COVID-19 IN NYC

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WHERE WE ARE NOW

- Over three months have passed since the first confirmed case of COVID-19 in New York City (NYC)
- NYC has had over 200,000 confirmed cases and over 52,000 hospitalizations
- With 21,547 deaths (confirmed + probable), NYC has the seventh highest number of deaths as compared to any country in the world
- But there has been a sustained decline in case counts, hospitalizations, and deaths, showing that mitigation measures, including physical distancing, are working
- These measures must be maintained as we transition to the suppression phase of our response



NYC Health Department Response

- Enhanced surveillance to track disease spread
- Educate the public through webinars, virtual town halls, social media, guidance documents, and media campaigns
- Provide guidance to doctors, hospitals, nursing homes, and other healthcare facilities
- Laboratory testing at NYC Health Department Public Health Laboratory
- Meeting increased healthcare needs
 - Distribution of medical equipment and supplies
 - Assist in building volunteer and paid healthcare workforce
- Targeted diagnostic testing and serology surveys
- Planning for future phases of the pandemic



RESPONSE HIGHLIGHTS

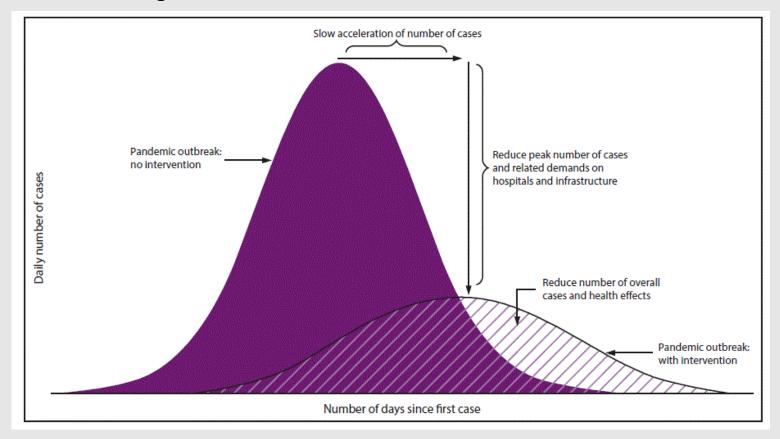
- Coordinated response between NYC public and private hospital systems
- Distributed tens of millions of gloves, facemasks, gowns, and other PPE
- Rapidly built auxiliary medical sites with New York State (NYS) and federal assistance (e.g., Javits Center, Arthur Ash stadium)
- Reinvented traditional community outreach through Zoom,
 Facebook live, and other platforms
- Multilingual response, with many materials translated into over 20 languages
- Harnessing data from new and existing sources to better understand and predict transmission patterns, disease burden, mortality, and disease risks



Flattening the curve! Our messaging worked – New Yorkers stayed home

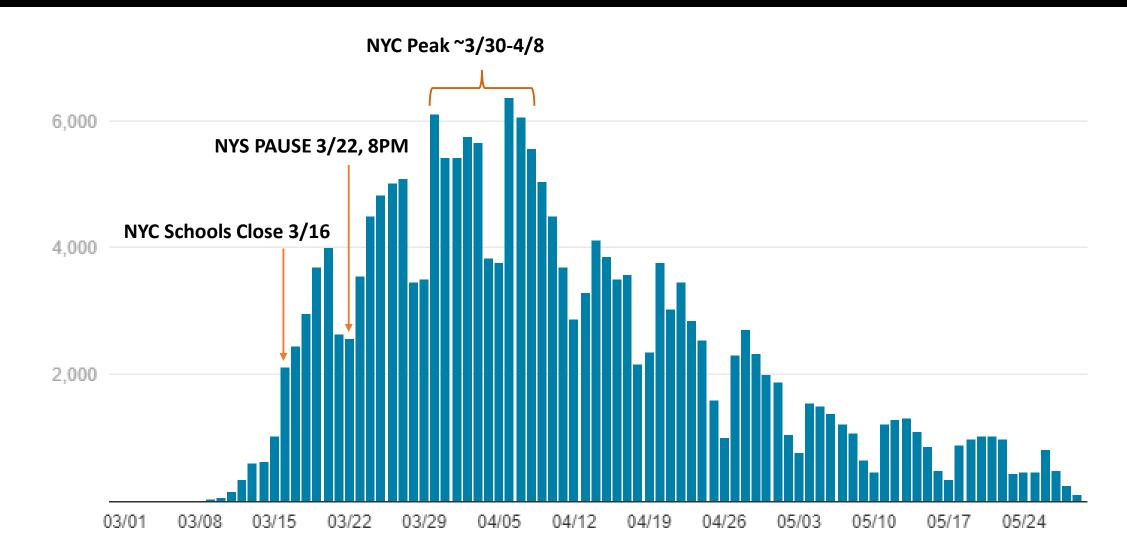
- Peaked ~2 weeks earlier than most models
- While pressed to the limits, ultimately, our healthcare systems was able to withstand the surge

