

# Immunization Service Provider Call

July 2024

Please place your name, and  
provider in the chat.



# Agenda

- Adult Immunization Data-Martin and Shanel
- Vaccine Updates -Teja
- HL7- Courtney
- Autodecrementing- Leila
- Guest Speaker  
Lauren Speer, BSN, RN  
Nursing Service, OSDH
- Looking Forward

05/17/24



# Vaccine Updates (Pneumococcal, TDAP, Shingles)

Shanel Byron



# Pneumococcal Vaccine

## Coverage Statistics

- Pneumococcal vaccines help protect against some of the more than 100 serotypes of pneumococcal bacteria.
- Pneumococcal disease contributes to the U.S. burden of pneumonia, meningitis, bacteremia, sinusitis, and otitis media.

## Vaccination of Adults 65 Years or Older

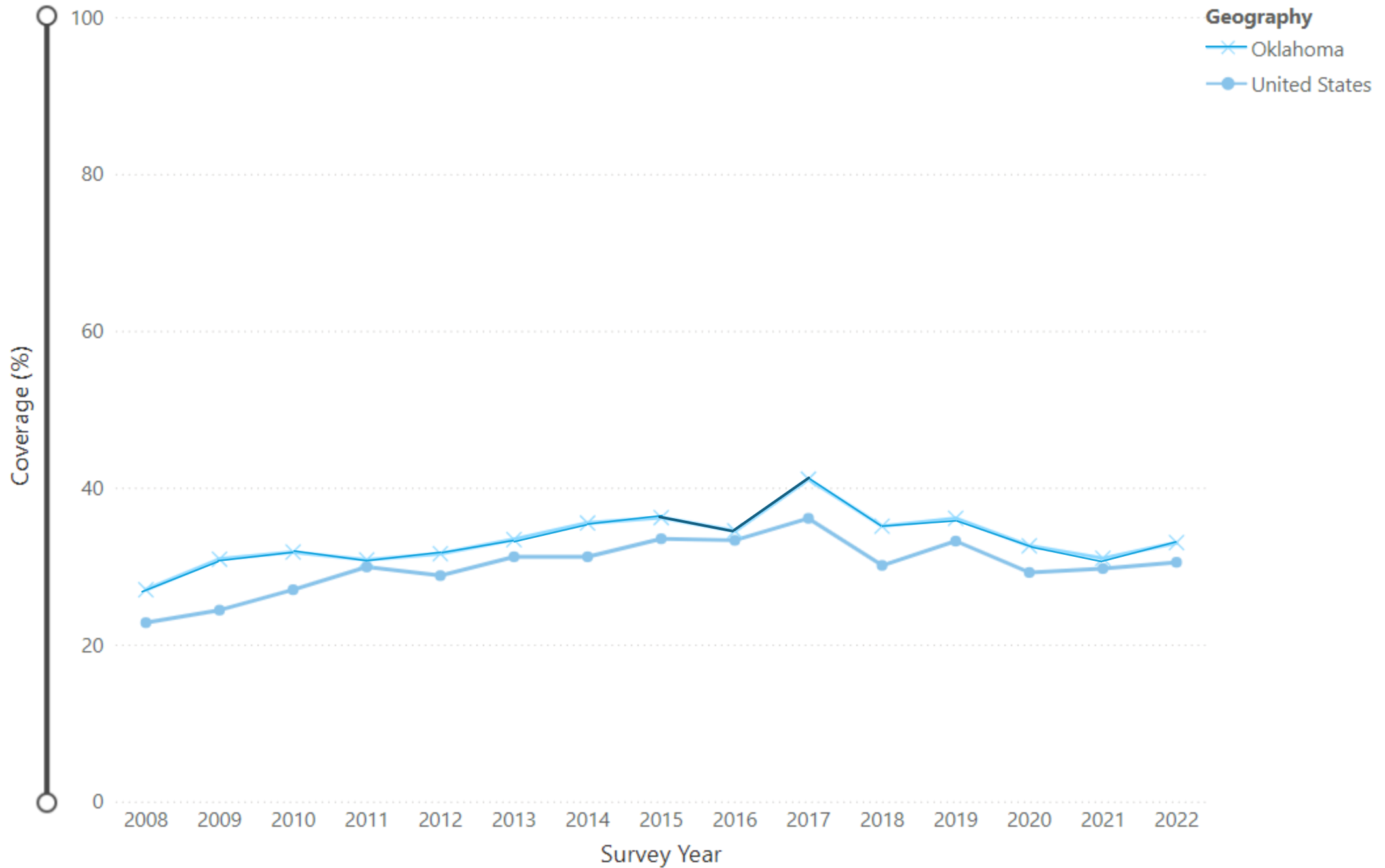
### Routine Recommendation

CDC recommends routine administration of pneumococcal conjugate vaccine (PCV15 or PCV20) for all adults 65 years or older who have never received any pneumococcal conjugate vaccine or whose previous vaccination history is unknown:

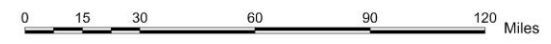
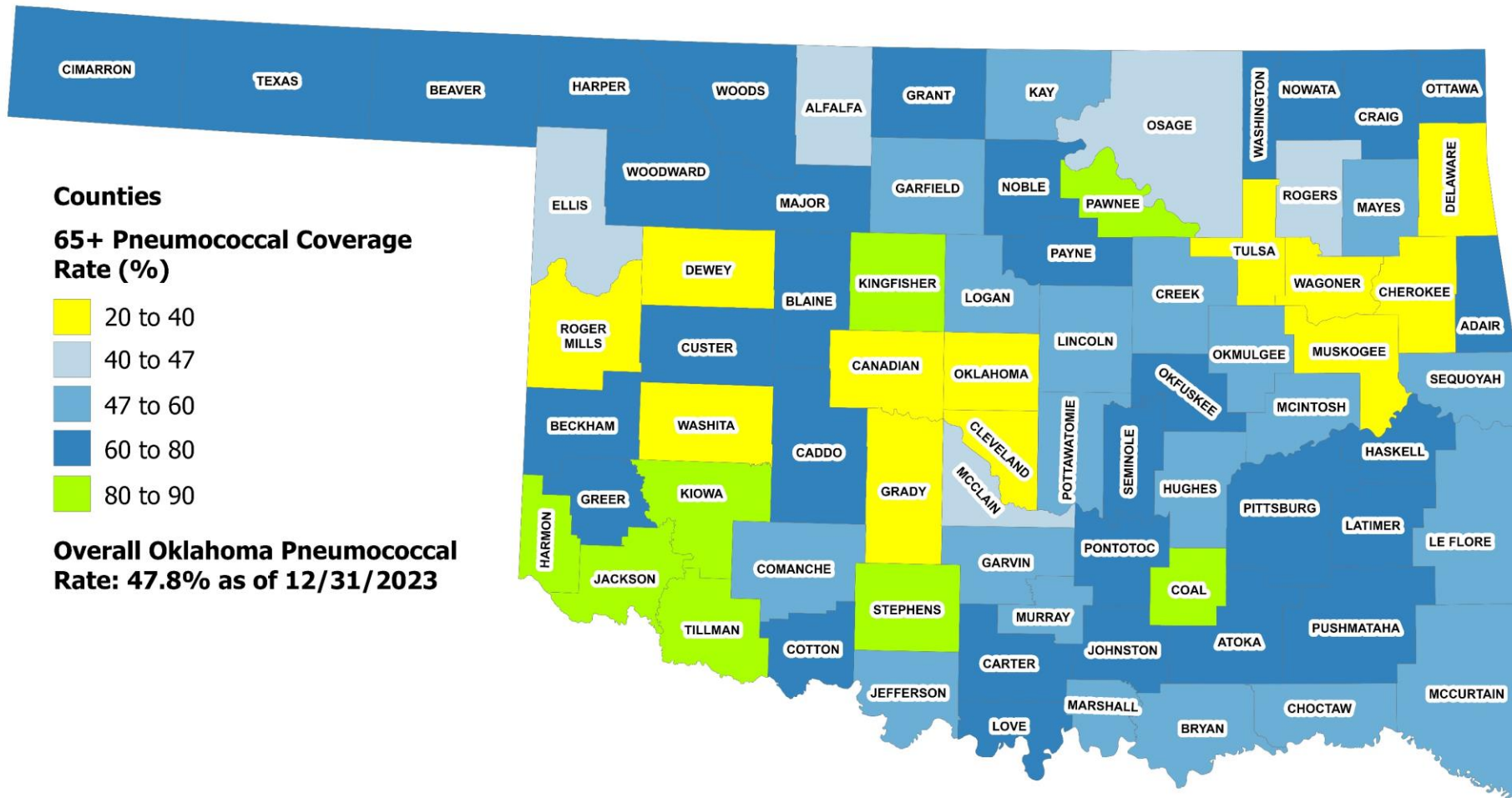
- If PCV15 is used, this should be followed by a dose of PPSV23 one year later. The minimum interval is 8 weeks and can be considered in adults with an immunocompromising condition<sup>†</sup>, cochlear implant, or cerebrospinal fluid leak.
- If PCV20 is used, a dose of PPSV23 is NOT indicated.
- See [Pneumococcal Vaccination: Summary of Who and When to Vaccinate](#) for CDC guidance on vaccination options for adults who have previously received a pneumococcal conjugate vaccine.



# Pneumococcal Vaccination Coverage among Adults Age 18-64 Years at Increased Risk, BRFSS



# Oklahoma Pneumococcal (1+ Shots) Coverage Rates by County, 65+ Years

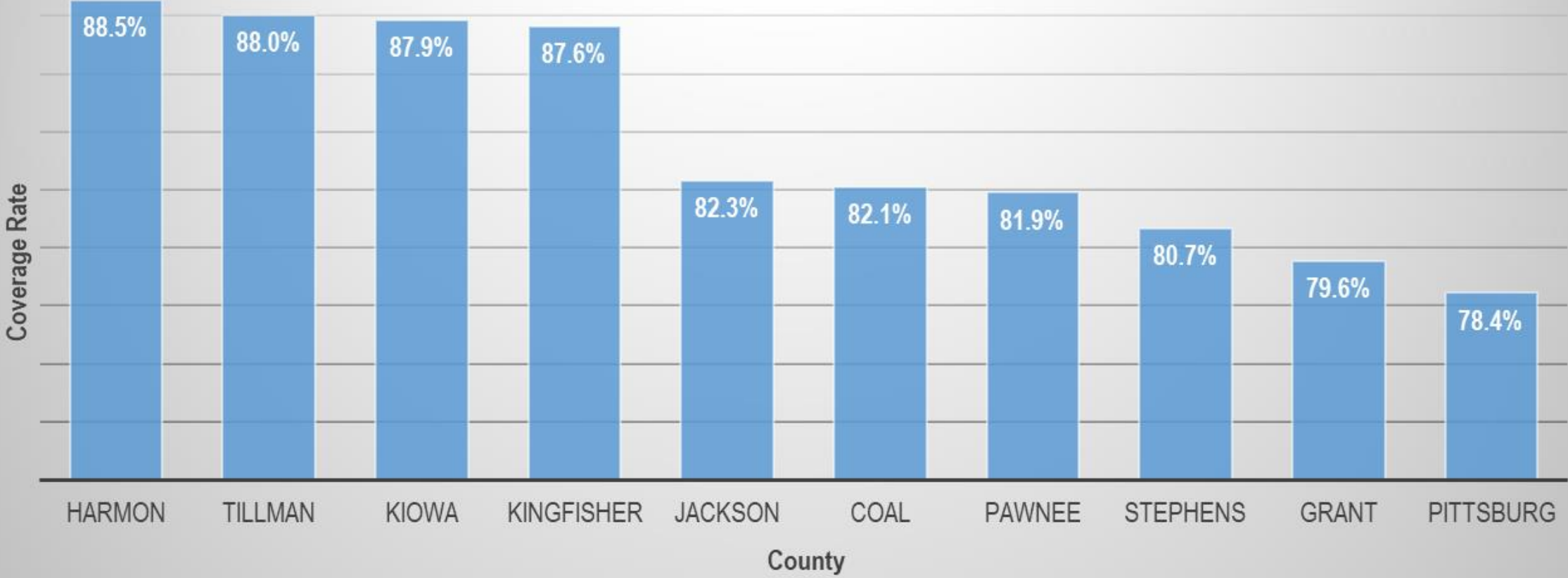


Data Source: OSIIS database and 2020 US Census. Current Pneumococcal completion data pulled as of 12/31/2023 from OSIIS for patients 65+ years old with at least 1 shot. Coverage rates calculated using a combination of OSIIS and 2020 US Census data.



