

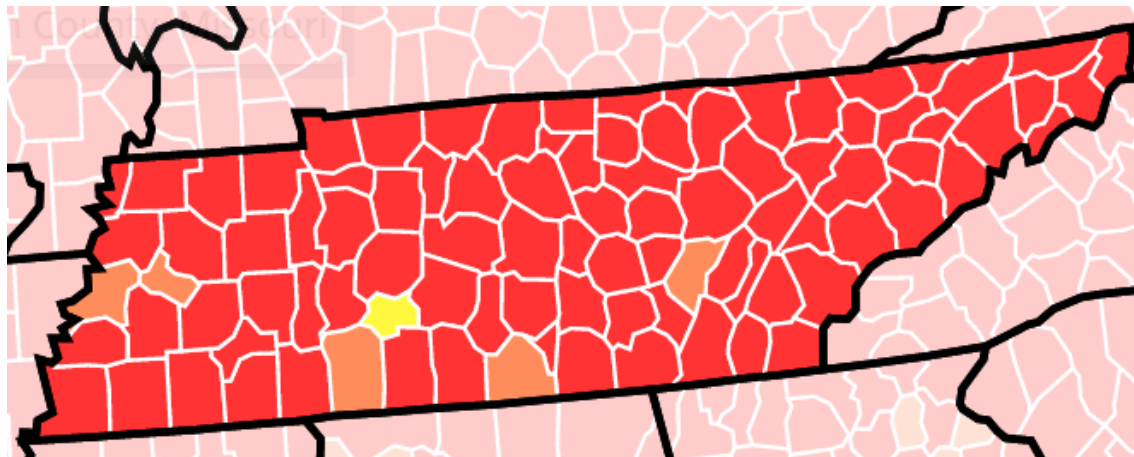


COVID-19 Update

Knox/East Tennessee Healthcare Coalition

Community Transmission

- Community transmission for Tennessee (and the entire U.S.) is classified as “High”
- When community transmission is “High” or “Substantial”, masks are recommended in public, indoor settings, regardless of vaccination status



	Low	Moderate	Substantial	High
New cases per 100,000 persons in the past 7 days*	<10	10-49.99	50-99.99	≥100
Percentage of positive NAATs tests during the past 7 days**	<5%	5-7.99%	8-9.99%	≥10.0%

Test Positivity

- Test positivity rates for the region and state are trending upward.
- State and East Region >10%, Knox ~9%; ideally want to see <5%