RESPONSE HIGHLIGHTS





NYC COVID-19 Cases, March 1-May 29, 2020 (by Diagnosis Date)





RESPONSE CHALLENGES: READINESS

- Systematic de-funding and underfunding of public health, including:
 - Over the last several years, federal funding for many NYC disease prevention and control programs has been reduced or flat-funded (flat-funding + inflation = budget cut)
 - NYS cut NYC's Article 6 funding in the FY2020 budget (~59 million loss to NYC Health Department per FY)
 - Elimination of \$200 million PREDICT pandemic early warning program by Trump administration
- This leads to public health playing catch-up:
 - Insufficient staffing
 - Archaic reporting and surveillance systems
 - Depleted emergency stockpiles



RESPONSE CHALLENGES: READINESS

- It's a new virus: our understanding of prevention, transmission, symptoms, care, and medical complications is continuously evolving:
 - Breadth of symptoms (early focus on fever, cough, shortness of breath only)
 - Likely significant role of asymptomatic transmission
 - Many things still unknown, including whether someone who had COVID-19 can get it again
- Late start to response:
 - Travel restrictions and screening were limited to China
 - Following CDC testing guidance, early testing was based on travel history to China only
 - Delays in CDC diagnostic tests and authorizing non-CDC tests
- Inadequate tests, testing supplies, PPE, and medical equipment
 - Causes decisions based on resources, not best public health practice



RESPONSE CHALLENGES: SIZE, SCOPE & STRUCTURAL ISSUES

- Largest emergency response in NYC's history, involving numerous city agencies with competing priorities, processes, and stakeholders
- NYS and NYC response at times lacked coordination
 - Conflicting mandates and guidance
 - Little to no advanced knowledge of policy changes
- Regular stream of misleading and false information
 - Federal position on extent of threat (e.g., "It's going to disappear. One day it's like a miracle—it will disappear.")
 - Federal claims re: benefits of unproven therapies (hydroquloroquine, ingesting disinfectant, UV light)
- Stigma, racism, history of medical abuses, and immigration climate create government mistrust



A TALE OF TWO CITIES

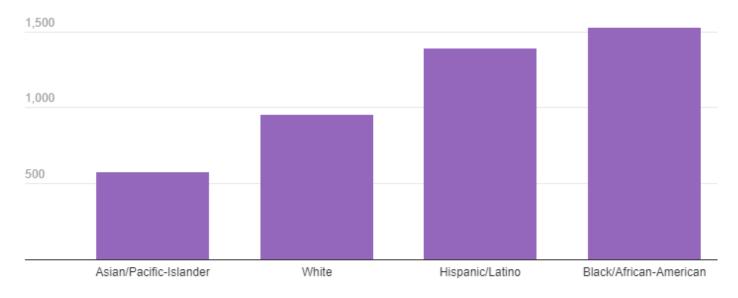
- As with other infectious diseases, people of color, of low income, and living in higher poverty neighborhoods account for a disproportionate share of COIVD-19 cases, hospitalizations, and deaths
- Disparities likely relate to:
 - Higher rates of pre-existing conditions
 - Difficulties in practicing physical distancing (smaller or more crowded apartments, need to take public transport, frontline jobs)
 - Healthcare access issues
 - Structural racism
 - Other social determinants of health



