

Hillsborough Township Health Department Rapid Public Health Assessment

I. Background

In New Jersey, local health departments (LHDs) are the boots on the ground for public health services. Through the statutory authority granted to municipalities, local boards of health are responsible for providing essential services in areas such as emergency response and disaster resiliency, communicable disease investigation and outbreak response, environmental and sanitation inspections, chronic disease prevention, and health promotion. There are currently 103 LHDs in New Jersey, serving diverse populations and ensuring swift and comprehensive public health response to the numerous communicable diseases that threaten the health and safety of the State's nearly nine (9) million residents. These LHDs have varied infrastructures, where some agencies may provide services to an entire county, some to a single city or municipality, and some to a group of municipalities.

To support COVID-19 response initiatives and prepare for future infectious disease events, the New Jersey Department of Health received \$29.9 million for state fiscal year 23 (7/1/22-6/30/23) in federal funding that it allocated for sub-grants to support county and local health departments for COVID-19 and other infectious disease response initiatives. During the COVID-19 pandemic, local health departments have been working around the clock to prepare, respond to and contain the spread of COVID-19 in the state, and these funds will provide health departments with more resources to identify, track and address local COVID-19 and other infectious disease outbreaks rapidly.

Health departments in each of the 21 counties and the City of Newark, known as Local Information and Network Communication System (LINCS) agencies, are responsible for preparedness and coordination of response to COVID-19 and other infectious diseases. For FY23, the New Jersey Department of Health received \$9.35 million in federal funding from the Centers for Disease Control and Prevention (CDC) to award to the 22 LINCS Agency LHDs for COVID-19 response and preparation for future infectious disease events.

The remaining 81 non-LINCS Agency Local Health Departments, each covering a varying number of municipal jurisdictions, were eligible to apply to receive a portion of \$20.6M that is funded through a combination of Federal and State funding sources. The breakdown of the FY2023 funding shown below is divided into three (3) categories to support the scope of this grant:

Local Health Outreach Coordinator (LHOC)

\$9.26 million of federal CDC funds (ELC Strategy 5 Use Laboratory Data to Enhance Investigation, Response, and Prevention) will be distributed to the non-LINCS Agency LHDs to appoint/hire a full-time Local Health Outreach Coordinator (LHOC) [formerly known as the Vulnerable Populations Outreach Coordinator (VPOC)] to assess, mitigate and respond to populations disproportionately affected by the social and health impacts of COVID-19 and other infectious diseases. This includes ensuring that these populations have access to testing and support services such as

housing, primary medical care, insurance coverage, and unemployment compensation to allow them to quarantine effectively.

Infectious Disease Preparedness Generalist (IDPG)

Another \$9.72 million of federal CDC funds (Cooperative Agreement for Emergency Response: Public Health Crisis Response-Workforce Development) will be distributed to non-LINCS Agency LHDs to appoint/hire a full-time Infectious Disease Preparedness Generalist (IDPG) [formerly known as the COVID-19 Generalist (CVG)] to assist with outreach to populations disproportionately affected by COVID-19 and other infectious diseases through POD planning/vaccine logistics, testing, contact tracing, resolving laboratory reporting issues within the jurisdiction, and other COVID-19 and other infectious disease-related activities.

Outbreak Preparedness (OP)

Additionally, a total of \$1.6 million in Strengthening Local Public Health Capacity funds earmarked through the State's 2023 Budget will also be allocated to non-LINCS Agency LHDs to strengthen Outbreak Preparedness and response capacity by reimbursing eligible COVID-19 and other Infectious Disease-Related Expenses (see Appendix 2) not covered by any other funding source.

Since Public Health Priority Funding was discontinued in 2011, most LHDs are funded solely through local taxes only; resulting in a reduced workforce and reduced available services, even though the need for public health services has increased. As such, LHDs must build sustainable communicable disease capacity in contact tracing and containment to ensure rapid response to and recovery from COVID-19 and be prepared for future infectious disease events.

II. Rapid Public Health Assessment Goal

From the beginning of the COVID-19 pandemic through the date of this assessment, public health response has evolved daily through testing, contact tracing, quarantine, isolation, and vaccination to prevent the spread of infectious disease and protect the public's health. As part of the Strengthening Local Public Health Capacity 2023 Grant, and in response to this unprecedented COVID-19 public health pandemic, the Hillsborough Township Health Department prepared this Rapid Public Health Assessment, to be referenced as the *Assessment* going forward in this document. The goal of this Assessment is to:

- Define and categorize populations disproportionately affected within the LHD's jurisdiction;
- Detail the community demographics of the LHD's service area;
- Describe the populations in need, health disparities, and community impacts of COVID-19 and other specific infectious diseases targeted by the LHD;
- List community agencies that provide support to these disproportionately affected populations; and
- Summarize key findings and priorities.

