



Lilly COVID-19 Drive-Through Testing Dashboard User Guide

The Lilly COVID-19 Drive-Through Testing Dashboard powered by hc1 provides key insights to better understand how COVID-19 has presented in select patients in Indiana who were tested for COVID-19 at the Eli Lilly (Lilly) drive-through testing facility.

- COVID-19 test results in this dashboard are from patients who received results from the Lilly drive-through testing facility between April 6th and May 22nd. All samples were collected by health care professionals via nasopharyngeal swab. A RT-PCR test was used to specifically identify the presence of SARS-CoV-2 RNA.
- In addition to providing information on patient demographics such as gender, age, and occupation, this dashboard includes patient reported symptomology present at the time of testing, providing key insights as we continue to better understand COVID-19. All demographic and symptomology data was self-reported and collected at the time of registration.

This document provides an overview of the dashboard and how to use it, defines its metrics and measures, and explains the data analyses behind the visualizations.

Accessing and Navigating the Dashboard

To access the dashboard, visit lilly.cv19dashboard.org. This dashboard is accessible to the public.

For the best dashboard performance, make sure you are using the latest version of Chrome, Firefox, Edge, or Safari as your web browser and have at least a 4G wired or wireless internet connection. The dashboard is compatible for use with both desktop and mobile devices.

To focus visualizations, you can hide a group by clicking its label in the report legend; click the label again to make the group visible. You can hover your mouse pointer over a part of any of these visualizations to see specific test result numbers.

Lilly COVID-19 Drive-Through Testing Dashboard Reports

Testing Summary

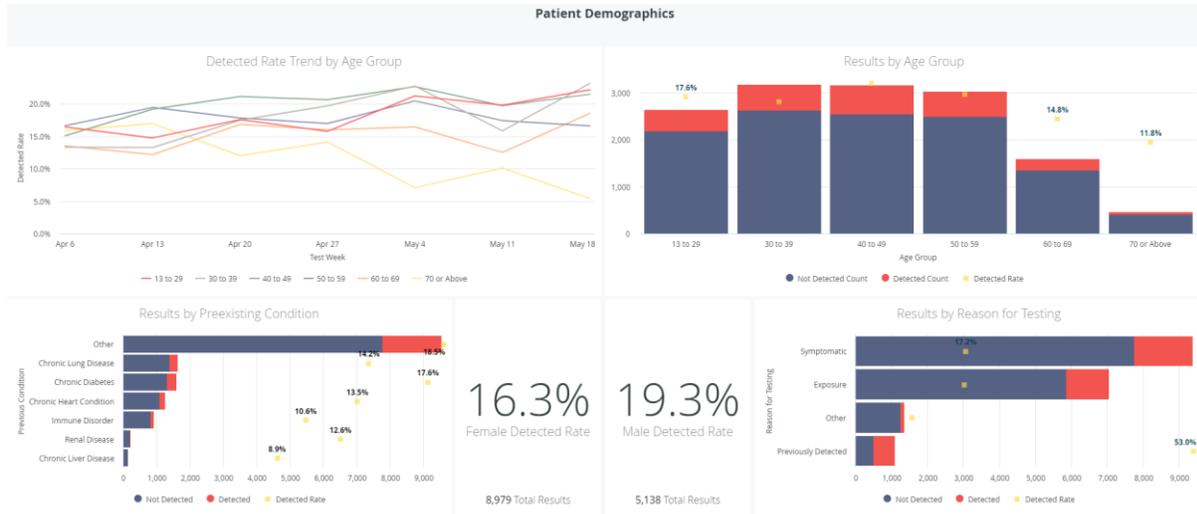
The reports in the Testing Summary section show key COVID-19 testing metrics.



- Results Count is a count of the total number of reported test results in the data set. A result of detected means the sample has confirmed presence of SARS-CoV-2, indicative of an active infection. The Detected Rate is the number of patients with a result type of detected divided by the results count number and rounded to the nearest tenth of a percent. The detected rate percentage only applies to patients within this data set and does not apply to the general population.
- The Testing by Result stacked bar graph shows how the total number of tested patients with a detected result compares with the total numbers of tested patients with a not detected result.
- The Trend in Testing Volume report shows how testing volume and the percentage of tests with a detected result type has varied by the week of the test result. A stacked bar chart shows the total number of test results broken down by result type for each week of test results.
- Testing Distribution provides a heat map of patients based on county of residence and is aggregated for all results within the testing data set. Counties with less than ten test results are not included.

Patient Demographics Breakdown

The Demographic Breakdown reports show testing results by patient age, gender, pre-existing condition, and reason for testing.



Results by Age Group

Lilly provides data to hc1 already aggregated into age ranges.

- **Detected Rate Trend by Age Group:** This graph shows the change by week for the percentage of results that detected SARS-CoV-2 by age group.
- **Results by Age Group:** This stacked bar chart shows the total number of test results for each age group broken down by result type for easy comparison. It also marks the percentage of test results in each age group that detected SARS-CoV-2.

Results by Pre-existing Condition

During testing registration, Lilly asked patients if any of the following pre-existing conditions applied to the individual being tested: Chronic Lung Disease, Chronic Diabetes, Chronic Heart Condition, Immune Disorder (including undergoing cancer treatment), Chronic Renal Disease, or Chronic Liver Disease. All conditions were self-reported, and an individual could have more than one condition to report. A selection of other could represent any of the following: none of the above conditions were applicable, a patient's pre-existing condition not listed, or a patient chose to not report a pre-existing condition.

