



Communicable Disease and Epidemiology Response Team Annual Report 2024

Epidemiology Response Team

Rowan County Health Department has an Epidemiology Response Team (Epi Team) to aid in identifying, monitoring, mitigating, and responding to outbreaks or potential outbreaks of communicable diseases. The Epi Team members consist of the Health Director, Communicable Disease Nurse, Nursing Supervisor for Immunizations and Communicable Disease, Environmental Health, Laboratory Technician, Director of Nursing, Clinic Coordinator, and Management Support. The Epi Response Team meets to discuss events that have occurred and identify ongoing communicable disease risks in the community. If there is a risk or a threat, the team develops intervention strategies to prevent the spread of a disease threat. The Epi team meets at least annually and anytime there is notice of a communicable disease threat.

Emerging and Current Communicable Diseases

The following are communicable diseases that we are currently investigating, contact tracing, reporting, vaccinating against, and/or are posing threats to the health of the public.

MPOX

Mpox (previously known as monkeypox) caused by an orthopoxvirus was declared a public health emergency in the United States on August 4th, 2022. The virus is spread through direct skin to skin contact with the rash, sores, or scabs of someone with mpox. Bodily fluids and respiratory droplets, such as saliva can spread mpox along with contaminated objects. Individuals with HIV are over-represented in current mpox cases, making individuals with HIV at an increased risk. North Carolina has seen coinfection with mpox, HIV, and other STIs.

The first case of mpox in North Carolina was reported on June 23, 2022. Since then, there has been a total number of 794 cases to date. Most cases have been among men who have sex with men (MSM). In Rowan County, we have investigated one case of mpox in 2024. The individual was MSM, living with HIV, and was unvaccinated against mpox. Contact tracing was completed and one contact was identified; the contact was a resident in a neighboring county. Appropriate communication with that local health department was made for prompt testing and further investigation in their county.

Our primary focus for mpox has been vaccinating high risk individuals. In North Carolina, 28,549 mpox vaccines have been administered since vaccine release. RCPH continues to offer mpox vaccines, a 2-dose JYNNEOS vaccine series for:

- Anyone who has or may have multiple or anonymous sex partners; or
- Anyone whose sex partners are eligible per the criteria above; or
- People who know or suspect they have been exposed to mpox in the last 14 days; or
- Anyone else who considers themselves to be at risk for mpox through sex or other intimate contact.

Pertussis

There has been a sharp increase in pertussis cases in Rowan County. In the past year, we have investigated 9 cases of pertussis. This is an uptick from 3 cases in 2023. Cases ranged in age from 3 months old to 65. Three of those cases were household contacts to an active case. The school aged cases were present at school settings during symptom onset and had attended church events as well. We notified the affected schools and churches of potential exposure and the need to inform symptomatic individuals to quarantine and seek testing and treatment at their healthcare provider. Rowan County did not experience a pertussis outbreak as a result of the number of cases.

Rowan County Public Health increased community awareness of pertussis through press releases and social media platforms. We encouraged our residents to ensure they are vaccinated against pertussis.

Tuberculosis:

Tuberculosis (TB) is spread from one person to another through airborne bacteria caused by *Mycobacterium tuberculosis*. TB usually attacks the lungs; however, the kidney, spine, and brain can also be affected. Not everyone infected by TB becomes sick or presents with symptoms. People who are infected with TB with a negative chest x-ray and express no symptoms are classified as having latent Tuberculosis infection (LTBI). We do have an increased number of persons being treated for LTBI.

We had one active TB case in 2024. Contact tracing discovered 3 contacts exposed to the active TB case. One of the three contacts is currently receiving LTBI treatment after testing positive on a blood test with a negative chest x-ray.

The chart below shows the number of cases for the years 2021-2024.

Year	Cases	Number of contacts	Contacts evaluated	Candidate for treatment	Completed Treatment
2021	1	2	2	0	0
2022	2	11	11	8	4
2023	2	11	11	2	0
2024	1	3	3	1	0



Communicable Disease Outbreaks in 2024

Throughout 2024 RCPH investigated and reported a total of 20 outbreaks. Most of the outbreaks were in long-term care facilities, 19 were respiratory illnesses and 1 was gastrointestinal.