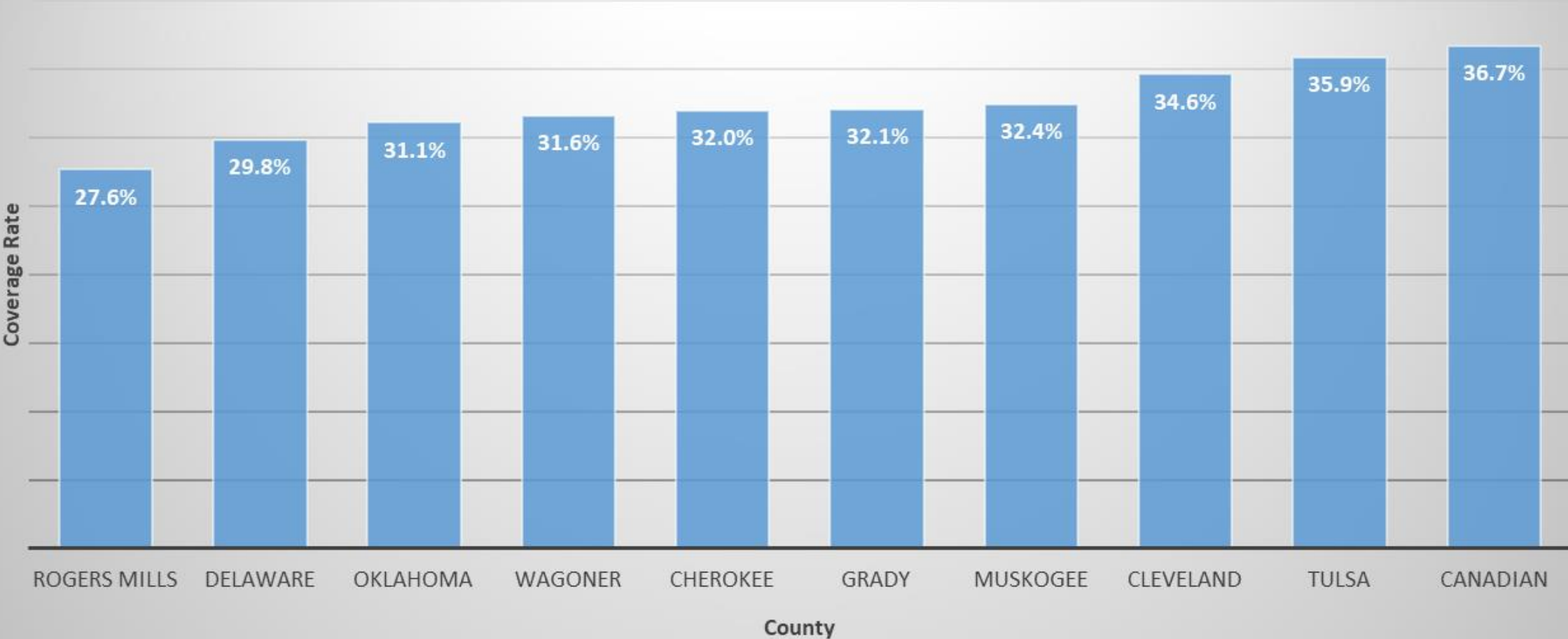
# 2023 DATA REVIEW: ADULT PNEUMOCOCCAL 1+ COVERAGE RATE, TOP TEN

## 2023 Adult (65+) 1 Dose Pneumococcal Rate, Top Ten, OSIS



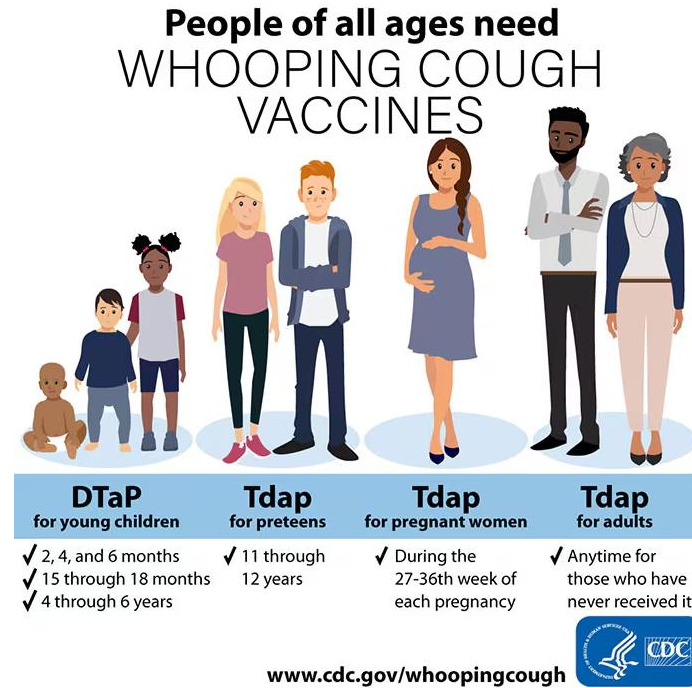


## 2023 Adult (65+) 1 Dose Pneumococcal Rate, Bottom Ten, OSIS



# Tdap (Tetanus, Diphtheria, Pertussis) Vaccine Coverage Statistics

# TDAP VACCINE OVERVIEW: STAYING UP-TO-DATE



**Tdap vaccine** can prevent **tetanus, diphtheria, and pertussis**.

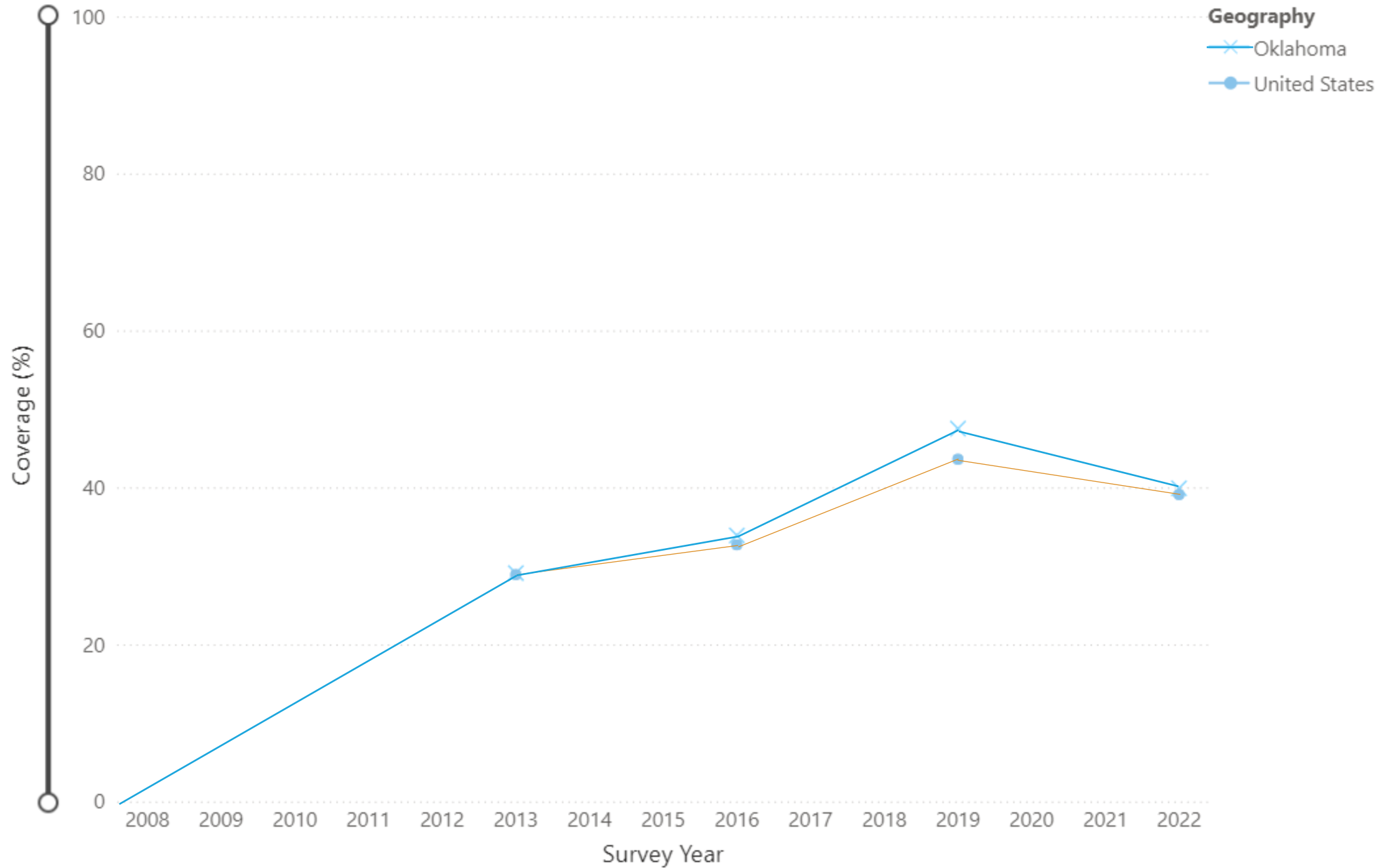
Diphtheria and pertussis spread from person to person. Tetanus enters the body through cuts or wounds.

