DISEASE PREVENTION AND EPIDEMIOLOGY NEWSLETTER

IN THIS ISSUE:

EpiNotes

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Survey of Adult Day Care Facilities in South Carolina Produces Helpful Data

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A recent survey of adult day care facilities (ADCFs) in South Carolina resulted in data that DHEC can use to better understand the population these centers serve and determine how public health agencies and health care organizations can partner with ADCFs to achieve optimal health outcomes.

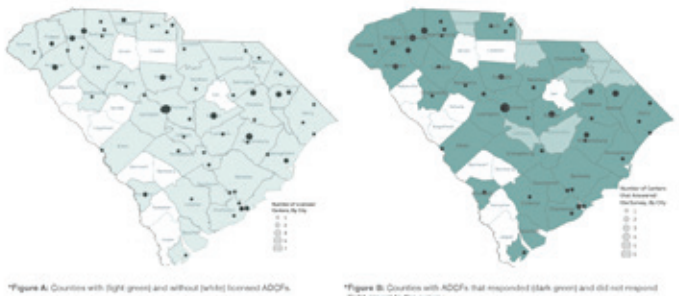
ADCFs serve seniors or adults with disabilities who are not able to care for themselves independently, but who wish to live at home. The attendees represent a vulnerable segment of the population: seniors, people with disabilities, racial minorities, and those with low income. The program is funded by Medicaid through Community Long-Term Care (CLTC). ADCFs offer important services related to public health, such as prevention and management of chronic conditions, health monitoring, education, and socialization opportunities. ADCFs help improve their attendees' quality of life while helping to reduce caregiver burden and health care costs.

We surveyed 82 ADCFs in South Carolina to learn more about the general profile of attendees, the services offered, and ongoing challenges for the centers resulting from the pandemic.

Sixty-two owners of ADCFs (76%) responded to the survey. As of April 2023, 11 rural counties do not have ADCFs. These 11 counties have a median of three primary care physicians (PCPs) per 10,000 residents compared to 9.9 per 10,000 residents estimated for the state overall. Three of the 11 counties also do not have hospitals (Lee, McCormick and Saluda).

The pandemic required ADCFs to close for three months, interrupting continuity of care. However, the centers-maintained contact with attendees by phone, care package delivery, online activities, and mail. Forty-three percent of ADCFs continue to have decreased attendance compared to pre-pandemic levels. In 2022, 62% of regular attendees (24 or more visits) statewide were Black or African American compared to 24% who were White.

ADCF expansion into counties with no hospital presence and few PCPs could fill an important need for health care in the community, especially for racial minorities. Compared to in-home care, ADCFs could keep people healthier longer through their preventive care model, including on-site nursing supervision, socialization to prevent isolation and depression, and activities to reduce the risk of physical and cognitive decline. ADCF attendance also benefits family caregivers financially by allowing them to retain employment and offer reprieve to family caregivers by reducing stress and thus potential harm and neglect to vulnerable older adults and people with disabilities.



Data maps continued on next page -->.

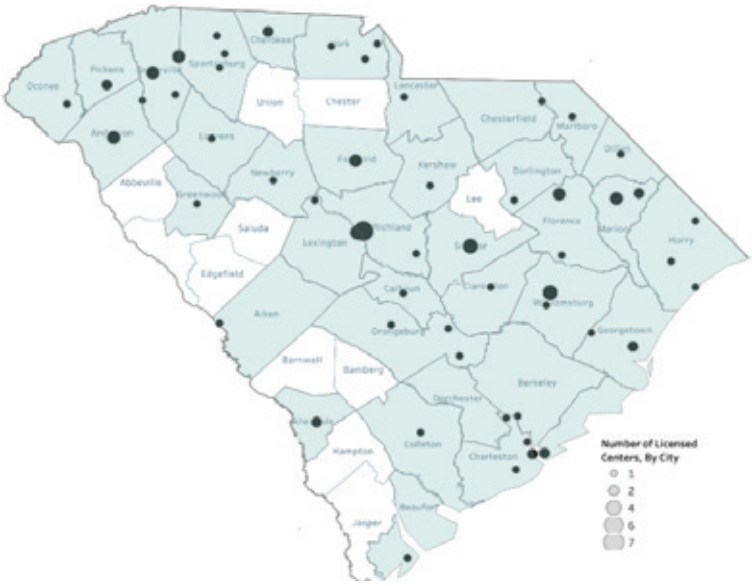


*Figure A: Counties with (light green) and without (white) licensed ADCFs.

