

Dear Colleague

COVID-19 Updates

New York City Department of Health and Mental Hygiene

Updated guidance and scientific literature on coronavirus disease 2019 (COVID-19)

Week of May 3-9, 2020



Mrs. Mabel J. Kimbrough, Public Health Nurse, District of Columbia Health Department, with client.
National Negro Health Week Bulletin, 1937. [National Archives](#)

If you are a certified health care worker, or a local provider in need of additional staff, learn how you can [apply to join the Medical Reserve Corp or receive surge staffing during the COVID-19 outbreak.](#)

Looking to make a donation of personal protective equipment (PPE)?
[You can do so online.](#)

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New York City Situation Summary

Updated New York City COVID-19 Case data

The New York City (NYC) Health Department’s interactive [COVID-19 data webpage](#) presents updated daily counts and rates of confirmed cases of, hospitalizations for, and deaths due to COVID-19. The page also includes:

- Demographic data of persons who died from confirmed or probable COVID-19.
- Rates of cases, hospitalizations, and deaths by race/ethnicity group.
- ZIP-code level maps with cumulative case counts and percent positivity.
- Public health milestones — key indicators used to gauge the level of COVID-19 transmission in NYC.

Data are available for download.

Race, Ethnicity, and COVID-19-related Deaths in New York City

Preliminary [NYC data](#) show that the rate of deaths among people with laboratory-confirmed COVID-19 has been higher among Black/African American and Hispanic/Latino New Yorkers compared with White and Asian New Yorkers. As of April 27, 2020, a total of 17,682 COVID-19-related deaths had been reported in NYC, including 12,287 deaths among persons with a positive laboratory test for COVID-19 and 5,395 probable deaths. Race/ethnicity information was available for 82% of decedents. The age-adjusted COVID-19 death rate per 100,000 population was 209.4 for Blacks/African Americans, 195.3 for Hispanics/Latinos, 107.7 for Whites, and 90.8 for Asians (Figure 1).

Deaths are reported to the NYC Health Department through the NYC Office of the Chief Medical Examiner and the NYC Health Department’s Bureau of Vital Statistics, which is responsible for the registration, analysis, and reporting of all deaths in the city. The mortality rates presented here include deaths that occurred among people who tested positive for SARS-CoV-2 and those whose death certificate listed as a cause of death “COVID-19” or an equivalent (i.e., “probable death”). Limitations notwithstanding, the preliminary data highlight disparities in the impact that COVID-19 is having on these communities that must be addressed.

Disparities in COVID-19-related deaths may reflect, in part, an increased risk for exposure among New Yorkers who do not have the option to work from home or shelter at home during a period of furlough or unemployment. Black/African American and Hispanic/Latino people dominate employment [in many sectors of the NYC service economy](#), which may increase their risk of being exposed to SARS-CoV-2 while earning a living as an essential worker. Black/African Americans and Hispanics/Latinos are [disproportionately affected by chronic health conditions](#), such as

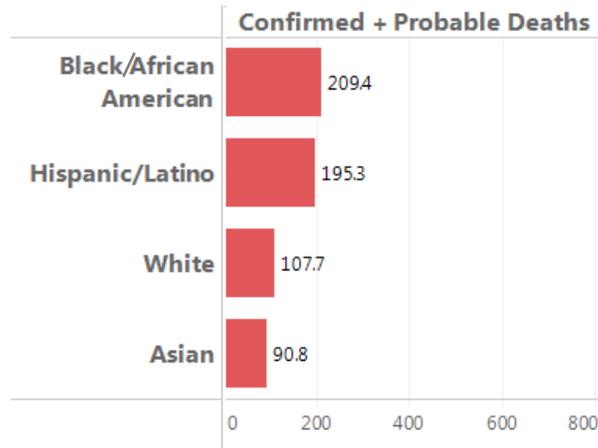


Figure 1. Age-adjusted rates of confirmed and probable COVID-19 deaths in New York City, by race and ethnicity, as of April 27, 2020.