The data referenced within this Assessment applies to the following municipalities served by the Hillsborough Township Health Department including Hillsborough, Millstone, and Flagtown. The Assessment is to be presented by the LHOCs to the Hillsborough Township Health Department Health Officer and governing body. Completing this rapid Assessment will inform the development or update of a community resource directory of social support agencies (web-based, or another format) by the LHOC(s). The forming of connections with support services providers and other community stakeholders will enable LHOCs to effectively provide targeted outreach within the community in the areas of COVID-19 prevention, testing, contact tracing, containment, isolation, quarantine, and vaccination.

III. Underlying Medical Conditions and Increased Risk

CDC updated the list of underlying medical conditions that increase the risk of severe COVID-19 illness after reviewing published reports, pre-print studies, and various other data sources. CDC experts then determined if there was clear, mixed, or limited evidence that the condition increased a person's risk for severe illness, regardless of age. There was consistent evidence (from multiple small studies or a strong association from a large study) that specific conditions increase a person's risk of severe COVID-19 illness, and include:

Chronic kidney disease	Smoking
Cancer	Type 2 diabetes
COPD (chronic obstructive pulmonary disease)	HIV/AIDS
Obesity (BMI of 30 or higher)	Sickle cell disease
 Immunocompromised state (weakened immune system) from solid organ transplant 	 Serious heart conditions, such as heart failure, coronary artery disease, or cardiomyopathies
Down Syndrome	Pregnancy and Breastfeeding

Source: https://www.cdc.gov/media/releases/2020/p0625-update-expands-covid-19.html

IV. Defining Disproportionately Affected Populations in the Community

Disproportionately affected populations are defined as those at greater risk for poor health status and health outcomes, experience significant disparities in life expectancy, often lack access to healthcare and social supports, and experience increased morbidity and mortality. The health needs of disproportionately affected populations are complex and intersect with the social and economic conditions they experience. These populations are also more likely to have one or more physical and/or mental health conditions. (Source: https://www.ajmc.com/view/nov06-2390ps348-s352) Additionally, the disparities in health and environmental risk factors that disproportionately affected populations experience put them at greater risk for COVID-19/other infectious disease related morbidity and mortality. To reduce the number of poor health outcomes due to COVID-19 and other infectious diseases in disproportionately affected populations, LHDs must identify these populations in the community and work closely with the social support agencies to connect them to COVID-19/other infectious prevention measures, testing, contact tracing, containment, isolation, quarantine, vaccination, primary care, and other social supports. (Source: https://www.ajmc.com/view/nov06-2390ps348-s352)

The following are multiple types and categories of disproportionately affected populations present within the communities served by the Hillsborough Township Health Department:

Disproportionately Affected Populations

Economic Disadvantage

ALICE (Asset Limited, Income Constrained, Employed) families/individuals; Low-income persons and those living at or under the poverty line, including those who have been in poverty for at least two generations; Ethnic and racial minorities; Undocumented workers/immigrants; Medicaid recipients; Working poor with limited resources, often working multiple jobs; Single mothers/fathers and sole caregivers; Low wage workers in multiple jobs

Difficulty Accessing Information or Technology (Language, Literacy, Cultural Barriers)

Persons with limited English language proficiency (read, write) in native language; low literacy or non-English speaking groups:

- Spanish, Asian and Pacific Island languages (Chinese, Korean, Hindi and Gujarati)
- o Other Indo-European languages (German, French, Italian, Polish)
- Sign Languages/American Sign Language (ASL)

Foreign visitors; Undocumented immigrants; Immigrants; Refugees Seniors often face difficulty accessing or utilizing technology

Age

Elderly with limited strength, but not disabled; Senior citizens; Infants; Mothers with newborns; Teens, school-age children, latchkey children; Families with children who have health care needs; Grandparents who are guardians of grandchildren

People living in Congregate, Crowded, Substandard Living Situations:

People living in: Shelters/Temporary Housing; LTC/Assisted Living Facilities or Other Long-Term Care Settings; Intellectual and Developmental Disabilities (IDD) group homes; Group Homes; Mental Health Group Homes; Schools; Migrant Workers/ Undocumented Immigrants; Affordable Housing; Other Congregate Settings

Isolation (cultural, geographic, or social)

Persons in the LGBTQ+ community; People living in shelters (victims of abuse); Homebound elderly; People living alone; Sole caregivers; Single individuals without extended family; Low-income persons; Persons experiencing mental illness; Persons formerly or recently incarcerated and those soon to be released from custody; People living in remote rural areas; Undocumented immigrants; Persons unable to afford transportation; People dependent on public transportation; Seasonal, temporary, migrant workers and families (i.e. farm, other); Persons living in temporary living conditions/ locations; Commuters; People displaced by fire or disaster.

