

## A Look into World TB Day and TB Risk Assessment in Health Care Settings

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Each year, we recognize World TB Day on March 24. This annual event commemorates the date in 1882 when Dr. Robert Koch announced his discovery of Mycobacterium tuberculosis, the bacillus that causes tuberculosis (TB).

World TB Day is a day to educate the public about the impact of TB around the world. DHEC, the Centers for Disease Control and Prevention (CDC) and our partners and colleagues around the world share successes in TB prevention and control and raise awareness of the challenges that hinder our progress toward the elimination of this devastating disease.

On this designated day, the CDC releases the previous year's case rates for public consumption. With this data, health care facilities regulated by S.C.'s Bureau of Health Facilities and Licensing are required to perform annual TB risk assessments. A TB risk assessment is an initial and ongoing evaluation of the risk for transmission of Mycobacterium tuberculosis in a particular health care setting. To perform a risk assessment, the following factors shall be considered: the community rate of TB, number of TB patients encountered in the setting and the speed with which patients with TB disease are suspected, isolated and evaluated. The risk assessment determines the types of administrative and environmental controls and respiratory protection needed for a setting. Health care facilities can find county case rates here.

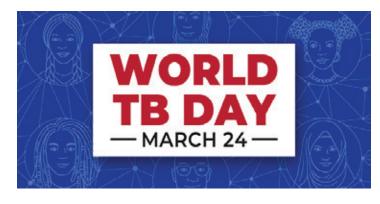
As a part of the risk assessment, all health care settings should perform a risk classification to determine the need for screening, testingt and evaluating personnel at risk for TB exposure. The Bureau of Health Facilities and Licensing has developed forms to guide facilities in meeting the regulatory requirements in conducting TB risk assessments. Using the case count data for the county and state, facilities will then complete the form(s) and assign a risk classification of low, medium, or ongoing transmission to perform TB testing as required.

Forms can be found by visiting: CDC TB Guidlines DHEC TB Risk Assessment

Additional resources:

CDC TB Healthcare Settings
CDC Guidelines for TB Prevention

For questions or concerns on data rates, please call the state TB office at 803-898-0558.



### **Employing Status-Neutral Approaches to End the HIV Epidemic in South Carolina**

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The National HIV/AIDS Strategy for 2022 through 2025, and the Integrated HIV Prevention and Care Plan Guidance for 2022 through 2026 list statusneutral approaches to HIV care. Incorporating status-neutral approaches into HIV services is a priority for the Centers for Disease Control and Prevention (CDC) and Health Resources and Services Administration (HRSA), as contained in a recent joint communique released by both agencies.

The CDC describes status-neutral approaches (or status neutrality) as person-centered approaches to care that emphasize quality HIV prevention and treatment services regardless of a person's HIV

Status-Neutral HIV Prevention and Care People whose HIV tests are negative are tests are positive ente offered powerful primary care and are offered effective evention tools like PrEP condoms, harm ction (e.g., SSPs). treatment and and supportive services to stay supportive services to achieve and maintain HIV negative Follow CDC guidelines to test people for HIV. Regardless of HIV status quality care is the foundation of HIV prevention and effective treatm Both pathways provide people with the tools they need to stay healthy and stoo HIV. Figure 7. CDC's HIV status-neutral approach to HIV services

status. DHEC champions the implementation of status-neutral services throughout the state as a strategy for ending the HIV epidemic (EHE) in collaboration with other stakeholders.

The prevention pathway offers tools such as pre-exposure prophylaxis (Prep), post-exposure prophylaxis (Pep), statewide condom distribution, harm reduction services, testing for sexually transmitted infections (STIs), and providing partner services to eligible persons. People who test HIV positive (treatment pathway) are commenced on antiretroviral therapy (ART) to achieve viral suppression. Studies have shown that people with an undetectable viral load do not transmit HIV to a sexual partner(s), referred to as Undetectable Equals Untransmittable or U=U. The two pathways culminate in one common endpoint a reduction in HIV acquisition and transmission, and a viable pathway to ending the HIV epidemic in South Carolina.

