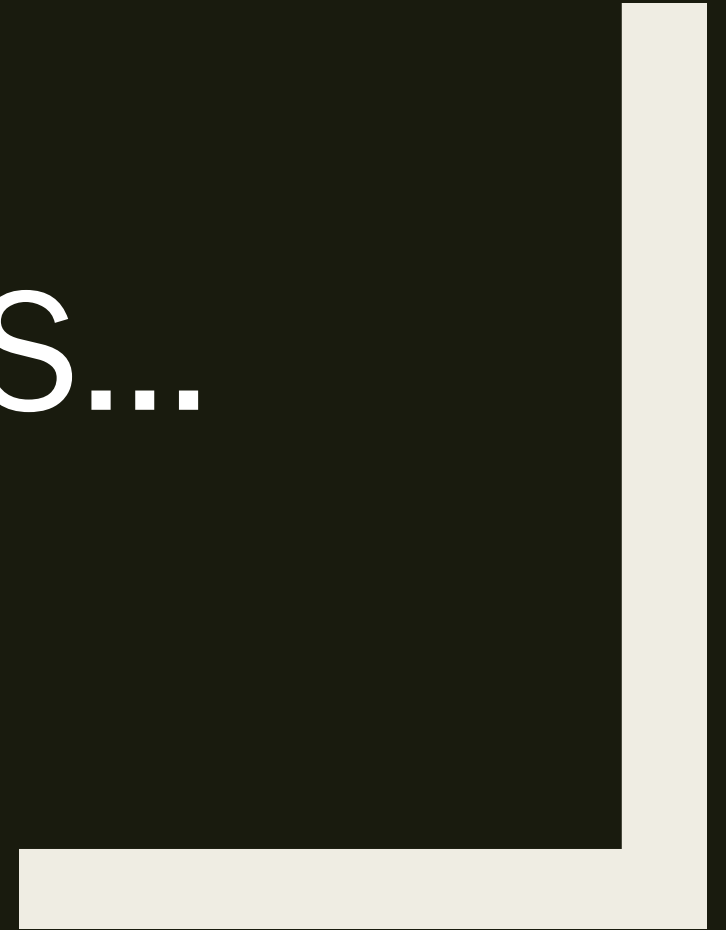
BIRTH-6 YEARS OLD

VACCINE-PREVENTABLE DISEASE	DISEASE COMPLICATIONS
<b>RSV (Respiratory syncytial virus)</b> Common viral infection of the nose, throat, and sometimes lungs; spread through air and direct contact	Infection of the lungs (pneumonia) and small airways of the lungs; especially dangerous for infants and young children
<b>Hepatitis B</b> Contagious viral infection of the liver; spread through contact with infected body fluids such as blood or semen	Chronic liver infection, liver failure, liver cancer, death
<b>Rotavirus</b> Contagious viral infection of the gut; spread through the mouth from hands and food contaminated with stool	Severe diarrhea, dehydration, death
<b>Diphtheria*</b> Toxin covered by a film produced by bacteria that infects the nose, throat, and sometimes skin	Swelling of the heart muscle, heart failure, coma, paralysis, death
<b>Pertussis (Whooping cough)*</b> Contagious bacterial infection of the lungs and always spread through air and direct contact	Infection of the lungs (pneumonia); death; especially dangerous for babies
<b>Tetanus (Lockjaw)*</b> Bacterial infection of brain and nerves caused by spores found in soil and dust everywhere; spores enter the body through wounds or broken skin	Seizures, broken bones, difficulty breathing, death
<b>Hib (Haemophilus influenzae type b)</b> Contagious bacterial infection of the lungs, brain and spinal cord, or bloodstream; spread through air and direct contact	Depends on the part of the body infected, but can include brain damage, hearing loss, loss of arm or leg, death
<b>Pneumococcal</b> Bacterial infection of ears, sinuses, lungs, or bloodstream; spread through direct contact with respiratory droplets like saliva or mucus	Depends on the part of the body infected, but can include infection of the lungs (pneumonia), blood poisoning, infection of the lining of the brain and spinal cord; death
<b>Polio</b> Contagious viral infection of nerves and brain; spread through the mouth from stool on contaminated hands, food or liquid, and by air and direct contact	Paralysis, death
<b>COVID-19</b> Contagious viral infection of the nose, throat, or lungs; may feel like a cold or flu	Infection of the lungs (pneumonia); blood clots; liver, heart or kidney damage; long COVID; death
<b>Influenza (Flu)</b> Contagious viral infection of the nose, throat, and sometimes lungs; spread through air and direct contact	Infection of the lungs (pneumonia), sinus and ear infections, worsening of underlying heart or lung conditions, death
<b>Measles (Measles)*</b> Contagious viral infection that causes high fever, cough, red eyes, runny nose, and rash; spread through air and direct contact	Brain swelling; infection of the lungs (pneumonia); death
<b>Mumps*</b> Contagious viral infection that causes fever, sore throat, and tender swollen jaw; spread through air and direct contact	Brain swelling; painful and swollen testicles or ovaries; deafness, death
<b>Rubella (German Measles)*</b> Contagious viral infection that causes low-grade fever, sore throat, and rash; spread through air and direct contact	Very dangerous in pregnant women; can cause miscarriage or stillbirth; premature delivery; severe birth defects
<b>Chickengroup (chickenpox)</b> Contagious viral infection that causes fever, headache, and an itchy, blistering rash; spread through air and direct contact	Infected sores; brain swelling; infection of the lungs (pneumonia); death
<b>Hepatitis A</b> Contagious viral infection of the liver; spread by contaminated food or drink or close contact with an infected person	Liver failure, death