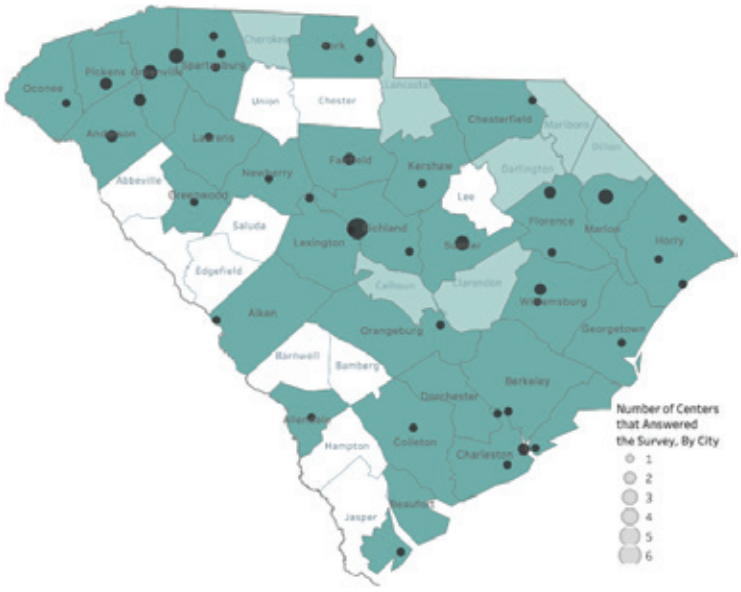


*Figure B: Counties with ADCFs that responded (dark green) and did not respond (light green) to the survey.

Updates for the 2024 S.C. List of Reportable Conditions (LORC)

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Below are the updates made to the 2024 edition of the South Carolina List of Reportable Conditions (LORC). Click here to access the poster.

In the Reporting Instruction at top of document:

The sentence directly below the document title, "South Carolina 2024 List of Reportable Conditions," was amended to add the word, "outbreak." It now reads, "Report upon recognition of a suspected case, outbreak, diagnosis, or positive laboratory evidence (see how to report on back)." This is not a new requirement; it simply reinforces the requirement to report outbreaks to DHEC regardless of the suspected etiology.

In the alphabetically-arranged Conditions Sections:

- Carbapenem-resistant Pseudomonas aeruginosa was changed to Pseudomonas spp.
- Coronavirus Disease 2019, as well as Multisystem Inflammatory Syndrome in children (MIS-C), is now routinely reportable within three days.
- Creutzfeld-Jacob Disease (CJD) is no longer reportable.
- The combined condition of Ehrlichiosis/anaplasmosis has been separated into two separate conditions to make surveillance of the conditions more robust.
- The requirement for laboratories to report, "HIV HLA-B5701 and co-receptor assay", has been removed.
- Influenza now uses only the #10 footnote.
- Malaria has been changed to be Urgently (within 24 hours) reportable.
- Streptococcus group A, invasive disease now has a requirement for providers to retain all isolates for 30 days after receipt to facilitate outbreak analysis. See footnote #14.
- Varicella has been changed to be Urgently (within 24 hours) reportable.

In the Footnotes section:

- The footnotes after #14 have been renumbered. **Please take time to review.**
- In footnote #6, Pseudomonas aeruginosa was changed to Pseudomonas spp.

- The COVID-19 footnote (Footnote #7) was amended to reflect the change to routinely reportable (three days). Reportable and unreportable lab results were clarified. COVID-19 deaths are no longer reportable by health care facilities. Deaths will be reportable via the existing Vital Records process.
- Footnote #9 previously referred to both hepatitis and influenza reporting. It has been changed to refer only to hepatitis. It now reads: "Negative results are reportable for Hepatitis B and C only for laboratories and providers that report via Electronic Laboratory Reporting (ELR). All positive hepatitis testing results must be accompanied by all serum aminotransferase levels, and if applicable, pregnancy test result or indication that testing was conducted as part of a pregnancy panel."
- Footnote #10 has been amended to read, "Negative results are reportable for influenza only for laboratories and providers that report via ELR. Influenza rapid antigen tests are not reportable. Report hospitalization aggregate totals weekly."
- The sentence, "Always include specimen type", was added to the lead footnote (footnote #11).
- A new footnote #14 was added. It states, "Retain all GAS isolated from sterile sites for 30 days for possible outbreak analysis."

In the What to Report Section

- The term, "specimen type", was added to the "Lab results", bullet.

In the How to Report Section

- In this section, each program lists its methods of reporting in the order of preference; however, this year, the word, "preferred" was added to the STD/HIV, "How to Report", section to highlight the preference of electronic reporting.
- The Lead program updated its mailing address to the Mills-Jarrett Complex at 2100 Bull St., Columbia SC.

NAA Testing key to early and accurate detection of M. TB in patients with high suspicion of TB Disease

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Numerous studies have demonstrated that nucleic acid amplification tests (NAAT) display superior accuracy for the detection of pulmonary TB when compared to traditional acid-fast bacilli (AFB) smear microscopy. Although mycobacterial cultures remain the gold standard of diagnosis, NAA testing should become a standard practice for patients suspected of having TB to avoid delays in early interventions and treatment.

