

# COVID-19 Reopening Metrics Data Notes

## District of Columbia

*All data are subject to change on a daily basis*

### Community Spread

#### District of Columbia COVID-19 Daily Case Rate per 100,000 population (7-day average)

**Data Source: DC Health. Data subject to change on a daily basis.**

**Data Notes:** The line represents a seven-day average of the daily case rate per 100,000 population. The number of daily cases is subject to the timeliness of test results reported from laboratories and may not always reflect the number of new positive tests on a given day. Data reflect ongoing data quality improvements.

**Metric Definition:** The daily case rate per 100,000 population is defined as the number of reported cases divided by the total DC population size, multiplied by 100,000. The metric is averaged over 7 days (inclusive of the most recent reported date).

#### Rate of Transmission (R(t))

**Source: DC Health. Data are subject to change on a daily basis.**

**Metric Definition:** The effective reproduction number (Rt) estimates the average number of secondary cases generated by an individual with SARS-CoV-2. If Rt is above 1, the number of daily new infections will grow at an exponential rate. If it is below 1, the number of daily new infections will decrease.

**Data Considerations:** The reproduction number is calculated in retrospect - data reported today is used to calculate the Rt for 14 days ago. This allows time for reported cases on a day to be more complete (~75% of cases reported), and calculates Rt over a 7-day window. Rt is primarily affected by 1) the under-reporting rate over time, 2) the caseload by start of infectious period, and 3) the serial interval (average days between the start of the infectious period in one individual, and the start of the infectious period in an individual they infect). Rt is estimated from cases by start of infectious period using the EpiEstim algorithm, and the day plotted is the midpoint of the 7-day window. Rt may not be a reliable indicator of transmission as cases decline, as it becomes more uncertain with less data, and can be heavily impacted by disease events in other states which are imported into DC. For this reason, the Rt is calculated excluding cases that are possible importations. Possible importations are defined as positive cases with international and/or domestic travel to a state excluding Maryland or Virginia during the exposure period, with no known close contacts in their household or workplace. *Thompson RN, Stockwin JE, van Gaalen RD, Polonsky JA, et al. Improved inference of time-varying reproduction numbers during infectious disease outbreaks. Epidemics (2019).*

#### Positivity Rate (7-day average)

**Source: DC Health and Public Health Labs. Data are subject to change on a daily basis.**

**Metric Definition:** Test positivity rate is calculated by date of specimen collection and takes the number of DC residents who test positive in a screening or diagnostic test, divided by the number of DC residents with an adequate sample collection for a test on that date.

**Data Considerations:** The positivity rate is calculated among DC-residents, and includes repeat testing. In a given day, the data are unique by person, but include persons who test on multiple days. This may include DC-residents who are tested by providers outside of DC. Inadequate samples (not-tested) or results without a positive/negative are excluded. Both diagnostic and screening tests are included; serological testing is excluded. Large point prevalence surveys may impact the positivity on a given day.

#### Percent of New Cases from Quarantined Contacts (7-day average)

**Source: DC Health. Data are subject to change on a daily basis.**

**Metric Definition:** A quarantined contact is defined as a close contact of a positive case who has been successfully reached by a contact tracer. A new case from a quarantined contact is defined as a positive case who was previously a quarantined contact.

**Data Considerations:** Contact tracing includes an interview with the initial positive case to collect basic information, identify close contacts, and provide resources and instructions for isolation. Close contacts of positive cases are interviewed to provide instructions for quarantine and gather more information about potential exposure. An individual can be a close contact of multiple positive cases. The moving average of the percentage of new

positive cases who were previously contacted as a close contact or reported an earlier quarantine start-date is calculated using a 7-day window, inclusive of the end date. The result is a 7-day average weighted by the number of cases received on that day.

## Healthcare System Capacity

### Percent Hospital Utilization (of available beds without surge)

**Source:** DC Hospital self-report to Health Emergency Preparedness and Response Administration, DC Health; DC Hospital Association.

**Metric Definition:** The number of beds currently in use for patient care divided by the total number of beds available under standard operations in acute care hospitals within DC.

**Data Considerations:** Occupied beds include those within inpatient and intensive care units. Patients may be ventilated. The total count includes patients who are being treated for conditions unrelated to COVID-19. Medical surge beds are not considered as part of the total. Gray circles indicate dates where one or more hospitals have not reported bed usage. For these dates, the bed usage for that hospital from the previous date is used. Acute care hospitals in DC are: Howard University Hospital, United Medical Center, MedStar Washington Hospital Center, Children's National Medical Center, Sibley Memorial Hospital, George Washington University Hospital, Georgetown University Hospital.

