

Illinois Department of Public Health

COVID-19 Regional Metrics

Methodology

All indicators will be updated daily with a three-day lag.

Test Positivity

The testing data represents data reported to IDPH through Electronic Laboratory Reporting (ELR) **only**. It is based on the date results are reported to IDPH. It excludes testing data that are received from sites that have not implemented ELR. This excludes 3-5% of test data statewide.

Each day, for each region and county, a 7-day test positivity average is calculated by dividing the sum of COVID-19 positive tests for 7 days by the sum of the total COVID-19 tests for the same 7 days, rounded to one decimal place.

Seven-day test positivity = $100 \times [\text{Sum of positive tests for 7 days}] / [\text{Sum of total tests for same 7 days}]$

- **Target:** 7-day average test positivity less than 8%.
- **Warning:** 7-day average test positivity at or above 8% for three consecutive days.

Increasing Test Positivity

The testing data represents data reported to IDPH through Electronic Laboratory Reporting (ELR) **only**. It is based on the date results are reported to IDPH. It excludes testing data that are received from sites that have not implemented ELR. This excludes 3-5% of test data statewide.

Each day, for each region and county, a 7-day test positivity average is calculated by dividing the sum of COVID-19 positive tests for 7 days by the sum of the total COVID-19 tests for the same 7 days, rounded to one decimal place.

Average test positivity = $100 \times [\text{Sum of positive tests for 7 days}] / [\text{Sum of total tests for same 7 days}]$

Whenever this average increases from the previous day, it is flagged.

Increase in test positivity = Number of days of the last 10 with a daily increase in the 7-day average test positivity.

- **Target:** Fewer than 7 days in the last 10 with a daily increase in the 7-day average test positivity.
- **Warning:** Seven or more days in the last 10 with a daily increase in the 7-day average test positivity.

Increasing Hospital Admissions for COVID-Like Illness

The number of COVID-like Illness (CLI) hospital admissions is measured using the Illinois Syndromic Surveillance System. Each day, for each region, a 7-day average is calculated by dividing the total number of CLI hospital admissions for 7 days by 7, rounded to a whole number.

Daily admission numbers for CLI reported on the IDPH regional COVID-19 Metrics website remain stable once publicly reported. The 7-day rolling average of admissions for CLI is calculated using the daily admission totals for the past 7-days that are available at the time the daily metrics are published. If a region could reach 7 days of increasing CLI admissions in a 10-day period along with a second metric, further investigation into the region's data will be performed. This includes, but is not limited to, evaluating the 7-day rolling average for CLI admissions using any additional information received after publication for the most up-to-date daily CLI admission trends.

Average CLI hospital admissions = [Region CLI hospital admissions for 7 days] / 7

Whenever this average increases from the previous day, it is flagged.

Increase CLI hospital admissions = Number of days of the last 10 with a daily increase in the 7-day average CLI hospital admissions.

- **Target:** Fewer than 7 days in the last 10 with a daily increase in the average number of CLI hospital admissions
- **Warning:** Seven or more days in the last 10 with a daily increase in the average number of CLI hospital admissions

Medical/Surgical Beds Percent Availability

Medical and surgical bed availability is reported daily by each hospital and represents the number of medical and surgical hospital beds that are empty. Hospitals are assigned to one of 11 Illinois COVID regions. Each day, for each region, the sum of the available medical and surgical beds over the last three days is divided by the sum of the total medical and surgical beds (i.e., bed capacity) over the same period.

Medical/Surgical bed availability = $100 \times [\text{Sum of medical and surgical beds available in the region for 3 days}] / [\text{Sum of total medical and surgical beds in the region for same 3 days}]$

- **Target:** At least 20% of medical and surgical beds are available
- **Warning:** Less than 20% of medical and surgical beds are available

ICU Percent Availability

Intensive Care Unit (ICU) availability is reported daily by each hospital and represents the number of ICU hospital beds that are empty. Hospitals are assigned to one of 11 Illinois COVID regions.

Each day, for each region, the sum of the available ICU beds over the last three days is divided by the sum of the total ICU beds (i.e., bed capacity) over the same period.

ICU availability = $100 \times [\text{Sum of ICU beds available in the region for 3 days}] / [\text{Sum of total ICU beds in the region for same 3 days}]$

- **Target:** At least 20% of ICU beds are available
- **Warning:** Less than 20% of ICU beds are available