**Adults** who have never received Tdap should get a dose of Tdap.

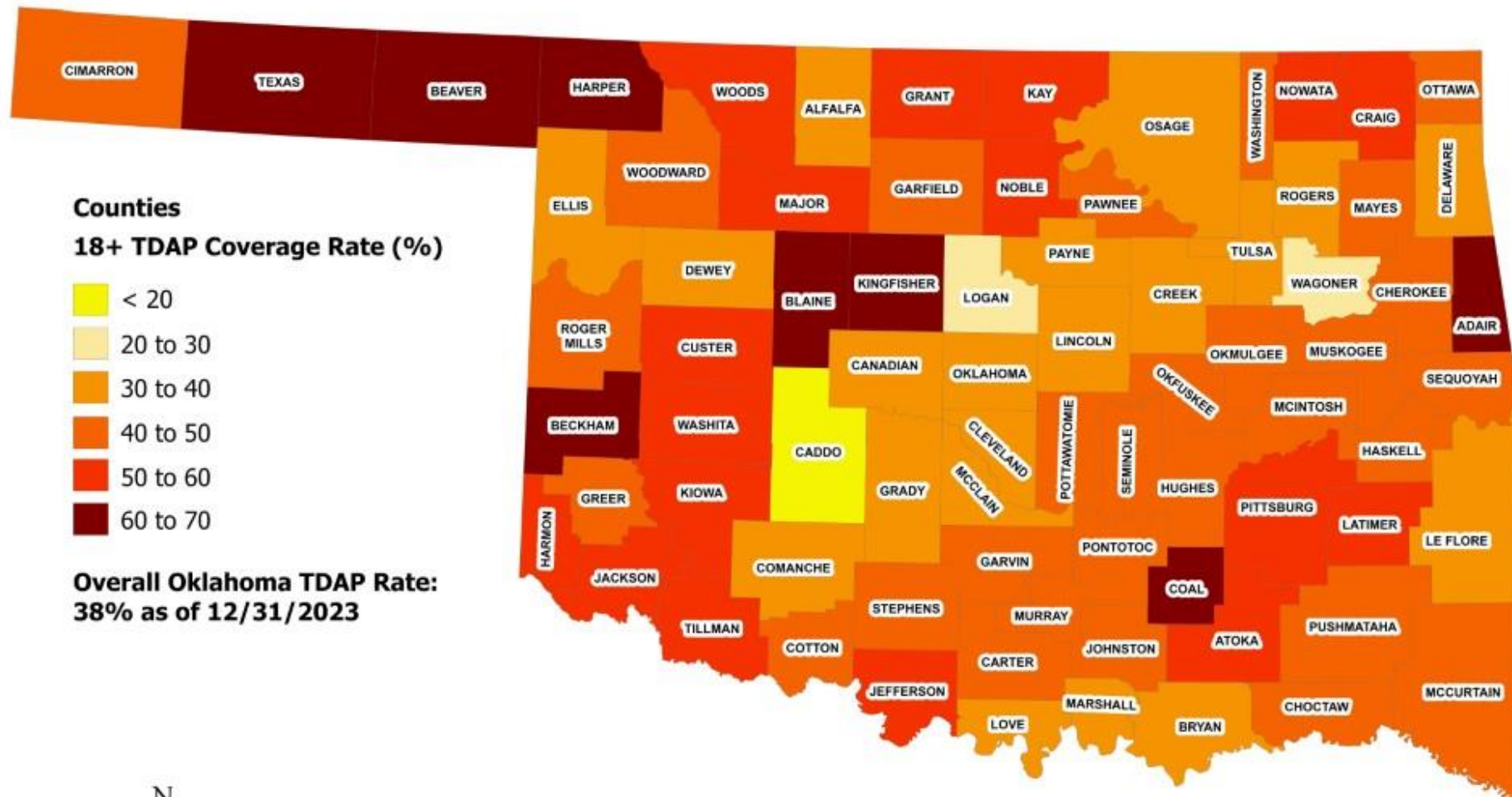
Also, **adults should receive a booster dose of either Tdap or Td** (a different vaccine that protects against tetanus diphtheria but not pertussis) **every 10 years**, or after 5 years in the case of a severe or dirty wound or burn.

 Tdap may be given at the same time as other vaccines.

# Tdap Vaccination Coverage among Adults Age $\geq 18$ Years, BRFSS



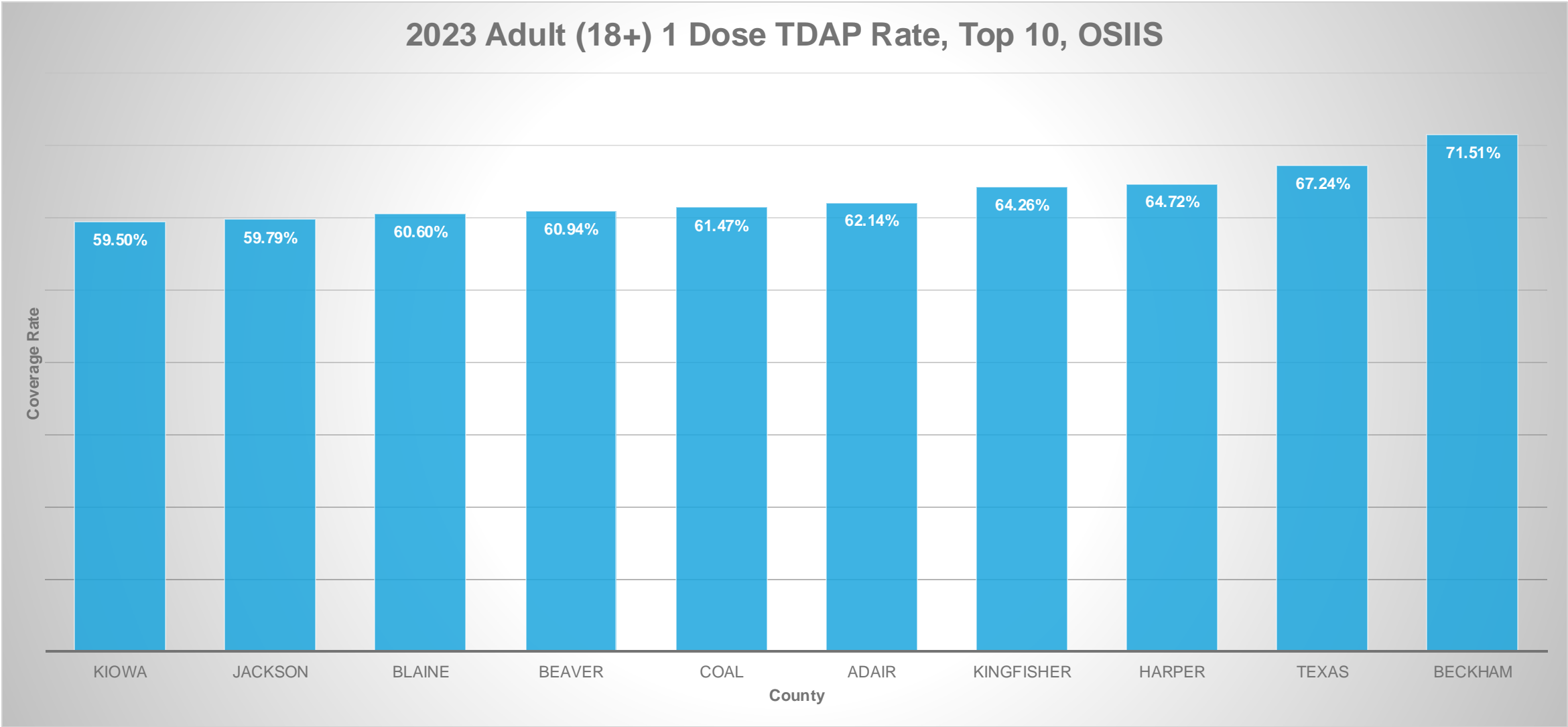
# Oklahoma TDAP (1+ Shots) Coverage Rates by County, 18+ Years Old



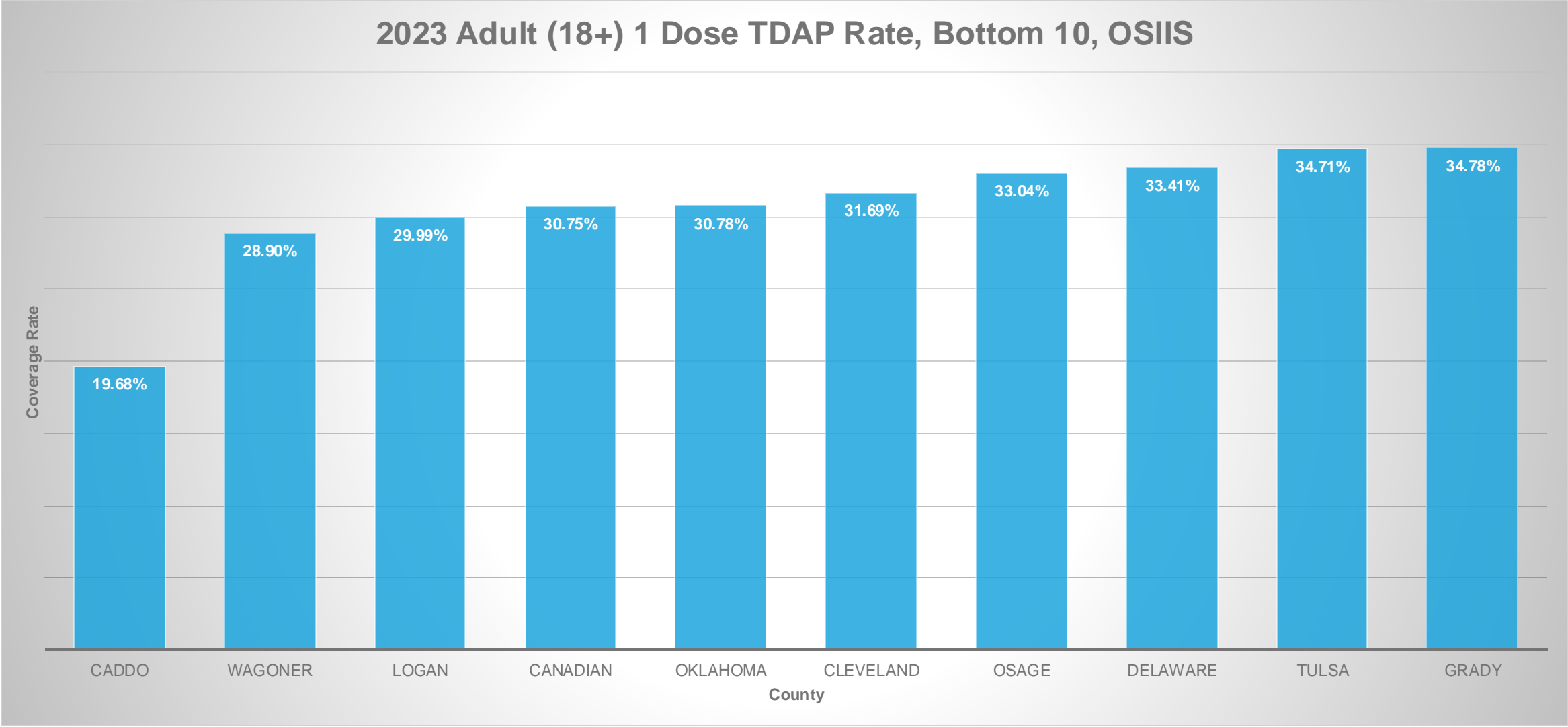
Data Source: OSIIS database and 2020 US Census. Current TDAP completion data pulled as of 12/31/2023 from OSIIS for patients 18+ years old. Coverage rates calculated using a combination of OSIIS and 2020 US Census data.