Status-neutral approaches to end the HIV epidemic are embedded within each of the four pillars (Diagnose, Treat, Prevent and Respond) of the SC EHE Plan reducing new HIV transmissions in S.C. by 75% by 2025 and by 90% in 2030. DHEC has expanded statewide HIV services to allow for more residents to get tested and know their HIV status, rapidly link, and re-engage people to care, and provide PrEP to eligible populations.

Applying HIV services through a status-neutral lens reduces stigma and discrimination, addresses social determinants of health to decrease new HIV infections, and supports the health and quality of life of people living with HIV.

For additional resources, please visit: CDC HRSA Status Neutral National HIV AIDS Strategy Ryan White HRSA Grants

### **Perinatal Hepatitis C Virus**

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As of April 2020, the Centers for Disease Control and Prevention (CDC) recommends that prenatal care providers screen all pregnant persons for hepatitis C virus (HCV). HCV can be transmitted from a mother to her baby in utero or during childbirth. While there are currently no treatments approved for use in pregnancy to prevent transmission of HCV to infants, identifying HCV in pregnant people allows access to treatment and identifies at-risk infants in need of testing and ongoing monitoring.

#### **Recommendations for Pregnant Persons:**

- 1. Know your status.
  - Almost half of people with HCV do not know it. Talk to your provider to request HCV testing if it is not offered to you.
- 2. Stay connected.
  - There is no treatment available for children under the age of 3. It is important to stay connected with your child's pediatrician to ensure your child receives proper testing and treatment.

#### **Recommendations for Providers:**

#### 1. Report

 Birth to a mother infected with HCV should be reported to the infant's health care provider and the local health department to ensure follow-up HCV testing and relevant contacts can receive hepatitis A and hepatitis B testing and vaccination and linked to appropriate preventive services.

#### 2. Confirm

- Currently, there is no "case management" of HCV-infected pregnant women. For new cases of perinatal HCV infection, it is recommended to confirm the HCV status of the mother with HCV RNA and routine liver function tests.
- All children born to HCV-infected women should be tested using an antibody-based test at or after 18 months of age.
- Children who are anti-HCV positive after 18 months of age should be tested with an HCV-RNA assay after age 3 to confirm chronic hepatitis C infection.

#### 3. Educate

- Educate the parent/guardian and pediatrician on HCV infection, transmission and treatment. In addition, hepatitis A virus and hepatitis B virus vaccinations for infants infected with HCV and relevant contacts should be promoted.
- Hepatitis C is not transmitted by casual contact and, as such, children with HCV infection do not pose a risk to other children and can participate in school, sports, and other regular childhood activities without restrictions.
- Universal precautions should be followed at school and in the home of children with HCV infection. Educate families and children about the risk and routes of HCV transmission and techniques for avoiding blood exposure.

Detailed clinical management of children with HCV and recommendations for counseling parents regarding transmission and prevention can be found here.

More general information regarding HCV here.

#### **Resources:**

HCV Guidlines CDC Hep C Pregnancy Test Perinatal HCV Tool Kit

### South Carolina Immunization Coalition Launches Statewide Vaccine Confidence Initiative

#### Division of Immunization

In November 2022 the S.C. Vaccine Equity Workgroup, coordinated via the statewide 501c3 nonprofit South Carolina Immunization Coalition (SCIC), announced the launch of the social media toolkit for community partners as part of its multi-layered Every Visit is a Vaccine Visit (EV3) initiative to build vaccine confidence and increase awareness of vaccine availability at every visit with a health care provider.

"Immunizations are essential to primary prevention of disease. The pandemic disrupted families' access to routine vaccines and preventive health conversations with their providers, resulting in many children who are unprotected against diseases like measles and the flu," said Beth Poore, S.C. Vaccine Equity Workgroup facilitator. "It's important for families and providers to talk about vaccines at any health care or pharmacy visit."

Through funding support from Vaccinate Your Family, workgroup members collaborated with leading researchers at College of Charleston and Clemson University to assemble an easy-to-use social media resource with 10 weeks of sample daily messaging and graphics for health care providers, immunizers and all school and community partners to use on their organization's social media platforms to amplify the message to make every visit count. Partners can request the toolkit here.

SCIC identified four counties with low student vaccination coverage rates in each region of the state to focus EV3 efforts, based on an analysis of recent school vaccination data available from DHEC. In addition to the EV3 social media campaign, the Vaccine Equity Workgroup received generous funding from the CCME Foundation to host a series of motivational interviewing skills building workshops for immunizers and health care professionals who live in and/or serve Cherokee, Chesterfield, Jasper and Lancaster counties in early 2023.