COVID-19:

In December 2023, NC DPH revised the definition for reporting outbreaks of COVID-19 in congregate living facilities. The updates are as follows:

- Two or more laboratory-confirmed cases of COVID-19 in residents and staff must occur within 14 days in the same facility.
- To declare an outbreak over, 14 days should have passed since the date of the last specimen collected of the most recent outbreak associated case in the facility.
- A cluster must have a minimum of five laboratory confirmed cases of COVID-19 within 7 days with evidence of epidemiologic linkage. This was a change from recent years when the time of cases was 14 days, not 7 days.

17 COVID-19 outbreaks were reported in Rowan County in 2024, all were in long-term care facilities. No cluster outbreaks reported in Rowan County.

Pneumonia Outbreak at Rowan County Middle School

The Centers for Disease Control and Prevention (CDC) released public information about increases in *Mycoplasma pneumoniae* infections in the United States. There was an uptrend of cases late spring of 2024, and numbers have remained high. While *M. pneumoniae* is not reportable in North Carolina, there have been reports of high numbers of cases seen in emergency departments and pediatric clinics in the central part of the state since late summer.

Mycoplasma pneumoniae bacterium may cause respiratory tract infections. The infection is normally mild and mostly presents as a chest cold. When *M. pneumoniae* progresses to the lung, it typically presents as a less severe form of bacterial pneumonia commonly referred to as “walking pneumonia”. Symptom onset is typically gradual and can include fever, cough, and a sore throat. Younger children may have different symptoms, such as diarrhea, wheezing, and vomiting.

Since late summer, the number of *M. pneumoniae* cases have been increasing and affected mostly school age children between 5-17 years of age. Rowan County has had one outbreak of pneumonia among students at a middle school. Thirty students and two faculty were

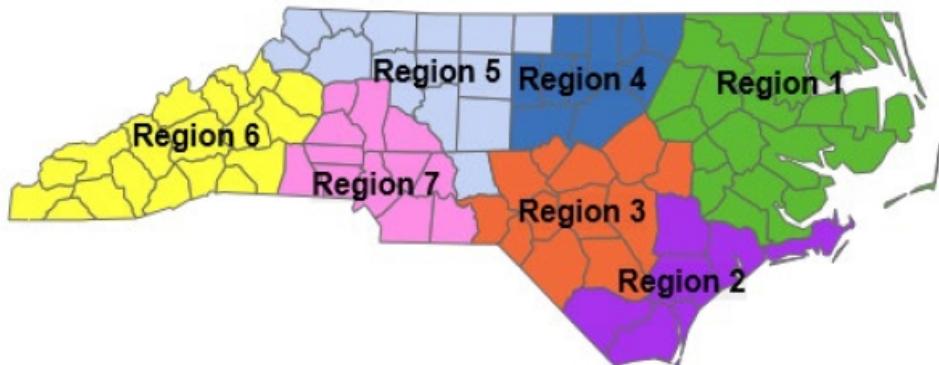
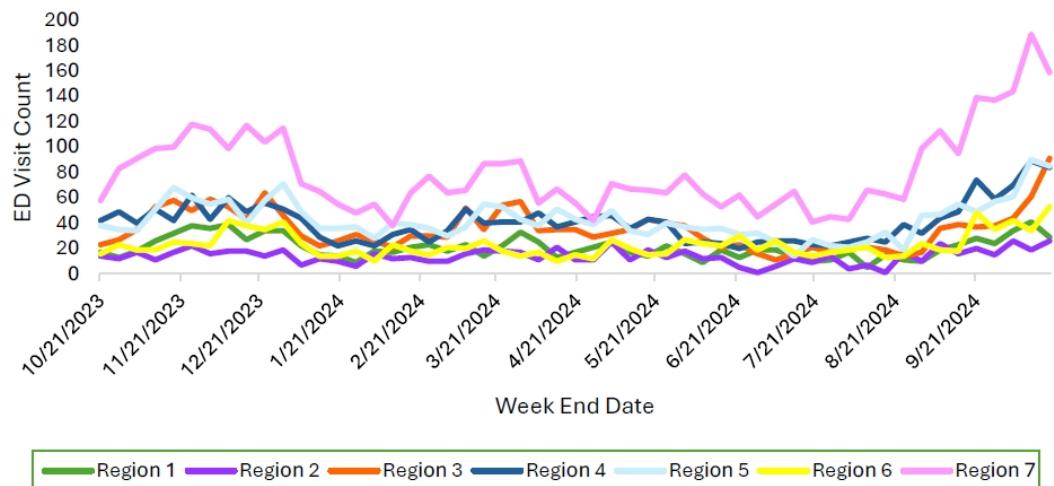
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sick with pneumonia-like symptoms. The outbreak was not specific to one grade or classroom. The students ranged from ages 11 to 15 and were in grades 6th- 8th. We reviewed one case in a student who was diagnosed by their pediatrician for M. pneumonia; however, most sick students were given appropriate antibiotic therapy with and without suspicion of mycoplasma infection. Our communicable disease team highly suspect the outbreak to be related to M. pneumonia.