### Percent COVID-19 Patients (of daily hospital census, 7-day average)

**Data Source:** DC Health. **Data are subject to change on a daily basis.**

**Data notes:** The line represents a seven-day average of the percentage of COVID-19 positive patients among the total number of hospitalized patients (i.e., the daily hospital census). Daily reporting of inpatients in DC hospitals includes individuals from other jurisdictions, and reflects ongoing data quality improvements.

**Metric Definition:** The percentage of COVID-19 hospitalizations is defined as the number of COVID-19 hospitalizations divided by the total number of DC hospitalizations (or, the hospital bed census). The metric is the percentage of COVID-19 hospitalizations, averaged over 7 days (inclusive of the most recent reported date).

### Mean Test Turnaround Time (7-day average)

**Data Sources:** DC Health and Public Health Labs.

**Data Notes:** The line represents a seven-day average of the mean test turnaround time for labs reporting COVID-19 diagnostic tests to DC Health. Daily reporting reflects ongoing data quality improvements and is subject to change.

### COVID-19 Diagnostic Tests Conducted per Million Population (7-day average)

**Sources:** DC Health and Public Health Labs. **Data are subject to change on a daily basis.**

**Data notes:** The line represents a seven-day average of the diagnostic tests conducted per 1,000,000 population. The daily report of tests conducted is subject to the timeliness of test results reported from laboratories. These data reflect ongoing data quality improvements.

**Metric Definition:** This metric is defined as the number of reported tests divided by the total DC population size and multiplied by 1,000,000. The metric is averaged over 7 days (inclusive of the most recent reported date).

## Public Health System Capacity

### Positive Cases with Contact Attempt within 1 Day (7-day average)

**Source:** DC Health. **Data are subject to change on a daily basis.**

**Metric Definition:** A contact tracing attempt is defined as a phone call attempting to reach the individual. The percentage of positive cases with at least one contact attempt made within one day of case notification to DC Health. New cases are reported largely through 12pm, and contact tracing attempts are considered to meet the one-day criteria if the attempt is made before the end of the following day.

**Data Considerations:** Contact tracing includes an interview with the initial case to collect basic information, identify contacts, and provide resources and instructions for isolation. Contact tracing is not conducted for deceased individuals, or residents of jails and long term care facilities. These cases are excluded from this calculation, and are handled in separate and specialized health investigations. The metric includes only DC residents, though out of state residents may be interviewed. Cases without valid contact information are also not

included in the metric. If contact information is identified at a later date, the case is included in the metric at that time, even though it may have past the ideal contact window. Three contact attempts are made before a case is marked loss-to-follow-up. These attempts are only part of the contact tracing workload, and do not represent the contact tracing of close contacts, or follow-up calls. The moving average of the percentage of cases contacted within one day is calculated using a 7-day window, inclusive of the end date. The result is a 7-day average weighted by the number of cases on that day. Date of report to DC Health is a proxy for the date most cases were reported, then imported into the system the following day.

### Close Contacts of Positive Cases with Contact Attempt within 2 Days (7-day average)

**Source: DC Health. Data are subject to change on a daily basis.**

**Metric Definition:** A contact tracing attempt is defined as a phone call attempting to reach the individual. The percentage of close contacts of positive cases with at least one contact attempt made within two days of case notification to DC Health.

**Data Considerations:** Contact tracing includes an interview with the initial case to collect basic information, identify contacts, and provide resources and instructions for isolation. Contact tracing is not conducted for deceased individuals, or residents of jails and long term care facilities. These cases are excluded from this calculation, and are handled in separate and specialized health investigations. Close contacts without valid contact information are not included in the metric. If contact information is identified at a later date, the contact is included in the metric at that time, even though it may have passed the ideal contact window. An individual can be a close contact of multiple positive cases. Three contact attempts are made before a contact is marked loss-to-follow-up. The moving average of the percentage of close contacts with a contact attempt within two days will be calculated using a 7-day window, inclusive of the end date. The result will be a 7-day average weighted by the number of cases on that day.

We began reporting on June 12 as data were transitioned to a new contact tracing system, which prevented our ability to accurately estimate the number of call attempts during the transition period.

