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INTRODUCTION

Since March 2020, the New York City Department of Health and Mental Health has been tracking COVID-19 statistics throughout the five boroughs. After a few months, it was noticeable that some neighborhoods were being affected more drastically than others. Factors like race, income status, dependents in the household, and neighborhood population density have been linked to attribute to differences in COVID-19 case rates.¹⁻³ Very few studies have investigated factors that attribute to higher death rates and antibody rates.

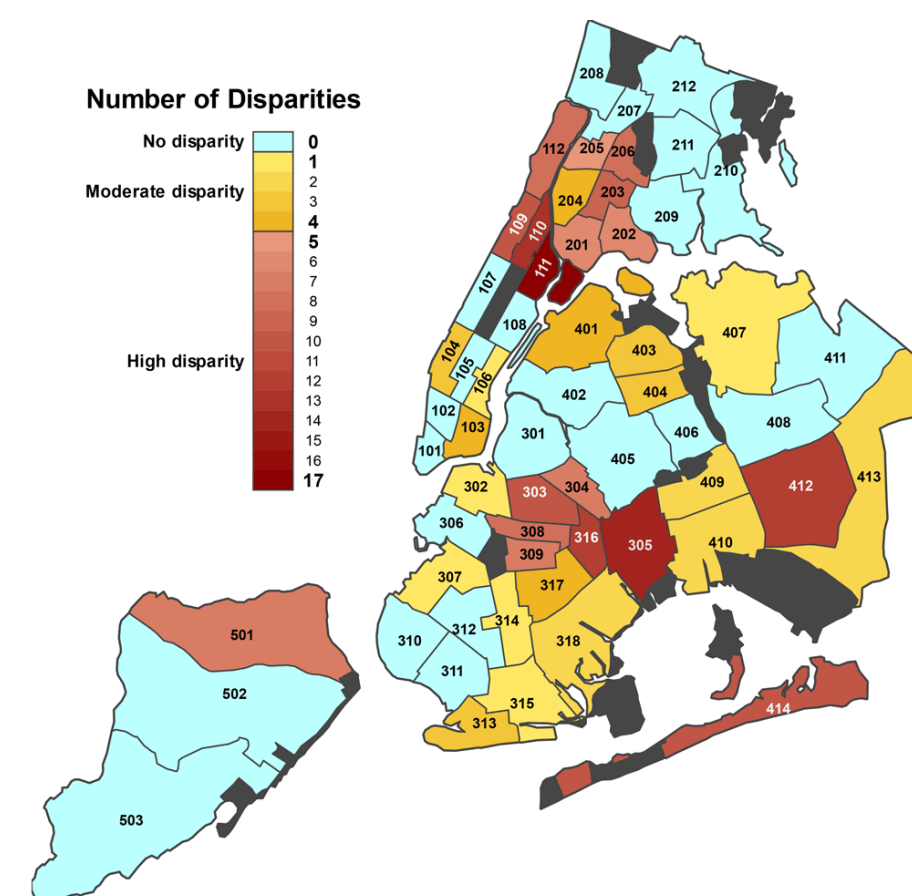
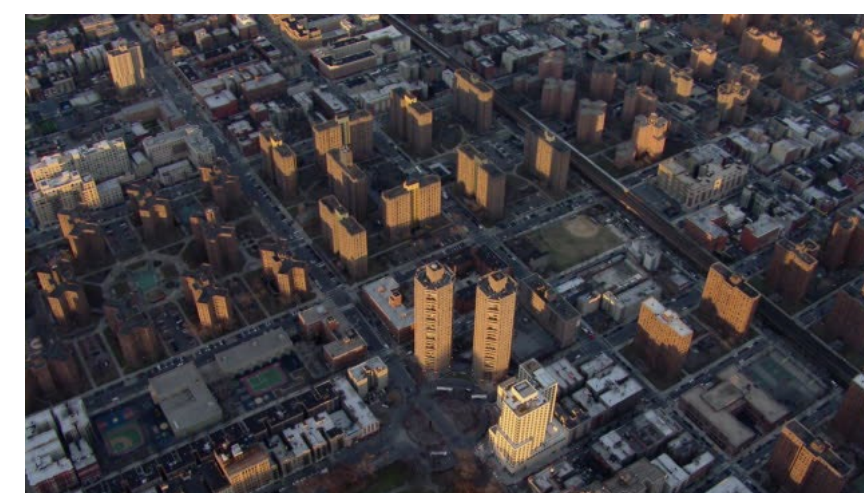
	East New York	Corona
Total COVID-19 cases per 100,000	4873.78	4,757.42
Total COVID-19 deaths per 100,000	716.97	401.45
Percent positive case rate	12.99	14.53
Total COVID-19 tests	4,656	36,535
Percent positive antibody rate	25.4	47.7
Total COVID-19 antibody tests	4,075	34,091
Information as of 10/24/20		