# 2023 DATA REVIEW: ADULTS AGED 18+, TDAP COVERAGE RATE, TOP TEN



# 2023 DATA REVIEW: ADULTS AGED 18+, TDAP COVERAGE RATE, BOTTOM TEN



# Shingles Vaccine

## Coverage Statistics



## Clinical Guidance

### Dosing schedule

Two doses of RZV are necessary regardless of previous history of shingles or previous receipt of zoster vaccine live (ZVL, Zostavax).<sup>†</sup>

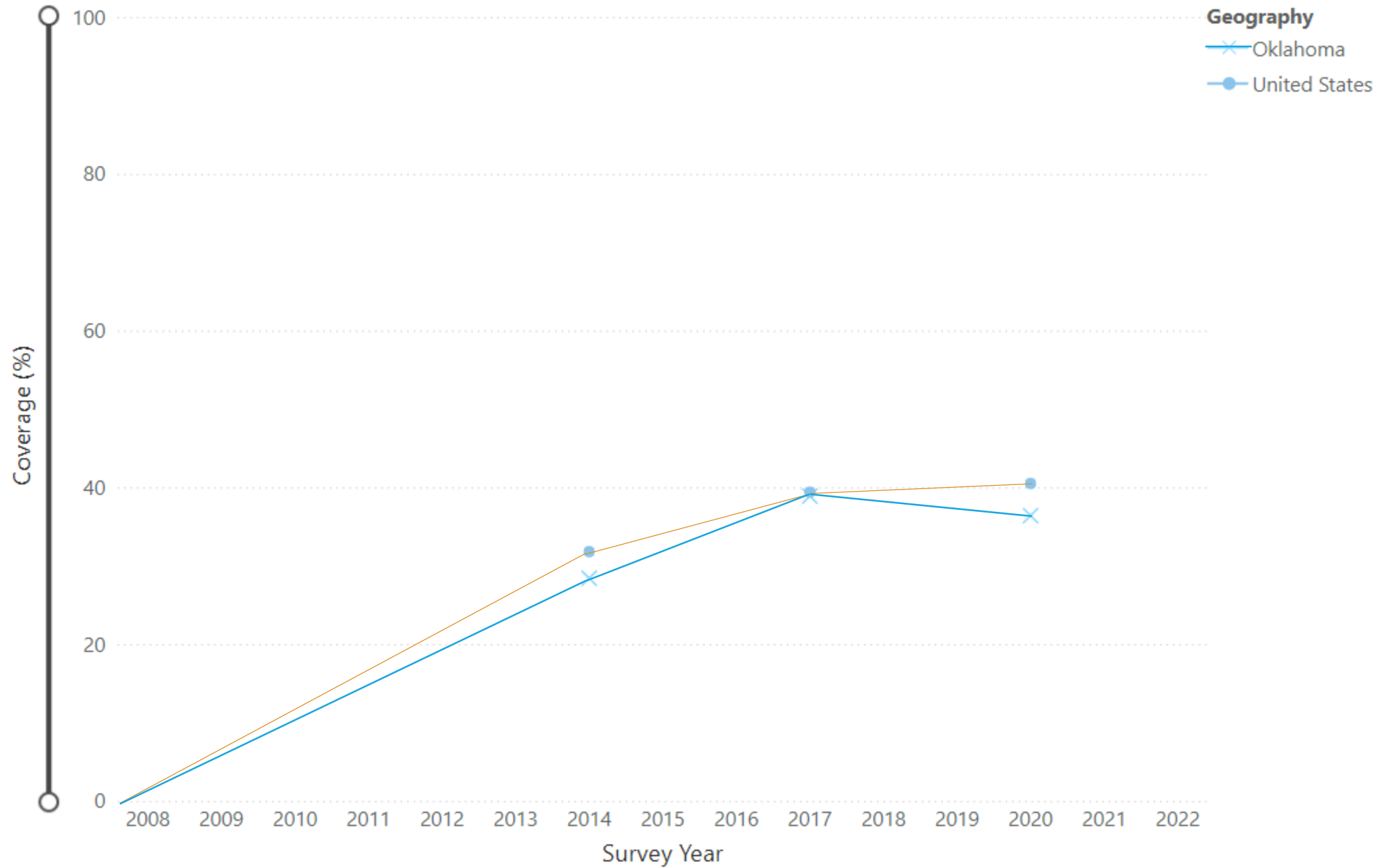
- The second dose of RZV should typically be given 2–6 months after the first.
- However, for persons who are or will be immunodeficient or immunosuppressed and who would benefit from completing the series in a shorter period, the second dose can be administered 1–2 months after the first (2). For example, a shorter interval between doses may facilitate avoiding vaccination during periods of more intense immunosuppression.
- If the second dose of RZV is given sooner than 4 weeks after the first, a second valid dose should be repeated at least 4 weeks after the dose that was given too early.
- The vaccine series does not need to be restarted if more than 6 months have elapsed since the first dose.

### Timing of vaccination

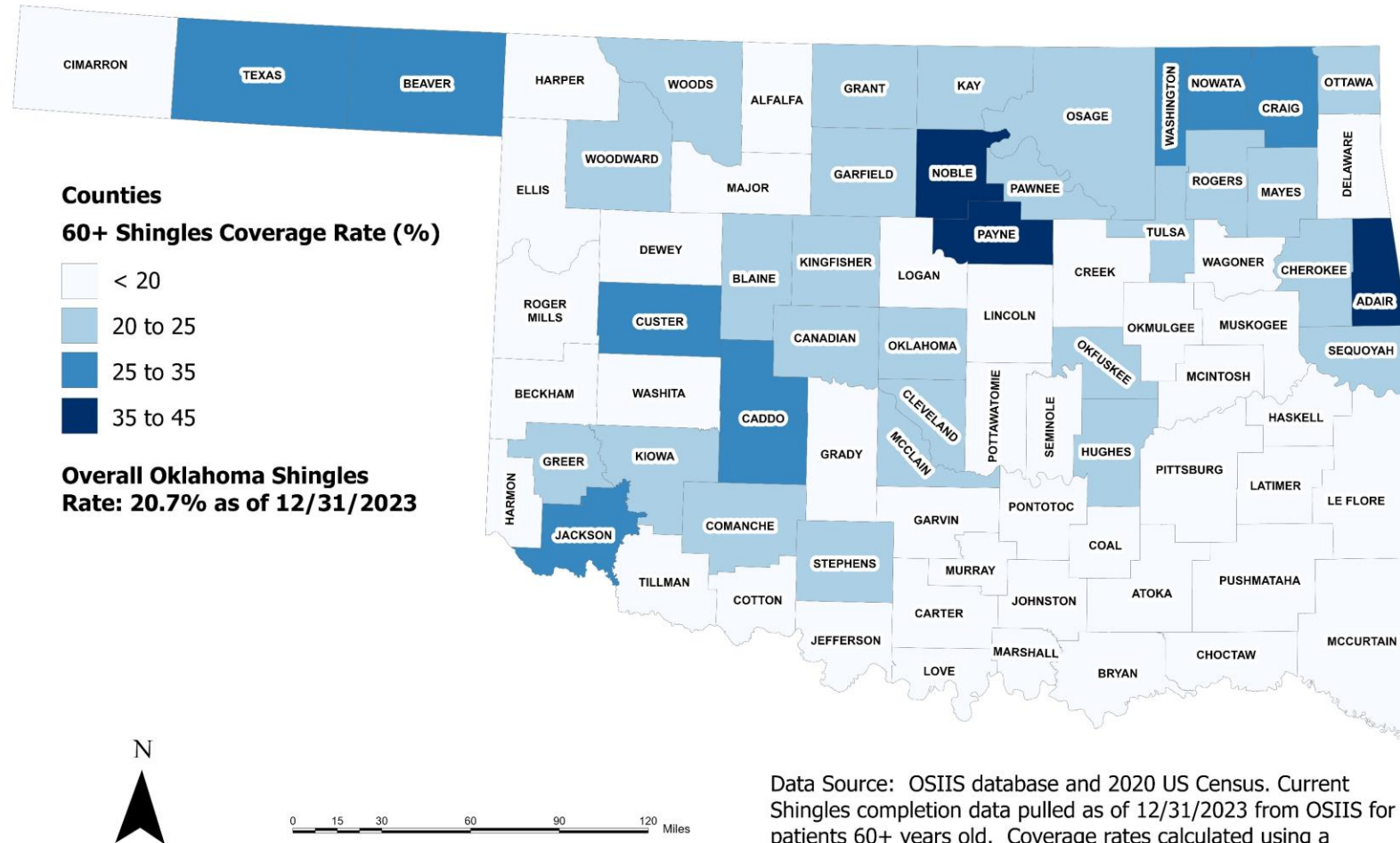
When possible, patients should be vaccinated before becoming immunosuppressed. If vaccination before immunosuppression is not possible, providers should consider timing vaccination when the immune response is likely to be most robust.



# Zoster (Shingles) Vaccination Coverage among Adults Age $\geq 60$ Years, BRFSS



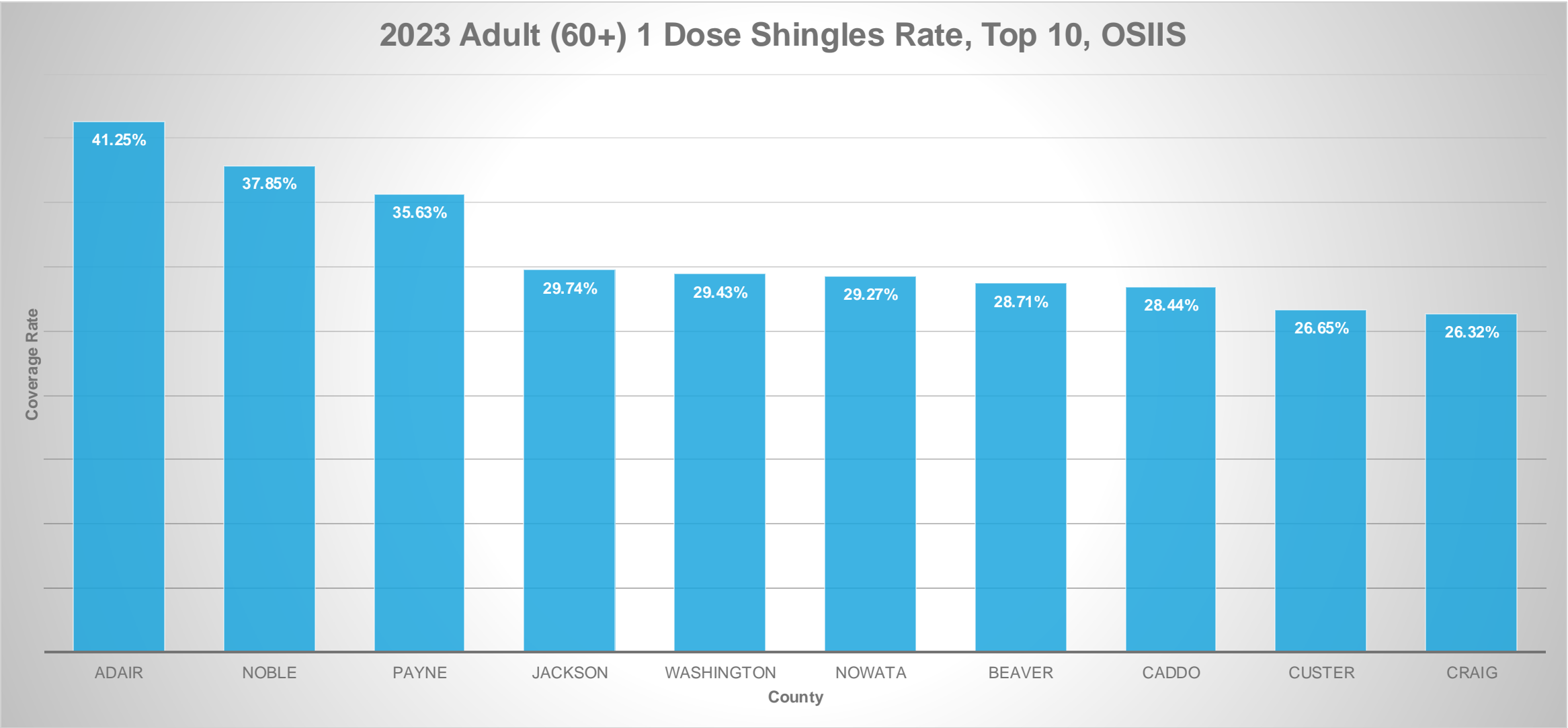
## Oklahoma Shingles (1+ Shots) Coverage Rates by County, 60+ Years Old