Hospitalized persons

Persons that are hospitalized; Persons living in congregate Long-Term Care Facilities/Assisted Living Facilities; Blind and visually impaired; Deaf and hard of hearing; Developmentally disabled; Mobility impaired; Medically dependent (persons dependent on life support/medical equipment); Chronic disease/infirm; Drug and/or alcohol dependent (perhaps not in treatment); Persons with history of drug overdose; Diagnosed with mental illness; Drug use and substance use disorder; Mentally ill or having brain disorders/injuries; Persons with chronic pain

Non-hospitalized patients

Require renal dialysis; Require supplemental oxygen; Require daily medication (insulin, antihypertensive agents, narcotics, antipsychotics); Persons receiving chemotherapy or cancer treatment; Clinically depressed individuals who may be unable to follow directions; Stroke patients with limited mobility and additional care requirements; Pregnant women; People recuperating at home from acute injury (e.g. broken bones, recent surgery, back injury, burns)

Challenges with Accessing Healthcare

Persons uninsured or underinsured; Persons who have reduced access to medical care; Persons who are fearful of seeking care due to ability to pay, fear of prejudice or stigma; Persons with behavioral health issues that prevent them from seeking care

Individuals at High Risk for COVID-19 (Phase 1B/Phase 1C Combined)

- Individuals aged 65 and older, and individuals ages 16-64 with medical conditions, as defined by the CDC, that increase the *risk* of severe illness from the virus. These conditions include:
 - Cancer
 - Chronic kidney disease
 - o COPD (chronic obstructive pulmonary disease)
 - o Down Syndrome
 - o Heart conditions, such as heart failure, coronary artery disease, or cardiomyopathies
 - o Immunocompromised state (weakened immune system) from solid organ transplant

- Obesity (body mass index [BMI] of 30 kg/m2 or higher but < 40 kg/m2)
- Severe Obesity (BMI ≥ 40 kg/m2)
- Sickle cell disease
- Smoking
- o Type 2 diabetes mellitus
- o Pregnant/Breastfeeding
- People aged 75 years and older because they are at high risk of hospitalization, illness, and death from COVID-19.
- Frontline Essential Workers

First Responders (Phase 1B) At-Risk for COVID-19

- Sworn law enforcement, firefighters, and other first responders, including:
- New Jersey State Police troopers
- Municipal and county police officers
- Detectives in prosecutors' offices and state agencies
- State agency/authority law enforcement officers (e.g. State Park Police and Conservation Officers, Palisades Interstate Parkway Officers, Human Services police, and NJ Transit police)
- o Investigator, Parole and Secured Facilities Officers
- Aeronautical Operations Specialists
- o Sworn Federal Law Enforcement Officers and Special Agents
- Bi-State law enforcement officers (e.g. Port Authority)
- Court Security Officers
- Paid and unpaid members of firefighting services (structural and wildland)
- o Paid and unpaid members of Search and Rescue Units including technical rescue units and HAZMAT teams
- o Paid and unpaid firefighters who provide emergency medical services
- Paid and unpaid members of Industrial units that perform Fire, Rescue and HAZMAT services
- Members of State Fire Marshal's Offices
- Bi-State Fire Service Personnel (e.g. Port Authority)

Other Frontline essential workers: food and agricultural workers, United States Postal Service workers, manufacturing workers, grocery store workers, public transit workers, and those who work in the educational sector (teachers, support staff, and daycare workers.)

• Other essential workers, such as people who work in transportation and logistics, food service, housing construction and finance, information technology, communications, energy, law, media, public safety, and public health.

Healthcare Personnel (Phase 1A) At-Risk for COVID-19

Paid and unpaid persons serving in health care settings who have the potential for direct or indirect exposure to patients or infectious materials, including, but not limited to:

- Licensed healthcare professionals like doctors, nurses, pharmacists, and dentists
- Staff like receptionists, janitors, mortuary services, laboratory technicians
- Consultants, per diem, and contractors who are not directly employed by the facility
- Unpaid workers like health professional students, trainees, volunteers, and essential caregivers
- Community health workers, doulas, and public health professionals like Medical Reserve Corps
- Personnel with variable venues like EMS, paramedics, funeral staff, and autopsy workers
- All workers in acute, pediatric, and behavioral health hospitals and ambulatory surgical centers
- All workers in health facilities like psychiatric facilities, Federally Qualified Health Centers, and rehabs
- All workers in clinic-based settings like urgent care clinics, dialysis centers, and family planning sites
- All workers in long-term care settings like nursing homes, assisted living facilities, group homes, and others
- All workers in occupational-based healthcare settings like health clinics within workplaces, shelters, jails, colleges and universities, and K-12 schools
- All workers in community-based healthcare settings like PACE and Adult Living Community Nursing
- All workers in home-based settings like hospice, home care, and visiting nurse services
- All workers in office-based healthcare settings like physician and dental offices
- All workers in public health settings like local health departments, LINCS agencies, harm reduction centers, and medicinal marijuana programs
- All workers in retail, independent, and institutional pharmacies
- Other paid or unpaid people who work in a healthcare setting, who may have direct or indirect contact with infectious persons or materials, and who cannot work from home.