This study sets out to understand the major factors contributing to differences in COVID-19 outcomes between these two communities. Hopefully, this will provide information on how to best help East New York residents.⁵

BACKGROUND AND SIGNIFICANCE

Communities that are hardest hit by new epidemics are most likely already facing other structural or health policy issues.⁴ After the mid-1950s, a new wave of immigrants, consisting of impoverished African Americans from the South and Puerto Ricans from the island. After a while, real estate and municipal practices abetted to segregate the community. The instability made it difficult for the new residents to create neighborhood-based organizations.⁶ Decades later, this problem is still happening, but the residents are suffering in different way.

East New York has the second highest health disparities in NYC, correlating to it constantly being overlooked by large public health interventions.⁵ Therefore, small, specific public health efforts must be created to help East New York residents. In order to set up appropriate intervention, community needs assessment should be administered to ensure the priorities of the residents are being addressed. Mixed-method surveys work best to understand sensitive and important topics.⁷



HYPOTHESIS AND SPECIFIC AIMS

Test the hypothesis that social connectiveness, health behaviors, and trust of the medical system are responsible for differences in COVID-19 survival in the residents of East New York, Brooklyn versus Corona, Queens.

Aims 1 Evaluate social connectiveness

Aims 2 Understand health behaviors

Aims 3 Assess trust in medical system

PROJECT METHODS

- Conduct a mixed method survey to understand the priority needs of residents in East New York and Corona/Elmhurst. Input information on RedCap.
- Recruit participants from local clinics or through social work programs.
- Use 2018 NYCDOHMH Community Health Survey and NYC COVID-19 public data set to determine factors that are markedly different between East New York and Corona
- Use survey information and statistically significant results to sit down with community leaders, stake-holders, medical students and faculty mentors to strategize on how to best serve these communities

Did you COVID-19, did you work inside or outside the home?

Inside
 Outside

During COVID-19, did you work inside or outside the home?

Inside
 Outside

Did you COVID-19, how many people did you talk with each week generally? ____

I talk with people (check all that apply)

in person
 phone call
 video chat
 messaging

During COVID-19, how many people do you talk with each week generally? ____

I talk with people (check all that apply)

in person
 phone call
 video chat
 messaging

During COVID-19, how you felt lonely?

Never
 Usually over
 Some of time
 Often
 Always

If you need help, do you have someone to ask?

If you had COVID-19 and got better, what helped you get better?

	Helped a lot	Helped a little	Didn't help much	Didn't help at all	Don't know
Visiting doctor					
Staying at home					
Wearing face mask					
Staying at home					

PRELIMINARY DATA FROM 2018 CHS

	East New York	Corona
Demographics		
Black residents (%)	52%	5%
Latino residents (%)	37%	51%
Born outside the US (%)	36%	63%
Younger than 18 yo (%)	27%	21%
Older than 65 yo (%)	12%	11%
Live in poverty (%)	30%	27%
Environment		
Air pollution (mg of fine particle matter/ m ³)	7.7	7.7
Adequate home maintenance (%)	38%	53%
Adult health status		
Report good health (%)	70%	68%
Obese (%)	35%	23%
Hypertension (%)	34%	27%
Eat at least one serving of fruits or vegetables	76%	88%
Smokers	13%	15%
Premature mortality		
Cancer	64.4%	34.6%
Heart disease	53.2%	16.3%