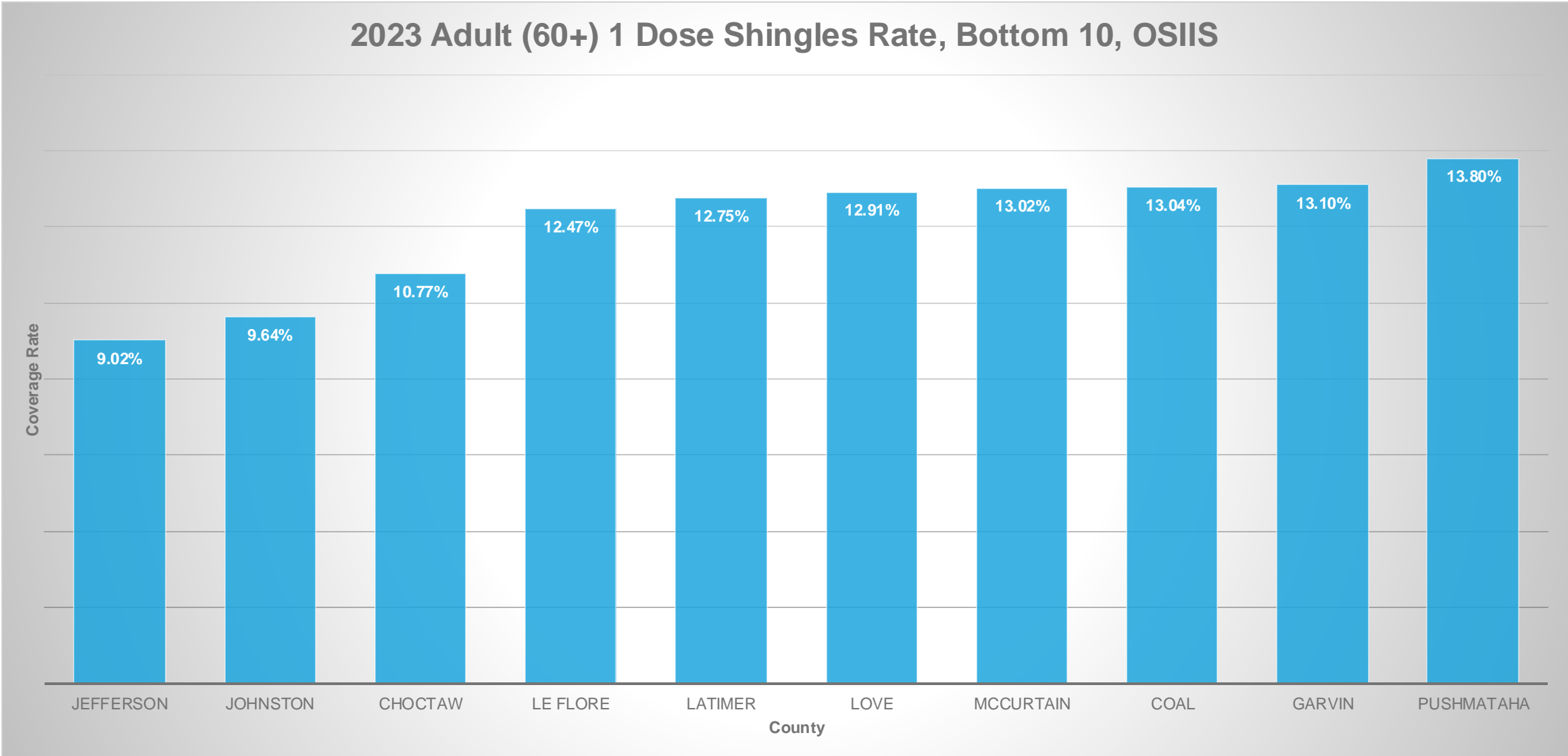
Data Source: OSIIS database and 2020 US Census. Current Shingles completion data pulled as of 12/31/2023 from OSIIS for patients 60+ years old. Coverage rates calculated using a combination of OSIIS and 2020 US Census data.



# 2023 DATA REVIEW: ADULT SHINGLES COVERAGE RATE, TOP TEN



# 2023 DATA REVIEW: ADULT SHINGLES COVERAGE RATE, BOTTOM TEN



# Conclusion

- General decline in shot rates in all three vaccines since COVID.
- Currently, immunization services and the CDC are trying to create an adult vaccine program to help improve adult coverage rates.
- There is a gap for some vaccines between national statistics and what we can pull from OSIIS (OSIIS rates are underestimates).
- Gap due to underreporting of shot records for privately funded shots.

# Vaccine updates

Sai Teja Paruchuri



# Vaccine updates

The following vaccines have been added to the CDC contracts and are now available to order from August 1st, 2024.

- New mixed NDCs for both Adults and Pediatrics:
  - a) Sanofi:
    - IPOL; IPV; MDV10; 1-pack; NDC: 49281-0860-10 (previously pediatric only)
    - Menquadfi; MCV4; SDV; 10-pack, NDC: 49281-0590-10 (replacement for 49281-0590-05)
  - b) Pfizer:
    - Penbraya; MCV4-MENB; SDV; 1-pack; NDC: 00069-0600-01 (previously pediatric only)
    - Penbraya; MCV4-MENB; SDV; 5-pack; NDC: 00069-0600-05 (previously pediatric only)

## **Allocations for Td Vaccine:**

- Td vaccine is still available to order but are under allocations put in place by CDC.

## **Vaccine Shipments:**

- Any issues with Over-shipments/ Mis-shipments/ Over-orders/ Delivery shortage/ Vaccine spoiled in transit, please report them on the same day to Vaccinehelp.
- For vaccines like MMRV, there is a date mentioned on the shipping label indicating that the vaccine should be received on or by that date or else the vaccine is nonviable.
- Please check for that date when you are receiving the vaccine and report immediately to Immunization Services.
- Do not reject any vaccine shipments because they are delayed in transit. Accept the shipment and reach out to either your IFC or Vaccinehelp so we can report the issue to Mckesson/ Merck accordingly.

# Vaccine orders for Back to School

- Plan ahead and place vaccine orders in OSIS accordingly.
- Use forecasting tool and add comments if you are ordering more than recommended doses.
- Order vaccines based on your clinic's patient volume and the need for vaccine.
- Do not wait until you are running out of vaccines to place an order.
- Always make sure to check OSIS news column for the latest updates.
- Reach out to [vaccinehelp@health.ok.gov](mailto:vaccinehelp@health.ok.gov) if you have any questions.



# Vaccine returns

Once vaccines in your inventory are spoiled/ expired, please submit a return in OSIIS to send the vaccines back to McKesson. Vaccines that are full/ unopened boxes and opened boxes, unopened vials, pre-filled syringes can be returned. This includes:

- Routine VFC/317/state vaccines
- Flu vaccine
- COVID-19 vaccine shipped from Mckesson
- Direct-ship vaccine from Merck
- Direct-ship COVID-19 vaccine from Pfizer
- The best practice is to create a return in OSIIS as soon as the vaccines are expired. Once the returns are processed, you will receive a return label either through email or mail based on the label shipping method you choose.
- As soon as you receive a return label, sort the vaccines by NDC, ensure that the vials don't break during shipping: use a bubble wrap/ packing paper; ship the vaccines within 30 days after receiving shipping labels.
- **Never discard expired vaccine that can be returned to Mckesson.**
- **Please wait until the vaccine is expired to submit a return in OSIIS.**

What is HL7?

What are the benefits?



# What is HL7?

Health Level Seven, known as HL7, is a set of international data standards for communicating medical data between software applications.

Using HL7 gives providers the ability to transfer and share data between providers with different software systems (E.H.R.'s).

The ability to transmit/exchange HL7 data from an Electronic Health Record (EHR) system that another healthcare provider uses is a huge time saver and is useful for providing better care to one's patients.

# Benefits of HL7 Submission

\* Provides information exchange between computer applications developed by different vendors (“common language”).

\* HL7 provides accurate, up-to-date, and complete information about patients at the point of care (ex: Immunization History).

\* Helps providers more effectively diagnose patients, reduce medical errors, and provide safer care (ex: Medical History).

\* Enhances privacy and security of patient data (no paper copies).

\* Reduces costs by decreasing the number of hours staff spend doing data entry (administrations sent directly from E.H.R., no manual entry in OSIS).



# OSIIS HL7 Onboarding Requirements

Must be an OSIIS Authorized Provider (signed Authorized Site Agreement).

Compatible software (ability to send HL7 messages utilizing SOAP method).

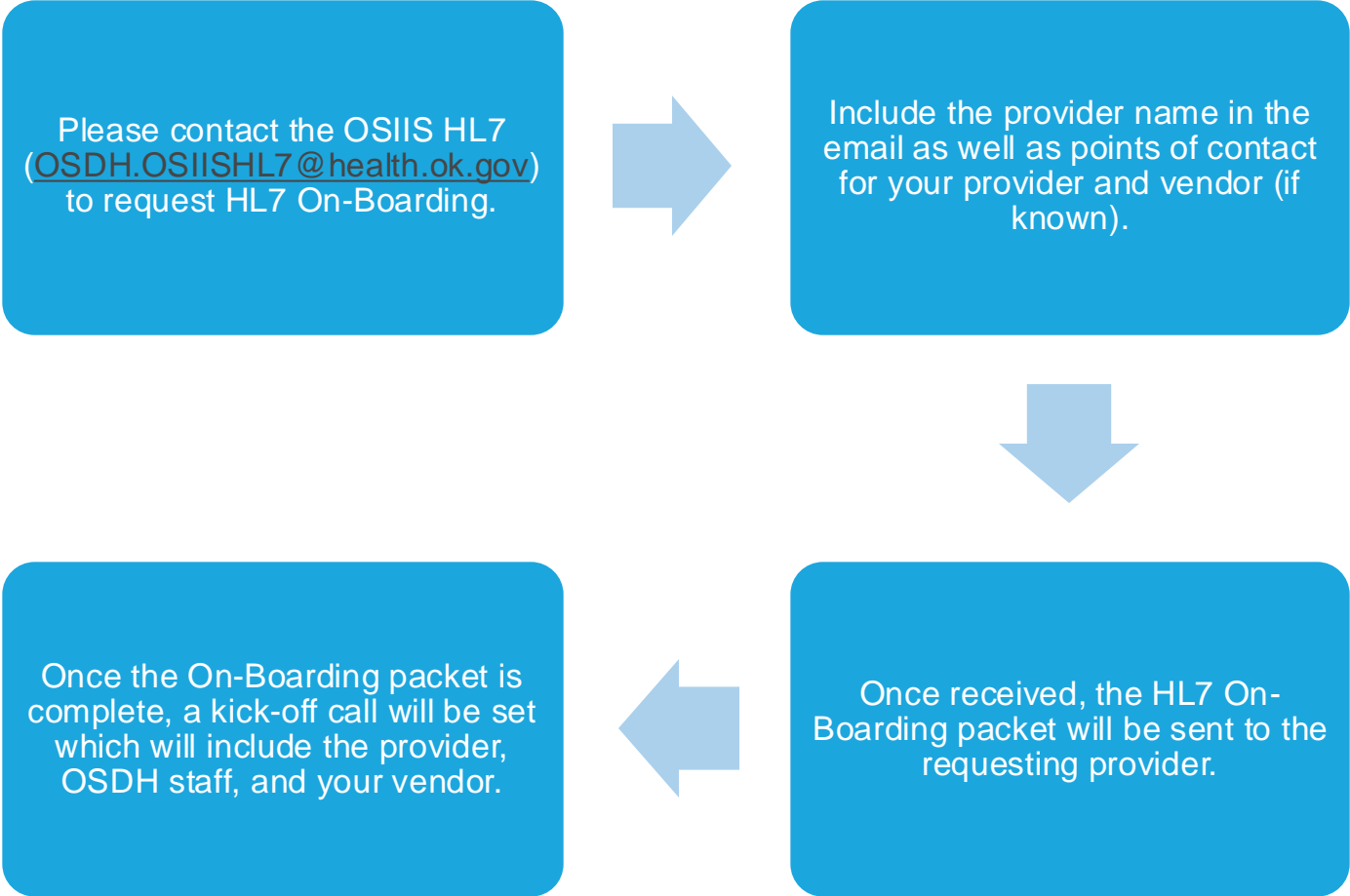
Basic understanding of HL7 messaging (at least vendor, NIST Report).

Demonstrate ability to send messages in accordance with CDC HL7 2.5.1 data standard (NIST and QA Testing).

Must complete HL7 onboarding packet which includes HL7 survey, a kick-off call, NIST report, 2.5.1 implementation guide, and which facilities submitting for.