Long-Term Care Residents and Staff (Phase 1A) At-Risk for COVID-19

All residents and workers of long-term care and high-risk congregate care facilities, including:

- Skilled nursing facilities
- Assisted living facilities, continuing care retirement communities, and personal care homes
- Group homes like residential care homes, adult family homes, adult foster homes, and intellectual and developmental disabilities group homes
- HUD 202 Supportive Housing for the Elderly Program residences
- Institutional settings like psychiatric hospitals, correctional institutions, county jails, and juvenile detention facilities (for eligible minors, e.g. 16+ years of age may be eligible for Pfizer vaccine under the emergency use authorization)
- Other disproportionately affected, congregate, long-term settings

V. Community Demographic Profile

This section of the Assessment contains information about the age, sex, race, and socioeconomic composition of the population within the LHD's jurisdiction. (*Data for Flagtown are limited due to the small size of the population.)

Demographic Characteristic	Hillsborough Township	Flagtown*Ω
Population estimates, July 1, 2021, (V2021)	42,986	Not available
PEOPLE		
Population		
Population estimates, July 1, 2021, (V2021)	42,986	Not available
Population estimates base, April 1, 2020, (V2021)	43,241	Not available
Population, percent change - April 1, 2020 (estimates base) to July 1, 2021, (V2021)	-0.6%	Not available
Population, Census, April 1, 2020	43,276	967
Age and Sex		
Persons under 5 years, percent	5.0%	Not available
Persons under 18 years, percent	21.9%	13%
Persons 65 years and over, percent	13.8%	12%

Demographic Characteristic	Hillsborough Township	Flagtown*Ω
Female persons, percent	51.4%	54%
Male persons, percent	48.6%	46%
Race and Hispanic Origin		
White alone, percent	69.1%	81%
Black or African American alone, percent	4.4%	0%
American Indian and Alaska Native alone, percent	0.5%	0%
Asian alone, percent	19.0%	13%
Native Hawaiian and Other Pacific Islander alone, percent	0%	0%
Two or More Races, percent	5.0%	1%
Hispanic or Latino, percent	8.5%	5%
White alone, not Hispanic or Latino, percent	64.2%	Not available
Population Characteristics		
Veterans, 2016-2020	1,104	2.7%
Foreign born persons, percent, 2016-2020	20.7%	7.9%
Housing		
Housing units, July 1, 2019, (V2019)	14,811	331
Owner-occupied housing unit rate, 2016-2020	85.3%	100%

Demographic Characteristic	Hillsborough Township	Flagtown*Ω
Median value of owner-occupied housing units, 2016-2020	\$447,300	\$468,800
Median selected monthly owner costs -with a mortgage, 2016-2020	\$2,748	Not available
Median selected monthly owner costs -without a mortgage, 2016-2020	\$1,304	Not available
Median gross rent, 2016-2020	\$1,861	Not available
Building permits, 2019	Х	Not available
Families & Living Arrangements		
Households, 2016-2020	13,994	304
Persons per household, 2016-2020	2.83	3.2
Living in same house 1 year ago, percent of persons age 1 year+, 2016-2020	92.8%	Not available
Language other than English spoken at home, percent of persons age 5 years+, 2016-2020	22.5%	20%
Computer and Internet Use		
Households with a computer, percent, 2016- 2020	95.9%	Not applicable
Households with a broadband Internet subscription, percent, 2016-2020	93.7%	Not applicable

Demographic Characteristic	Hillsborough Township	Flagtown*Ω
Education		
High school graduate or higher, percent of persons age 25 years+, 2016-2020	96.5%	99.1%
Bachelor's degree or higher, percent of persons age 25 years+, 2016-2020	59.4%	46.3%
Health		
With a disability, under age 65 years, percent, 2016-2020	5.4%	Not available
Persons without health insurance, under age 65 years, percent	2.4%	Not available
Economy		
In civilian labor force, total, percent of population age 16 years+, 2016-2020	72.9%	Not available
In civilian labor force, female, percent of population age 16 years+, 2016-2020	67.3%	Not available
Total accommodation and food services sales, 2017 (\$1,000)	67,026	Not available
Total health care and social assistance receipts/revenue, 2017 (\$1,000)	240,372	Not available
Total transportation and warehousing receipts/revenue, 2017 (\$1,000)	55,909	Not available

Demographic Characteristic	Hillsborough Township	Flagtown*Ω
Total retail sales, 2017 (\$1,000)	458,092	Not available
Total retail sales per capita, 2017	11,617	Not available
Transportation		
Mean travel time to work (minutes), workers age 16 years+, 2016-2020	34.5	26.3
Income & Poverty		
Median household income (in 2020 dollars), 2016-2020	\$139,313	\$152,500
Per capita income in past 12 months (in 2020 dollars), 2016-2020	\$59,015	\$59,189
Persons in poverty, percent	2.1%	0%
Business		
Total employer establishments, 2020	х	Not available
Total employment, 2020	х	Not available
Total annual payroll, 2020 (\$1,000)	х	Not available
Total employment, percent change, 2019-2020	х	Not available
Total non-employer establishments, 2019	х	Not available
All employer firms, Reference year 2017	928	Not available