Note: A death is classified as confirmed if the decedent was a NYC resident who had a positive SARS-CoV-2 laboratory test. A death is classified as probable if the decedent was a NYC resident who had no known positive laboratory test for SARS-CoV-2 but the death certificate lists as a cause of death “COVID-19” or an equivalent. Hispanic/Latino includes people of any race. People of other races are not shown

[Data](#) from the New York City Health Department

hypertension, diabetes, or obesity, which may also contribute to a higher risk for COVID-19-related death. Additionally, decreased access to timely and appropriate health care could play a role.

Black/African American and Hispanic/Latino people in the United States (U.S.) are [less likely to have health insurance](#), which can help facilitate access to care, than other groups. Barriers to care are likely to be exacerbated by the current economic downturn leading to increased unemployment rates in the service economy, since many people are likely to lose employer-based health insurance.

The NYC Health Department is committed to providing COVID-19-related data according to race/ethnicity and neighborhood whenever possible, so that inequities in the impact of COVID-19 can be identified and their root causes investigated and addressed. Racism is a fundamental cause of these inequities. To advance efforts that address health inequities in NYC, including [structural racism](#), the NYC Health Department is critically reviewing policies and practices, both current and past, that perpetuate conditions that may lead to higher rates of COVID-19. We are supporting tailored messaging for communities that have been disproportionately impacted by COVID-19 and are developing strategies to direct other resources toward those communities.

NYC health care providers can partner in these efforts by ensuring continued outreach to people in communities that have been disproportionately affected by the COVID-19 pandemic. Consider contacting patients with [underlying medical conditions or other risk factors](#) for severe COVID-19 and encouraging them to continue taking prescribed medicines, maintain a 90-day supply of

essential medications, and promptly seek care if they have warning signs or if their condition worsens. Communication can be via [telemedicine](#) or in person if necessary. Providers can also reinforce that there are some symptoms for which medical care should always be sought immediately. These include trouble breathing, chest pain, acute change in mental status, cyanosis, and signs suggestive of a stroke.

Patients with possible COVID-19 who do not have a regular health care provider or who lack access to medical services can call **844-NYC-4NYC** (844-692-4692) or **311** to receive medical advice and assistance, regardless of their immigration status or ability to pay.

For more information on the NYC Health Department's work to address health inequities, visit the Center for Health Equity and Community Wellness webpage: www1.nyc.gov/site/doh/health/neighborhood-health/center-for-health-equity.page.

The NYC Health Department has launched Race to Justice, an internal reform effort to help staff learn what they can do to address racial health gaps and improve health outcomes for all New Yorkers. For more information, visit: <https://www1.nyc.gov/site/doh/health/health-topics/race-to-justice.page>.

Taking Care of Yourself While You Are Taking Care of Others

Health care workers, including clinical providers, administrators, and maintenance staff, face unique stressors and challenges related to the COVID-19 pandemic. Stressors related to the health care setting, such as evolving information and supply shortages, as well as stressors related to health care workers specifically, such as increased risk of infection, workload, and patient death toll, can all lead to stress reactions. Using coping skills such as staying connected to friends and family, limiting exposure to the news, making time for adequate rest, eating healthy, and engaging in physical activity can decrease the negative impact of stress and promote resiliency. NYC Well offers a number of well-being and emotional support apps that can help you cope. Visit the "App Library" at nyc.gov/nycwell for online tools.

Supervisors in health care settings can promote supportive work environments by acknowledging staff concerns and providing consistent, clear messages while acknowledging that things are constantly changing. For more information on stress and coping specific to health care workers, you can read [Taking Care of Your Emotional Well-Being: Tips for Health Care Workers During COVID-19](#).