# Requesting an HL7 Connection





# HL7 Points of Contact & Resources

## Contacts:

- Courtney Woodard, HL7 Coordinator  
([CourtneyW@health.ok.gov](mailto:CourtneyW@health.ok.gov))
- Martin Lansdale, OSIS Data Quality Manager  
([martinl@health.ok.gov](mailto:martinl@health.ok.gov))
- Leila Fadaiepour, Provider Enrollment  
Specialist/Trainer (HL7 Electronic Decrementing)  
([Leila.fadaiepour@health.ok.gov](mailto:Leila.fadaiepour@health.ok.gov))

## OSIS HL7

([OSDH.OSISHL7@health.ok.gov](mailto:OSDH.OSISHL7@health.ok.gov))

## HL7 Information:

- <https://www.hl7.org/about/index.cfm?ref=footer>
- <https://www.cdc.gov/vaccines/programs/iis/technical-guidance/hl7.html>



# OSIIS Auto-Decrementing

Leila Fadaiepour

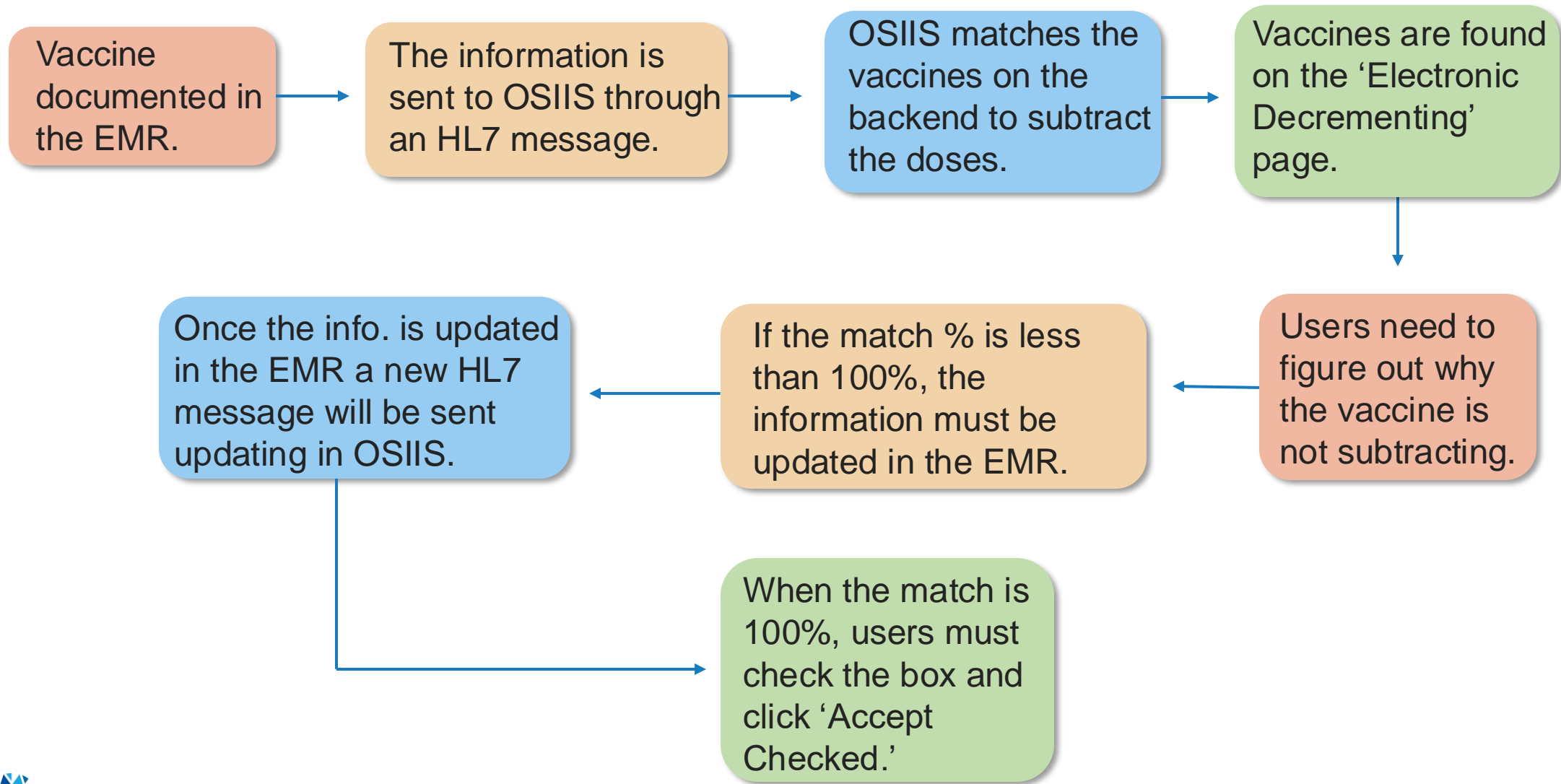


# What is Auto-Decrementing?

- Auto-decrementing is the process by which OSIIS subtracts vaccines from your inventory on-hand once you are set up with HL7 reporting.
  - HL7 reporting is the interface that is set up to remove the step of manual data entry into OSIIS.
    - Manual data entry into OSIIS would remove the vaccine from the inventory on-hand anytime a vaccine was selected from the drop-down to be added to a patient's record.
- Now, with HL7 (no manual data entry), the vaccines are decremented from the inventory WHEN auto-decrementing is turned on.
  - There can be HL7 providers who do NOT have auto-decrementing turned on.
    - These providers must go in and manually adjust their inventory on-hand.



# Auto-Decrementing Process



# Electronic Decrementing Page

- This page captures all the vaccines that OSIS doesn't automatically subtract from the inventory.
- OSIS matches the vaccines on:
  - Name, Manufacturer, lot number, expiration date, and funding source.
- Less than 100% matches need to be reviewed and corrected
- 100% matches can come from the system wanting you to review the information.
  - Could be a very similar lot number
  - Could be an updated patient

## Electronic Decrementing ?

**Electronic Decrementing Search**

Immunization From: 10/31/2023

Immunization Through: 11/14/2023

After Last Reconciliation Count Date  
 Up to the Last Reconciliation Count Date

Inventory Location \*

Vaccine Group

Decrementation Status \*
  Review  
 No Match  
 Manual

Review Multiple Locations  
 Auto  
 Review Multiple Match

Exclude matching to Private Inventory  
 Exclude Private Immunizations  
[Show Clean-up Options >>](#)

Minimum Match Confidence 90%

Vaccine information listed in OSIS inventory on-hand.

Search Results - 5 entries (8 Doses)

Showing 1 to 5 of 5 entries

Auto-check Match checkbox if confidence is

Incoming Inventory Transaction	Matched Inventory On-Hand	Match Confidence	Doses	Match?	Match Status
TD (ADULT), P-FREE : PMC : U7745AA : 05/31/2025 : VFC	93% - TD (ADULT), ADSORBED : PMC : U7745AA : 05/31/2025 : VFC (8 REMAINING DOSES)	93%	4	<input type="checkbox"/>	REVIEW
COVID-19 (MOD) 12+YRS : MOD : 8057456 : 03/31/2024 : VFC	100% - COVID-19 (MOD) 12+YRS : MOD : 8057456 : 03/31/2024 : VFC (25 REMAINING DOSES)	100%	1	<input checked="" type="checkbox"/>	REVIEW
FLU MDCK QUAD P-FREE INJ : SEQ : 370647 : 05/31/2024 : VFC	UNABLE TO FIND ANY MATCHES WITH 90% CONFIDENCE		1		NO MATCH
PCV15 : MSD : X020316 : 10/31/2025 : VFC	100% - PCV15 : MSD : X020316 : 10/31/2025 : VFC (46 REMAINING DOSES)	100%	1	<input checked="" type="checkbox"/>	REVIEW MULTIPLE MATCH*
ROTAVIRUS (ROTARIX) : SKB : Y4NG3 : 10/31/2025 : VFC	100% - ROTAVIRUS (ROTARIX) : SKB : Y4NG3 : 10/31/2025 : VFC (41 REMAINING DOSES)	100%	1	<input checked="" type="checkbox"/>	REVIEW
			8	<input type="checkbox"/> Match?	

Vaccine information from the EMR.



# Reconciliation

- The reconciliation page will have a new column called ‘Aggregate Administered’.
- This column will account for any doses administered when the reconciliation is opened.
- If reconciliation is opened when vaccines are being documented, they will not subtract from the inventory on-hand.
- To account for those doses, put the amount in the aggregate administered column.
  - The aggregate doses administered report can be run to show the doses given during that time frame.
- The recommendation is to complete the reconciliation when no vaccines are being administered.
- Also, make sure to adjust all of the doses from the electronic decrementing page before the reconciliation is opened.

## Vaccine Inventory Reconciliation ? i

Cancel Links

Inventory by Doses							
Description	Summary	Aggregate Administered	Physical Count	Inventory Difference	Acceptable Inv. Difference	Action	Audit
<b>VFC</b>							
1. COVID-19 (MOD) 12+yrs (Spikevax 2023-2024 (10 x 0.5mL sdv vials) 12+ yrs) MOD • 80777-0102-95 • 8057456 • 03/31/2024	Σ	0	27	0	✓	Action	?
2. COVID-19 (MOD) 6m-11y (Moderna 2023-2024 (10 x 0.25mL sdv vials) 6m-11y) MOD • 80777-0287-92 • AU5509B • 05/19/2024	Σ	0	0	0	✓	Action	?
3. COVID-19 (MOD) 6m-11y (Moderna 2023-2024 (10 x 0.25mL sdv vials) 6m-11y) MOD • 80777-0287-92 • AU5551B • 05/30/2024	Σ	0	20	0	✓	Action	?
4. COVID-19 (PFR) 12+yrs (COMIRNATY 2023-2024 (10 x 0.3mL vials) 12+ yrs) PFR • 00069-2362-10 • HD9876 • 12/14/2023	Σ	0	10	0	✓	Action	?
5. COVID-19 (PFR) 5 thru 11y (Pfizer-BT 2023-2024 (10 x 0.3mL sdv vials) 5-11 yr) PFR • 59267-4331-02 • HE2391 • 12/14/2023	Σ	0	28	0	✓	Action	?
6. COVID-19 (PFR) 6m-4y (Pfizer-BT 2023-2024 (10 x 3 dose vials) 6m-4yrs) PFR • 59267-4315-02 • HH3252 • 12/16/2023	Σ	0	60	0	✓	Action	?
7. DTaP (Infanrix (0.5 mL x 10 syr)) SKB • 58160-0810-52 • GG39D • 06/07/2025	Σ	-2	22	0	✓	Action	?
8. DTaP (Infanrix (0.5 mL x 10 syr)) SKB • 58160-0810-52 • 6H773 • 07/13/2025	Σ	0	50	0	✓	Action	?