Demographic Characteristic	Hillsborough Township	Flagtown*Ω
Men-owned employer firms, Reference year 2017	S (Suppressed; does not meet publication standards)	Not available
Women-owned employer firms, Reference year 2017	S	Not available
Minority-owned employer firms, Reference year 2017	S	Not available
Non Minority-owned employer firms, Reference year 2017	579	Not available
Veteran-owned employer firms, Reference year 2017	S	Not available
Non Veteran-owned employer firms, Reference year 2017	779	Not available
Geography		
Population per square mile, 2020	792.4	566.3
Land area in square miles, 2020	54.61	1.7

Data source for Hillsborough Township:

https://www.census.gov/quickfacts/hillsboroughtownshipsomersetcountynewjersey

Ω: ACS 2020 data source: https://censusreporter.org/profiles/16000US3423610-flagtown-nj/

VI. Vulnerability, Health Disparities, and Community Impacts of COVID-19 and Other Infectious Diseases

Vulnerability of the Community

Multiple impacts of COVID-19 and other infectious diseases are described below. The greatest impacts on disproportionately affected populations have been in the areas of health, education, employment, provision of human/social services, and community resources.

Within the LHD's jurisdiction, the following disproportionate population impacts have been observed in the following categories: See section below marked Ethnic and Racial Disparities

Within the LHD's jurisdiction, geographic locations with the greatest observed disproportionately affected population impacts include:

Defined pockets of disproportionately affected students based upon participation in the Free and Reduced School Lunch Program, and the uninsured/unknown insurance status of families in the School District. The data indicate that the families might be disproportionately affected due to limited finances and limited access to healthcare around some of the elementary schools. In particular, these include the areas surrounding Sunnymead Elementary, Woodfern Elementary, and Hillsborough Elementary.

Disparities in Cases and Deaths from COVID-19 and Other Infectious Diseases

Conditions known as social determinants of health based on the places where people live, work, learn, play, and worship affect a great variety of health risks and outcomes, such as with COVID-19/Other Infectious Diseases. Systemic social and health inequities have placed many people from racial and ethnic minority groups at increased risk of dying from COVID-19 and Other Infectious Diseases. For example, although CDC data show that the highest percentage of COVID-19 cases have affected non-Hispanic White persons, ethnic and racial minority populations are disproportionately represented among COVID-19 cases, hospitalizations, and deaths.

Nationwide, data show that the following groups have experienced disproportionately higher rates of infection and/or complications/death as a result of the COVID-19 pandemic:

- People with underlying health conditions (especially lung disease, asthma, diabetes, cardiovascular disease, kidney disease, liver disease, severe obesity, and individuals with immunocompromised conditions)
- Older persons
- People of color, particularly African Americans, and persons of Hispanic ethnicity

Within the Hillsborough Township Health Department's 2023 Strengthening Local Public Health Capacity Grant application, the following Other Infectious Diseases were elected:

- Tickborne diseases
- Influenza

The following chart outlines how populations are disproportionately affected by COVID-19 and Other Infectious Diseases within the Hillsborough Township Health Department's service area (including those who live or work here) thus far:

Health Impacts: As of October 3, 2022, there have been 10,928 total confirmed COVID-19 cases in Hillsborough
Township. Of those confirmed cases, 128 people have died. That is a 1.2% case mortality rate. Case counts have
fluctuated minimally in the past six weeks, ranging from 27 to 49 cases per week. There was a one-time increase in
total reported cases and deaths in April 2022 due to a change in reporting processes and a lag in Omicron reporting.

Community Health Needs Assessment Findings

Individuals over 65, especially those with underlying health conditions, have been shown to be at particular risk for severe health implications from COVID-19.	Seniors living in nursing, residential, and rehab centers experienced high levels of COVID infection. 90% of the deaths in Hillsborough occurred in people aged 65 and above, and they had a much higher mortality rate. Seniors who have difficulty accessing technology and/or are homebound have found it difficult to access vaccines. Only 76% of our oldest residents (80 and up) have received a first COVID vaccine booster.
Mental health resources will need to be available in new and increased ways to deal with the many different stressors/traumas caused by the pandemic, especially its impact over an extended time period.	Mental health issues have grown since the beginning of the COVID pandemic, especially among school-age children and youth. Additionally, seniors have experienced increased isolation due to concerns about the risk of COVID. We should be prepared with information and referrals to mental health care at all levels. The Township will also want to examine the need for additional crisis response in response to mental health emergencies. This may simply be in the form of strengthened current or additional counseling, outpatient, and in-patient referral sources. In the Fall of 2022,

