

Public Health Working with OB/GYN: Immunizations, HIV PrEP and STI in Pregnant Women



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Protecting Women with Vaccination

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Disclosures

- None

Overview

- Review of immunization recommendations for women
- SC immunization data
- How can we improve rates?
- Access to vaccines in SC
- Resources



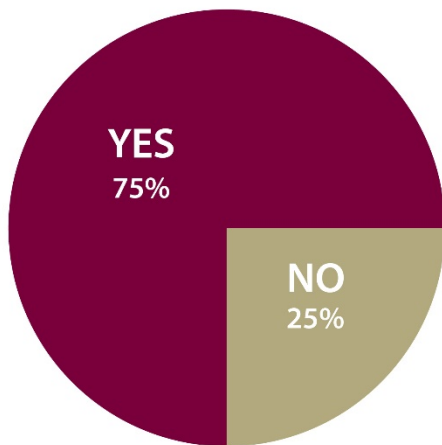
Why give vaccines during pregnancy?

Passive Immunity

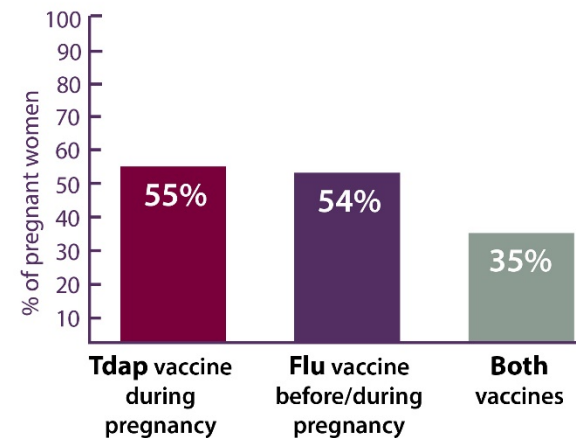
- Mothers pass antibodies to the fetus across the placenta
 - Temporary protection (lasts up to 6 months)
 - Allows the baby to develop his or her own antibodies
- Breast milk does contain antibodies
 - Protects against gastrointestinal illness only

Vaccines often offered, but many pregnant women and babies left unprotected

Women who report provider offer or referral for flu and Tdap vaccine



Flu and Tdap vaccination coverage for pregnant women



SOURCE: CDC Internet Panel Survey 2019

Why is getting a flu shot so important for pregnant women?

- Flu is more likely to cause severe illness in pregnant women (and up to 2 weeks postpartum)
- Increased risk of premature labor and delivery
- Shown to protect both the mother and baby from influenza -related illness and hospitalizations.



The flu shot is safe for pregnant women.

- The nasal spray (live attenuated influenza virus, or LAIV) flu vaccine is not recommended for pregnant women.
- The flu shot can be given during any trimester.
- Many studies support the safety of flu vaccine in pregnant women.



SC WIC: Flu vaccine during pregnancy period, by region, 20 17

Pregnant women with certifications ending in CY 20 17

	Upstate	Midlands	Pee Dee	Lowcountry	State
Pregnant women, total	3,526	3,043	3,012	2,762	12,343
Received Flu vaccine	674	478	290	334	1,776
Percent	19.1%	15.7%	9.6%	12.1%	14.4%



SC WIC: Flu vaccine during pregnancy period, by region, 20 18

Pregnant women with certifications ending in CY 20 18

	Upstate	Midlands	Pee Dee	Lowcountry	State
Pregnant women, total	3,037	2,927	2,866	2,367	11,197
Received Flu vaccine	671	544	260	339	1,814
Percent	22.1%	18.6%	9.1%	14.3%	16.2%



One dose of Tdap
vaccine is recommended
during each pregnancy.

Tdap protects moms and babies from pertussis (whooping cough)

- The US has an increase of pertussis.
- Babies don't get DTaP until age 2 months. Maternal antibodies provide short term protection.
- Pertussis can cause serious complications in infants.
 - About half of those younger than 1 who get pertussis are hospitalized.



Tdap recommendations:

Best given between 27 and 36 weeks

- This maximizes the maternal antibody response and passive antibody transfer to the infant.

Given during every pregnancy

- The level of pertussis antibodies decreases over time

People of all ages need WHOOPIING COUGH VACCINES



DTaP for young children

- ✓ 2, 4, and 6 months
- ✓ 15 through 18 months
- ✓ 4 through 6 years

Tdap for preteens

- ✓ 11 through 12 years

Tdap for pregnant women

- ✓ During the 27-36th week of each pregnancy

Tdap for adults

- ✓ Anytime for those who have never received it

www.cdc.gov/whoopingcough



Tdap cocooning – create a circle of protection

Anyone who will have close contact with a baby <12 months old should receive a single dose of Tdap (if they have not received one previously).





SC WIC: Tdap during pregnancy period, by region, 2017

Pregnant women with certifications ending in CY 2017

	Upstate	Midlands	Pee Dee	Lowcountry	State
Pregnant women, total	3,526	3,043	3,012	2,762	12,343
Received Tdap vaccine	1,271	1,113	774	906	4,064
Percent	36%	36.6%	25.7%	32.8%	32.9%



SC WIC: Tdap during pregnancy period, by region, 2018

Pregnant women with certifications ending in CY 2018

	Upstate	Midlands	Pee Dee	Lowcountry	State
Pregnant women, total	3,037	2,927	2,866	2,367	11,197
Received Tdap vaccine	1,204	1,182	832	933	4,151
Percent	39.6%	40.4%	29.0%	39.4%	37.1%

Talk to Pregnant Women about Vaccines:



- **Present vaccination as a standard part of care**
 - Provide information initial prenatal visit
 - Ensure all staff deliver consistent messages about the importance of vaccination
 - Normalize vaccination as a part of pregnancy care
- **Make a strong recommendation for vaccinations to patients**

Strong Vaccine Recommendations

“I recommend Tdap and flu vaccines for you and all of my pregnant patients, because I believe vaccines are the best way to help protect you and your baby against whooping cough and the flu.”

“Today you are due for Tdap and flu vaccines. These will protect your baby from whooping cough and flu infections right after they are born.”

Immunizations after pregnancy

- It is safe for a woman to receive routine vaccines after delivery, even while she is breastfeeding.
- If she didn't receive a Tdap or flu vaccine during pregnancy, she should get them after delivery.



#HowIRecommend

- Short YouTube videos for providers showing effective recommendations and answering patient questions
- <https://www.cdc.gov/vaccines/howirecommend/maternal-vacc-videos.html>
- <https://www.cdc.gov/vaccines/howirecommend/flu-vacc-videos.html>



A world free of cervical cancer

WHO Director-General Dr. Tedros Adhanom Ghebreyesus

“We have all the tools we need to consign cervical cancer to the history books.

Vaccination. Screening. Treatment. Palliative care.

The challenge is to scale -up the use of those tools everywhere around the world.

It is simply no longer acceptable that any woman should die from a disease that is completely preventable and treatable.”

To the UN General Assembly, NY, Sept 24, 2018,
https://www.who.int/dg/speeches/2018/UNGA_cervical-cancer/en/

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Cervical cancer: Australia 'to be first to eliminate disease'

3 October 2018

f     Share



Australia will become the first country to effectively eliminate cervical cancer if vaccination and screening rates are maintained, researchers say.

The disease could be eradicated as a public health issue nationally within 20 years, according to new modelling.

It is predicted to be classified as a "rare cancer" in Australia by 2022, when it should drop to less than six cases per 100,000 people.

Top Stories

Key senators back embattled Kavanaugh

Brett Kavanaugh looks all but certain to be confirmed as a Supreme Court judge in a vote on Saturday.