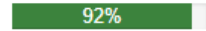


# Common Issues



VARICELLA : MSD : X018953 : 07/31/2025 : VFC

92% - VARICELLA : MSD : X021280 : 08/31/2025 : VFC (76 REMAINING DOSES) ▾



3

REVIEW

FLU MDCK QUAD P-FREE INJ : SEQ : 373195 : 06/30/2024 : VFC

100% - FLU MDCK QUAD P-FREE INJ : SEQ : 373195 : 06/30/2024 : VFC (57 REMAINING DOSES) ▾

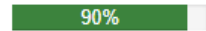


2

REVIEW

MMR : MSD : X005838 : 06/30/2024 : VFC

90% - MMR : MSD : X000177 : 01/31/2025 : VFC (26 REMAINING DOSES) ▾



2

REVIEW



Search Results - 4 entries (7 Doses)

Showing 1 to 4 of 4 entries

Auto-check Match checkbox if confidence is

Accept Checked

Incoming Inventory Transaction	Matched Inventory On-Hand	Match Confidence	Doses	Match?	Match Status
INFLUENZA QUAD ADJUVANTED : SEQ : 374228 : 06/30/2024 : ?	UNABLE TO FIND ANY MATCHES WITH <u>90%</u> CONFIDENCE		3	<input type="checkbox"/>	NO MATCH
TDAP, ADSORBED : PMC : U7837AA : 07/31/2025 : ?	UNABLE TO FIND ANY MATCHES WITH <u>90%</u> CONFIDENCE		2	<input type="checkbox"/>	NO MATCH
INFLUENZA QUAD ADJUVANTED : SEQ : 4XY5D : 06/30/2024 : VFC	91% - INFLUENZA QUAD INJ P : SKB : 4XY5D : 06/30/2024 : VFC (48 REMAINING DOSES) ▾	91%	1	<input type="checkbox"/>	REVIEW
INFLUENZA QUAD INJ P : SEQ : AU10610 : 05/31/2024 : ?	UNABLE TO FIND ANY MATCHES WITH <u>90%</u> CONFIDENCE		1	<input type="checkbox"/>	NO MATCH
			7	<input type="checkbox"/> Match?	



# Back to School Immunizations

**Lauren Speer BSN, RN**  
Immunization & Communicable Disease  
Nurse Consultant



# Objectives

- Importance of Back-to-School Routine Vaccines
- Infection Prevention Strategies for Schools & Parents
- Kindergarten Routine Vaccines
- Middle School Routine Vaccines
  - Human Papilloma Virus (HPV) Immunization
  - Meningococcal Immunization
- College Routine Vaccines



# Back to School with Routine Vaccines

Staying up-to-date on wellness visits and vaccinations is crucial for the health and well-being of students, families, teachers, and school staff. Routine vaccines and school vaccination requirements are effective tools to protect school communities against vaccine preventable disease outbreaks, keeping children in school and ready to learn, and supporting schools' operational, fiscal and academic goals by maximizing student attendance.

<https://shotrecords.health.ok.gov/>



Oklahoma State Department of Health |  
Back to School Vaccines



## Impacts of COVID-19 on School Vaccination Coverage:

Kindergarten routine vaccination coverage has remained high and stable for decades in the United States. During the two school years following the start of the COVID-19 pandemic, routine kindergarten vaccination coverage dropped by two percentage points nationwide from 95 percent to 93 percent, and by as much as 10 percent in some jurisdictions. This translates to an estimated 725,000 young learners who entered kindergarten during the COVID-19 pandemic and are potentially not protected against vaccine-preventable diseases such as measles and whooping cough. Influenza vaccination coverage also dropped five percent among children 6 months to 17 years old during the same time period.

Tiny declines in measles, mumps, and rubella (MMR) vaccination coverage in Europe, similar to the U.S., is fueling a resurgence of measles with cases increasing by 30-fold in 2023 compared to the previous year. The U.S. is now also experiencing a rise in measles cases and outbreaks, underscoring the large impact that small declines in vaccination coverage can have and that under-vaccinated and un-vaccinated children are at risk of illness, including serious illness, and absenteeism.



## Strategies and Resources for Healthcare Professionals, Schools and Partners

- Use evidence-based strategies and available resources to encourage catching up on routine vaccinations and communicate why being up to date on routine vaccinations is critical for staying healthy so that families and adults can make informed decisions.

Getting routine immunizations back on-track is a goal that we can achieve by working together



### Health Departments

- Leverage IIS to identify individuals behind on their vaccinations
- Facilitate patient return for vaccination
- Make vaccines easy to find and access
- Give strong vaccine recommendations
- Disseminate vaccine-related communications around catch-up
- Partner with schools and community organizations

### Health Care Professional

- Send reminders to families whose children are behind on or due for vaccination
- Improve vaccine-related communications
- Offer vaccination-only appointments or hold vaccination clinics
- Implement systems to review vaccine history at every visit
- Offer strong recommendations
- Have standing orders
- Be prepared to answer questions and address concerns

### Other Partners

- Know where to find accurate information on routine vaccination
- Connect with local public health department, ask how you can help with catch-up
- Help carry messages about importance of catch-up; you are trusted sources who understand your community best
- Engage with community members to address vaccine hesitancy
- Leverage data to focus catch-up efforts on communities that have fallen behind on vaccinations

### Schools

- Share and utilize school vaccination data for catch-up
- Include vaccination information in back-to-school communications
- Help share the facts about vaccines
- Send reminders to families whose children are not up to date on their vaccinations
- Expand access to immunization services (e.g. school-based vaccination clinics)
- Enforce school vaccination requirements



# Tips to Prevent and Control the Spread of Infections in Schools



# Tips to Prevent and Control the Spread of Infections in Schools

## Hand Washing:

[Washing hands in school](#) can help prevent the spread of respiratory and gastrointestinal diseases. Teaching and reinforcing [proper handwashing](#) can lower the risk of spreading diseases. Schools can set routines or scheduled opportunities for handwashing throughout the day. During times of increased illness spread or absenteeism, schools can evaluate hand hygiene routines and increase those opportunities.

## Respiratory Etiquette:

Schools can teach and reinforce respiratory etiquette to help keep individuals from getting and spreading respiratory viruses, including but not limited to [influenza](#), [RSV](#), and [SARS-CoV-2](#) (the virus that causes COVID-19). Reinforce [covering of the mouth and nose](#) with a tissue when coughing or sneezing and throwing the used tissue in the trash after use. This might require locating tissues in areas convenient for easy student access (e.g., at workstations or near play centers). If a tissue is not available, students and staff can be reminded to sneeze into the elbow, not the hands. [Handwashing](#) should be performed immediately after blowing the nose, coughing, or sneezing.

## Vaccinations:

Staying up to date on recommended vaccinations is essential to prevent illness and to prevent severe illness from some infections. Schools and health departments can help promote equitable access to routine and annual vaccinations, including for influenza and COVID-19, for staff and students in many ways:

- ✓ Provide information about recommended vaccines to staff, students, and families.
- ✓ Promote the safety and effectiveness of vaccines.
- ✓ Establish supportive policies and practices that make getting vaccinated easy and convenient.
- ✓ Make vaccinations available on-site by hosting school-located vaccination clinics, or connect eligible children, students, teachers, staff, and families to off-site vaccination locations.



**Parents can play an important role in helping their child have a healthy place to learn. Below are some helpful resource links for schools to help students, families, and school staff keep kids healthy and learning.**

[Guidance for Infection Prevention and Control in K-12 School \(cdc.gov\)](#)

[Child Care Setting Resources \(oklahoma.gov\)](#)

## Influenza (Flu) Prevention and Control in K-12 Settings

### What can teachers and other school officials do to reduce the spread of influenza?

- 1. Recognize the symptoms of flu.** The symptoms of flu are fever (greater than 100°F or 37.8°C), cough, sore throat, body aches, headache, chills, and fatigue. Sometimes diarrhea or vomiting may occur, however, these symptoms are usually not the main problem.
- 2. Prevent others from becoming sick.** Children with symptoms of flu (see #1) should be removed from the classroom as soon as possible. Send the child to the school nurse or designated school official. Keep sick children separate from others while waiting for someone to take them home.
- 3. Contain ill persons.** Designate an area where ill children can stay while waiting to leave school. This area should be away from common rooms or areas where others could be exposed.
- 4. Designate staff to watch ill persons** until they can be sent home. Limit the number of people involved. Designated staff should not be at high risk of flu. People at high risk for contracting flu include pregnant women, people who have weakened immune systems, people with chronic health conditions among others.
- 5. Follow exclusion guidelines.** Inform parent/guardian that the child is to be excluded from school and extracurricular activities, such as sports activities, academic clubs, school dances, until at least 24 hours after their fever is gone. The sick child's fever must go away without using fever-reducing medications, even if the child is taking an antiviral medication.

### What can you do to prevent or reduce the spread of flu in your school?

- 1. Get the flu vaccine every year.** The single best way to protect against seasonal flu is for children and staff to get a seasonal influenza vaccine every year. Flu vaccination is recommended for all children aged 6 months and older.
- 2. Wash your hands.** Wash your hands several times a day using soap and warm water for 15-20 seconds. Check restrooms regularly to ensure soap dispensers are full and paper towels are always available. Alcohol-based hand sanitizers are also effective.
- 3. Use alcohol-based hand sanitizers.** Alcohol-based hand gels may be used in classrooms to minimize lesson disruption. Hand sanitizer with at least 60% alcohol is effective in killing germs on hands when they are not visibly soiled. Important times to practice good hand hygiene are after coughing, sneezing, or contact with infected surfaces (i.e., desks, doorknobs).
- 4. Cover your mouth and nose with a tissue when you cough or sneeze.** Make sure tissues are available in all classrooms. Tissues should be thrown away immediately, and then followed by cleaning your hands. If you don't have a tissue, cough or sneeze into your elbow or shoulder, not into your hands.
- 5. Avoid touching your eyes, nose, or mouth.** Germs are spread this way.
- 6. Stay home when you are sick.** Any student, teacher, or staff member reporting flu-like symptoms should stay at home or be sent home until at least 24 hours after their fever is gone. The sick person's fever must go away without the use of fever-reducing medications, even if the individual is taking an antiviral medication.
- 7. Clean surfaces frequently.** In the school, clean commonly used surfaces such as door handles, handrails, eating surfaces, desks, etc., frequently with detergent-based cleaners or EPA registered disinfectants that are normally used in the school setting. Special cleaning products are not needed. Use cleaning products according to the directions on the product label. For bleach solutions, mix 1/4 cup chlorine bleach with 1 gallon of cool water. Bleach solutions should be changed daily. Additionally, extensive cleaning of school settings by wiping down floors and walls is not necessary as this has not been demonstrated to decrease the spread of influenza.
- 8. Remember the school bus.** Clean commonly handled interior surfaces (i.e., door handles, handrails, etc.) between groups of students. Consider making tissues and alcohol-based hand gel available on buses since hand washing facilities are not available.
- 9. Report high absentee rates to your local health department.** Your health department will work with you to help stop the spread of illness.

For more information call Infectious Disease Prevention and Response at 405-426-8710 or visit us online at [oklahoma.gov/health/infectiousdisease](http://oklahoma.gov/health/infectiousdisease)

## Too Sick for School?



When should a child stay home from school for illness

### 5 reasons your child may be too sick for school



#### 1. Fever

If a child has a temperature of 100° F or higher, your child is too sick for school. Keep them home until they have been fever free for 24 hours without the use of anti-fever medications.

#### 2. Diarrhea or Vomiting

If a child has 3 or more loose bowel movements, even if there are no other signs of illness, your child is too sick for school. Any vomiting is a reason to send a child home or keep a child home. Keep them home until vomit and diarrhea-free for 24 hours.



#### 3. Rash

There are different rules for returning to school depending on the cause of the rash. Children with contagious rashes, such as chicken pox and measles, need to be kept home. If your child has a rash AND a fever, keep them at home and talk with your healthcare provider.

#### 4. Cough or Sore throat

Children with a cough or sore throat should be watched closely. If the cough or sore throat becomes worse or if the child develops a fever, the child is too sick for school.



#### 5. Other conditions

Children with other communicable conditions such as head lice, ringworm, or scabies may need to be kept home from school. Children may need to see a healthcare provider for treatment.

### Not sure if your child is too sick for school?

Talk to your school nurse or school administration about exclusion policies for these

## Help Your Child's School Prevent the Spread of Infections

You can play an important role in helping your child have a healthy place to learn. The Centers for Disease Control and Prevention (CDC) developed [guidance](#) for schools to help students, families, and school staff keep kids healthy and learning. Here are some ways you can help your child's school stop the spread of germs:



**1.** Encourage your child to practice healthy habits, like [washing their hands](#) often and covering their mouth and nose when [coughing and sneezing](#).