Guidance and Recommendations

New York City Health Alerts

The Health Alert Network (HAN) is the primary way that the NYC Health Department shares information and official guidance on public health issues and emergencies with local health care providers. Sign up to receive NYC Health Alerts [here](#). Recent COVID-19 alerts include:

- [NYC Health Alert #12: NYC Public Health Laboratory Now Accepting Nasal Swabs and Saliva Specimens for COVID-19 Testing \(April 27, 2020\)](#)
Announces that the NYC Public Health Laboratory is accepting nasal swabs and saliva specimens for COVID-19 testing, so that the sensitivities of testing these less invasively collected specimens may be confirmed. If these methods are found to yield reliable results, patients will be able to collect their own specimens, saving laboratory testing and specimen collection supplies and protective gear.
- [NYC Health Alert #11: Current Status of SARS-CoV-2 Serologic Testing \(April 22, 2020\)](#)
Cautions NYC health care providers against using SARS-CoV-2 serology to diagnose current or past infection or to determine immune status. Unvalidated SARS-CoV-2 serology test kits have entered the marketplace that can produce false-positive and false-negative test results that can lead to incorrect patient guidance.
- [NYC Health Alert #10: COVID-19 Updates for New York City \(April 11, 2020\)](#)
Recommends that all employees wear face masks while providing care to patients in health care facilities due to emerging data on asymptomatic and presymptomatic transmission of SARS-CoV-2. It describes a serious shortage of swabs needed to collect specimens for COVID-19 testing and recommends prioritizing testing of patients with severe disease. It also describes how to report deaths due to COVID-19 using [eVital](#).

New York City Health Department Guidance

Telemedicine: Overview and Resources

Telemedicine refers specifically to the practice of medicine using technology that enables health care delivery at a distance, whereas telehealth broadly refers to such technology. Many aspects of patient care can be provided via telemedicine, including initial consultations, urgent care, routine follow-up visits, medication management, and psychotherapy. Such services can be delivered through video visits, telephone calls, or secure portals for exchange of text messages or emails.

Regulations and Reimbursements: In the current emergency, various [federal restrictions have been relaxed](#) on types of technologies that can be used to virtually connect patients with

providers. For example, the requirement to use Health Insurance Portability and Accountability Act (HIPAA)-compliant technologies has been eased during the COVID-19 emergency, enabling the use of certain video conferencing services approved by U.S. Department of Health and Human Services. The COVID-19 pandemic has also necessitated the loosening of restrictions on billing for telehealth services and sites where telehealth services are provided.

Each type of communication has different billing and coding requirements and reimbursement rates. It is important to note that telephone communication between providers and patients is included and is reimbursed by both [Medicaid](#) and [Medicare](#).

Prioritizing Patient Encounters: Providers should consider prioritizing visits with patients who are at risk for severe COVID-19 illness: adults aged 50 years or older, people who are immunocompromised, or people who have chronic conditions such as lung disease, heart disease, moderate to severe asthma, obesity, diabetes, hypertension, kidney disease, liver disease, or cancer. Patients who have poorly controlled chronic conditions and those who may not have a sufficient reserve of essential medications should also be prioritized for assessment when symptomatic.

Most electronic health records (EHRs) have “Patient Lists” or “Registry” features that can be used to identify patients who should be prioritized. The following table highlights examples of such queries.

Examples of potential EHR queries to identify patients for outreach during social or physical distancing

Prescriptions: Any prescription with an end date in the next 30 days, active corticosteroid or other immunosuppressive treatment (to identify patients who may have weakened immunity)

Problem list (example of health condition, followed by relevant ICD-10 codes):

Asthma (J45.x); COPD (J44.x); HIV (B20.x); Coronary artery disease (I25.x); Congestive heart failure (I50.x); Cancer (C00 - C49); Diabetes (E10.x, E11.x); Chronic kidney disease (N18.x); Liver disease (K76.x)

Many patients with COVID-19 can be managed remotely with advice on symptom management and self-isolation. The following tips, which are adapted from the British Medical Journal’s article, “[COVID-19: A Remote Assessment in Primary Care](#),” may be helpful for assessing patients with symptoms of possible COVID-19 via telemedicine.

- Begin the encounter with a ballpark assessment: Sick or not sick? Distressed? Lying down or sitting comfortably? Tachypneic?
- Take a history of the present illness as usual. To get more information about dyspnea, ask about shortness of breath at rest versus walking, and how they feel after climbing one flight of stairs. Are they able to speak while walking? What daily activities are they unable

to do today that they were previously able to do? Ask about known risk factors for severe COVID-19 illness when gathering past medical history.