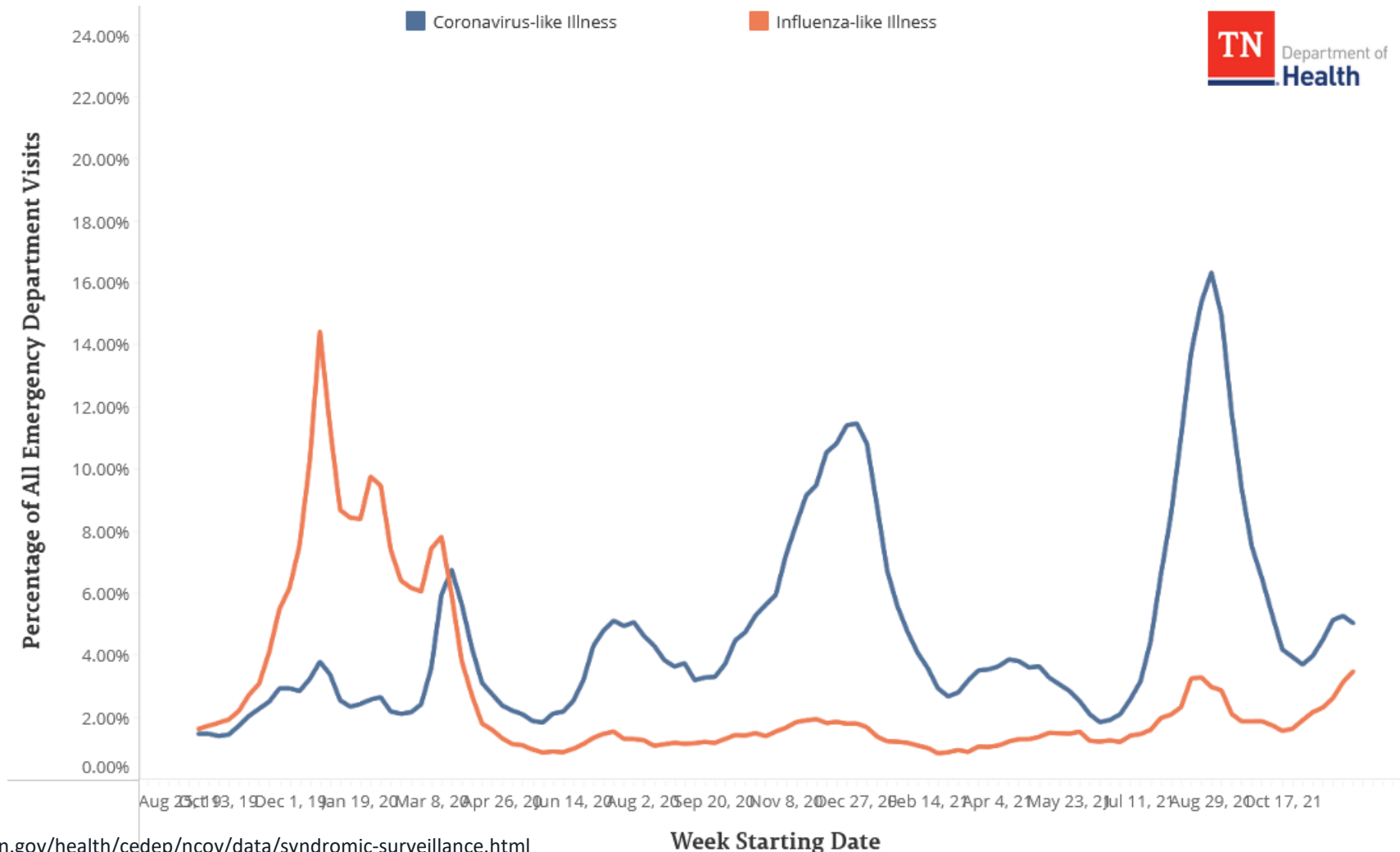
Daily Percent of Positive COVID-19 Tests₃

The chart below visualizes the daily percent of positive COVID-19 tests. For today, December 7, 2021, the daily positivity rate was 10.1% and the positivity rate for the last 7 days was 9.4%.



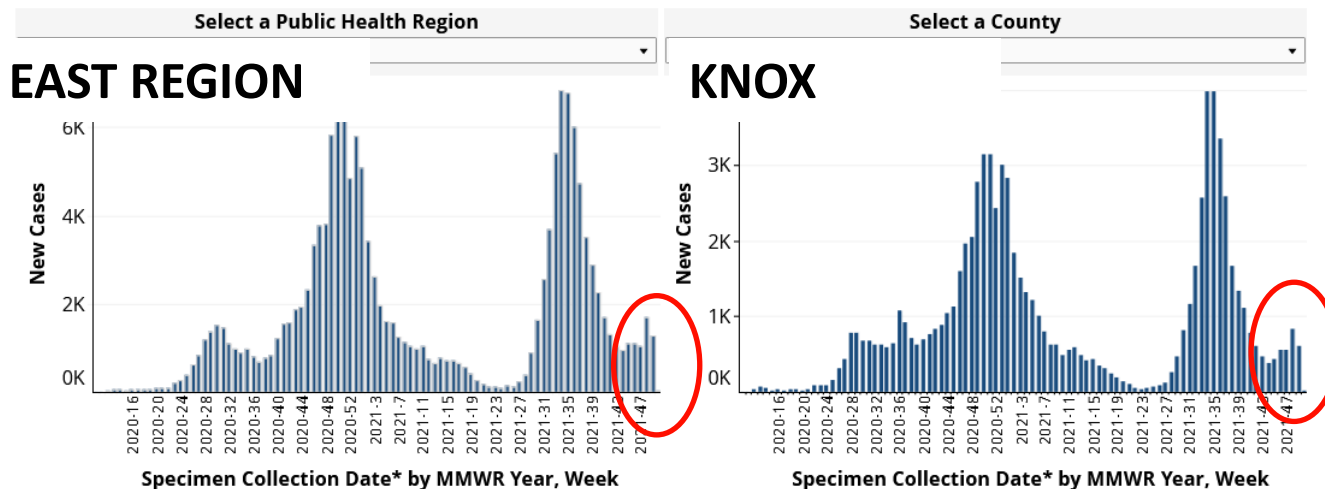
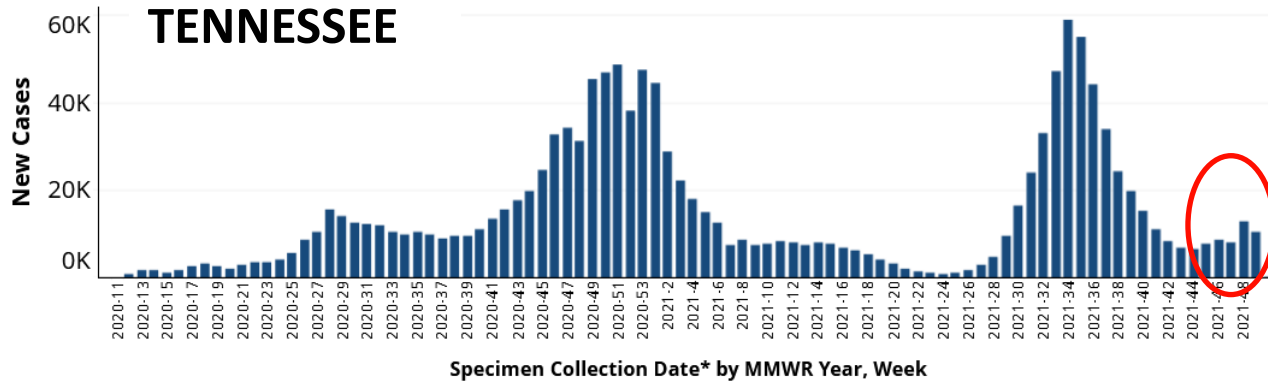
Syndromic Surveillance (ED Chief Complaint Data)