Early and accurate detection of tuberculosis (TB) disease is a key component of TB control and prevention in the United States.

What is a NAAT?

A NAAT for TB is a molecular test used to detect the DNA of mycobacterium tuberculosis complex (MTBC) in a sputum or other respiratory specimens. The first commercial TB NAATs were approved by the U.S. Food and Drug Administration (FDA) in the 1990s with widespread use across the U.S. In 2013, the FDA approved a New TB NAAT, Xpert MTB/RIF (Xpert), which can simultaneously detect DNA of mycobacterium tuberculosis complex and genetics mutations associated with resistance to Rifampin.

Patients for whom NAATs should be ordered:

All patients initially evaluated for active pulmonary TB disease (signs and symptoms, radiologic evidence or for whom a diagnosis of TB is being considered "TB suspect") should have three respiratory specimens collected or induced (including an early morning specimen), separated by at least eight hours, each sent for AFB smear and culture; **a NAAT should be performed on at least one of these specimens.** A single positive NAAT result can support the diagnosis of TB in a patient for whom there is a reasonable index of suspicion. This result should be reported to the Public Health TB program following the South Carolina 2024 List of Reportable Conditions guidelines. Eary initiation of TB treatment (using clinical judgment) and intensified efforts to obtain an isolate for drug susceptibility testing and genotyping is also recommended if NAAT returns positive.

What are the advantages of a NAAT for TB?

- Earlier diagnosis leads to earlier initiation of treatment, a reduced period of infectiousness, and improved patient outcomes.
- Earlier notification of TB cases to public health authorities should permit public health interventions sooner and may engage a TB expert sooner in the care of the TB patient.
- Earlier detection of M. *tuberculosis* bacteria in sputum specimens can facilitate earlier infection control (respiratory isolation) decisions.
- Earlier differentiation of AFB-smear positive specimens containing M. *tuberculosis* from those containing other mycobacteria (i.e., M. *Avium*) for additional testing and definitive diagnosis.
- Prompt confirmation of tuberculosis may help avoid inappropriate empirical use of fluoroquinolones as monotherapy of pneumonias, a practice suspected to lead to development of tuberculosis resistant to fluoroquinolones.
- The XpertMTB/Rif assay aids in the prompt diagnosis of TB and Rifampin resistance disease. Rifampin resistance most often coexists with Isoniazid (INH) resistance; TB that is resistant to both drugs is multidrug-resistant (MDR). A positive result indicating a mutation in rpoB gene of MTBC should be confirmed by rapid DNA sequencing prompting reassessment of the treatment regimen and followed by growth-based drug susceptibility testing (DST).

Morbidity and Mortality Weekly Report

TABLE 1. Interpretation and proposed minimum laboratory report laboratoy for results from the Cepheid Xpert MTB/RIF assay* — United States 2013

GeneXpert Instrument System generated result using Xpert MTB/RIF assay	Interpretation of Xpert MTB/RIF assay result	Minimum laboratory report language†
MTB detected, RIF resistance detected	MTB target is detected within the sample. A mutation§ in the *rpoB* gene has been detected.	MTBC detected. A mutation in *rpoB* gene has been detected, indicating possible RMP resistance. Confirmatory testing should follow.¶
MTB detected, RIF resistance not detected	MTB target is detected within the sample. A mutation in the *rpoB* gene has not been detected.	MTBC detected. No *rpoB* gene mutations detected; probably RMP susceptible.
MTB detected, RIF resistance indeterminate	MTB target is detected within the sample. A mutation in the *rpoB* gene because of insufficient signal detection.	MTBC detected; presence of *rpoB* gene mutations cannot be accurately determined.
MTB not detected	MTB target is not detected within the sample.	MTBC not detected.

Abbreviations: To be consistent with the Xpert MTB/RIF assay package insert, MTB and MTBC = *Mycobacterium tuberculosis* complex; and RIF and RMP = rifampin.

* All samples tested by the Xpert MTB/RIF assay should have concomitant mycobacterial culture, regardless of the Xpert MTB/RIF assay results, to address lower sensitivity of the Xpert MTB/RIF for sputum samples that are negative on acid-fast bacilli microscopy, and to obtain isolates for drug susceptibility testing and genotyping.

† CDC suggested minimum language for the laboratory report. Laboratories are encouraged to enhance and customize this basic language in accordance with the capabilities or referral systems of their institution.

§ Might refer to more than one mutation.