- You should be able to document general appearance (pallor, color of lips), HEENT, and brief respiratory exam (audible wheeze?). Ask the patient to take their own temperature. You can teach them to measure their heart rate or to use a heart rate monitor. Some patients may also have a blood pressure monitor or pulse oximeter. Ask the patient to walk around the room and gauge whether they can speak in full sentences.
- In addition to providing information on self-management of symptoms, end the encounter by explaining objective signs and symptoms that warrant escalating care. Provide guidance on when a patient should contact you versus when they should seek emergency care or call **911**.

Additional sources of information:

[National Telehealth Technology Assessment Resource Center](#)

[Northeast Telehealth Resource Center](#)

[American Telemedicine Association](#)

[Center for Connected Health Policy](#)

[American College of Physicians](#)

[New York State Guidance for Telehealth for Medicaid Providers](#)

[Weekly webinars hosted by the NYC Health Department Bureau of Equitable Health Systems' NYC REACH \(Regional Electronic Adoption Center for Health Sites\) program](#)

Practices that already participate in the Bureau of Equitable Health System's [NYC REACH](#) program can get assistance through **NYC Health COVID Calls**. Specific inquiries for technical assistance with contacting patients can be directed to nycreach@health.nyc.gov.

Additional New York City Health Department Clinician Guidance

[Warning About Serologic SARS-CoV-2 Assays \(April 7\)](#)

[Frequently Asked Questions About COVID-19 for Health Care Providers \(April 29, 2020\)](#)

[COVID-19 Guidance for Home Health Care Workers and Community Health Care Workers \(April 30, 2020\)](#)

Recent Literature and Additional Resources

Mortality

The literature report below is not exhaustive. Common themes across studies include:

- Patients who died tended to be older and to have underlying comorbidities, particularly hypertension or other cardiovascular conditions.
- In general, decedents tended to be more severely ill at presentation to the hospital compared with those who survived to hospital discharge.
- Dyspnea at illness onset or presentation to the hospital was a specific symptom that was more commonly reported among those who ultimately died compared with those who survived hospitalization or with what has been reported in the general population with COVID-19.
- In addition to respiratory failure, acute cardiac injury was noted in a high proportion of decedents in certain case series.

- Chen T, Wu D, Chen H, et al. [Clinical characteristics of 113 deceased patients with coronavirus disease 2019: retrospective study](#). *BMJ*. 2020;368:m1091.

Retrospective case series of 799 patients hospitalized at a single Wuhan, China hospital with COVID-19, 113 of whom died and 161 who recovered at the time of the report. Compared to patients who recovered, decedents had a higher median age and were disproportionately male, and a higher proportion had hypertension or other cardiovascular comorbidities. Dyspnea or chest tightness at illness onset were more common among decedents compared to those who recovered. Decedents tended to be more severely ill upon presentation to the hospital compared to those who survived. Acute respiratory distress syndrome was noted in all decedents; other common complications included acute cardiac injury and acute kidney injury.

- Du RH, Liu LM, Yin W, et al. [Hospitalization and critical care of 109 decedents with COVID-19 pneumonia in Wuhan, China](#). *Ann Am Thorac Soc*. Published online April 7, 2020.

Case series of 109 persons with laboratory-confirmed COVID-19 pneumonia who died at three hospitals in Wuhan, China through February 24, 2020. Mean age was 70.7 years; 32.1% were female; and 78.0% had one or more underlying conditions, the most common of which were hypertension, cardiovascular or cerebrovascular diseases, and diabetes. Dyspnea was a more common presenting symptom among decedents than was reported in the general population with COVID-19 in China. Cardiac injury and coagulation disorders were common, and 38.5% had documented bacterial or fungal coinfection. All had indications for intensive care unit admission; only 46.8% had access.

The authors emphasized the importance of plans for allocating ICU beds and other resources during scarcity.

- Grasselli G, Zangrillo A, Zanella A, et al. [Baseline characteristics and outcomes of 1591 patients infected with SARS-CoV-2 admitted to ICUs of the Lombardy Region, Italy](#). *JAMA*. 2020;323(16):1574-1581.