- Results by Pre-existing Condition: This stacked bar chart shows the total number of test results by self-reported pre-existing condition. It also marks the percentage of test results for each pre-existing condition that detected SARS-CoV-2.

Results by Patient Gender

The percentage of test results that detected SARS-CoV-2 for male and female patients are shown. The total number of male and female patients tested is also shown.

Results by Reason for Testing

During testing registration, Lilly asked patients if any of the following reasons for testing applied: patient had symptoms of COVID-19, patient was exposed to someone who tested positive for SARS-CoV-2, or a patient previously tested positive for SARS-CoV-2 and needed a negative test result to return to work. All scenarios were self-reported, and more than one reason could be applicable. A selection of other could represent a patient declining to provide or the reasons listed were not applicable. All individuals tested were required to have a physician order for testing.

- Results by Reason for Testing: This stacked bar chart shows the total number of test results for each reason for testing. It also marks the percentage for each reason for testing that detected SARS-CoV-2.

Occupation Breakdown

In addition to testing its employees, Lilly tested the following groups in the drive-through facility: health care workers, first responders, on-site essential workers as defined by the State of Indiana, and those deemed to be at higher risk for the complications of COVID-19. During testing registration, Lilly asked patients for their occupation. Health care workers are further broken down into physicians, nurses, and health care worker – other, which includes occupations such as medical assistants, hospital workers, dentists and pharmacists. First responders are broken down into firefighters and law enforcement. Other may include individuals such as essential workers, those deemed to be in vulnerable populations, or other categories of first responders like EMTs.



- Detected Rate Trend by Occupation: This graph shows how the number of test results that detected SARS-CoV-2 has changed for each occupation by the week of the test result.
- Results by Occupation: This stacked bar chart shows the total number of test results for each occupation. It also marks the percentage for each occupation that detected SARS-CoV-2.

Symptom Breakdown

During testing registration, Lilly asked patients if they had any symptoms of COVID-19: cough, body aches, GI distress, fever, shortness of breath, or loss of taste or smell. A selection of other could represent a patient who had no symptoms (asymptomatic), a patient who had symptoms not listed, or a patient who declined to respond. All symptoms were self-reported, and more than one symptom could be applicable. This dashboard does not include statistical analyses to predict COVID-19 based on symptomology; the dashboard reports factual detected rates in the data set based on self-reported symptoms.



- Results by Symptom: This stacked bar chart shows the total number of test results for each symptom. It also marks the percentage for each symptom that detected SARS-CoV-2.
- Commonality of Symptoms in Detected Patients: This graph shows the percent of patients with detected SARS-CoV-2 who experienced each symptom. A patient who tested positive for SARS-CoV-2 could have more than one symptom reported.
- Symptom Frequency in Detected Patients by Occupation: This graph shows the percent of patients with detected SARS-CoV-2 who experienced each symptom by occupation.
- Detected Rate by Count of Symptoms Reported: This stacked bar chart shows the total number of test results by the number of symptoms. It also marks the percentage for each symptom that detected SARS-CoV-2. The number of symptoms can represent any combination of symptoms. For example, a patient with two symptoms could have a cough and fever or a cough and loss of taste or smell. The “other” category represents patients who had no symptoms (asymptomatic), patients who had symptoms other than those listed (cough, body aches, GI distress, fever, shortness of breath, or loss of taste of smell), and patients who declined to respond.

Data and Methods

This section explains the data sources and methods behind the Lilly COVID-19 Drive-Through Testing Dashboard.

Data Sources

Lilly began operating the drive-through testing facility in mid-March. These reports only include test results that hc1 received from Lilly related to samples collected at the Lilly drive-through testing facility between April 6th and May 22nd. The results were tested at the Lilly Clinical Diagnostics Laboratory, and the results do not include data from the asymptomatic study conducted by Lilly or from samples that were collected at hospitals and nursing homes and sent to the Lilly lab through the Indiana State Department of Health.

Lilly Drive-Through Data Collection

In addition to employees, the Lilly COVID-19 testing drive-through tested health care workers, first responders, on-site essential workers as defined by the State of Indiana, and those deemed to be at higher risk of complications from COVID-19. All individuals were required to have a physician order to request testing and registration was completed through a call center. Each patient was asked to provide demographic information, along with self-reported information such as occupation, pre-existing conditions, and any symptoms they were experiencing.

Test results and the associated de-identified information was sent from Lilly directly to hc1. Lilly is not currently offering drive-through COVID-19 testing to the public. The dashboard represents the latest data from the data set.

Unique Patient Identification

The level of patient detail that hc1 receives from Lilly and the detail hc1 displays in this dashboard are both subject to HIPAA regulations. Therefore, Lilly deidentifies data before sending to hc1, and further data aggregation occurs to visualize the dashboard. In some cases, data may be excluded from views where groupings produce too few results. In a limited number of cases, a single individual might be represented more than once in patient counts if they were tested multiple times.

Mapping Methodology

Each result is mapped to county based on the five-digit home zip code. In cases where a zip code spans counties, hc1 applies a weighted distribution of the results that are associated with that zip across the related counties. The weighting is done according to the percentage of the zip code's total population that falls in each county, according to the latest U.S. Census population data (2017 or 2018 data sets). For example, if a patient with a COVID-19 test result lives in a zip code that spans two counties, .7 of the patient's result would be attributed to the county that contains 70% of that zip code's population, and .3 of the result would be attributed to the county that contains 30% of the zip code population. Result counts are rounded up or down to the nearest whole number.