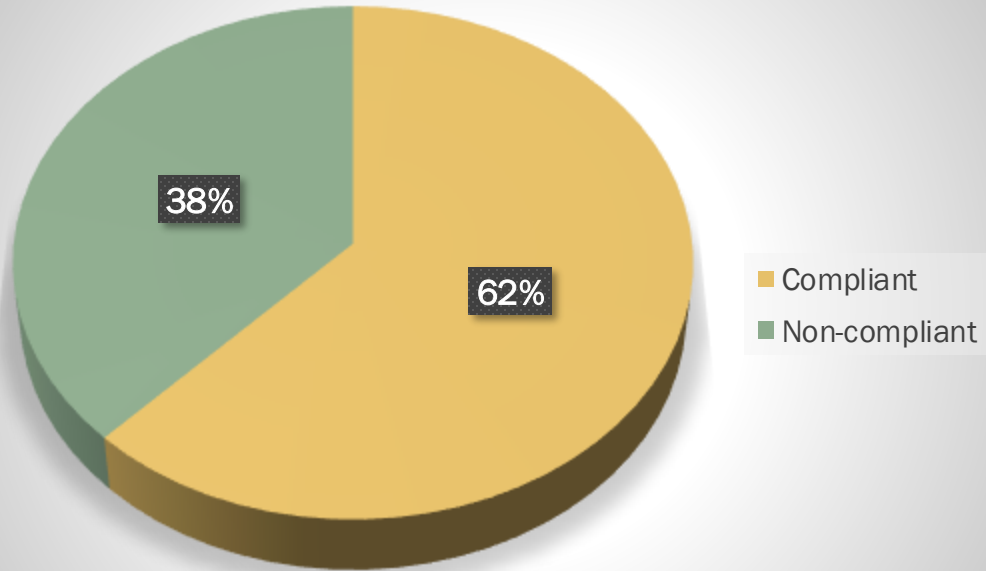
\*DTaP protects against tetanus, diphtheria, and pertussis. \*\*MMR protects against measles, mumps, and rubella.

Last updated: June 2025

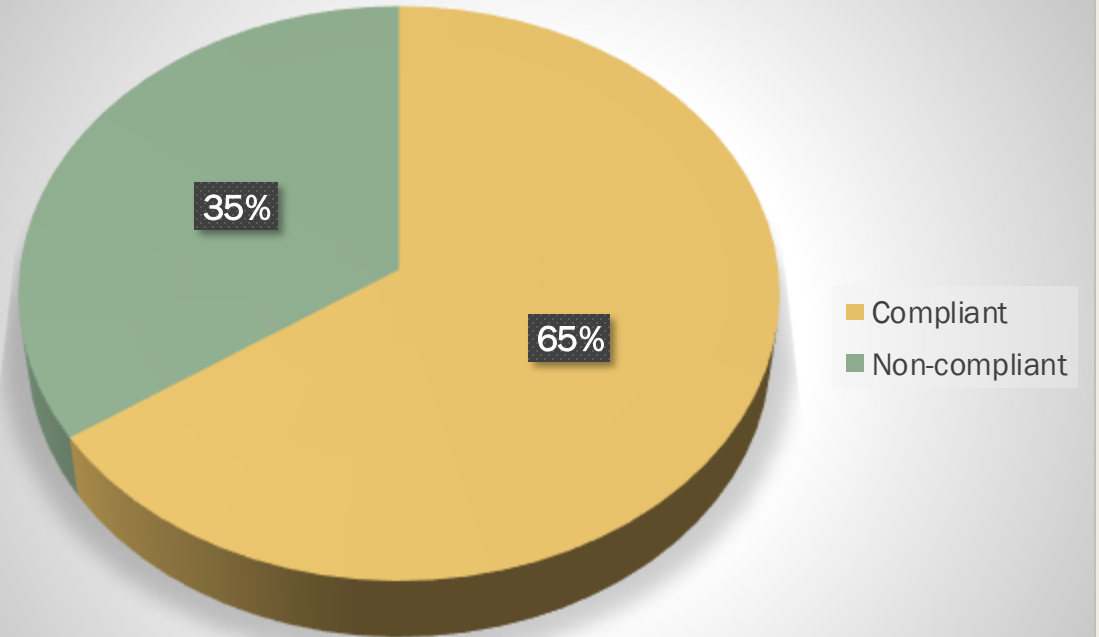
THE NUMBERS...

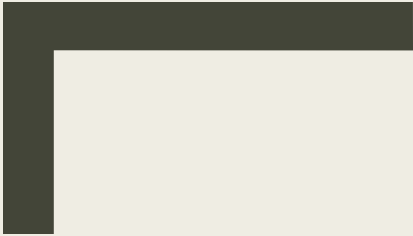
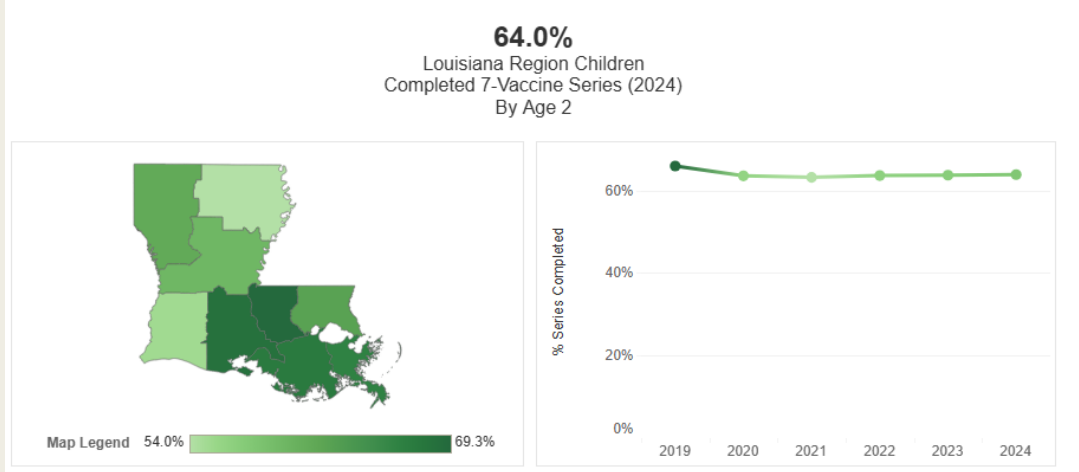
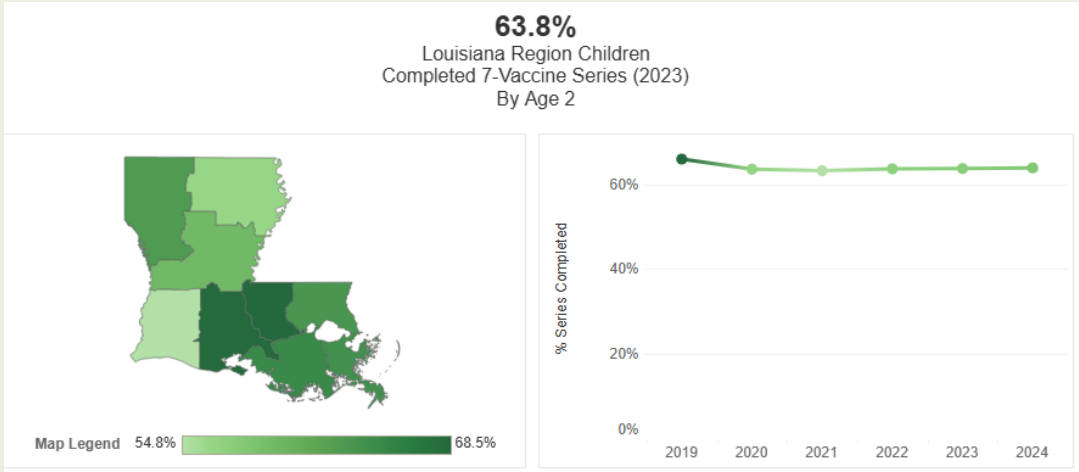