30 minutes ago

The political fallout from the Kavanaugh vote

12 minutes ago

Protesters shout down Democratic senator

1 hour ago

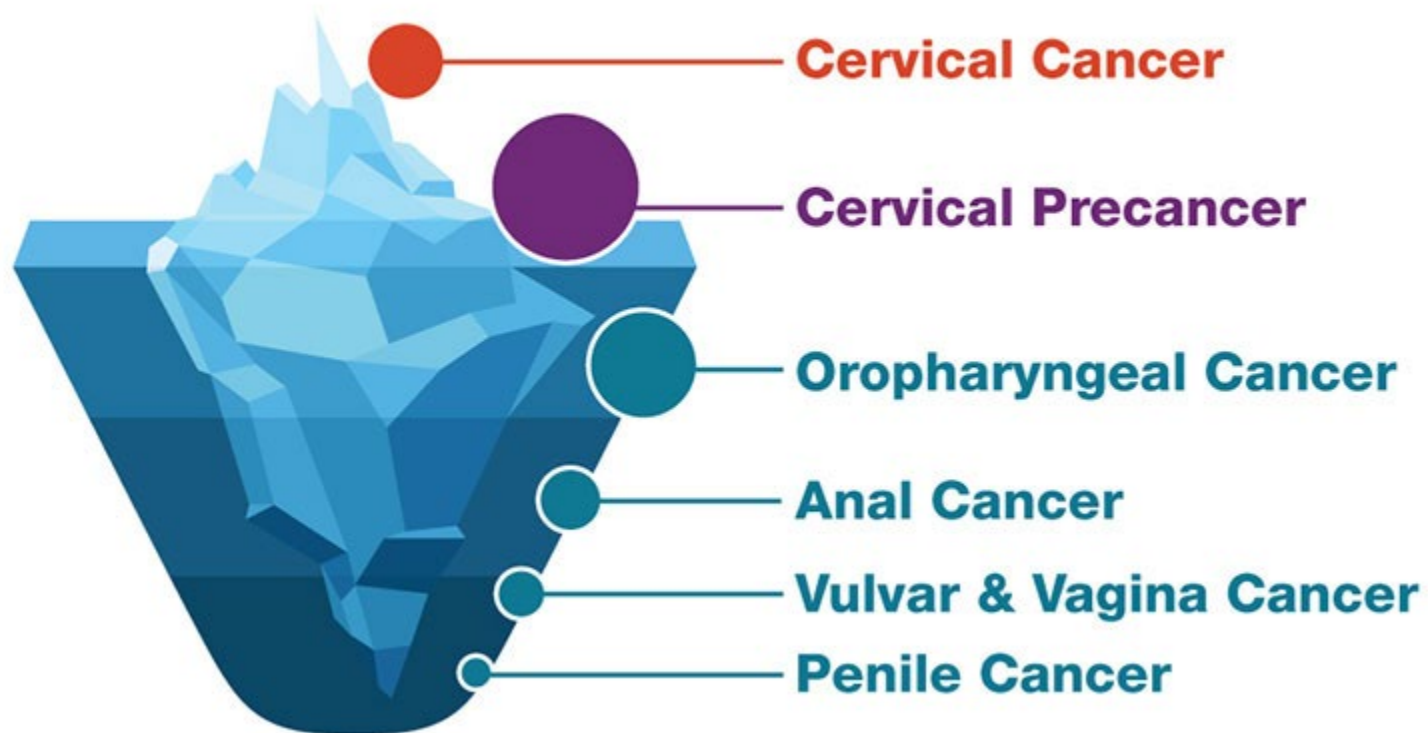
Features



What Trump's 'elevator screamers' tweet tells us



Screening Won't Protect Your Patients from Most HPV Cancers



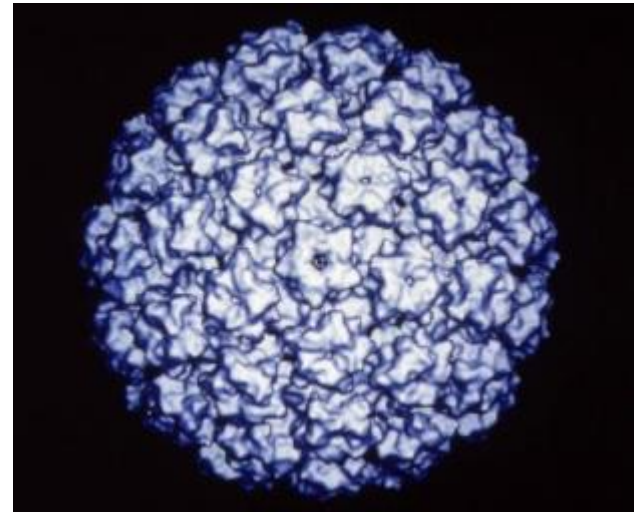


SC HPV Cancer Data
2011-2015

Cancer site	Sex	Incidence rate	Estimated Average Annual Number* for HPV-associated Cancers	Percentage HPV-associated Cancers Estimated to be Attributed to Any HPV Type	Estimated Average Annual Number* Cancers Attributed to Any HPV Type
Cervix	Female	7.4	187	91%	171
Vagina	Female	0.3	9	75%	7
Vulva	Female	2.6	76	69%	53
Penis	Male	0.8	20	63%	13
Anus	All	1.6	90	91%	82
Rectum	All	0.2	11	91%	10
Oropharynx	All	5.8	345	70%	242
	Female	2.1	65	63%	41
	Male	10.0	281	72%	203
TOTAL	All	13.3	736	79%	582
	Female	14.5	402	83%	334
	Male	12.1	335	73%	245

HPV Vaccine

- Recombinant L1 capsid proteins that form “virus-like” particles (VLP)
- Non-infectious and non-oncogenic
- Produce higher levels of neutralizing antibody than natural infection



HPV Virus-Like
Particle

Best given at age 11 or 12

- Better immune response to the vaccine at a younger age, can give as early as age 9
- Given with the other adolescent vaccines as a bundle



New ACIP recommendations:

- If not vaccinated at age 11 -12, older adolescents and young adults should be vaccinated up to age 26.
 - If patient starts the vaccine series at age 15 or older → 3 doses of the vaccine for full protection
- Vaccination of persons 27 through 45 years of age based on "shared clinical decision-making" between the patient and the clinician.

HPV vaccine FAQs

- Vaccinated women still need routine cervical cancer screening.
 - The vaccine does not provide protection against all types of HPV that cause cervical cancer
- Vaccinate even if the patient is sexually active or has a history of genital warts.
 - HPV vaccination prevents new HPV infections but does not treat existing infections or diseases

Other FAQs

- HPV vaccine is not recommended for use in pregnant women.
- The vaccine series does not need to be restarted because of an interval that is longer than recommended.



Estimated vaccination coverage, age 13 – 17 – NIS Teen, SC, 2016 – 2018

	2016	2017	2018
≥1 HPV	44.2%	59.6%	63.7%
Females	50.5%	59.8%	66.7%
Males	38.2%	59.3%	60.7%
HPV UTD	29.1%	42.7%	41.2%
Females	30.8%**	47.4%	44.8%
Males	27.4%	38.0%	37.7%
≥1 Tdap	77.5%**	89.4%	88.9%
≥1 MenACWY	68.9%	78.6%	79.7%

You are the Key to Cancer Prevention!

- Unfortunately, not all teens are being offered the vaccine at the recommended age.
- We need your help!



Strong Vaccine Recommendations

- A healthcare provider recommendation is the single best predictor of vaccination.
- Studies show that a patient who receives a provider recommendation is 4 –5 times more likely to receive the HPV vaccine

“I recommend the HPV vaccine for you and all of my patients, because it prevents cancers caused by HPV.”

**[ROUTINELY RECOMMEND
CANCER PREVENTION]**

Where can patients get vaccines?



Vaccine Programs for age 0 -18

- Vaccines for Children (VFC) Program
 - Uninsured
 - Medicaid
 - American Indian/Alaska Native
- SC State Vaccine Program
 - Underinsured (insurance doesn't cover vaccines)
- Both programs available at DHEC health departments and enrolled private health care providers

Where can my adult patient (≥ 19 years) get vaccines?

- Health care provider offices, FQHCs, etc.
- SC Pharmacies
 - All ACIP recommended vaccines can be administered to adults 18 years and older by a pharmacist.
 - No prescription needed.
- DHEC health departments



Adults \geq 19 years who are uninsured or don't have coverage for vaccines

DHEC Adult Vaccine Program

- No cost vaccines, administration fee of \$25
- Patients should not let cost be a barrier to getting the vaccines they need
- HPV, Tdap/Td, Hep A, Hep B, PPSV23, PCV13, Zoster (Shingrix) and flu
- Available at all DHEC health departments

For appointments: **1-855-4SC-DHEC (472-3432)**

Summary

- Tdap and Flu immunization rates for pregnant women in SC are lower than national average.
- While rates of adolescent vaccination are increasing, many teens and young adults have not been vaccinated for HPV
- Studies have shown that a strong provider recommendation along with an offer of vaccine is the best predictor of patients getting vaccinated.

Resources

- [cdc.gov/hpv](https://www.cdc.gov/hpv)
- [cdc.gov/hpv/hcp/how-to-recommend.html](https://www.cdc.gov/hpv/hcp/how-to-recommend.html)
- www.aap.org/immunization
- [scdhec.gov/vaccines](https://www.scdhec.gov/vaccines)
- [cancer.org/hpv](https://www.cancer.org/hpv)
- www.immunizationforwomen.org

Pregnant? Top 3 Reasons Why You Need the Flu Vaccine

- 1 The flu is a serious illness that can be much more severe during pregnancy. It can be life-threatening for newborns and pregnant women.
- 2 Getting the flu vaccine during pregnancy helps protect your newborn from the flu until the baby is old enough for his or her own vaccine.
- 3 The flu vaccine is safe for both you and your fetus. You cannot get the flu from the flu vaccine.