	mental health issues continue to be a prominent issue, and
	availability of resources to meet these needs continue to be
	strained.
Nutrition impact	In 2020, nutrition for school-aged children previously accessing free/reduced breakfast, lunch, and snacks was impacted as many were now removed from that food source due to school closures. School lunches were made available to all District students regardless of their financial eligibility for the Title IA program. The enrollment numbers for 2020-2021 appear to be skewed for that reason. Therefore, 2019-2020 numbers were probably a more accurate assessment of families' needs. In the 2022-2023 school year, school lunches are longer free for all students; instead, families have to apply for free lunch based on income documentation again. This may lead to low utilization rates of free lunches. This area needs to be more closely examined as there may be even more families eligible now that more families are struggling financially due to the pandemic. The Social Services Department noted an increase in requests for food in the period of April to September 2022 compared to the same time in 2021. They had 160 clients in Q3 of 2021 and 187 clients in 2022. Staff members were not sure what to attribute the increase
	to, but this is an area we need to continue to monitor.
Increased domestic/intimate partner violence	In 2020, the domestic violence agency for Somerset County, Safe+Sound Somerset, served 4040 survivors, which was a 21% increase in the number of clients served, and a 40% increase in services provided over 2019 numbers. These higher numbers persisted through 2021 and we remain in anticipation of updated 2022 data from our partner Safe+Sound Somerset. When the pandemic started, survivors were reporting an increase in the frequency and severity of the violence. They were seeking services from Safe+Sound Somerset and presenting with more complex needs—utilizing more of the programs, which include Emergency shelter, counseling, legal advocacy, family advocacy, financial empowerment and the Domestic Violence Housing First Initiative. Over 10% of Safe+Sound Somerset clients reside in Hillsborough, making it the township with the 2 nd highest utilization rates in the county.
Other health impacts	In 2021, school nurses reported a decrease in general immunization rates, perhaps due to parents delaying routine doctor visits during the extended lockdown phase. However, Hillsborough Schools reported that they sent out reminders to parents about the importance of routine vaccines. We remain in anticipation of updated 2022 immunization rates from our partners at the Township school district.

• Employment Impacts:

Individuals in the healthcare field are at high-risk of exposure to COVID-19 and are under tremendous stress due to

Hillsborough has a large number of doctors' offices, multiple group homes, 5 assisted living facilities, and 6 Home Care agencies. The

additional work hours and challenging work conditions. In particular, many of those workers with close, frequent contact with disproportionately affected individuals are lower-wage individuals.	workers at these facilities are at increased risk of COVID due to their types of duties and close interactions with clients. Some of the facilities have struggled to get their staff vaccinated due to fears and misconceptions regarding the vaccines. Long term care and assisted living facilities' staff in Hillsborough are working on getting their staff up to date on their vaccines with the new bivalent booster. The LHOT will continue to work with them to provide evidence-based information about the COVID vaccine and encourage them to get vaccinated, especially since they are regularly in close contact with high-risk, elderly people. We have also assisted in vaccination efforts at LTCFs by partnering with a pharmacist to administer vaccinations. Some LTCs have expressed difficulty with staffing, as it can be challenging to hire qualified workers (especially nurses) during this time.
Undocumented workers have difficulty accessing services.	Hillsborough has multiple businesses dependent on seasonal or "day workers" without traditional employment relationships, such as landscaping companies and home cleaning services. These types of workers may have had limited access to the COVID vaccine. The LHOT worked to increase access to the vaccine to these groups through a variety of pop-up clinics. Additional actions are planned to continue impacting vaccination rates amongst this population.
Retailers are having difficulty hiring workers.	Hillsborough Economic & Business Development Office has reported that employers in town have had difficulty finding and hiring qualified workers, especially for hourly-/tip-based businesses.
Other employment issues	Going into 2022, the Hillsborough Economic & Business Development Office has noted a large uptick in business development in the last 6 months. Ten new businesses have recently opened, and 5 more are planning to open next year. Staffing issues (primarily for hourly/tip-based businesses) remain a major challenge. However, there is a general lack of access to employment and workforce development services for young adults post- high school graduation.

• Educational impacts:

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COVID led to negative impacts on student learning.	The Hillsborough school district was fully remote for 3 months in 2020, then offered a choice of remote or hybrid learning during the 2020-2021 school year. Since the 2021-2022 school year, the district has been open for full in-person learning for all students. However, national trends show that the pandemic resulted in negative impacts on learning and test scores during the first 2 years. Anecdotally, school staff have observed a gap in maturity and social-emotional development among students because of the pandemic.
	Current district guidelines require students who test positive for COVID to stay home for 5 days, which will impact their learning.

• Impacts on Human Services Provision:

Demand for human services grew quickly during the pandemic and remains higher than pre-COVID.