## 2023 Combination 3 Member Compliance Rate



## 2024 Combination 3 Member Compliance Rate



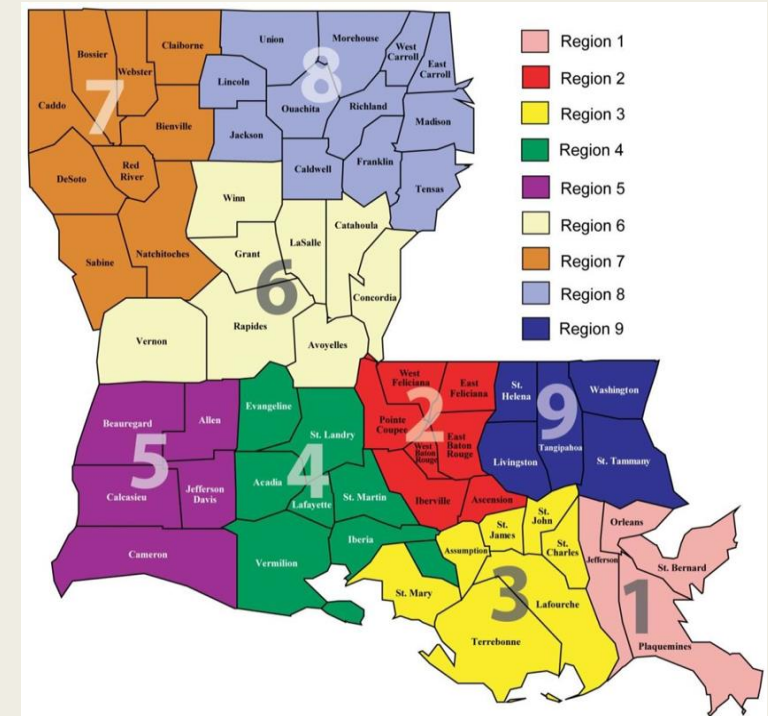
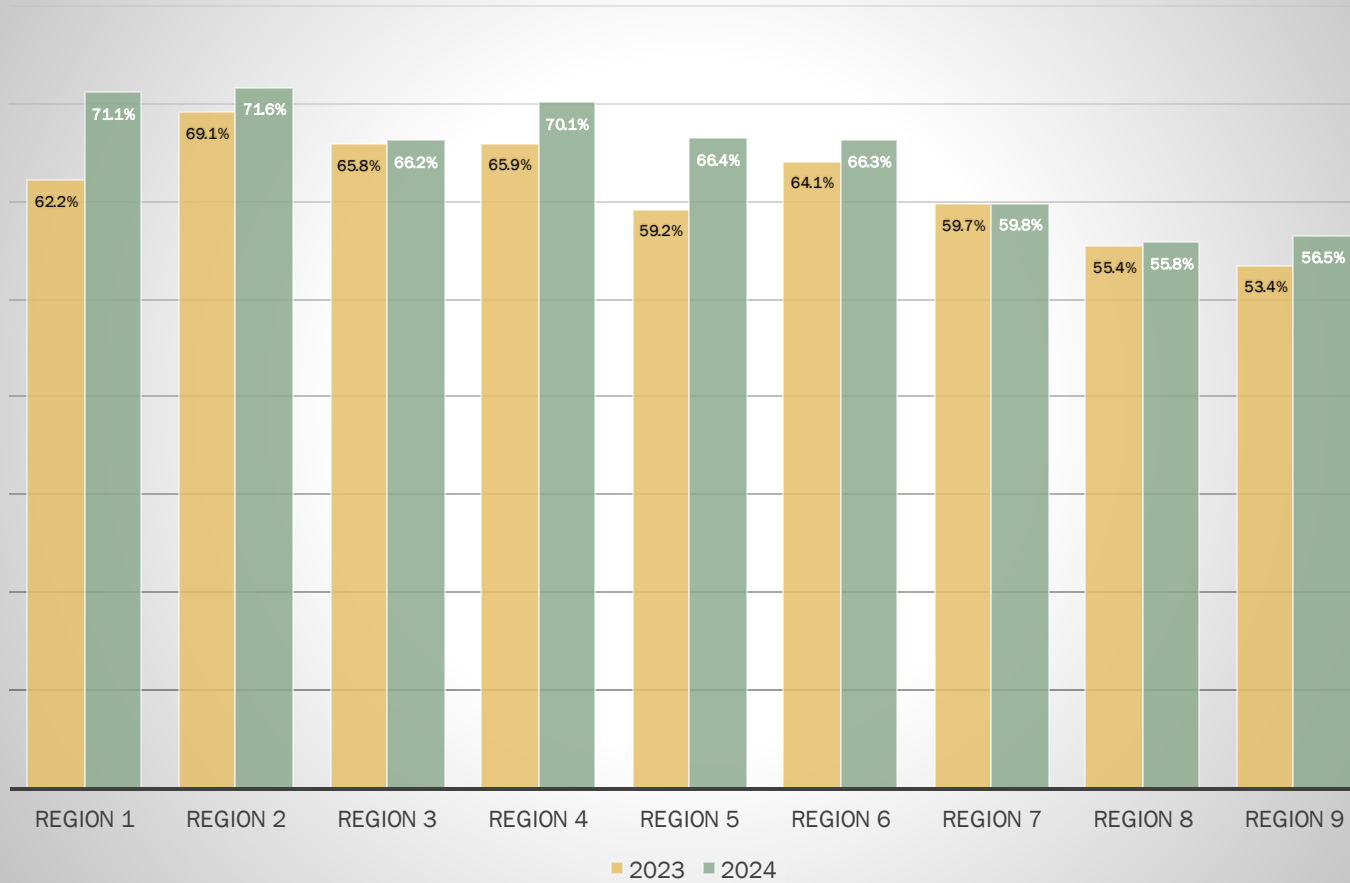