**2.** Make sure your child goes for their [yearly check-ups](#) and gets the recommended routine vaccines they need.

This helps keep your child healthy and in school by reducing the spread of germs in school and making sickness shorter and milder.



**3.** Know when your child is well enough to go to school and when they should stay home because of their symptoms. Some reasons to have your child stay home include fever, vomiting, diarrhea, and respiratory symptoms that are getting worse or not improving. [Guidance on staying home when sick](#) can also help you decide whether your child needs to stay home. Ask your child's school if they have specific policies for returning after being sick.



**4.** Help make decisions about how your child's school is preventing illness, by taking steps for cleaner air, for example. You can join a school or district committee such as a school health advisory committee (SHAC), wellness committee, or parent teacher association (PTA). These committees help set the policies for health and wellness, work to include language about infections in school policies and practices and inform emergency operations and recovery plans.

**5.** Volunteer for school or community activities that support a healthy education environment. You can also attend, or support meetings and training events offered by your child's school or district to learn more about how schools can help prevent the spread of infections.



# Kindergarten Immunizations



## To enter Kindergarten a child will require-

- 5 DTaP
- 2 MMR
- 1 Varicella
- 4 IPV (4<sup>th</sup> dose IPV on or after 4<sup>th</sup> birthday)
- 2 Hep A
- 3 Hep B

## Recommended Immunizations-

- Seasonal Influenza
- Second Varicella dose at 4 years old
- COVID-19, if not up-to-date

<https://rules.ok.gov/code>

Title 310 Chapter 535 Subchapter 1



# 7<sup>th</sup> Grade Immunizations





#### History:

- 5 DTaP
- 2 MMR
- 2 Varicella
- 4 IPV
- 2 Hep A
- 3 Hep B

#### Required to enter 7<sup>th</sup> grade:

- Tdap

#### Recommended:

- Seasonal Influenza
- HPV
- MCV4
- COVID-19, if not up to date



# Human Papilloma Virus (HPV)



# HPV

Gardasil-9 (9vHPV) is the vaccine distributed in the United States. This vaccine protects against nine HPV types (6, 11, 16, 18, 31, 33, 45, 52, and 58).

- HPV vaccination provides safe, effective, and lasting protection against the HPV infections that most commonly cause cancer. The HPV vaccine series is most effective when given before a person is exposed to the virus.
- Every year in the United States, HPV causes about 36,000 cases of cancer in both men and women. While there is screening for cervical cancer that can detect cancer early; there is no recommended screening for the other cancers caused by HPV infection. This includes cancers of the back of the throat, anus, penis, vagina, or vulva.

## Dosing Schedule:

**Children ages 11–12 years** should get 2 doses of HPV vaccine, given 6 to 12 months apart. HPV vaccines can be given starting at age 9. Only 2 doses are needed if the first dose was given before 15th birthday.

**1st dose** - 11–12 years old (can start at age 9)

**2nd dose** - 6–12 months after the 1st dose

**People 15–26 years old** who start the series later need 3 doses of HPV vaccine.

- The doses are given over 6 months.  
*minimum intervals:*  
*dose 1 to dose 2: 4 weeks*  
*dose 2 to dose 3: 12 weeks*  
*dose 1 to dose 3: 5 months*
- If your teen isn't vaccinated yet, talk to their healthcare provider about doing so as soon as possible.

**People with weakened immune systems** should get 3 doses if they are 9–26 years old.



# HPV

**People older than 26 years.** Vaccination is not recommended for everyone older than age 26 years.

- Some adults age 27 through 45 years who are not already vaccinated may decide to get HPV vaccine after speaking with their doctor about their risk for new HPV infections and the possible benefits of vaccination for them.
- HPV vaccination in this age range provides less benefit, because more people in this age range have already been exposed to HPV.

## **Who should get vaccinated:**

- All preteens need HPV vaccination, so they are protected from HPV infections that can cause cancer later in life.
- Teens and young adults through age 26 years who didn't start or finish the HPV vaccine series also need HPV vaccination.

## **HPV vaccine contraindications:**

- A severe allergic reaction (e.g., anaphylaxis) to a vaccine component or following a prior dose of HPV vaccine is a contraindication to receipt of HPV vaccine.
- A moderate or severe acute illness is a precaution to vaccination, and vaccination should be deferred until symptoms of the acute illness improve.
- 9-valent HPV vaccine is produced in *Saccharomyces cerevisiae* (baker's yeast) and is contraindicated for persons with a history of immediate hypersensitivity to yeast.
- HPV vaccine is not recommended for use during pregnancy. People known to be pregnant should delay initiation of the vaccination series until after the pregnancy.



# Meningococcal

# Meningococcal Vaccine

There are 3 types of meningococcal vaccines available in the United States:

- Meningococcal conjugate or MenACWY vaccines (Menveo® and MenQuadfi®)
- Serogroup B meningococcal or MenB vaccines (Bexsero® and Trumenba®)
- Pentavalent meningococcal or MenABCWY vaccine (Penbraya™)

## Contraindications to Vaccination

Do not administer meningococcal vaccines to:

- A person who has ever had a severe allergic reaction (e.g., anaphylaxis) after a previous dose or allergic to any component of the vaccine.

## Recommended Schedule for MenACWY-

- All 11 – 12 year old's should get a MenACWY (Menveo® or MenQuadfi®) vaccine with a booster dose at age 16 years old. The booster dose provides protection during the ages when adolescents are at highest risk of meningococcal disease.
  - *2-dose series at age 11–12 years; 16 years*
  - *Age 13–15 years: 1 dose now and booster at age 16–18 years (minimum interval: 8 weeks)*
  - *Age 16–18 years: 1 dose*
- Adolescents who are at increased risk due to medical conditions need a 2-dose primary series of MenACWY vaccine administered 8 weeks apart, as well as regular booster doses every 5 years.
- CDC also recommends a booster dose for those at increased risk due to an outbreak if 5 or more years have passed since receiving MenACWY.



# MenB & MenABCWY

## ❑ Serogroup B meningococcal or MenB vaccines (Bexsero® or Trumenba®) Recommended Schedule-

- ✓ All 16 – 23 year old's may get a MenB (Bexsero® or Trumenba®) vaccine.

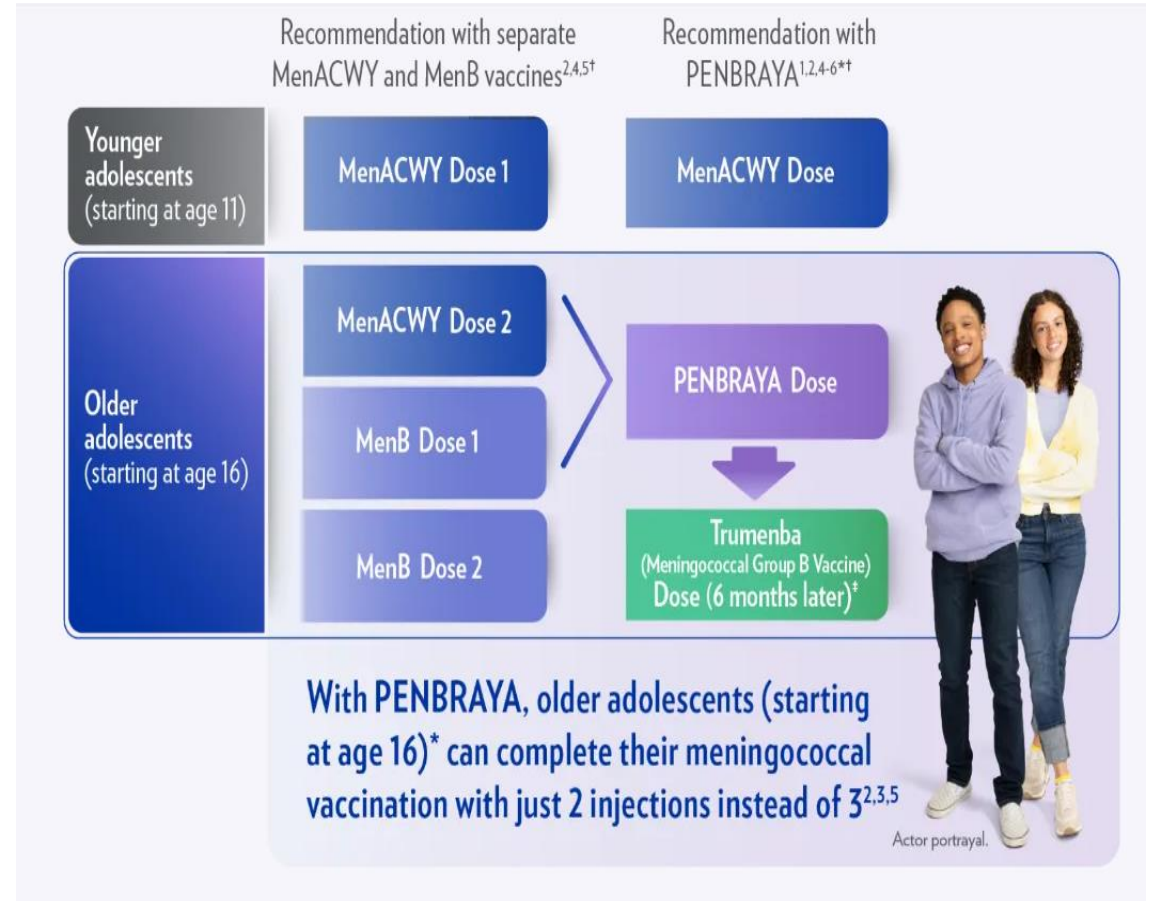
*Bexsero®: 2-dose series at least 1 month apart.*

*Trumenba®: 2-dose series at least 6 months apart (if dose 2 is administered earlier than 6 months, administer a 3rd dose at least 4 months after dose 2)*

## ❑ Pentavalent meningococcal or MenABCWY vaccine (Penbraya™) Recommended Schedule-

- ✓ Those that are getting a MenACWY and MenB vaccine at the same visit may instead get MenABCWY (Penbraya™) vaccine.
- ✓ When vaccinating with MenABCWY (Penbraya™), MenB (Trumenba®) must be administered (6 month interval) to complete the MenB series.

*B component vaccines are not interchangeable by manufacturer. Administration of a B component vaccine (MenB or MenABCWY) requires that subsequent B component vaccine doses be from the same manufacturer.*



<https://penbraya.pfizerpro.com/dosing-recommendations>



# Common Error

**The client was only given the diluent for the two-vial formulation of Menveo (MenACWY-CRM). What should I do now?**

- The liquid vaccine component (the diluent) of Menveo contains the C, W-135, and Y serogroups. The lyophilized vaccine component (the freeze-dried powder) contains serogroup A.
- Because the patient received only the diluent, he or she is not protected against invasive meningococcal disease caused by *N. meningitidis* serogroup A.
- *N. meningitidis* serogroup A is very rare in the United States but is more common in some other countries. If the recipient (of the C-Y-W135 “diluent” only) is certain not to travel outside the United States then the dose does not need to be repeated. However, if the recipient plans to travel outside the United States the dose should be repeated with correctly reconstituted Menveo or with a dose of another brand of MenACWY.
- There is no minimum interval between the incorrect dose and the repeat dose.



# College Immunizations

# College Immunizations

## Required proof of vaccination:

- Hep B series (3 doses)
- MMR (2 doses)
- Students who reside in on-campus student housing shall be required meningococcal disease vaccine:
  - MCV4 (ACWY) series
  - Men B series
- Medical/Nursing/Healthcare Schools may have additional requirements such as COVID-19 or varicella.





# Questions

[laurens@health.ok.gov](mailto:laurens@health.ok.gov)

Thank you!

# Questions/Suggestions

**Looking Forward:**

**Discuss a topic that interests you**

**Next Call:**

**October 4, 2024**

**at 12pm**