¶ Because of the low positive predictive value of RMP resistance results in low prevalence populations, in the United States, confirmatory testing should include prompt DNA sequencing and subsequent phenotypic drug susceptibility testing of cultured isolates. DNA sequencing of direct patient samples (or if not available, isolates) with possible RMP resistance should include genetic loci associated with resistance to RMP (to include *rpoB*) as well as isoniazid (to include *inhA* and *katG*) to assess for multidrug-resistant tuberculosis; *rpoB* mutations detected by the Xpert MTB/RIF assay might be silent mutations that do not affect RMP susceptibility. DNA sequencing can distinguish silent mutations, which in this context refer to synonymous single nucleotide polymorphisms (also known as sSNPs).

Summary:

Good communication and education between health care providers, laboratorians, clinicians, public health officials, and TB experts are critical in optimizing the benefits of NAA testing for timely diagnosis and treatment.

Please contact the DHEC Division of Tuberculosis Control at (803) 898-0558 with questions regarding testing, diagnosis, and treatment for tuberculosis.

Get Tested and Treated for Hepatitis C

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We have the tools to eliminate hepatitis C virus (HCV) from our state in the next 10 years.

HCV, discovered 35 years ago, causes liver cirrhosis and cancer after years of chronic infection. Unfortunately, unrecognized HCV infections may quietly damage someone's liver, which has a huge impact in our society. There are few barriers standing in the way of ridding South Carolinians of this virus, and we can achieve our goal of a hepatitis C-free society by working together.

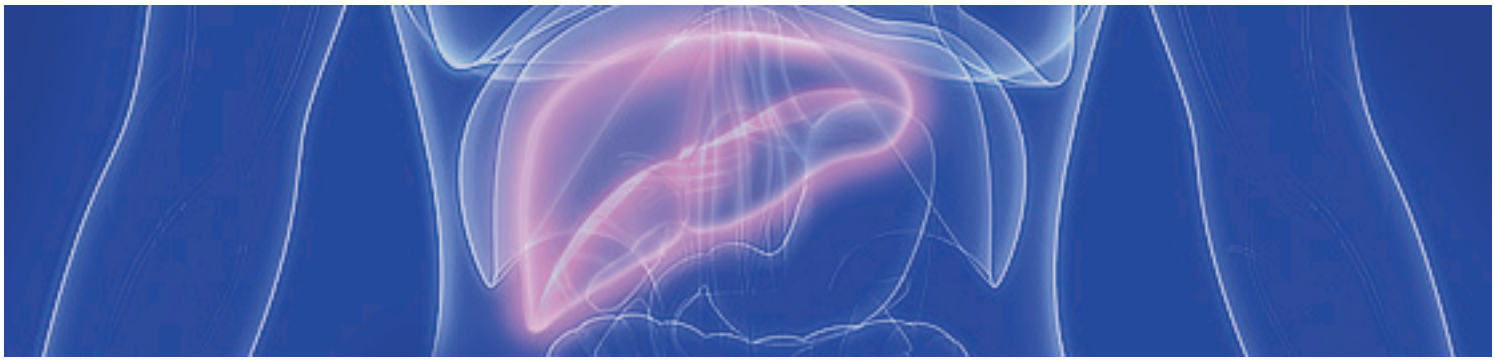
Expanding screening programs to link HCV-infected people to care and cure are top priorities of the South Carolina Viral Hepatitis Elimination Committee.

There are two main groups of people with HCV infection. Baby Boomers (adults born between 1945-1965) became infected through contaminated blood products or medical procedures primarily before HCV was recognized. Young people 18-40 years of age are now more likely to be infected through unsafe injection drug use. Current HCV screening recommendations direct everyone over 18 to be tested at least once and know their status. If someone has behaviors that put them at higher risk of infection, they should be tested more frequently. If you do not confidently know your HCV risk or status, you should get tested.

Knowing one's HCV status is important because there is an accessible cure for this infection. The old days of interferon treatment have passed; the new days of direct acting antivirals (DAAs) curative treatments are available. With eight or 12 weeks of treatment, HCV infection can be cured in over 95% of people. Treatment is generally well tolerated and easy with once daily medication. Recent changes to SC Medicaid guidelines make HCV treatment accessible through primary care providers to more people. The Viral Hepatitis Elimination Committee is working to expand access to DAAs through primary care providers across the state.

Previously a costly treatment, HCV medications today are considered both cost-saving and lifesaving. If not covered through insurance, medications can be obtained at little or no cost through pharmaceutical company patient access programs. Someone with HCV infection no longer needs to have advanced liver disease to qualify for DAA treatment; nor do they have to demonstrate abstinence from substance use. Everyone with HCV infection benefits from treatment and cure. By scaling up treatment resources, the complications of infection can be prevented and the health care burden of disease on our society can be reduced.

For more information about HCV treatment or to get involved with the Committee, please email SCVHprogram@dhec.sc.gov.



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