# U.S. Medical Affairs
# 2025 Trends Insights Report: 9/21/25-10/4/25

**This information is sourced and aggregated from BIOFIRE® FIREWORKS and BIOFIRE® Syndromic Trends and may vary from what is displayed on BIOFIRE® Syndromic Trends. For reference purposes only.**
**Visit our syndromic trends site for more information: BIOFIRE® Syndromic Trends**

## Gastrointestinal (GI)

### What is the data showing us:

- *C. difficile* rates are consistently high throughout the U.S., reflecting the highest activity in the **West (16.3%)** and elevated elsewhere **(>10%)**, while Norovirus is elevated in the **West (16.6%)**, **Northeast (11.1%→14.2%)**, and **>10% in the South and Midwest**.
- Enteropathogenic *E. coli* (EPEC), Enteroaggregative *E. coli* (EAEC), and Enterotoxigenic *E. coli* (ETEC) activity remains high and rising in all regions. EPEC is high in all regions **(West 13.3%, Northeast 10.1%, South >10%)**. EAEC rose in the **Northeast (1.3%→3.8%)** and is high in the West and South, while ETEC similarly increased in the **Northeast (1.3%→3.6%)** and exceeds 3-month averages elsewhere.
- Shiga Toxin-Producing *E. coli* (STEC) O157 is elevated in the **Northeast (1.1%→1.8%)**, with non-O157 medium in the West.
- *Campylobacter* remains in **high, stable activity across all regions**. *Salmonella* is **heightened in the South**, trending higher than its 3-month average.
- Adenovirus F 40/41 co-detection rates are on the rise across all regions, with the **Northeast** reflecting an increase from **0.9%→1.5%**. Sapovirus **continues to trend upward** in the South and West, **moving from medium to high activity**.
- Other GI pathogens (*Giardia,* Astrovirus*, Virbrio*): *Giardia lamblia* and Astrovirus are trending above 3-month averages in the **West (medium activity)**, while *Vibrio* (non-cholerae) continues to rise (above 3-month average) but **remains in low activity**.

### What this means for U.S. providers/labs:

- As *C. difficile* remains elevated, it's important to note that **a positive result does not indicate an active infection**. **A positive result could be an indication of colonization.** Therefore, a positive result **should be interpreted alongside clinical symptoms and other factors**.
- Norovirus and *E. coli* (EPEC, EAEC, ETEC) continue to drive GI illness across regions, demonstrating the **importance of rapid pathogen identification to optimize treatment** and **reduce unnecessary antibiotics prescription.**
- *Campylobacter* and *Salmonella* detections **highlight ongoing foodborne transmission risks**, particularly with *Salmonella* rising above baseline in the South and linked to recent outbreaks.
- Clinicians should consider Adenovirus F 40/41 and Sapovirus pathogens in patients, **especially children who present with symptoms of acute gastroenteritis**.
- Less common pathogens such as *Giardia*, Astrovirus, and *Vibrio* are emerging regionally, **reinforcing the need for a broad multiplex PCR GI panel to correctly identify these pathogens**.

## Respiratory (RP)

### What is the data showing us:

- Human Rhinovirus (RV)/Enterovirus (EV) **peaked nationwide at 25–30%** during the week of September 20 (Northeast one week later) and has since declined across all regions: **West (27.4%→25.5%)**, **Midwest (25.4%→22.9%)**, **South (24.2%→23.4%)**, **Northeast (29.3%→24.6%)**.
- SARS-CoV-2 rates are **declining in all regions with rates peaking at 7.6% nationwide** in mid-late August. Rates declined over the past two weeks for the **West (6.7→4%), Midwest (3.5%→3.2%), South (4.1%→3.2%) and Northeast (4.7%→3.8%).**
- Adenovirus detections are rising nationwide, led by the **South (2.9%→3.4%)**, where it ranks as the second most prevalent pathogen. The **West** increased during late September **(1.0%→2.3%→2.0%)**, the **Midwest** saw a moderate rise **(1.1%→1.8%)**, and the Northeast remains stable **(1.4%→1.3%)**.
- Parainfluenza virus 1 & 2 (PIV1/PIV2) activity has risen throughout most regions, ranking among the **top 3–5 pathogens**. In the **West (PIV1: +1.4%, PIV2: 2.1%→1.7%)** and **Midwest (PIV1: +1.1%, PIV2: 1.5%→2.6%)**, rates increased steadily, with smaller gains in the **South (PIV1: 0.8%→1.2%)**. The **Northeast** was the exception, showing a decline in **PIV2 (1.3%→0.9%)** but slight rises in **PIV1 (1.1%→1.5%)** and **PIV4 (0.5%→1%)**.
- Respiratory Syncytial Virus (RSV) activity **remains low in all regions**, with rates below **1%** across the US except the **South (1.2%→1.5%).**

### What this means for U.S. providers/labs:

- **RV/EV activity remains elevated post-peak, driving continued community transmission**, especially in schools and childcare settings, where **reinforcing preventative measures such as hand hygiene and respiratory etiquette is key**.
- The summer SARS-CoV-2 surge, driven by the XFG variant, is tapering after peaking in late August, though XFG remains the dominant strain. The CDC projects **COVID-19 hospitalizations for the 2025–2026 season may match or exceed last year's levels** if a new immune-evasive variant emerges. **Vaccination will be an important part of prevention**.
  - Read more here: Variants and Genomic Surveillance
- Adenovirus is becoming a more frequent contributor to respiratory illness. **Remain alert for outbreaks in congregate settings** (e.g., daycare centers, military facilities, long-term care homes) and **for cases of severe pneumonia among vulnerable populations**.
- Parainfluenza activity is up, coinciding with school reopening. **Consider parainfluenza in the differential diagnosis for children with stridor, barking cough, or bronchiolitis, especially if RSV and rhinovirus are negative.**
- RSV activity remains low nationwide, but a slight uptick in the South **signals the need for vigilance as RSV season approaches, especially in pediatrics and high-risk adults, with prevention now a standard of care**.
  - Read CDC recommendations here: Respiratory Syncytial Virus (RSV) Immunizations