Get the flu vaccine during **every pregnancy**, as soon as the vaccine is available. You can get the flu vaccine during any trimester.



The American College of
Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

Learn more at
ImmunizationforWomen.org

Pregnant? Top 3 Reasons Why You Need the Tdap Vaccine

- 1 The Tdap vaccine prevents whooping cough. This is a very serious, often life-threatening disease for babies.
- 2 Getting the Tdap vaccine during pregnancy helps protect your newborn from whooping cough until the baby is old enough for his or her own vaccine.
- 3 The Tdap vaccine is safe for both you and your fetus.



For the health of your baby:

Get the Tdap vaccine during **every pregnancy** between 27 and 36 weeks, as early in that window as possible.



The American College of
Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

Learn more at
ImmunizationforWomen.org



FLU VACCINE FOR YOU

partmen
thy Comm

Protection for Two

The flu shot is the best protection for you—and your baby.

Getting the flu during pregnancy can cause serious problems for you and your baby.

The flu shot is safe for you and your child anytime during pregnancy.



Talk to your prenatal health care provider about getting your flu shot at your next appointment. You can also get vaccines at your local DHEC health department.

For an appointment, call
1-855-472-3432



ML-025678 12/18

www.cdc.gov/vaccines/pregnancy

Tdap VACCINE FOR YOU

tal Control

Protection for Two

Pregnant women are recommended to get the Tdap vaccine to protect their baby from whooping cough (pertussis).

Whooping cough is a serious disease that can cause babies to stop breathing.

Tdap vaccine given during your 3rd trimester (between 27 and 36 weeks) will give your baby the best protection.

The Tdap vaccine is safe for you and your baby.



Talk to your prenatal health care provider about getting the Tdap shot at your next appointment. You can also get vaccines at your local DHEC health department.

For an appointment, call
1-855-472-3432



ML-025678 12/18

www.cdc.gov/vaccines/pregnancy

To order free copies:

- www.scdhec.gov/agency/EML
- Create a free account
- Browse Library
 - Choose Program “Immunizations”
 - Select
 - ML-025678 “Tdap vaccine for you, Protection for Two”
 - ML-025692 “Recommended Vaccines during pregnancy/Spanish”



Contact Us



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S.C. Department of Health
and Environmental Control



- Divya Ahuja, MD, MRCP (London)
 - Associate Professor of Medicine
 - Prisma-USC
- 
- A decorative wavy line in a light peach color spans the width of the slide, positioned below the list. At the bottom of the slide, there is a solid dark blue horizontal bar, with a small red rectangular section on the far right.

SYPHILIS IN NEWBORNS IS ON THE RISE IN U.S.

Congenital syphilis is a tragic disease that can cause miscarriages, premature births, stillbirths, or even death of newborn babies.

In the past five years, cases of congenital syphilis have

NEARLY TRIPLED



A mother is likely to pass syphilis onto her baby if she is not treated.

Source: U.S. Centers for Disease Control and Prevention

SYPHILIS TESTING IS ESSENTIAL FOR **ALL** PREGNANT WOMEN



AND



A mother is likely to pass syphilis onto her baby if she is not treated.

Source: U.S. Centers for Disease Control and Prevention

2018 STD SURVEILLANCE REPORT HIGHLIGHTS ALARMING THREAT: NEWBORN DEATHS FROM SYPHILIS

22 PERCENT INCREASE FROM 2017 TO 2018 (FROM 77 TO 94 DEATHS)

Fast Facts



Chlamydia

1.8 million cases;
19% increase since 2014



Gonorrhea

583,405 cases;
63% increase since 2014



Primary and Secondary Syphilis

35,063 cases;
71% increase since 2014



Congenital Syphilis

1,306 cases;
185% increase since 2014



DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service

Centers for Disease Control
and Prevention (CDC)
Atlanta GA 30333

October 8, 2019

Dear Partners in Prevention,

Today, CDC released the [Sexually Transmitted Disease \(STD\) Surveillance Report, 2018](#). STDs reached an all-time high in 2018, marking the fifth consecutive year of increases for chlamydia, gonorrhea, and syphilis. **The most alarming threat: newborn deaths from syphilis.**

There was a startling 22 percent increase in newborn deaths from 77 in 2017 to 94 in 2018. This goes beyond data and surveillance, beyond numbers and calculations – we lost 94 lives before they even began to an entirely preventable infection.

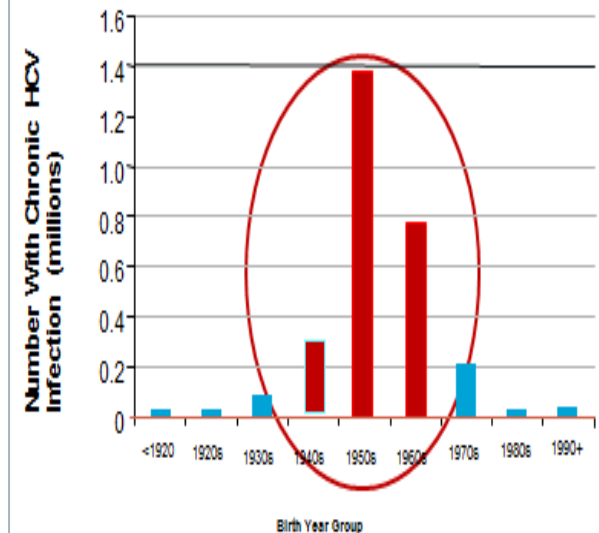
CDC's "State of the Union" on sexually transmitted diseases (STDs) in the United States stresses that we must stop syphilis – too many babies are needlessly dying

Chronic Hepatitis C (CHC)

- Nearly 1% of the US population has Chronic Hepatitis C
- Peak prevalence
 - Persons born between 1945-1965
 - 29-39 year old
- Estimated 60,000- 80,000 South Carolinians with CHC

Baby Boomers Account for the Majority of HCV Cases in United States

Estimated Prevalence by Age Group

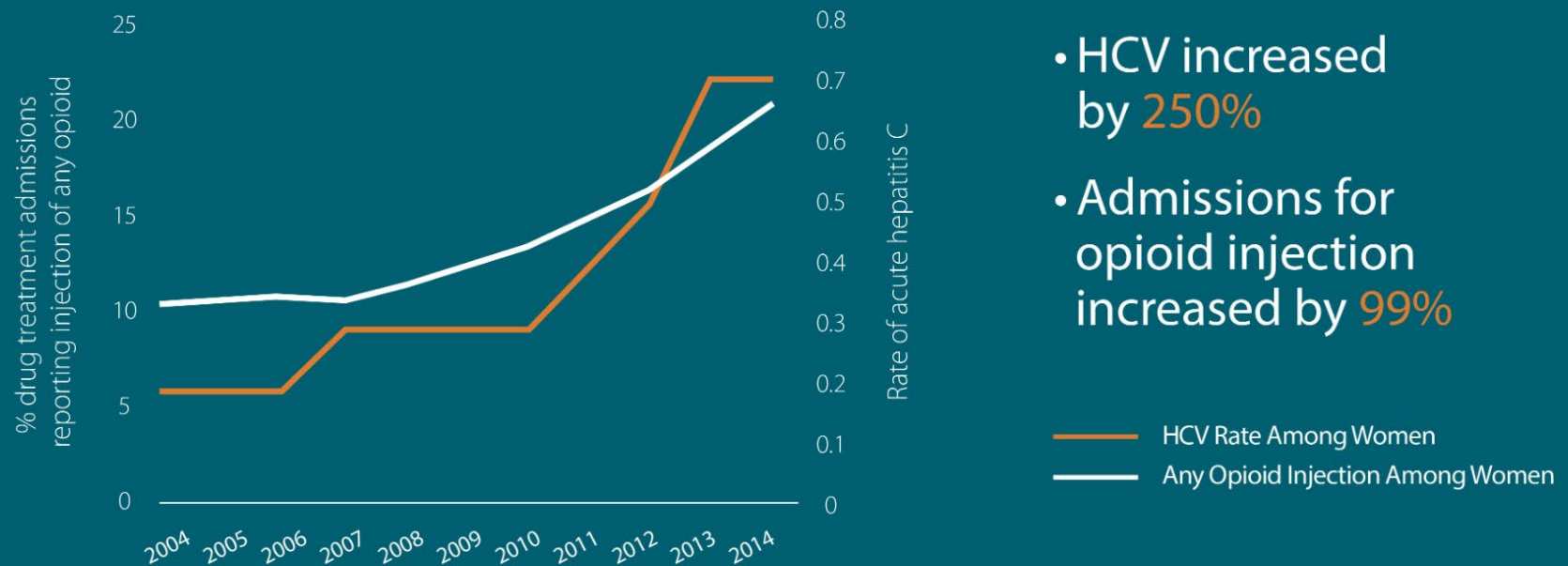


National Trends in Hepatitis C Infection by Opioid Use Disorder Status Among Pregnant Women at Delivery Hospitalization — United States, 2000–2015