"We know the pandemic has involved a lot of vaccine mis-and dis-information online and on social media, leading to people having mixed feelings about the COVID-19 vaccine, which has ultimately impacted how people feel about vaccines overall," said Alexandra Hayes, SCIC Organizing Director. This effort includes providing immunizing professionals "conversation tools to effectively address patient concerns about vaccines," she said.

SCIC is dedicated to convening vaccine champions across the state to protect people of all ages from common and serious vaccine-preventable diseases. Partners throughout South Carolina are encouraged to join the effort to build vaccine confidence in our communities. Submit a request for the toolkit here, and learn more about the EV3 initiative on the coalition's website.

## Submission of Required Specimens to the Public Health Laboratory (PHL): The importance of identifying an etiologic agent

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One of the "10 Essential Services of Public Health" identifies the importance of "investigating, diagnosing, and addressing health problems and hazards affecting the population." From the perspective of infectious disease surveillance and response, this essential service is built upon the concept called the Epidemiologic Triad, which has three components:

- Agent: an infectious microorganism or pathogen; a virus, bacterium, or other microbe. Generally, the agent must be present for disease to occur; however, presence of that agent alone does not always cause disease.
- Host: the human who can get the disease. A variety
  of factors intrinsic to the host can influence a
  person's exposure, susceptibility, or response to a
  causative agent.
- Environment: physical factors such as geology and climate, biologic factors such as insects that transmit the agent, and socioeconomic factors such as crowding, sanitation and the availability of health services.

If all three components are not known, the ability to fully address the "whys" and "hows" is limited, along with the ability to develop a public health intervention to limit and/or halt disease transmission. Knowing the host and the environment may tell us what to look for (symptoms) and how to respond (limit transmission). Not knowing the agent may limit our ability to determine how the unknown agent may change over time and its susceptibility to interventions (antivirals/antimicrobials, vaccines).

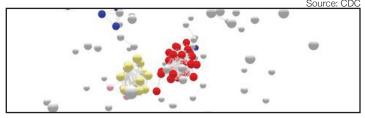
With the advent of culture-independent diagnostic tests (CIDTs), and expansion of rapid and at-home testing, the public health messaging about what people can do to limit disease transmission has been enhanced; we can now more quickly and correctly identify a disease-causing agent. Many CIDTs are more sensitive than culture, so they can increase the likelihood of identifying the pathogen. However, CIDTs do not provide an isolate of the pathogen.

Isolates are needed to conduct whole genome sequencing (WGS), which produces a pathogen's unique "DNA fingerprint." Public health officials use DNA fingerprints to monitor trends in infections, detect outbreaks and link illnesses to likely sources.

WGS data is also used to identify pathogen characteristics, such as serotype, virulence, and antimicrobial resistance.

As with many things, there is often a trade-off: testing done at commercial and other laboratories may help identify a causative agent faster; however, what is often sacrificed is the more detailed and revealing information about the agent that additional testing can provide.

Over the past two years, the Division of Acute Disease Epidemiology has noticed an increase in enteric and respiratory outbreaks where a final etiologic agent has not been identified. We want to remind our clinical partners how important the ongoing partnership with public health is to assisting in the surveillance for reportable conditions and identifying disease-causing agents.



Submission of the required specimens to the Public Health Laboratory (PHL) is especially important when looking for the source of an outbreak or determining antimicrobial resistance in bacteria and fungi. Footnote 2 on the South Carolina List of Reportable Conditions identifies the 29 situations/diseases and conditions where specimen submission is required.

Additional testing can help answer disease surveillance and outbreak response-specific questions like:

- "Is this a new serotype or strain of a disease we haven't seen very much in the state?" (Disease Surveillance)
- "Is this WGS pattern the same as we've seen among other people and products with similar host and/or environment components?" (Outbreak Response)

For questions or more information, please reach out to the regional public health offices or use the contact information in the "How to Report" Section of the List of Reportable Conditions.



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Epi Notes is published by the South Carolina Department of Health and Environmental Control Bureau of Communicable Disease Prevention and Control.

CR-010898 4/23