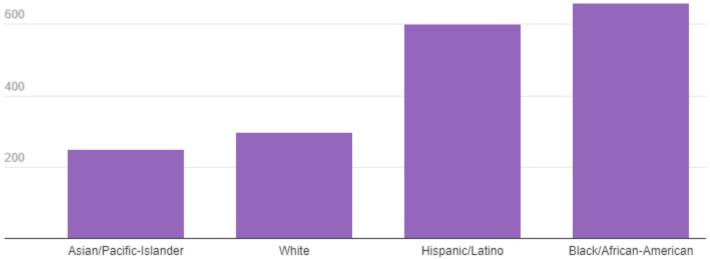
COVID-19 CASES AND HOSPITALIZATIONS BY RACE/ETHNICTY

Race and ethnicity information is most complete for people who are hospitalized or have died. There are much less demographic data currently available for non-hospitalized cases.

CASES



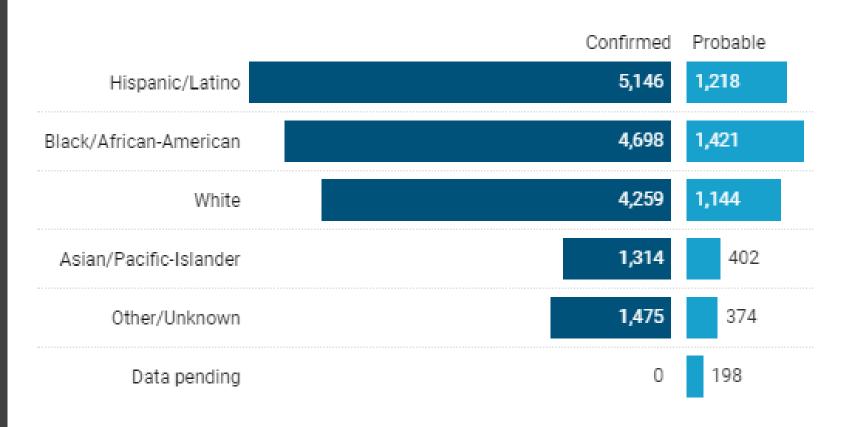
HOSPITALIZATIONS





COVID-19 CONFIRMED AND PROBABLE DEATHS BY RACE/ETHNICTY

Race and ethnicity information is most complete for people who are hospitalized or have died. There are much less demographic data currently available for non-hospitalized cases.





COVID-19 Case Rate by Zip Code of Residence



ZIP Code: **10012**

Neighborhood: **Greenwich Village/Soho, Manhattan**

Case Count: 160

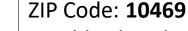
Rate per 100,000: **667.19**

Percent of people tested who

tested positive: 13.5

Deaths: 8

Death rate per 100,000: **33.36**



Neighborhood: Allen, Baychester, Pelham Gardens, Williamsbridge

Bronx

Case Count: **2955**

Rate per 100,000: **4132.39**

Percent of people tested who

tested positive: **33.57**

Deaths: **320**

Death rate per 100,000: **447.5**



LESSONS & OPPORTUNITIES

- COVID-19 has drawn attention to inherent weaknesses in the U.S. that lead to disease transmission
 - Lack of paid sick leave
 - Cost of healthcare, high un- and under-insurance rates
 - Public charge and other anti-immigration rules and sentiment
- It has also shone a spotlight on the importance of sustained public health funding to rapidly detect and respond to disease outbreaks
- We can rebuild better/smarter, including by harnessing technology
 - Invest in bi-directional, electronic case reporting systems
 - Harness cost-effective information-sharing technology (e.g., apps)
 - Continue the use of telehealth as a sustainable, cost-effective alternative to many in-person healthcare encounters
- And we must take into account structural racism in everything we do



THANKS!