Weekly / October 4, 2019 / 68(39);833–838

- National rate of HCV infection among women giving birth
 - **Increased >400%**
 - From 0.8 to 4.1 per 1,000 deliveries
- Rate of vertical transmission about 6%
- Screening for Hepatitis C
 - Not yet routine.
- Risk-based HCV screening endorsed by
 - Centers for Disease Control and Prevention
 - American College of Obstetrics and Gynecology
 - The Society of Maternal-Fetal Medicine
- **Endorsement of Universal HCV screening in pregnancy is coming!**
 - AASLD-IDSA
 - USPSTF(Draft statement)

HEPATITIS C AND OPIOID INJECTION ROSE DRAMATICALLY AMONG WOMEN FROM 2004-2014



Source: Centers for Disease Control and Prevention and Substance Abuse and Mental Health Services Administration

Hepatitis B- Check Hepatitis B s Antigen

- ***First prenatal visit***
 - Screen all pregnant women
- ***Third trimester***
 - Test those who were not screened prenatally
 - Those who engage in high risk behaviors
 - Signs or symptoms of hepatitis at the time of delivery
- **Risk Factors:**
 - More than one sex partner in the previous six months
 - Evaluation or treatment for an STD
 - Recent or current injection-drug use
 - An HBsAg-positive sex partner

HIV

- What is the prevalence of HIV in the US?
 - 1. 1 out of 150
 - 2. 1 out of 350
 - 3. 1 out of 3500
 - 4. 1 out of 35000

HIV

- What is the prevalence of HIV in the US?
 - 1. 1 out of 150
 - 2. **1 out of 350**
 - 3. 1 out of 3500
 - 4. 1 out of 35000

AIDS Cases in 2016

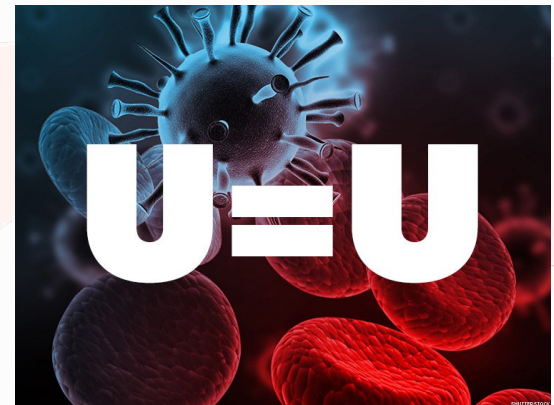
Rank	Area of Residence	AIDS Cases	
		No. Cases	Rate per 100,000
1	District of Columbia	185	27.2
2	Louisiana	564	12.0
3	Florida	2,354	11.4
4	Georgia	1,159	11.2
5	Maryland	586	9.7
6	Mississippi	276	9.2
7	Nevada	239	8.1
8	New York	1,578	8.0
9	Texas	2,077	7.5
10	South Carolina	369	7.4
10	Delaware	70	7.4

Rank	Area of Residence	AIDS Cases	
		Cases	Rate
1	Baton Rouge, LA	150	18
2	Jackson, MS	99	17.1
3	Miami/WPL/Ft. L, FL	1,029	17
4	New Orleans/Met, LA	179	17
5	Jacksonville, FL	194	13.1
6	Columbia, SC	103	12.6 (13 in 2015)
7	Atlanta/SS/Ros, GA	695	12
8	Baltimore/Columbia, MD	315	11.3
23	Charlotte/Con/Gas, NC	175	7.1
26	Charleston/N.Ch, SC	51	6.7
51	Greenv./And/Maul, SC	43	4.9

Centers for Disease Control and Prevention. *HIV Surveillance Report, 2016*; vol. 28. □ <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published November 2017. Accessed [7/27/18] .

Recommendations for Initiating ART for an HIV infected person

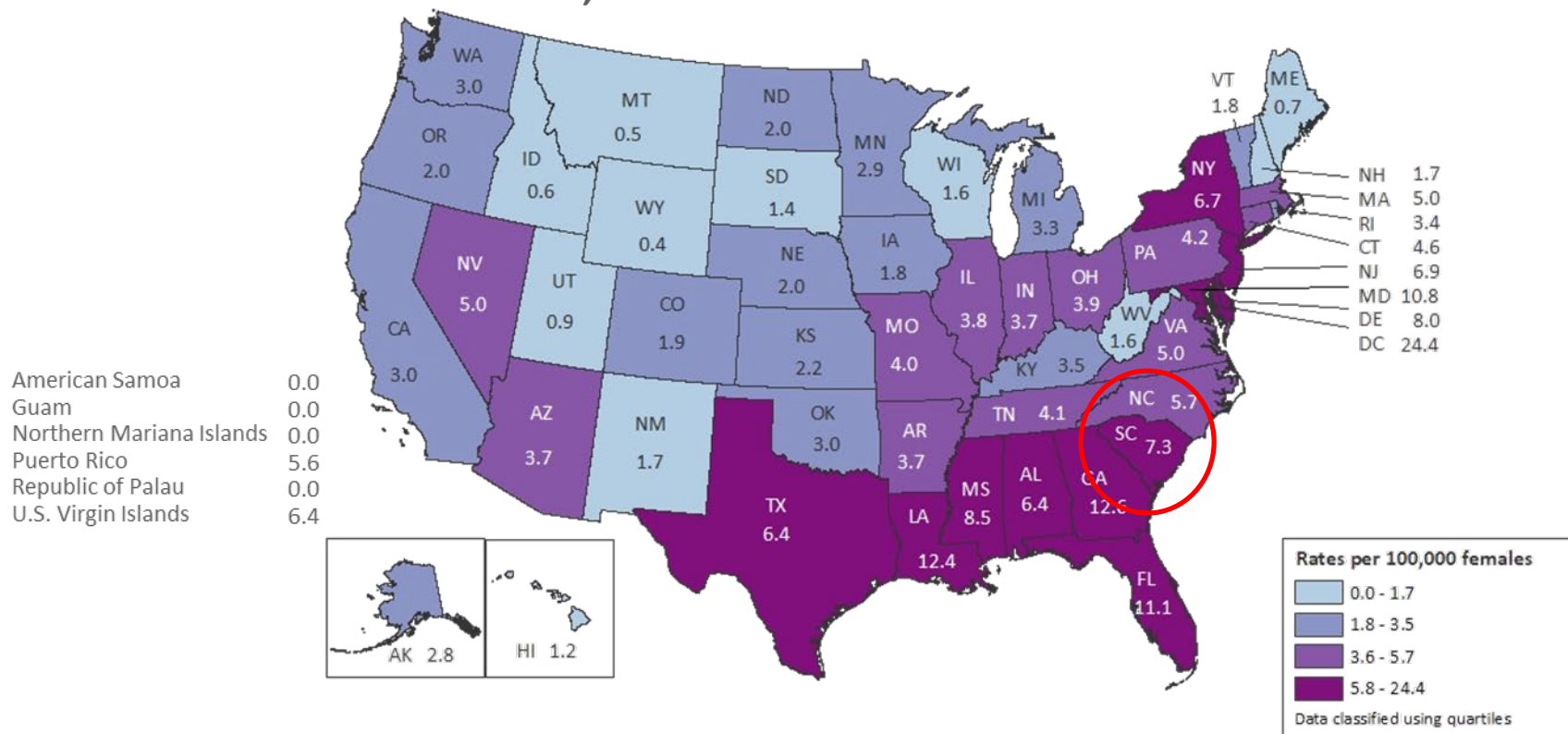
- ART (Antiretroviral therapy or HIV medications) is recommended for all HIV-infected individuals to reduce the risk of disease progression.
- Effective ART reduces transmission to almost “0”
- **Undetectable= Untransmissible**



Rates of Diagnoses of HIV Infection among Female Adults and Adolescents 2017—United States and 6 Dependent Areas

N = 7,401

Total Rate = 5.2



Note. Data for the year 2017 are considered preliminary and based on 6 months reporting delay.

Women and HIV PrEP

- Women comprise 1 in 5 HIV diagnoses in the US
- The rate of new HIV diagnosis
 - Among black women was 16 times as high of white women and 5 times as high as Hispanic women
- PrEP is an individual-controlled prevention method
- PrEP offers an effective, safe, and private option for women to reduce their risk of HIV acquisition
- CDC estimated that 468,000 women in the US may benefit from PrEP
- Data from 82% of US pharmacies between 2013 -2016
 - Women accounted for only 14% of PrEP prescriptions
 - Only 17% were African American

Aaron E, et al. AIDS Patient Care STDS. 2018;32(1):16–23.

