COVID-19 Surveillance Summary: 25 August

• Since August 1\textsuperscript{st}, COVID-19 cases\textsuperscript{1} have increased 176% statewide
  – In the last 7d, COVID-19 cases have increased 37% statewide

• The volume of (PCR) testing statewide continues to trend upward, with a 7d average of \textasciitilde27,000 tests reported per day (up from 6300 on 1 July; down from YTD high of \textasciitilde30k in mid-January).

• The percent of PCR tests that are positive has stabilized at \textasciitilde18\% (from a low of 1.31\% on 12 June).

\textsuperscript{1} 7-day average
National Trends of New COVID-19 Cases

NEW CASES PER 100,000

Date: 8/20/2021

New Cases per 100K
08/13/2021-08/19/2021

NATIONAL RANKING OF NEW CASES PER 100,000

National Rank | State | National Rank | State
--- | --- | --- | ---
1 | ME | 27 | UT
2 | VT | 28 | KS
3 | MD | 29 | NM
4 | CT | 30 | NV
5 | MI | 31 | WV
6 | NH | 32 | WA
7 | PA | 33 | IN
8 | CO | 34 | ID
9 | MA | 35 | AZ
10 | NJ | 36 | MO
11 | MN | 37 | OR
12 | IA | 38 | NC
13 | DC | 39 | HI
14 | SD | 40 | WY
15 | NY | 41 | TX
16 | OH | 42 | OK
17 | CA | 43 | KY
18 | PR | 44 | AK
19 | WI | 45 | AL
20 | MT | 46 | SC
21 | NE | 47 | TN
22 | IL | 48 | GA
23 | ND | 49 | AR
24 | VA | 50 | FL
25 | RI | 51 | LA
26 | DE | 52 | MS

Case Counts (Weekly)

By Specimen Collection Date

1,002,632 Total Cases

Case Counts (7 Day Average)

Over the last 7d: ~6400 new cases reported per day
7d Average of New PCR Tests (n= 8,919,799)

PCR Test Percent Positivity

7 Day Average: 17.8%

Case Demographic Trends: 0-18 years

Children represent 16.5% of cumulative cases, with most cases among 14-18 year olds. The week of 8/8/2021, there were 8,851 child cases, comprising 27.5% of all cases. The week of 8/15/2021, there were 13,912 child cases, comprising 35.6% of all cases.
Case Trends (7D Average): 17-25 year olds

Over the last 7d: ~410 new cases reported per day
Healthcare Resources

• Healthcare Resource Tracking System
  – Established in 2006

• Acute care hospitals report daily:
  – Number of beds (floor / ICU / AIIR)
  – Number of ventilators
  – Amount of PPE
  – Number of COVID-19 patients (floor, ICU, ventilated, pending)
Current COVID Hospitalizations

COVID patients represent ~25% of all hospitalized patients in TN.

SARS-CoV-2 Variant Classification

- **Variants of high consequence**
  - n=0
    - B.1.1.7
    - B.1.351
    - B.1.617.2
    - P.1

- **Variants of concern**
  - n=4
    - B.1.427
    - B.1.429
    - B.1.525
    - B.1.526, B.1.526.1
    - B.1.617, B.1.617.1, B.1.617.3
    - P.2

- **Variants of interest**
  - n=9
    - B.1.427
    - B.1.429
    - B.1.525
    - B.1.526, B.1.526.1
    - B.1.617, B.1.617.1, B.1.617.3
    - P.2
SARS-CoV-2 ‘Delta’ Variant

- First identified in December 2020
- More contagious
- May cause more severe illness (especially in unvaccinated persons)
- Fully vaccinated people with Delta breakthrough infections can spread the virus to others; however, they appear to be infectious for a shorter period of time
- Vaccination remains the best protection against Delta

### CDC Variant Proportions (by State)

<table>
<thead>
<tr>
<th>State/Jurisdiction</th>
<th>B.1.1.7 (Alpha)</th>
<th>B.1.351 (Beta)</th>
<th>P.1 (Gamma)</th>
<th>B.1.617.2 (Delta)</th>
<th>AY.1 (Delta)</th>
<th>AY.2 (Delta)</th>
<th>Other lineages</th>
<th>Total Sequences</th>
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<tbody>
<tr>
<td>Alabama</td>
<td>3.8%</td>
<td>0.0%</td>
<td>1.0%</td>
<td>94.2%</td>
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<td>0.5%</td>
<td>0.4%</td>
<td>2.8%</td>
<td>2,301</td>
</tr>
</tbody>
</table>
| Wisconsin          | 0.8%           | 0.0%           | 0.4%       | 95.0%             | 0.0%        | 0.4%        | 3.5%          | 515            

**93.2% Delta**
Three vaccines currently have an emergency use authorization from FDA

- Pfizer (12-16yo), Moderna, Janssen (J&J)

One vaccine has received full FDA approval (Biological License Application)

- Pfizer (16+)
Vaccine Update (as of 8/23/21)

• 6,034,370 doses administered

• 137K doses administered in last 7 days

• Tennesseans with at least one dose (% of total population)
  – 3,296,643 or 48.3% (up from 47%) ¹
  – National rate = 60.8% (up from 59.8%) ²

• Tennesseans fully immunized (% of total population)
  – 2,814,896 or 41.2% (up from 40.4%) ¹
  – National rate = 51.5% (up from 50.8%) ²

¹ As reported by TennIIS: https://www.tn.gov/health/cedep/ncov/covid-19-vaccine-information.html
² As reported by CDC: https://covid.cdc.gov/covid-data-tracker/#vaccinations
Tennessee Ranking

- **42nd** for vaccine administration/100K population

- **44th** for % of total population with at least one dose

- **42nd** for % of total population fully vaccinated

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3[https://covid.cdc.gov/covid-data-tracker/#vaccinations](https://covid.cdc.gov/covid-data-tracker/#vaccinations)
COVID-19 Vaccinations by Age Group

Percent vaccinated (at least 1 dose)

2.5% increase in 7 days
Effective Primary Prevention Measures

THE SWISS CHEESE RESPIRATORY VIRUS PANDEMIC DEFENCE

RECOGNISING THAT NO SINGLE INTERVENTION IS PERFECT AT PREVENTING SPREAD

Personal Responsibilities

Each intervention (layer) has imperfections (holes).
Multiple layers improve success.

Shared Responsibilities
Available Resources

- TDH COVID-19 Website: https://www.tn.gov/health/cedep/ncov.html
- Downloadable Dataset Cases 17–25 years old by County: https://www.tn.gov/content/dam/tn/health/documents/cedep/novel-coronavirus/datasets/Public-Dataset-Daily-County-Cases-17-25-Years.XLSX
- CDC Data Tracker: https://covid.cdc.gov/covid-data-tracker/
Questions?

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