- Trending upward for ILI (beginning mid-Oct) and CLI (beginning early Nov) both statewide and locally



COVID-19 Case Trends - Tennessee

- Statewide and locally, we continue to see large volume of new cases reported each week with upward trend over the last few weeks:
 - East Region: ~1300 new cases during week of 12/5 (v. 1092 week of 11/7 – 17% increase)
 - Knox County: 600 new cases during week of 12/5 (v. 437 week of 11/7 – 39% increase)



Data as of 12.13.2021

<https://www.tn.gov/health/cedep/ncov/data/epi-curves.html>

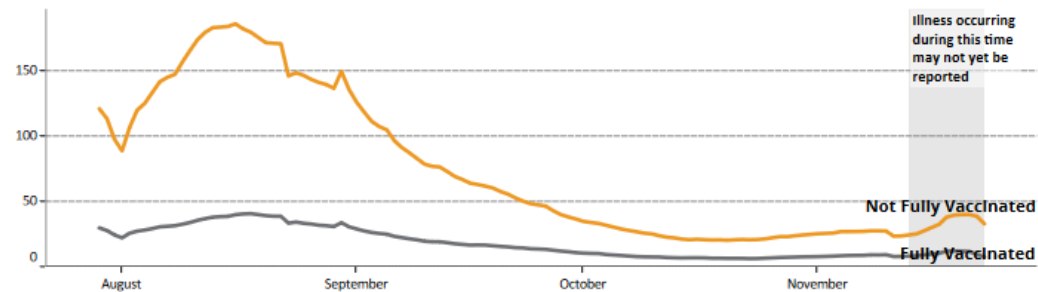


Trends by Vaccination Status

- **Breakthrough cases** remain **uncommon** compared to unvaccinated cases.
- **Rates consistently higher for cases, hospitalizations, and deaths among unvaccinated persons (yellow line) than those who are vaccinated (grey line)**
- **Statewide May – September 2021**
 - 86% of cases identified were unvaccinated
 - 88% of individuals hospitalized were unvaccinated
 - 86% of COVID deaths were individuals who were unvaccinated

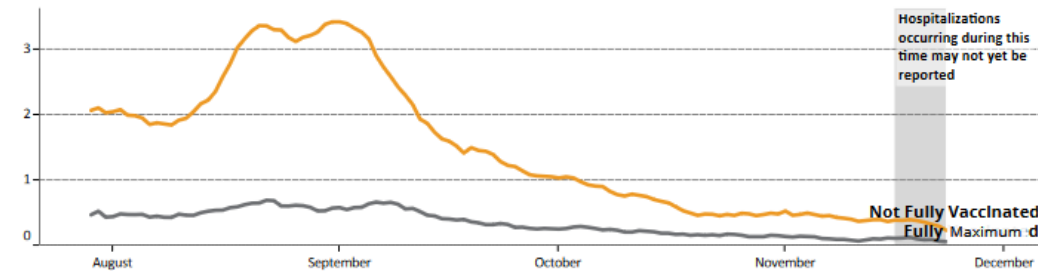
7 Day Rolling Average of COVID-19 Cases by Vaccination Status

The plot below shows the 7 day rolling average rate of COVID-19 cases (per 100,000 persons) by vaccination status.