Retrospective case series of 1591 consecutive patients with laboratory-confirmed COVID-19 referred for intensive care unit (ICU) admission at one of 72 hospitals in Lombardy, Italy during February 20 to March 18, 2020. Median age was 63 years; 82% were male. A high proportion (88%) required mechanical ventilation. Of 1043 patients with available data, 709 (68%) had at least one comorbidity, the most common being hypertension and cardiovascular disease. Among 1581 patients with data as of March 25, 2020, 920 (58%) remained in the ICU, 256 (16%) had been discharged from the ICU, and 405 (26%) had died in the ICU. Older patients (n = 786; age ≥64 years) had higher mortality than younger patients (n = 795; age ≤63 years) (36% vs. 15%).

- Xie J, Tong Z, Guan X, et al. [Clinical characteristics of patients who died of coronavirus disease 2019 in China](#). *JAMA Netw Open*. 2020;3(4):e205619.

Retrospective case series of 168 deaths occurring January 21 to 30, 2020 among hospitalized patients with laboratory-confirmed COVID-19 in 21 Wuhan hospitals. Of these, 75% were male, median age was 70 years, and 74% had one or more comorbidities, most commonly hypertension, diabetes, or ischemic heart disease. Approximately one-fifth received mechanical ventilation, suggesting mechanical ventilation was delayed. Some patients had “silent hypoxemia” — hypoxia without dyspnea or other reported symptoms.

- Zhou F, Yu T, Du R, et al. [Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study](#). *Lancet*. 2020;395(10229):1054-1062.

Retrospective study of 191 adults with laboratory-confirmed COVID-19 admitted to two Wuhan hospitals, of whom 54 died during hospitalization. In-hospital death was associated with older age, evidence of multi-organ-system dysfunction at admission, d-dimer > 1 on admission.

Disparities

- Owen W, Carmona R, Pomeroy C, et al. [Failing another national stress test on health disparities](#). *JAMA*. Published online April 15, 2020.

Data show disparities in COVID-19 outcomes that reflect historic racial/ethnic health inequities. To identify and address these inequities, the authors recommend: (1) mandating data collection of COVID-19 cases stratified by race, ethnicity, sex, socioeconomic status, and community health status to target resources to the most vulnerable groups; and (2) initiating a multilingual multimedia public service announcement campaign to provide non-English speakers with information about social distancing, testing, and health care services.

- Pew Research Center. [Health Concerns from COVID-19 Much Higher Among Hispanics and Blacks than Whites](#). April 14, 2020.

A Pew Research Center study of 4,917 U.S. adults found that concern about being hospitalized for COVID-19 or unknowingly spreading SARS-CoV-2 to others was more common among Latinos (43%, 49%, respectively) than Black people (31%, 38%) or White people (18%, 28%). Knowing someone who had been hospitalized or had died as a result of COVID-19 was more common among Black people (27%) than Latinos (13%) or White people (13%).

- Wang Z, Tang K. [Combating COVID-19: health equity matters](#). *Nat Med*. 2020;26(4):458-464.

Health equity should be at the center of all pandemic outbreak planning. Assessment of health inequities early in the pandemic is recommended in order to increase the effectiveness of disease control measures.

- Wenham C, Smith J, Morgan R, et al. [COVID-19 is an opportunity for gender equality within the workplace and at home](#). *BMJ*. 2020;369:m1546.

Female health care workers are expected to be impacted by COVID-19 infection in far greater numbers than male workers since the majority of this workforce is female. Pandemic response planning tends to be gender-neutral, however, and it will therefore not account for the inevitable loss of greater numbers of female workers from the front lines. Policies that recognize the multiple competing priorities women face should be implemented and should remain in place once the COVID-19 outbreak is over.

- Yancy C. [COVID-19 and African Americans](#). *JAMA*. Published online April 15, 2020.

In the U.S., African Americans or black people are more likely than other racial or ethnic groups to contract SARS-CoV-2 and to die from COVID-19, a disparity that appears due to the greater likelihood of having underlying health conditions that increase the risk of severe COVID-19 and being concentrated in high-poverty, high-density communities where social distancing is a privilege unattainable to most. The author writes, "COVID-19

has become the herald event that now fully exposes the deep and chronic social wounds in U.S. communities.” He asks whether COVID-19 will spur the U.S. to address poor health outcomes in Black America and no longer accept disproportionate suffering.