PrEP: What is HIV PrEP

- Pre-exposure prophylaxis (PrEP)
 - A method of preventing an uninfected person from acquiring the disease
 - One tablet once daily
 - Minimal side effects
 - High Efficacy if taken regularly
 - (>90%)



PrEP to reduce HIV acquisition

- Time to protection from Tenofovir
 - Maximum intracellular concentration of tenofovir
 - Cervicovaginal tissue penetration takes ~20 days
 - Rectal tissue - 7 days
- PrEP requires adherence:
 - 6 of 7 doses/week (85% adherence) to protect cervicovaginal tissue
 - 2 of 7 doses/week (28% adherence) to protect colorectal tissue.
- The efficacy of PrEP in women varied widely across clinical trials from 26% to 81% and corresponded with adherence

PrEP: The Guidelines

US Public Health Service

PREEXPOSURE PROPHYLAXIS FOR
THE PREVENTION OF HIV
INFECTION IN THE UNITED STATES
– 2017 UPDATE

A CLINICAL PRACTICE GUIDELINE

- PrEP is recommended as one prevention option for persons at substantial risk of HIV acquisition:
 - MSM (men who have sex with men) (IA)
 - Adult heterosexual men and women (IA)
 - Adult persons who inject drugs (PWID) (IA)
 - HIV-discordant couples during conception and pregnancy (IIB)

PrEP: Endorsed by...

US Public Health Service

PREEXPOSURE PROPHYLAXIS FOR THE PREVENTION OF HIV INFECTION IN THE UNITED STATES – 2017 UPDATE

A CLINICAL PRACTICE GUIDELINE



The American College of
Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

COMMITTEE OPINION

Number 595 • May 2014
(Reaffirmed 2017)

Committee on Gynecologic Practice

This Committee Opinion was developed with the assistance of the HIV Expert Work Group. This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. This information should not be construed as dictating an exclusive course of treatment or procedure to be followed.

**Preexposure Prophylaxis for the Prevention of Human
Immunodeficiency Virus**



U.S. Preventive Services TASK FORCE

Draft Recommendation Statement

Prevention of Human Immunodeficiency Virus (HIV) Infection: Pre-Exposure Prophylaxis

This opportunity for public comment expired on December 26, 2018 at 8:00 PM EST

Note: *This is a Draft Recommendation Statement. This draft is distributed solely for the purpose of receiving public input. It has been disseminated otherwise by the USPSTF. The final Recommendation Statement will be developed after careful consideration of the feedback received and will include both the Research Plan and Evidence Review as a basis.*

Recommendations made by the USPSTF are independent of the U.S. government. They should not be construed as an official position of the Agency for Healthcare Research and Quality or the U.S. Department of Health and Human Services.

Draft: Recommendation Summary

Population	Recommendation	Grade (What's This?)
Persons at high risk of HIV acquisition	The USPSTF recommends that clinicians offer pre-exposure prophylaxis (PrEP) with effective antiretroviral therapy to persons who are at high risk of HIV acquisition.	A

- 1) <https://www.cdc.gov/hiv/risk/prep/index.html> (CDC- 2017 guidelines)
- 2) http://apps.who.int/iris/bitstream/handle/10665/75188/9789241503884_eng.pdf;jsessionid=F0C57C0B6ADFA651F46AF51949D6848F?sequence= (WHO 2012 guidelines)
- 3) <https://www.uspreventiveservicestaskforce.org/BrowseRec/Search?s=PREP>
- 4) <https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Gynecologic-Practice/Preexposure-Prophylaxis-for-the-Prevention-of-Human-Immunodeficiency-Virus>

A**Screening Visit****Laboratory Tests****Confirm HIV negative status**

If worried that patient has acute infection, repeat HIV test and viral load to confirm HIV status

Creatinine clearance

Confirm estimated creatinine clearance (CrCl) / eGFR (estimated glomerular filtration rate) ≥ 60 ml/min

Pregnancy intentions

Assess pregnancy intentions, offer contraception or preconception care as appropriate, and document pregnancy status (may take PrEP if attempting conception, pregnant or breastfeeding)

Hepatitis B

Document Hepatitis B serology (if not immune, offer vaccination). This is not required to start PrEP; importantly TDF/FTC treats chronic hepatitis B infection.

This information shapes counseling around risks of stopping Truvada (potential flare of Hep B)

Options for when to start PrEP**Schedule return visit**

Schedule a return visit when laboratory results for HIV will be available

Notify of results and call in prescription

Call with results if reliable phone number is available, and if HIV-negative, call in a prescription to a pharmacy.

Complete insurance and/or medication assistance paperwork**Uninsured patients**

If the patient has no insurance, patient can be referred to an insurance counselor if available and apply for public health PrEP access programs or free drug through [GileadAdvancingAccess.com](http://www.gilead.com/advancingaccess)

Uninsured patients

If insured, patient can apply for copay assistance (<http://www.gilead.com/responsibility/us-patient-access/truvada%20for%20prep%20medication%20assistance%20program>)

Counsel patient to call clinic if insurance denied so that appeal can be submitted promptly

B

Initiation of PrEP

Prescribe 90 day supply of Truvada

Explain possible side effects

Provide education about potential short-term side effects (headache, nausea, vomiting, mild diarrhea), how to manage, over the counter remedies, and when to call if help/advice is needed.

Counsel patient on the importance of medication adherence

Provide tips to support daily adherence (e.g., pill box, phone app reminders, same-time daily reminders, and key-chain holder doses for when away from home)

Discuss other forms of protection

Inform patient about the importance of condom use, especially if there are periods of inconsistent medication adherence

- Adequate doses for vaginal protection can take 20 days.
- Adequate doses for anal protection can take 7 days.

Stopping PrEP use

Counsel patient about how to stop PrEP if they want to (e.g., continue until 4 weeks after last potential exposure, and call clinic first) and how to safely restart (e.g., need an HIV test before restarting).

Schedule follow-up visit for HIV test and refill

First check-in

Consider phone check-in at 1 month to assess medication adherence issues and side effects

Young adult patients

If person is young (e.g., <25 years of age) or you have concerns about adherence, you may want to recommend a 30 day follow up appointment

Follow-up Visits

Follow-up Timeline

First 3-month visit

At first 3-month visit, and every 6 months thereafter, check renal function (estimated CrCl)

Every 3 months

HIV test; assess pregnancy intentions and offer contraception, preconception counseling, and pregnancy testing as appropriate; offer STI screening (especially gonorrhea and syphilis); and PrEP refill

Every 6 months

Conduct STI screening (even if asymptomatic)

Every 12 months

Assess the need for continuing PrEP

PrEP: For Pregnancy

Reproductive Options for HIV-Concordant and Serodiscordant Couples (Last updated October 26, 2016; last reviewed October 26, 2016)

Panel's Recommendations

For Couples Who Want to Conceive

For Concordant (Both Partners are HIV-Infected) and Discordant Couples:

- Expert consultation is recommended so that approaches can be tailored to couples' specific needs (AIII).
- Partners should be screened and treated for genital tract infections before attempting to conceive (AII).
- Both partners should attain maximum viral suppression before attempting conception (AIII).

For Discordant Couples:

- The couple should be counseled and only attempt conception after the HIV-infected partner has initiated antiretroviral therapy and have achieved sustained suppression of plasma viral load below the limits of detection (AI).
- Administration of antiretroviral pre-exposure prophylaxis 30 days before and 30 days after conception for HIV-uninfected partners may

For discordant couples:

-HIV partner should be on ART and have sustained suppression of VL (AI)

-PrEP 30 days before and 30 days after conception for HIV-uninfected partners may offer an additional tool to reduce the risk of sexual transmission(BII)

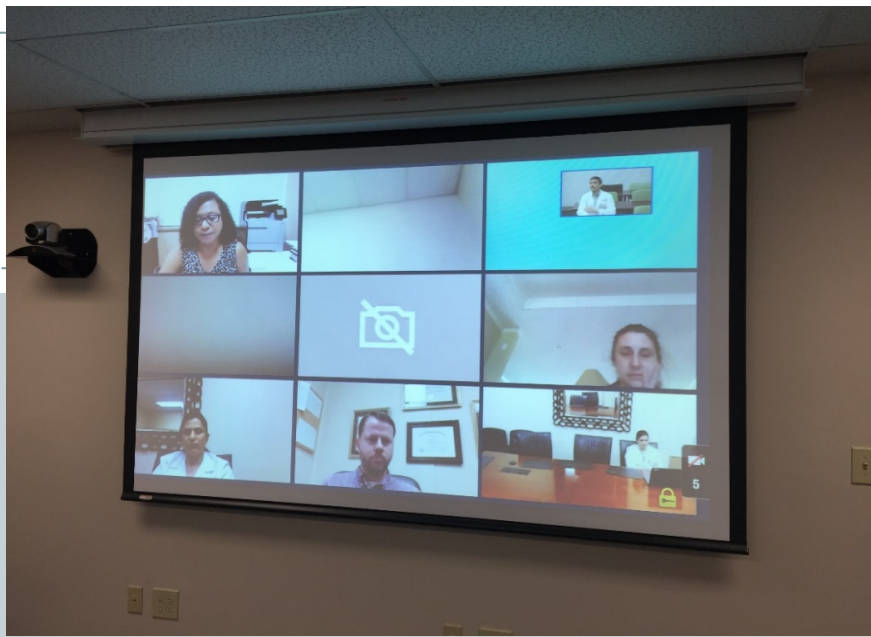
designed, nonrandomized trials or observational cohort studies with long-term clinical outcomes; III = Expert opinion