# STATE WIDE COMPLIANCE

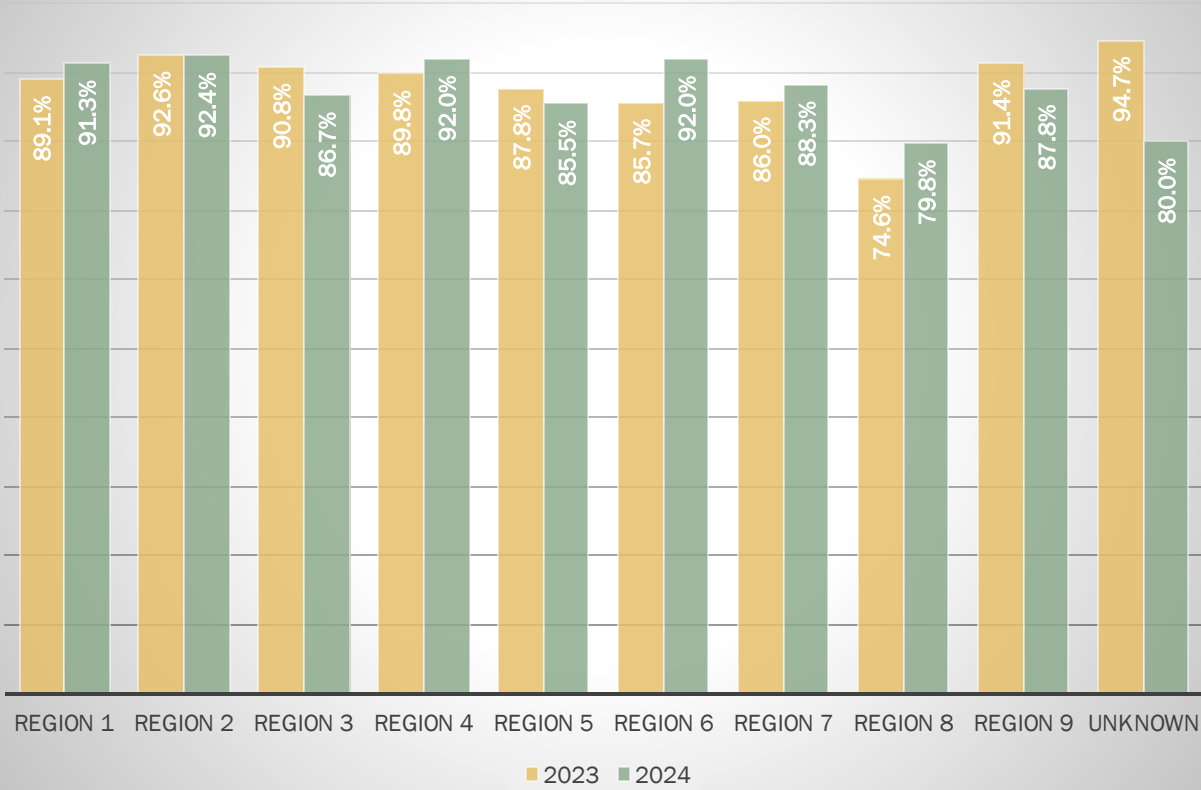


# Member Compliance By Region

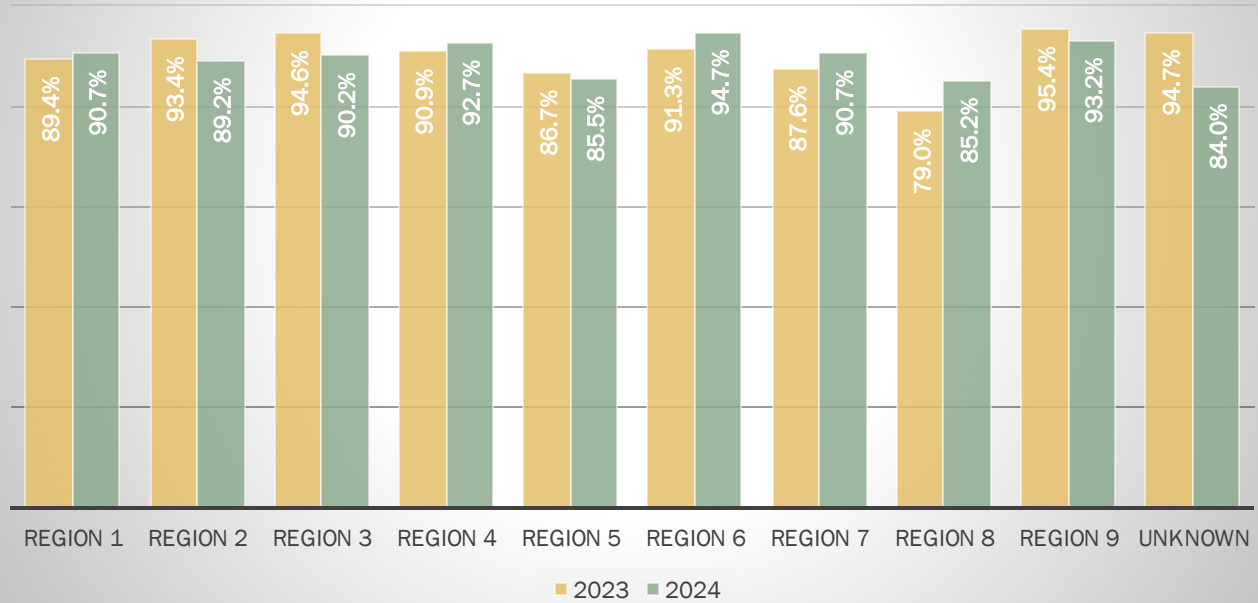
CIS Combo 3 Compliance Rate By Region



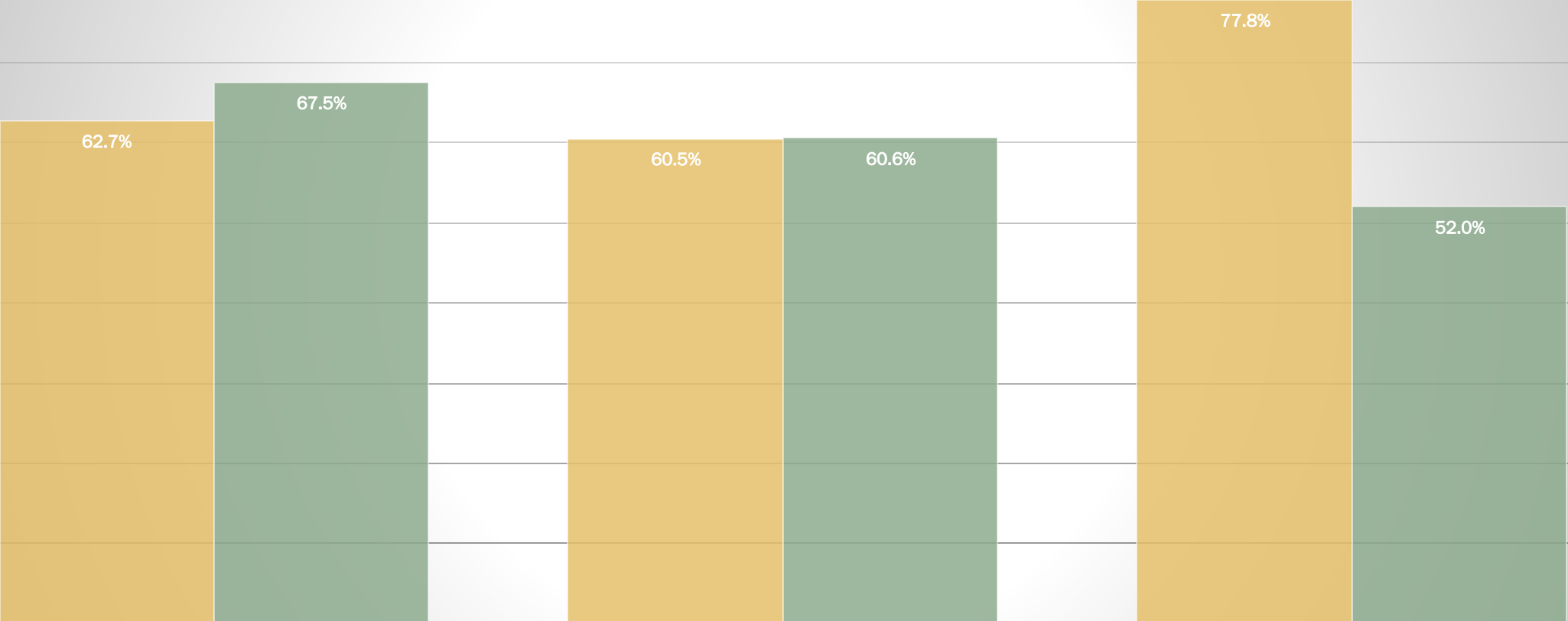
## Well Visit Rate by Region



## PCP Visit Rate by Region



# CIS Combo 3 Compliance Rate By Population Density



URBAN

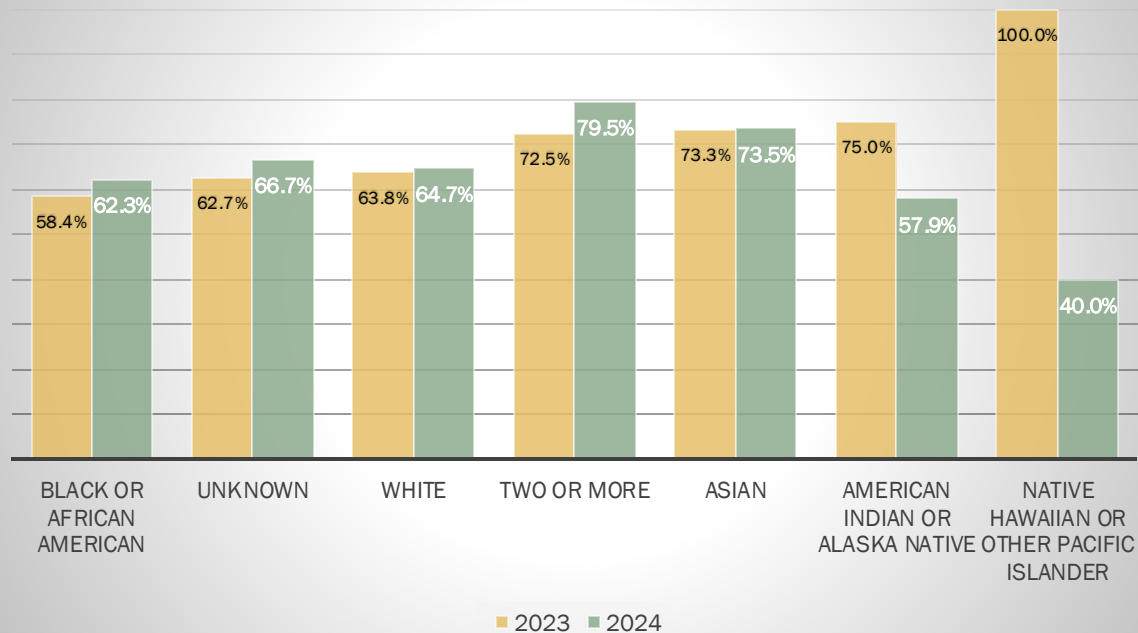
RURAL

UNKNOWN

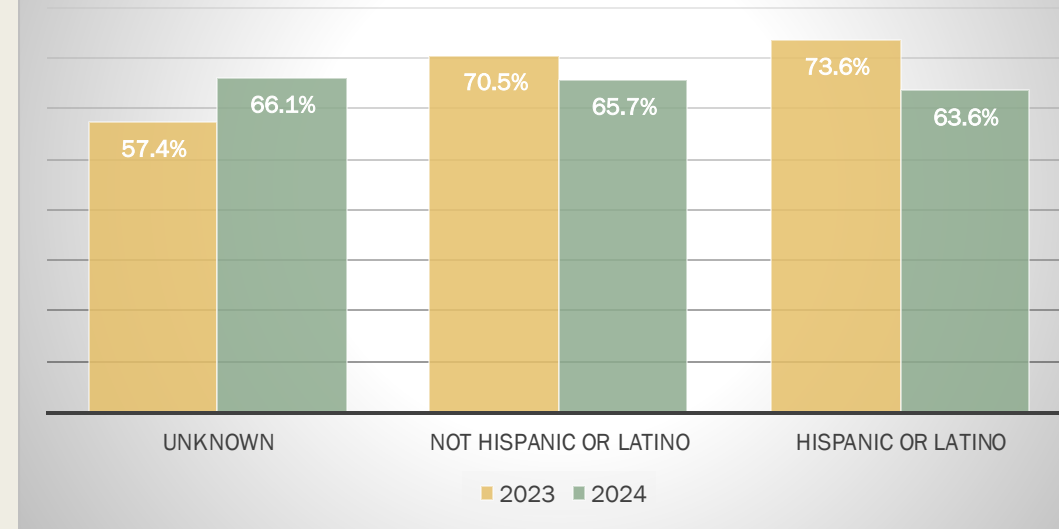
2023 2024

# Compliance by Race and Ethnicity

## CIS Combo 3 Compliance Rate by Race

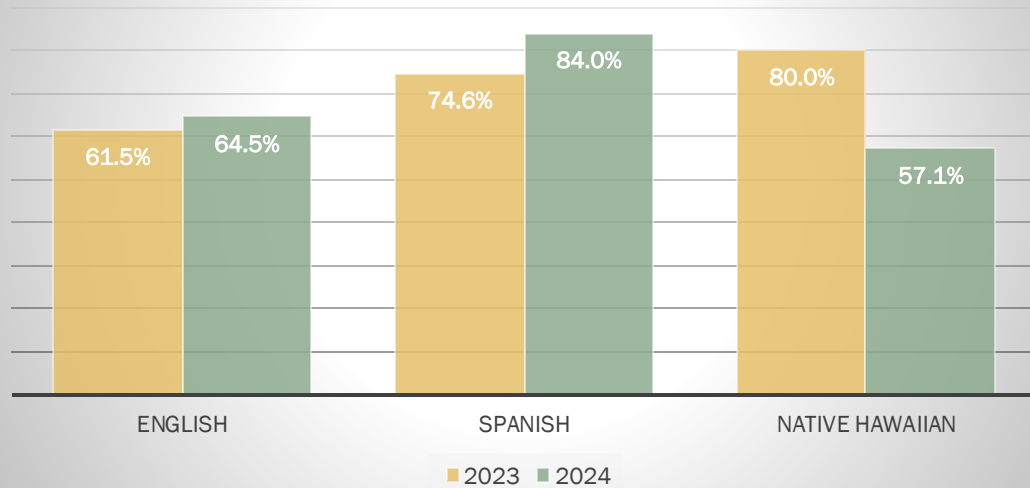


## CIS Combo 3 Compliance Rate by Ethnicity

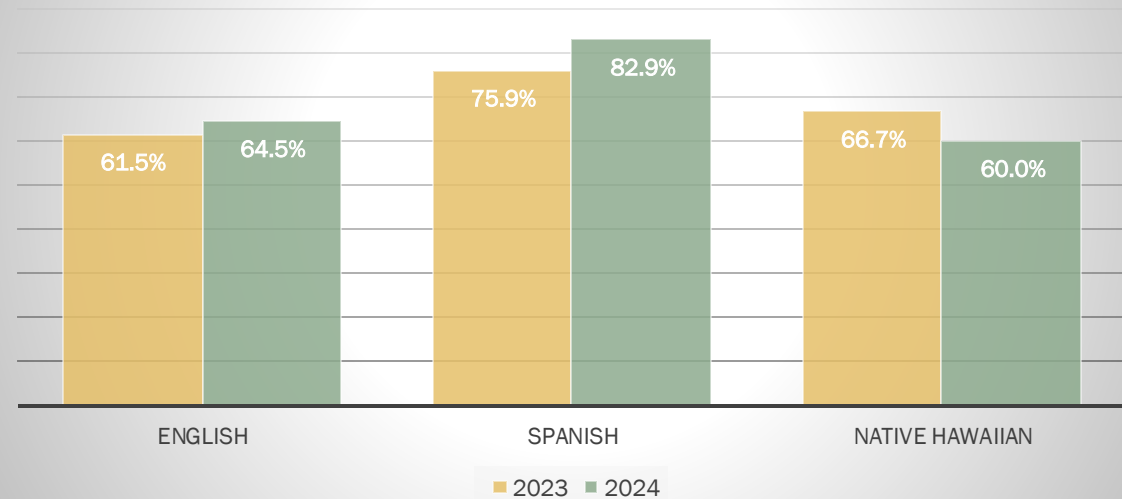


# Compliance by Language

## CIS Combo 3 Compliance Rate by Language Spoken

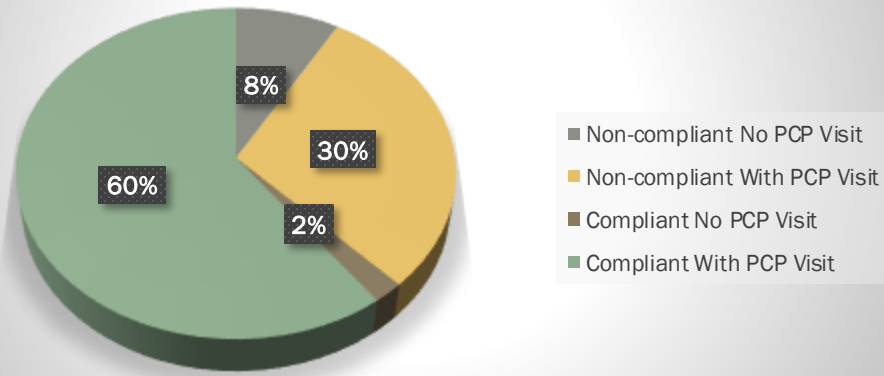


## CIS Combo 3 Compliance Rate by Language Written

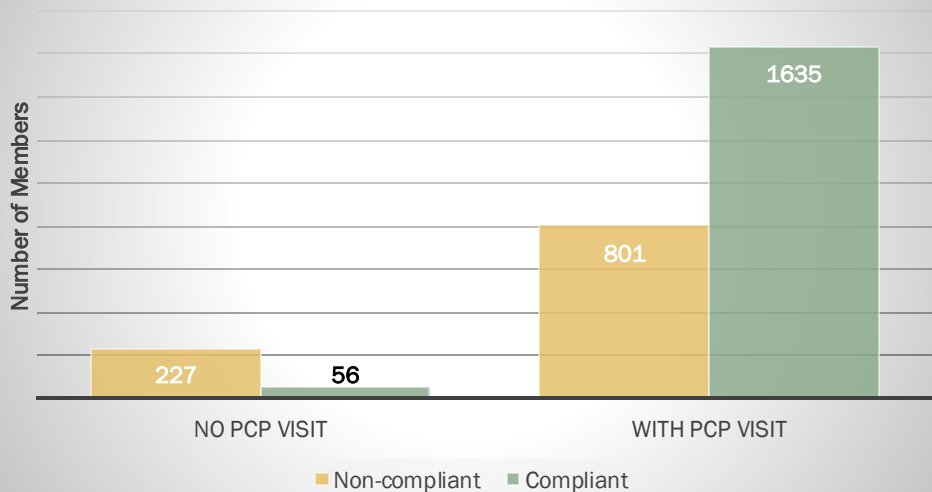