Treatment

- Bhimraj A, Morgan RL, Shumaker AH, et al. [Infectious Diseases Society of America guidelines on the treatment and management of patients with COVID-19](#). *Clin Infect Dis*. Published online April 27, 2020.

The IDSA guideline panel agreed on seven treatment recommendations for patients admitting to the hospital with COVID-19, while acknowledging that there exists a knowledge gap with these recommendations. Among those admitted for COVID-19, hydroxychloroquine/chloroquine or convalescent plasma are recommended in the context of a clinical trial. Hydroxychloroquine/chloroquine plus azithromycin, lopinavir/ritonavir, or tocilizumab are recommended only in the context of a clinical trial. Among those with COVID-19 pneumonia, the IDSA guideline panel suggests against the use of corticosteroids (conditional recommendation). The use of corticosteroids for patients admitted with ARDS due to COVID-19 is recommended in the context of a clinical trial.

- Borba MG, Val FFA, Sampaio VS, et al. [Chloroquine diphosphate in two different dosages as adjunctive therapy of hospitalized patients with severe respiratory syndrome in the context of coronavirus \(SARS-CoV-2\) infection: Preliminary safety results of a randomized, double-blinded, phase IIb clinical trial](#) (CloroCovid-19 Study). *MedRxiv*. Published online April 16, 2020. (not peer-reviewed)

The findings from this preliminary study suggest that higher CQ dosage should not be recommended. The high-dose CQ arm (600 mg twice daily for 10 days) presented more QT prolongations (25% with QTc > 500 ms) and a trend toward higher lethality as compared to the lower dose (450 mg for five days, twice daily only on the first day).

- Caly L, Druce JD, Catton MG, Jans DA, Wagstaff KM, et al. [The FDA-approved drug ivermectin inhibits the replication of SARS-CoV-2 in vitro](#). *Antiviral Res*. 2020;178:104787.

Related FDA Letter to Stakeholders: [Do not use ivermectin intended for animals as treatment for COVID-19 in humans](#)

Antiviral Research pre-publication paper, “The FDA-approved drug ivermectin inhibits the replication of SARS-CoV-2 in vitro” demonstrated that a single dose of ivermectin inhibited viral replication of SARS-CoV-2 within 48 hours in cell culture. FDA’s Center for Veterinary Medicine issued a warning regarding this study. They stress that the study was

conducted in a laboratory setting, and additional research is needed to assess safety and efficacy of the drug in treating COVID-19. Ivermectin is approved for use in certain animal conditions, and self-medication with this drug by the public could be harmful.

- Grien J, Ohmagari N, Shin D, et al. [Compassionate use of remdesivir for patients with severe COVID-19](#). *N Engl J Med*. Published online April 10, 2020.

Authors provided a 10-day course of remdesivir on a compassionate-use basis to patients hospitalized with COVID-19 who had an oxygen saturation of 94% or less on room air or were receiving oxygen support. Clinical improvement was defined by hospital discharge or a 2-point decrease in a modified ordinal scale assessing oxygen requirements. Thirty-six of 53 patients (68%) had improvement in oxygen support, 17 of 30 patients (57%) receiving mechanical ventilation were extubated, 25 patients (47%) were discharged, and seven patients (13%) died. One major limitation is that this study had no controls. Measurement of efficacy will require randomized, controlled trials.

Additional Resources on COVID-19

NYC Health Department Resources

- The NYC Health Department offers regular presentations on COVID-19 for health care providers. Visit the [NYC Health Department Provider webpage](#) to register and to find updated information on COVID-19.
- The NYC Health Department also offers [Emergency Planning Resources for Hospitals](#).
- Sign up to receive Dear Colleague COVID-19 newsletters, which are distributed through the [City Health Information network](#).

Other Resources

- [Johns Hopkins University](#) COVID-19 Resources
- [World Health Organization](#) Global Research on COVID-19
- Critical care and other health care facility planning resources are available on [the Greater New York Hospital Association web page](#)