Services to disproportionately affected populations are improving but the capacity of all providers was stretched by the devastation of hurricane Ida in 2021. Some agencies are experiencing staff shortages due to vaccination issues or staff not returning to the job.

The American Rescue Plan Act (ARPA) funds are no longer available and the low income housing needs continue to be great. There is some local money available for Ida recovery through the Somerset Area Disaster Recovery Committee (SADRC).

Community Resource Impacts:

The impacts of COVID-19 on community resources are numerous and include a reduction in the availability of resources (access to group activities, commercial services), a scarcity of some resources (health care, food and emergency supplies) and/or needs for resources that have not previously been required in this community in any significant capacity.

The Mass Feeding Sub Committee of the Somerset County Organizations Active in Disaster (SCOAD) consists of agencies that deal with food distribution at all levels.

The Social Services Department noted an increase in requests for food in the period of April to September 2022 compared to the same time in 2021. They had 160 clients in Q3 of 2021 and 187 clients in 2022. Staff members weren't sure what to attribute the increase to, but this is an area we need to continue to monitor. During the last few years, free breakfast and lunch for all students, child tax credits, and WIC's addition to EBT cards have increased residents' ability to buy food. However, free school meals and the tax credits have now expired so demand for food assistance is likely to increase.

The broad impacts of COVID-19 on this community have created an even more urgent need for coordination and collaboration of resources among the public sector, the public health sector, first responders, educators, the business community, the faith community, and many others. The Hillsborough Township Health Department plays an important role convening organizations, people, and resources to support families.

The Somerset Area Disaster Recovery Committee (SADRC) has taken up where SCOAD left off. The SADRC is a voluntary group of community serving agencies and nonprofits that meets monthly to focus particularly on Ida recovery. The committee just received a donation of \$11,000 from a local church that is earmarked for general Ida recovery in Somerset County. They also take into consideration other community needs and provide information, identify needs, gaps in the system, and offer solutions and support.

Mass Feeding Subcommittee -

Cathy Faerber, Hillsborough Assistant Director of Social Services, expanded the Township food pantry and distributed information regarding COVID safety precautions, testing, and eventually vaccination.

Based on input from faith-based leaders, faith-based organizations saw an increase in social isolation, loneliness, anxiety, depression, and family discord. The faith community relies on personal interactions for spiritual, emotional, and physical support.

• Ethnic and Racial Disparities

The impacts of COVID-19, health more broadly, and access to education and social services have negatively impacted Latinos in the community more than

In response to the disproportionate impact of COVID on our Latinx community, the LHOT scheduled vaccine clinics in the Township including onsite at several businesses that have a majority of Latinx and Black employees. This focused on factory workers, home

other groups.	health aides and landscapers. Additionally, Hillsborough staff translated multiple documents and information to Spanish to address language barriers.
	Nine percent of the population in Hillsborough is Latinx, and 7% of the vaccinations given have been to Latinx people. Four percent of the population is Black, and 4% of the vaccinations given have been to Black people. So, while still lower than the overall population data, Hillsborough has been meeting its targets.
Black and Latino residents' perspectives are not well represented in the community.	Hillsborough community members and stakeholders stated they think Latino and Black voices are not represented in the community, particularly in the schools. People expressed concern about the lack of diversity, equity and inclusion in leadership positions.

• Transportation & Community Infrastructure

Transportation and community infrastructure has long been an issue in Hillsborough Township.

Community members consistently expressed a concern over the lack of community infrastructure and transportation and described it as a "colossal problem" in Hillsborough. Residents who do not have a car can find it very difficult to access services like food, healthcare, education, employment, etc. Although Somerset County has some excellent social programs and services, not all families and individuals, especially the most disproportionately affected and in need, can access them without adequate transportation services. Some people think the lack of transportation and community infrastructure impacts mental and physical health and the economy in the community. Residents who do not have a car may find it more difficult to access health services, such as vaccinations and COVID testing. In response to this concern, the LHOT have held several pop-up clinics throughout the town.

Prolonged community resource/coordination issues

With COVID-19 impacting the community for almost three years, the need for community resource/coordination will continue long-term until the community can recover from the widespread effects of the pandemic. Ongoing community preparedness to guard against a future outbreak will also require ongoing coordination and new community readiness strategies based on what is shown to be most effective.

Regular meetings with the Hillsborough Health Department and community serving agencies will be part of planning for the future so that individuals and communities are better prepared for disasters and broad community impact issues.