<https://aidsinfo.nih.gov/guidelines/html/3/perinatal-guidelines>

DHHS Perinatal Guidelines, Updated Oct 2016

Provider role in PrEP

- PrEP may not be suitable for all persons at risk of HIV
 - Those unable to adhere to a daily pill regimen
 - Fear of partner violence
- Provider strategies to improve PrEP uptake
 - Facilitate accurate knowledge
 - Understanding of medication benefits
 - Requirements for adherence
 - Reminder calls or text messages
 - Peer support
 - Mental health
 - Substance use
 - Economic and housing constraints



- **South East Hepatitis C Telehealth Initiative**
- **HIV PrEP Telehealth**
 - Free HCV/HIV PrEP teleconsultation program
 - CME accredited clinical training and case-based consultations via video conferencing for health care providers at FQHCs, Ryan White Clinics & Deaddiction Centers



STD Screening in Pregnancy

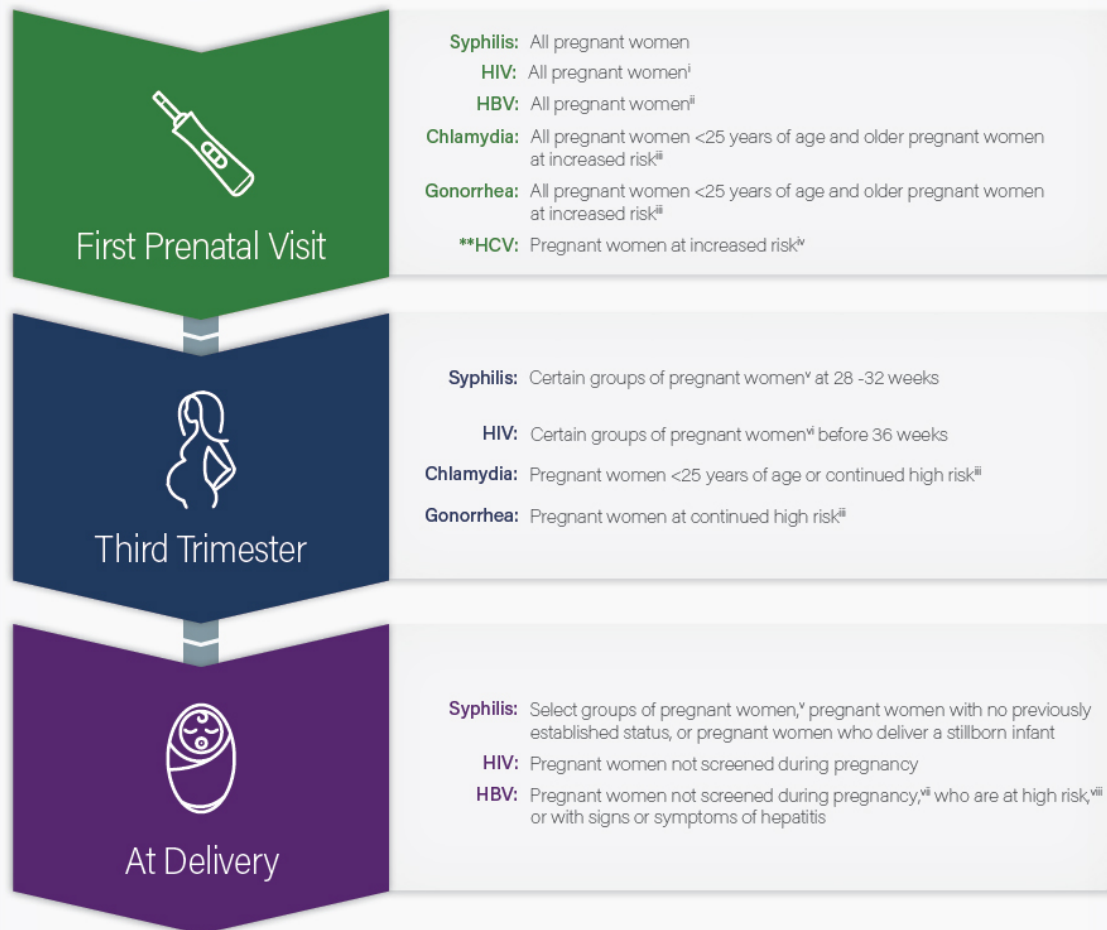
Melanie Nichols, MSN -FNP

South Carolina Department of Health and Environmental Control

Healthy People. Healthy Communities.

Screening Recommendations:

Clinician Timeline for Screening Syphilis, HIV, HBV, HCV, Chlamydia, and Gonorrhea





Required and Recommended Prenatal Screening for HIV and STDs

Screening for STDs during Pregnancy: Recommendations & Guidelines

	Prenatal Screening		Labor and Delivery Screening
	First Prenatal Visit	Third Trimester	L&D
Syphilis	Required by S.C. State Law S.C. Code of Laws (44-29-120) .	Recommended for ALL pregnant women	Yes, if status is unknown or undocumented, if treated for syphilis within one year of L&D, or if infant is stillborn
HIV	Unless the woman is known to be positive, HIV screening should be offered as an opt-out test.	Recommended for ALL pregnant women	Yes, if status is unknown or undocumented
Hepatitis B	Test for Hepatitis B surface antigen (HBsAg), even for those with a positive Hepatitis B core antibody.	Yes, if risk factors present	Yes, if status is unknown or undocumented
Hepatitis C	Women at risk for Hepatitis C infection (including current or past injection drug users) should be screened	--	--
Chlamydia	Screen all pregnant women under 25 years of age and those over 25 years of age with risk factors	Yes, if risk factors present, if woman is under 25 years of age, and if infected during pregnancy (retest at least 3 weeks after treatment)	--
Gonorrhea	Screen all pregnant women under 25 years of age and those over 25 years of age with risk factors (including new or multiple partners at time of screening)	Yes, if risk factors present	--

Risk Factors

- Partner(s) living with or at risk for HIV
- Illicit drug use
- History of STDs during this pregnancy or one year prior to pregnancy
- New or multiple sex partners during pregnancy
- Exchanges sex for money or drugs
- Signs or symptoms of acute HIV infection, Syphilis or other STD

Syphilis Serology

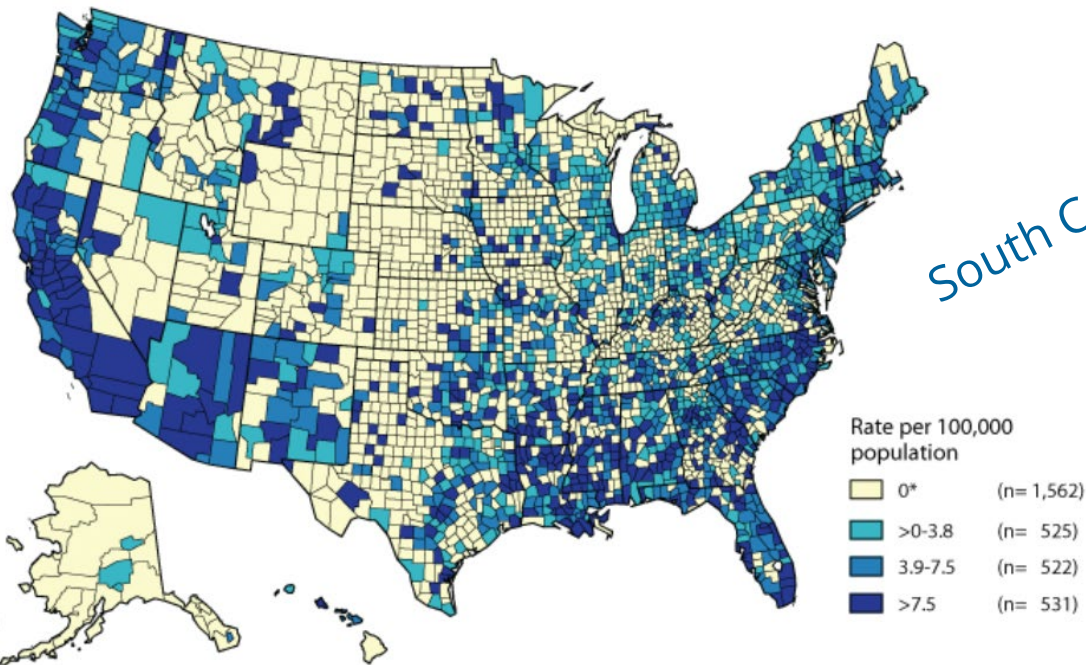
Non -Treponemal Test

- Rapid plasma reagin (RPR)
- Venereal Disease Research Laboratory (VDRL)