## **Community Engagement**

### Percent Cases with Completed Interview within 3 Days (7-day average)

**Data Source: DC Health. Data subject to change on a daily basis.**

**Data Notes:** The line represents a seven-day average of the percent of positive cases interviewed within three days of the date their cases were imported into the Contact Tracing system. Cases from identified special populations, such as residents of jails or long term care facilities are excluded from this calculation, and are handled in separate and specialized health investigations. The metric includes only DC residents, though out of state residents may be interviewed. Cases that are deceased or without valid contact information are also not included in the metric. If contact information is identified at a later date, the case is included in the metric at that time, even though it may have past the ideal contact window. Three contact attempts are made before a case is marked loss-to-follow-up.

**Metric Definition:** The percentage of positive cases with a completed interview within 3 days is defined as the number of COVID-19 positive cases with a completed interview date or date where the call outcome indicated that they had completed the interview, divided by the total number of positive outreach cases prioritized for contact tracing. The metric is averaged over 7 days (inclusive of the most recent reported date).

### Percent Cases Providing Close Contact Information (7-day average)

**Data Source: DC Health. Data subject to change on a daily basis.**

**Data Notes:** The line represents a seven-day average of the percent of positive cases that provided information about close contacts. Cases from identified special populations, such as residents of jails or long term care facilities are excluded from this calculation, and are handled in separate and specialized health investigations. The metric includes only DC residents, though out of state residents may be interviewed. Cases that are deceased or without valid contact information are also not included in the metric. If contact information is identified at a later date, the case is included in the metric at that time, even though it may have past the ideal contact window. Three contact attempts are made before a case is marked loss-to-follow-up.

**Metric Definition:** The percentage of positive cases that provided close contact information is defined as the number of COVID-19 positive cases that were prioritized for contact tracing activities and provided information about close contacts, divided by the total number of positive outreach cases prioritized for contact tracing. The metric is averaged over 7 days (inclusive of the most recent reported date).

### Mean Number of Close Contacts Provided (7-day average)

**Data Source: DC Health. Data subject to change on a daily basis.**

**Data Notes:** The line represents a seven-day average of the number of close contacts provided by positive outreach cases prioritized for contact tracing. Cases from identified special populations, such as residents of jails or long term care facilities are excluded from this calculation, and are handled in separate and specialized health investigations. The metric includes only DC residents, though out of state residents may be interviewed. Cases that are deceased or without valid contact information are also not included in the metric. If contact information is identified at a later date, the case is included in the metric at that time, even though it may have past the ideal contact window. Three contact attempts are made before a case is marked loss-to-follow-up.

**Metric Definition:** The mean number of close contacts provided per positive case is defined as the total number of close contacts divided by the total number positive cases that were prioritized for contact tracing activities. The metric is the averaged over 7 days (inclusive of the most recent reported date).

## Exposure Notification Opt-In

**Data Source: DC Health. Data subject to change on a daily basis.**

**Data Notes:** The summary value represents the number of smart phones that have opted-in to receive notifications from the DC COVID Alert Notice (DC CAN) application. DC CAN uses an Exposure Notifications System through Google and Apple to quickly notify users who have likely been exposed so they can reduce the risk of infection for friends and family and help DC stop the spread of SARS-CoV-2.

**Metric Definition:** The cumulative number of smart phones that have opted-in to the District's official exposure notification system.

## Correct Face Covering or Mask-Wearing in Public

**Data Source: DC Health. Data subject to change on a daily basis.**

**Data Notes:** The summary value represents the percent of observed people over a 3-week period who were correctly wearing their mask in public out as required by Mayor's Order 2020-080 of the total number of observations made. Those who were not wearing a face covering or mask when not required as per the Mayor's Order 2020-080 (i.e. if they were >6 feet from other people, children 2 or younger) were not recorded as an observation.

**Metric Definition:** The percentage who were observed correctly wearing a mask in public.

## COVID-19 Vaccine Coverage

**Data Source: DC Health. Data subject to change on a daily basis.**

**Data Notes:** The summary value represents the cumulative COVID-19 complete (2-dose) vaccine coverage for DC residents. This metric is updated weekly.

**Metric Definition:** COVID-19 vaccine coverage is defined as the total number of DC residents who have had two doses of the COVID-19 vaccine divided by the population of the District of Columbia.