# Compliance and PCP Visits

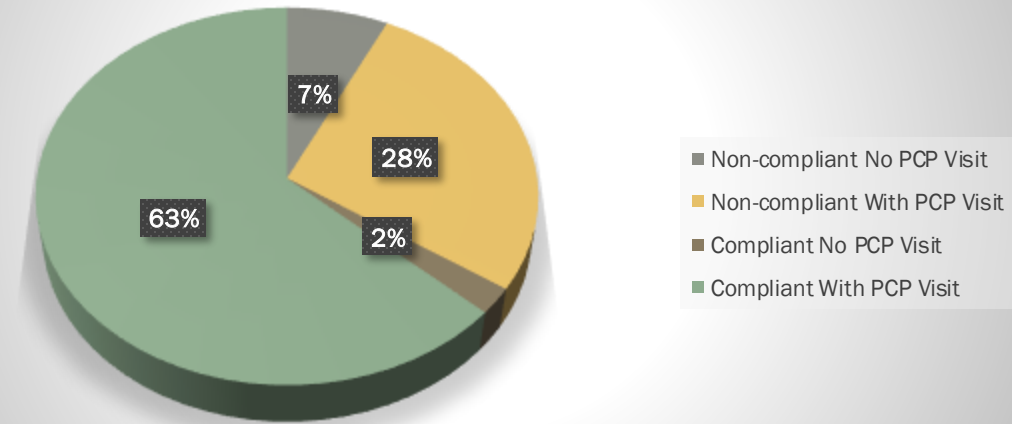
## Compliance Rates and PCP Visits 2023



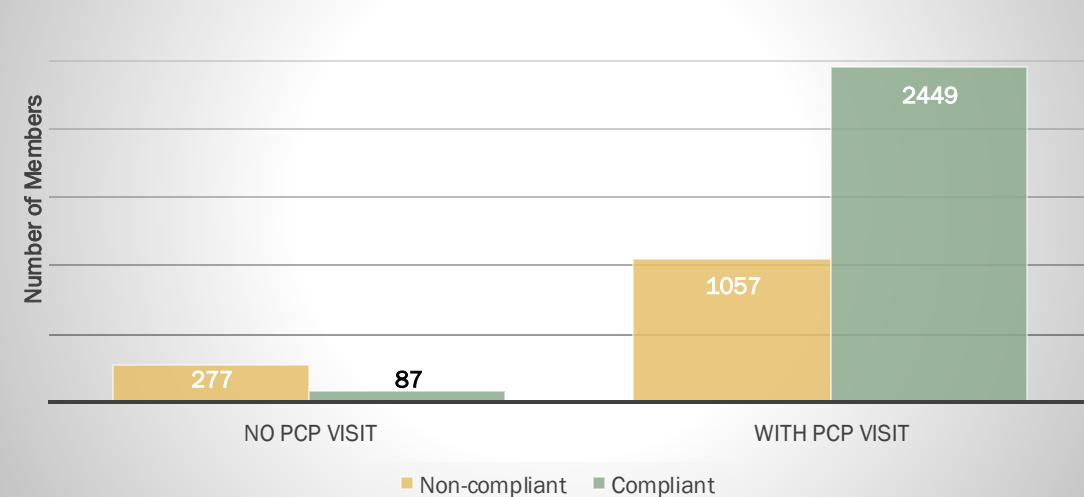
## Compliance and PCP Visits 2023



## Compliance Rates and PCP Visits 2024

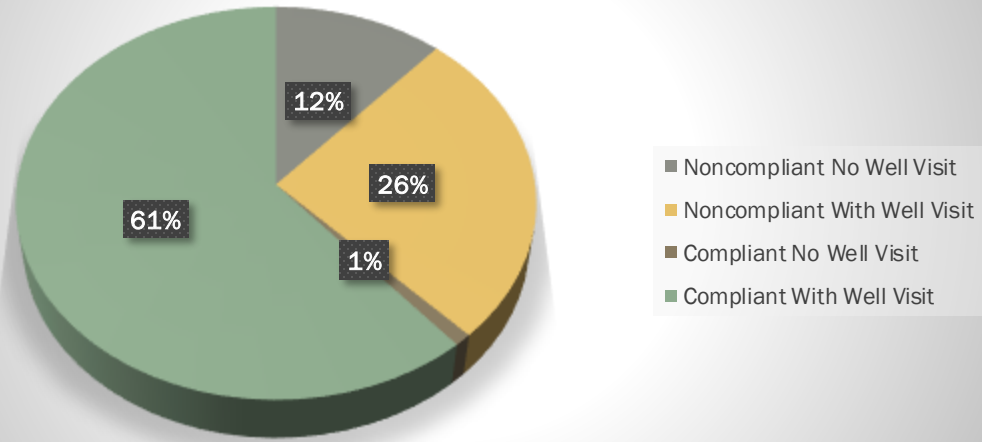


## Compliance and PCP Visits 2024

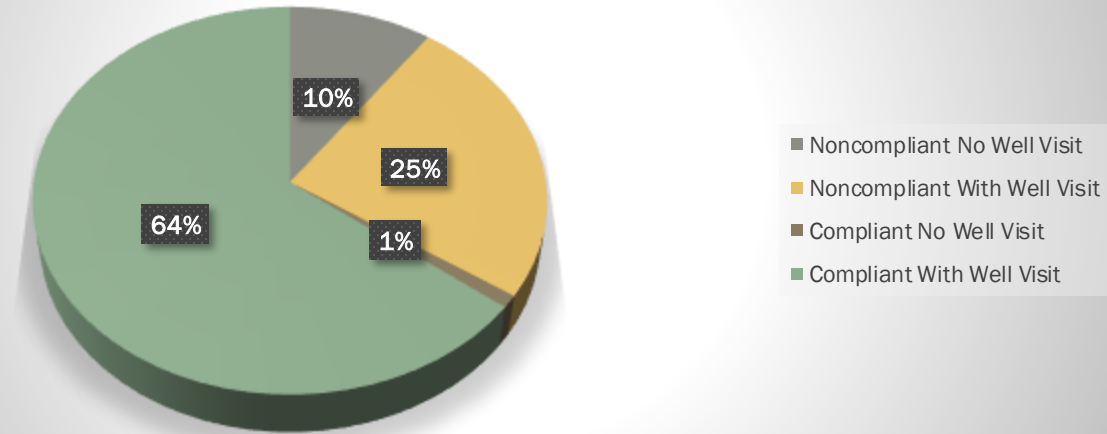


# Compliance and Well Visits

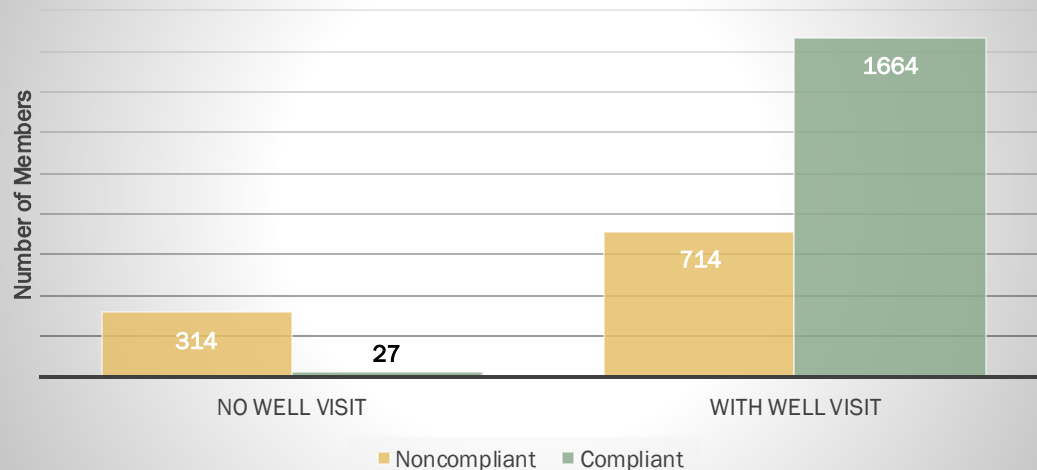
## Compliance Rates and Well Visits 2023



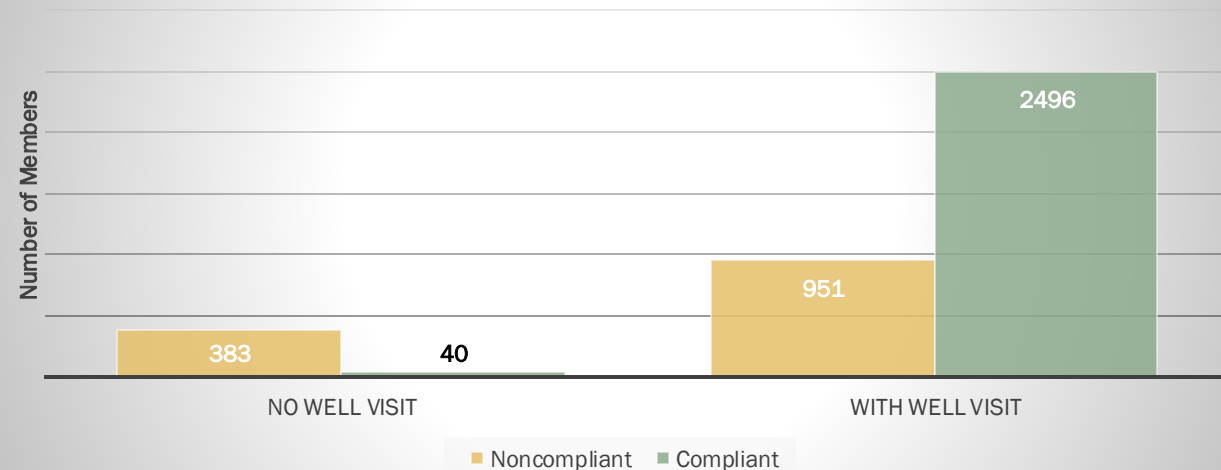
## Compliance Rates and Well Visits 2024



## Compliance and Well Visits 2023



## Compliance and Well Visits - 2024





# Potential Barriers to Vaccination

- Misinformation and negative messaging about vaccine safety
- Distrust in healthcare and medical institutions
- Social determinants of health limiting access
  - *Transportation challenges*
  - *Financial constraints*