Treponemal Test

- Fluorescent Treponemal Antibody (FTA-Abs)
- Microhemagglutination test (MHA-TP)
- *T. pallidum* passive particle agglutination (TP-PA)
- Syphilis IgG (EIA)

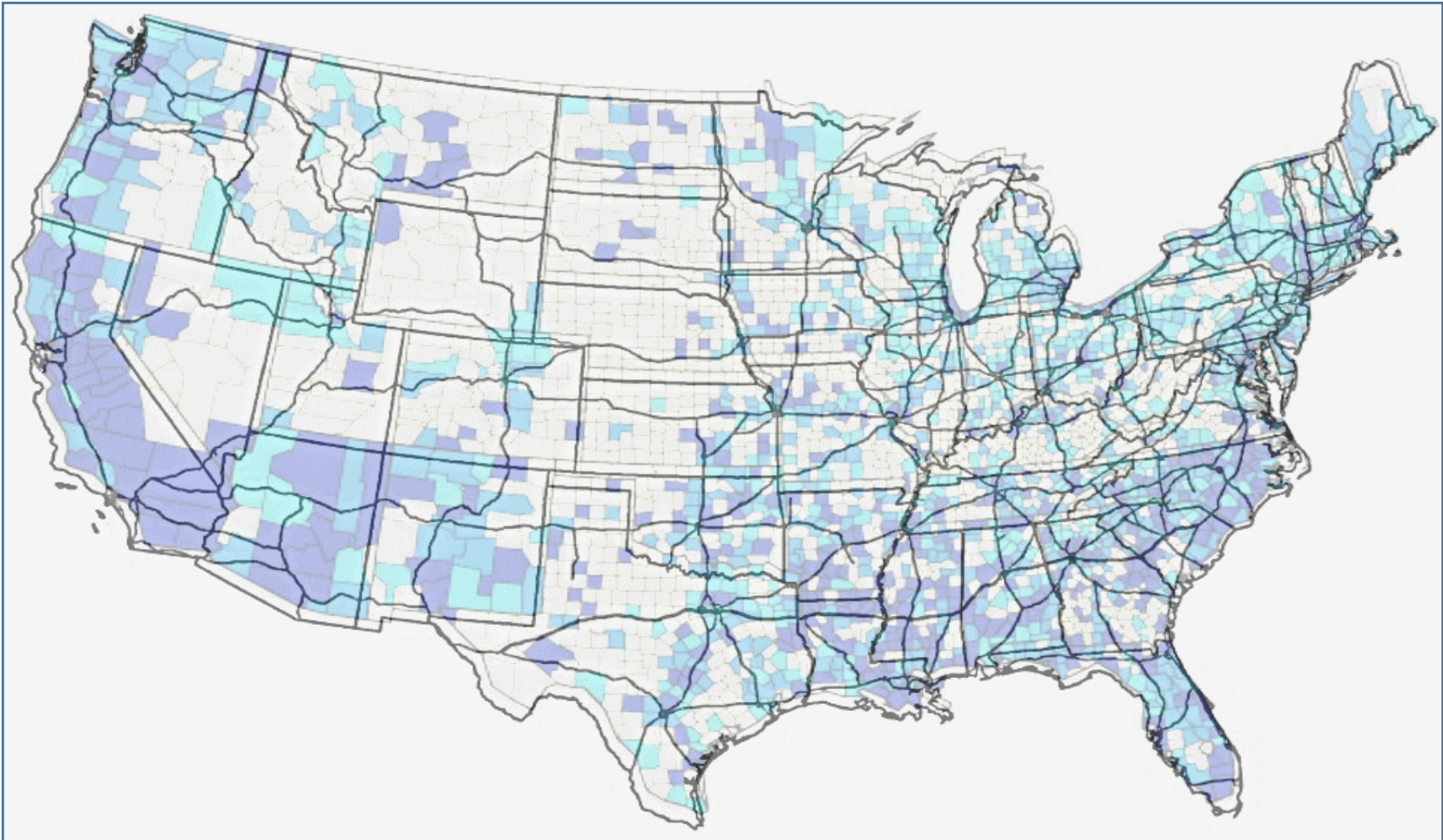
Syphilis Prevalence



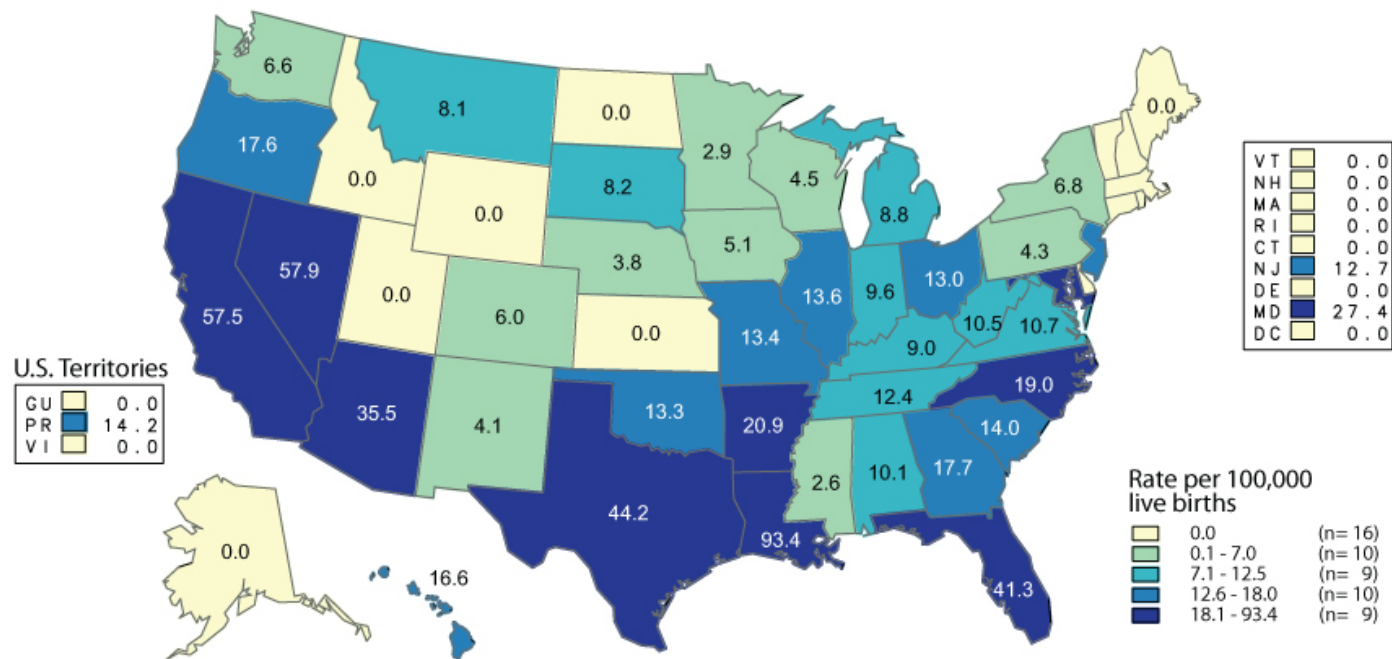
South Carolina is ranked #22



South Carolina Department of Health and Environmental Control
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Congenital Syphilis —Rates of Reported Cases Among Infants by Year of Birth and State, United States and Outlying Areas, 2017



Maternal Testing and Treatment During Pregnancy —Congenital Syphilis Cases, United States, 2016 (N=628)

Testing/Treatment Status	N	%
Not tested in time	266	42%
Infected with syphilis during pregnancy, after initial screening test	101	16%
Tested in time (and positive), but not treated in time	88	14%
Received inadequate regimen	23	4%
Other/Can't classify based on data provided	150	24%

Primary Syphilis

- Single or multiple usually painless sores (also called chancre)
- Lasts 3-6 weeks and heals with or without treatment