The Rowan-Salisbury school system sent emails to parents about the rise of respiratory illness, especially M. pneumonia, and preventative measures for their children.

As of December 2024, we have seen a significant downtrend after the Thanksgiving break and have not had new cases reported in one month. We are continuing to monitor peripherally for any new spikes in our schools.

Pediatric Unspecified Pneumonia Counts By NC Region





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Salmonella Outbreak in Cabarrus County

We had two cases of confirmed Salmonella infections associated to a Salmonella outbreak in Cabarrus County at a Tree Lighting potluck event in November 2024. In the outbreak investigation, it was discovered over 800 attendees were present from different counties, some were Rowan County residents. Food was present and served at the festival, such as turkey chili, nachos, and cotton candy. Two Rowan County residents consumed food at the festival and tested positive for Salmonella. The affected Rowan County residents had a full recovery and did not require hospitalization. The investigation for the outbreak in Cabarrus County is ongoing.

HIV/STI:

A large percentage of the CD Nurse time is STI follow up. The Health Department must obtain proof of treatment for any positive STI test and report information into the state system. If a person has tested positive for an STI and has not been treated or not properly treated per NC STI guidelines, the CD nurse is responsible for assuring individuals receive appropriate treatment. For positive HIV cases, the CD nurse reports results within 24 hours of receiving and connects the individual to the state disease intervention specialists (DIS). The DIS completes contact investigation as well as links all involved to testing, treatment, and follow-up care.

Since most chlamydia and gonorrhea cases occur among 15–29-year-olds, public health increased outreach regarding STI prevention and education. In 2024, the Communicable Disease Nurse and STI Health Educator presented STI educational sessions to students at Livingstone and Catawba Colleges. Topics included STI county rates, facts, and the importance of STI prevention. Six sessions were presented with approximately 30 college freshmen attending each session.



We continue to work diligently to slow the spread of STIs by providing clinical interventions, education, community awareness, and by monitoring disease trends through surveillance and epidemiology.

FIGURE 1: SHOWS CHLAMYDIA, GONORRHEA, AND SYPHILIS CASES DURING 2020-2023

General Communicable Disease Report:

Rowan County Health Department is responsible for reporting a total of 75 different communicable diseases. The table below shows a summary of the most frequently reported communicable diseases in 2024.

	2020	2021	2022	2023	2024
Pertussis	7	0	0	3	9
Hepatitis A	2	72	6	1	0
Hepatitis B – Acute	1	3	7	1	4
Hepatitis B – Perinatal	-	-	1	2	0
Hepatitis C – Acute	3	4	1	4	0
Cryptosporidiosis	6	2	0	0	2
Spotted Fever Rickettsiosis (including Rocky Mountain Spotted Fever)	6	1	0	1	0
Lyme Disease	6	1	1	4	1

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Shigellosis	7	2	4	1	4
Salmonellosis	27	15	25	25	17
Campylobacter Infection	20	22	16	39	26
Streptococcal Infection Group A, Invasive	21	12	12	21	17
Legionellosis	1	4	2	4	7
Hemoph. influenza	2	3	5	3	2
E Coli-Shiga Toxin	2	2	6	6	7
Meningitis, Pneumococcal	-	1	4	0	
Mumps	-	-	1	0	0
Varicella (Chicken Pox)	-	1	0	3	0
Influenza Adult Death (18 years of age or more)	1	0	1	2	2
Mpox	-	-	7	1	1
CRE (Carbapenem Resistant Enterobacteriaceae)	-	-	9	8	4
Meningococcal invasive disease	-	-	-	1	0
Vibrio infection (other than cholera and vulnificus)	-	-	-	3	0
Toxic shock syndrome streptococcal	-	-	-	5	1
Botulism	-	-	-	1	0