  - *Educational disparities*
- Lack of awareness of vaccine availability and importance

# ACLA Well Visit Interventions

- Wellness Days (PNM)
- Member Reassignment
- Multidisciplinary Provider Education
- Provider Newsletter
- RELAY Reminder Texting Campaign
- Care Card Member Incentive
- Member Newsletter(s)
- Summer Letters
- Gap in care Reports
- Postcard Mailer
- RROT/Quality Outreach

# Potential Interventions

## Primary Care Visits

- Schedule Follow-Up appointment before patient leaves
- Providers remind patients of Well Visits
- Syndicate Immunization Resources on Your Website

### Benefits of Syndication

The Content Syndication tool has many [benefits](#) including:

- Shows up-to-date recommended [immunization](#) schedules on your web sites and apps
- Provides access to [CDC](#) schedules without ever requiring your visitors to leave your web site or app
- Share content and media directly to your Facebook, Twitter, and other social networks

### Display Immunization Schedules

Click on the links below to go to [CDC's](#) Public Health Media Library site and copy the embed code to your website.

Having problems with syndicating the schedules? [Get help.](#)

### Healthcare Provider Schedules

[CDC](#) official recommended [immunization](#) schedules for children and adults.

#### Children, Birth to 18 Years

- [Child schedule by age](#)
- [Catch-up schedule](#)
- [Schedule by medical indication](#)

### ON THIS PAGE

#### [Benefits of Syndication](#)

#### [Display Immunization Schedules](#)

#### [Healthcare Provider Schedules](#)

#### [Parent-Friendly Schedules](#)

#### [Display Vaccine Assessment Tools](#)

### RELATED PAGES

#### [Immunization Schedules](#)

#### [Adult Schedule Appendix](#)

#### [Adult Schedule Addendum](#)

#### [Schedule Changes & Guidance](#)

#### [Schedule-Related Resources](#)

#### [CDC Vaccine Schedules App for Healthcare Providers](#)

#### [VIEW ALL Vaccines & Immunizations](#)

## Member Focused

- Send Reminders for Well Visits through member portal
- Send vaccination reminders through portal to non-compliant members
- Use targeted ads on social media sites to inform the community about childhood vaccinations
  - *Incentivize members to follow social media account so they get updates*

# Thank you!

ACLA: Renee Wells, Shea Good, Rhonda Baird,  
Carrie Blades

LSU: Dr. Gregory Randolph, Dana Smith



QUESTIONS?



# Resources

- <https://www.cdc.gov/vaccines/hcp/imz-schedules/syndicate-resources.html>
- <https://www.cdc.gov/vaccines-children/about/index.html>
- <https://ldh.la.gov/page/5227>
- ACLA Measures Powerpoint
- ACLA IMMUNIZATIONS\_QIA\_2025
- ACLA WCV\_QIA\_2025