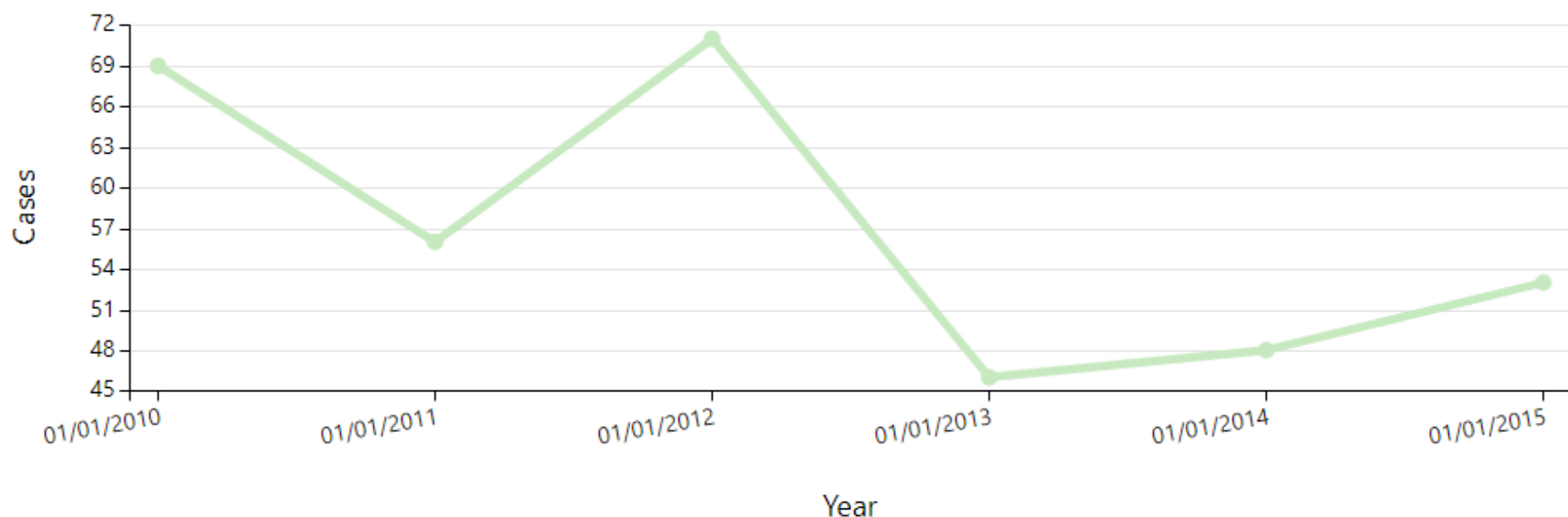


Secondary Syphilis

- Rash (usually does not itch) and/or mucous membrane lesions
- Resolves with or without treatment in 2-6 weeks



Number of HIV diagnoses among infants, United States



	2010	2011	2012	2013	2014	2015
Cases	69	56	71	46	48	53



140,145

Number of women aged 15-44 years living with chronic or acute HBV¹

952

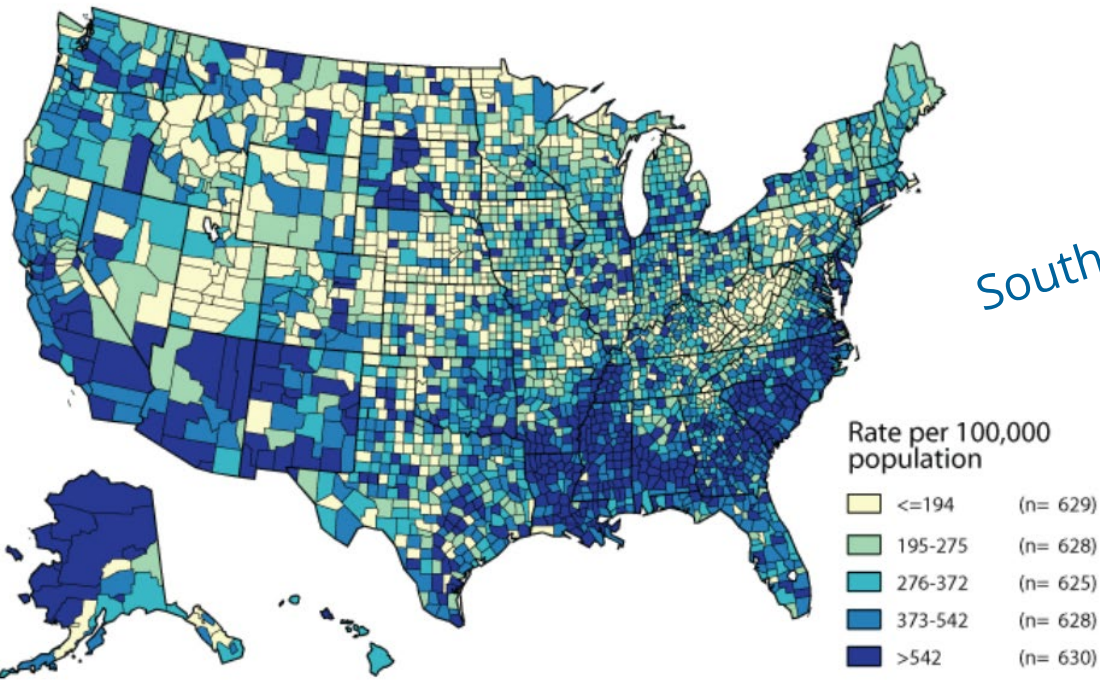
Number of infants with chronic HBV, 2009, United States²

20,678 (Estimated)³

11,334
(Identified)⁴

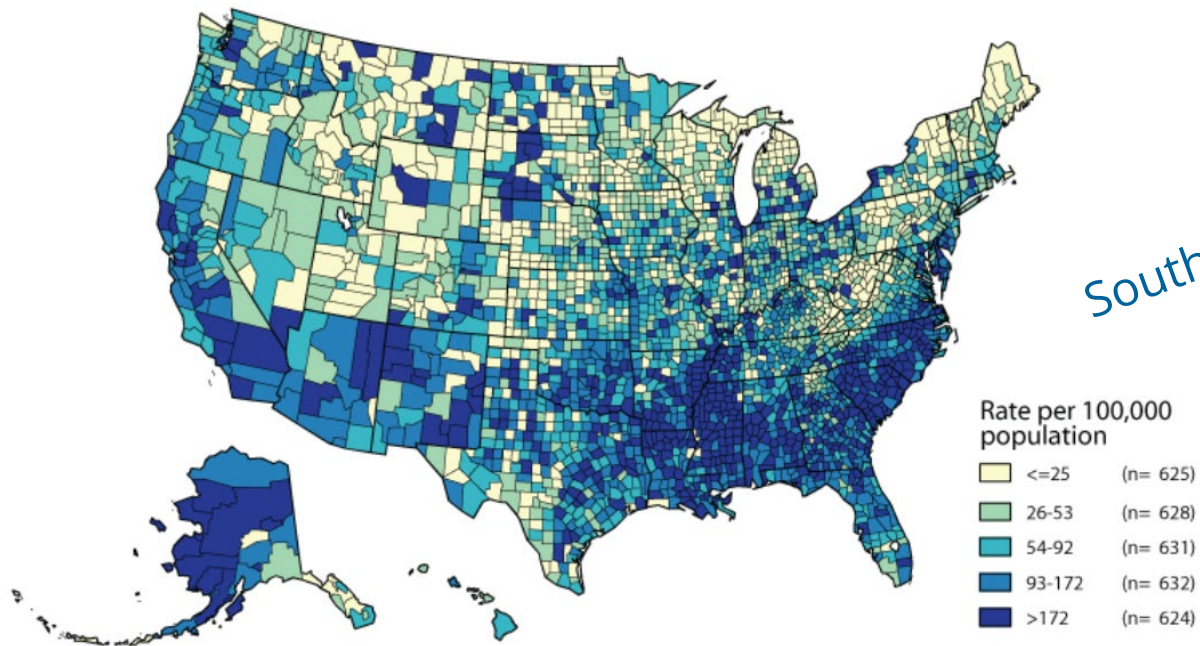
Number of pregnant women identified as living with HBV infection, 2015, United States

Chlamydia Prevalence



South Carolina is ranked #5
We were #7 last year...

Gonorrhea Prevalence



South Carolina is ranked #4
We were #9 last year...

Current Screening Statistics

- Approximately **75%–80%** of pregnant women are screened for HIV infection^{3,4}
- Approximately **84%–88%** of pregnant women are screened for HBV infection⁵
- Approximately **85%** of commercially insured pregnant women are screened for syphilis⁴

References

- https://www.scdhec.gov/sites/default/files/Library/Prenatal_Screening_HIV_and_STDs.pdf
- <https://www.cdc.gov/std/stats17/womenandinf.htm>

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