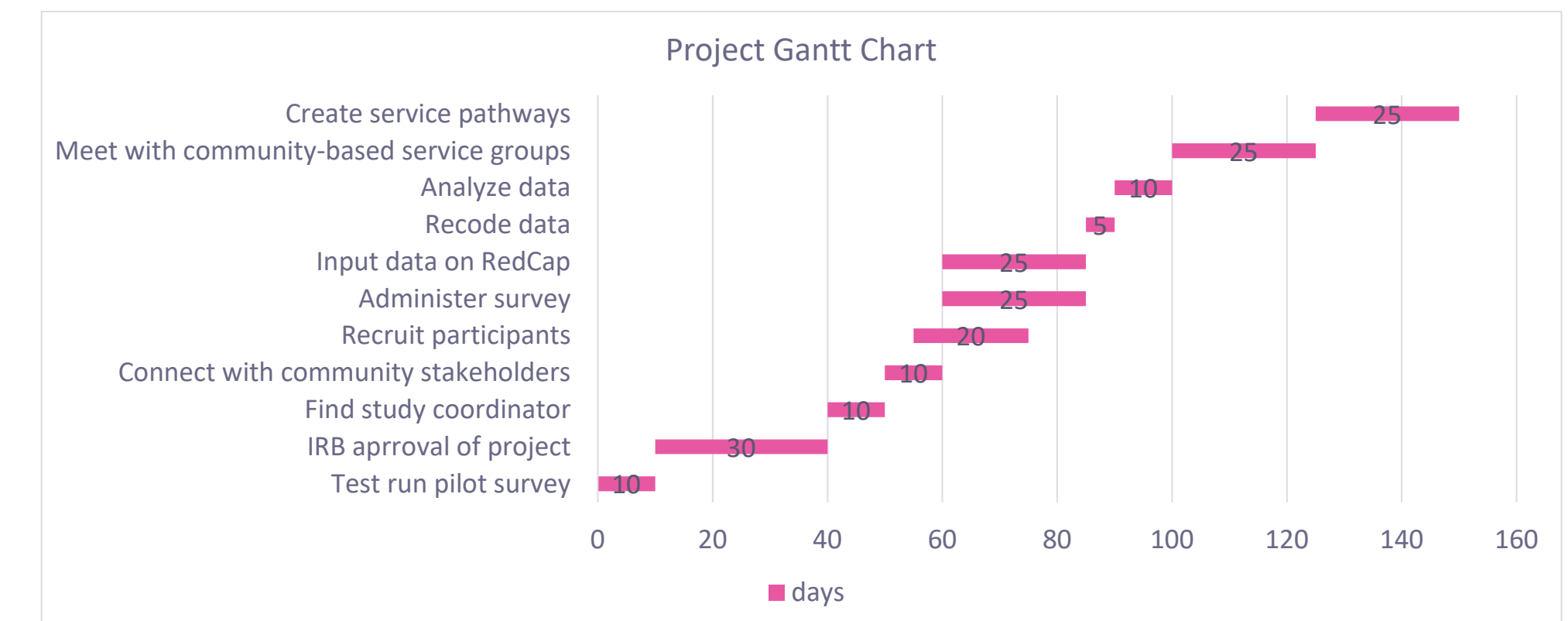
POTENTIAL PROBLEMS

Some problems that might be encountered are:

- Low participant enrollment
- Survey asks too personal information
- Survey is too complex and long
- Undesired responses are recorded

The survey will be piloted on the target population to try to overcome these problems. Survey was also written in third-grade language. Sensitive, demographic questions are included at the end.

PROJECT TIMELINE



PROJECT BUDGET

The budget for the project will consist of prices for:

- Hiring study coordinator
- Getting iPads to administer surveys
- Offering participant reimbursement gift cards

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