



May 30, 2020

TO: Local Health Departments (LHDs), Healthcare Providers, and Healthcare Facilities
FROM: New York State Department of Health (NYS DOH)

HEALTH ADVISORY: SYMPTOM-BASED STRATEGY TO DISCONTINUE HOME ISOLATION FOR PERSONS WITH COVID-19

SUMMARY

- This document provides updated guidance on releasing individuals from home isolation as a result of COVID-19 illness. The information contained herein supersedes [NYS DOH guidance issued on March 28, 2020](#), and is not intended to be applied to settings such as nursing homes, assisted living facilities, or adult care facilities.
- In the context of community transmission, the [Centers for Disease Control and Prevention \(CDC\)](#) has indicated that an interim strategy based on time-since-illness-onset and time-since-recovery can be implemented to establish the end of isolation.
- NYS DOH is adopting the CDC guidance and recommends that for persons with COVID-19 illness recovering at home (or other home-like setting, such as a hotel), maintain isolation for at least 10 days after illness onset and at least 3 days (72 hours) after recovery.
 - Illness onset is defined as the date symptoms began.
 - Recovery is defined as resolution of fever without the use of fever-reducing medications, with progressive improvement or resolution of other symptoms.

BACKGROUND

For an emerging pathogen like SARS-CoV-2, the patterns and duration of illness and infectivity have not been fully described. However, available data indicate that shedding of SARS-CoV-2 RNA in upper respiratory specimens declines after onset of symptoms. At 10 days after illness onset, recovery of replication-competent virus in viral culture (as a proxy of the presence of infectious virus) is decreased and approaches zero. Although persons may produce PCR-positive specimens for up to 6 weeks (Xiao, 2020), there is no evidence to suggest that these PCR-positive samples represent the presence of infectious virus. Furthermore, among patients who have recovered and have detectable RNA in upper respiratory specimens, concentrations of RNA after 3 days are generally in ranges where virus has not been reliably cultured by CDC. These data have been generated from adults across a variety of age groups and with varying severity of illness. Data from children and infants is not presently available.

Key findings and references are summarized below:

- Viral burden measured in upper respiratory specimens declines after onset of illness (CDC unpublished data, Midgely 2020, Young 2020, Zou 2020, Wölfel 2020).
- At this time, replication-competent virus has not been successfully cultured more than 9 days after onset of illness. The statistically estimated likelihood of recovering replication-

competent virus approaches zero by 10 days (CDC unpublished data, Wölfel 2020, Arons 2020).

- As the likelihood of isolating replication-competent virus decreases, anti-SARS-CoV-2 IgM and IgG can be detected in an increasing number of persons recovering from infection (Wölfel 2020).
- Attempts to culture virus from upper respiratory specimens have been largely unsuccessful when viral burden is in low but detectable ranges (i.e., Ct values higher than 33-35^[1])(CDC unpublished data).
- Following recovery from clinical illness, many patients no longer have detectable viral RNA in upper respiratory specimens. Among those who continue to have detectable RNA, concentrations of detectable RNA 3 days following recovery are generally in the range at which replication-competent virus has not been reliably isolated by CDC (CDC unpublished data, Young 2020).
- No clear correlation has been described between length of illness and duration of post-recovery shedding of detectable viral RNA in upper respiratory specimens (CDC unpublished data, Midgely 2020, Wölfel 2020).
- Infectious virus has not been cultured from urine or reliably cultured from feces (CDC unpublished data, Midgely 2020, Wölfel 2020); these potential sources pose minimal if any risk of transmitting infection and any risk can be sufficiently mitigated by good hand hygiene.

Additional information on CDC's interim strategy is available at

<https://www.cdc.gov/coronavirus/2019-ncov/community/strategy-discontinue-isolation.html>.