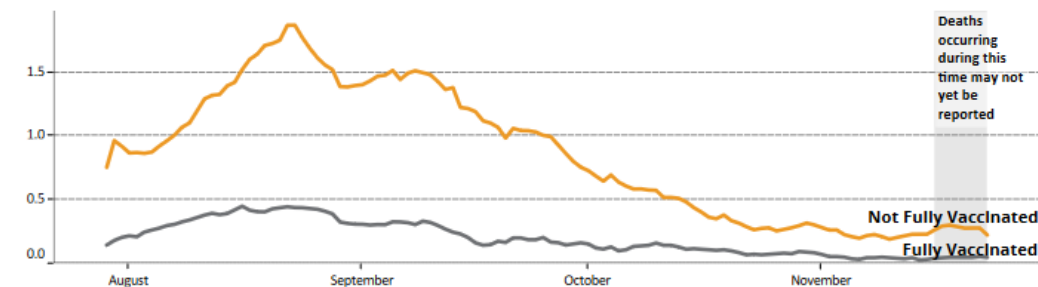
7 Day Rolling Average of COVID-19 Hospitalizations by Vaccination Status

The plot below shows the 7 day rolling average rate of COVID-19 hospitalizations (per 100,000 persons) by vaccination status.



7 Day Rolling Average of COVID-19 Deaths by Vaccination Status

The plot below shows the 7 day rolling average rate of COVID-19 deaths (per 100,000 persons) by vaccination status.



Data as of 12.10.2021

<https://www.tn.gov/content/dam/tn/health/documents/cedep/novel-coronavirus/CriticalIndicatorReport.pdf>

COVID-19 Variants

- Until June '21, the B.1.1.7 (aka "UK variant", aka "Alpha") had been the most common in Tennessee and in the U.S.
- In mid-June/early July, the **Delta variant began to outpace Alpha** creating a surge in case rates.
- CDC predicts **Delta and its sub lineages now account for**
 - **97.9%** of specimens sequenced from **Tennessee**
 - **99.9%** of specimens sequenced in the **U.S.**



A Few Notes on the Omicron Variant (B.1.1.529)

- Currently lots of unanswered questions, but more and more data being released every day
- What we **know**:
 - Initially identified by South Africa 11/24
 - First known positive samples collected 11/11/21 in Botswana and 11/14/21 in South Africa
 - Now circulating in numerous countries including the United States (first confirmed case 12/1) and Tennessee
 - This variant possesses a high number of mutations, prompting the World Health Organization to classify as a variant of concern
 - PCR and antigen tests remain reliable
 - Several studies showing potential for reduced vaccine effectiveness, more so than we saw with delta; likely we will see more breakthroughs and more reinfections
- What we are **still learning**:
 - Extent of spread
 - Impact of transmissibility
 - Impact on severity
 - Impact on vaccines
 - Impact on therapeutics

Defense Against Variants

- GET VACCINATED
- Vaccination (including boosters!) layered with additional prevention strategies is still our best defense even in the context of this new variant:
 - Mask indoors (both vaccinated and unvaccinated)
 - Social distance
 - Frequent handwashing
 - Stay home when sick
 - Observe quarantine and isolation recommendations

Additional Info

- TDH Critical Indicators report: <https://www.tn.gov/content/dam/tn/health/documents/cedep/novel-coronavirus/CriticalIndicatorReport.pdf>
- TDH Breakthrough Cases: <https://www.tn.gov/health/cedep/ncov/data/breakthrough-cases.html>
- CDC COVID Data Tracker: <https://covid.cdc.gov/covid-data-tracker/#datatracker-home>
- CDC Omicron Updates: <https://www.cdc.gov/coronavirus/2019-ncov/variants/omicron-variant.html>
- CDC COVID variant proportions: <https://covid.cdc.gov/covid-data-tracker/#variant-proportions>



QUESTIONS?