Other Issues:

Circi issuesi		
COVID-19		
Other issues		

OTHER INFECTIOUS DISEASE(S)

Tickborne Diseases

In 2019, 95% of confirmed Lyme disease cases were reported from 17 states: Connecticut, Delaware, Illinois, Maine, Maryland, Michigan, Minnesota, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia and Wisconsin. Lyme disease is the most commonly reported vector-borne illness in the United States, however this disease does not occur nationwide and is concentrated heavily in the Northeast and upper Midwest. The NJ 2020 incidence rate of 27.6 cases per 100,000 population remains far above the US 2019 incidence rate of 10.7. Additionally, in 2019, NJ ranked third in most cases of Lyme Disease, a tickborne illness caused by the bacterium Borrelia burgdorferi and the most common vector-borne disease in the US, in the country and had the second highest rate, with 40.7 cases per 100,000.

Worth noting is that in recent years, the Asian tick, a rare, invasive tick, also known as the longhorn tick, was discovered in Somerset County. This tick is known to occur in humans and a wide range of animals, being documented in deer, sheep, goats, cattle, horses, dogs, raccoons and opossums. If animals become heavily infested with these ticks, the loss of blood can kill the animal. Other ticks can also spread a variety of diseases. In Somerset County, ticks are active year round, with the greatest risk of spreading disease in the spring and early summer. In Somerset County, during the fall, ticks become more active, which increases your pet's risk of illness. Equally important, tickborne diseases pose a serious threat to the health of dogs and cats in Somerset County and across the US, potentially injecting a virus, bacteria or protozoa into their blood. If bitten by a tick, pets could develop various diseases, including Lyme Disease, Rocky Mountain Spotted Fever, Babesiosis and others. Symptoms of these conditions can be painful and even be life-threatening for pet dogs and cats.

For these reasons, we are including tickborne diseases as one of three infectious diseases we are currently focusing on in Hillsborough.

Influenza

Although influenza rates in NJ have remained strikingly low for the past two years because of pandemic-related precautions, rates are expected to increase this year. Australia's flu season — which often gives US experts a sense of how many influenza cases could emerge here — has been severe, indicating the possibility of flu cases being higher than average in NJ and other states this fall and winter seasons. The rate of influenza per 100,000 persons in NJ has grown significantly in recent years. The most recent data available shows the influenza rate per 100,000 persons in NJ more than doubling from the prior year – from 152.7 cases per 100,000 population in 2017 to 317.4 in 2018. On the inpatient side, hospitals throughout NJ collectively discharged 61% more patients with an influenza-related primary diagnosis from Oct. 1, 2017, to March 31, 2018, than during the same six-month period in the subsequent year. This finding is consistent with the CDCs estimated number of hospitalizations due to influenza for these two flu seasons. Influenza and pneumonia combined were the tenth leading cause of death among NJ residents and ninth among all US residents in 2019.

Of particular concern are the elderly, for whom influenza presents greater risks from complications. Patients 65 years and older comprised more than 55% of inpatient influenza cases in NJ for the 2018-19 flu season and 64% of inpatients for the 2017-18 season. Again, this finding parallels results at the national level, including the CDCs finding that between 50-70% of seasonal flu-related hospitalizations have occurred among people 65 years and older. In addition to the elderly, the young, the immunocompromised, those with chronic conditions and pregnant persons are disproportionately affected by influenza. However, influenza also inflicted NJs healthiest component of society. In 2017-18, an unanticipated number of individuals between the ages of 19 and 64 visited NJ hospital emergency departments seeking treatment for influenza. Compared to the following year, emergency department visits for influenzarelated diagnoses were 31% higher during the 2017-18 season. However, unlike the inpatient activity, patients seeking care at emergency departments and not subsequently admitted to the hospital were predominantly younger. The cohort between the ages of 19 and 64 comprised 62% of all total influenzarelated emergency department visits for the 2017-18 season and 60% of the total the next flu season.

In Somerset County, there were 140.4 per 100,000 persons with reported cases of influenza in 2018. The age-adjusted death rate due to influenza and pneumonia in Somerset County in 2017-2019 was 13.8 per 100,000 persons, making it the NJ county with the 4th highest influenza rates in the state. For these reasons, we are including tickborne diseases as one of three infectious diseases we are currently focusing on in Hillsborough.

Within the LHD's jurisdiction, geographic locations that may be the most disproportionately affected by COVID-19 and Tickborne diseases:

Municipality: Hillsborough Township

Census tracts: 537.03, 537.04, 537.05 and 537.07

Section of town/city: Hillsborough and Flagtown

Ward: N/A

Other

VII. Community Agencies Supporting Disproportionately Affected Populations

Agency	Types of Services Provided
See ATTACHMENT for our list of agencies	
and resources.	

VIII. Conclusion

Quantitative and Qualitative Data

The Hillsborough Township Local Health Outreach Team collected quantitative and qualitative data to guide us in understanding disproportionately affected populations and preparing to develop an action plan. Our quantitative

data includes demographic information from multiple local, state, and national databases, ALICE Report Data, City Health Dashboard, demographic information from the Board of Education, and the police department.

The qualitative data were derived from multiple focus group interviews/discussions (Principals from the Hillsborough School District, BoroSAFE [high school/community-based partnership for suicide prevention], Daycares/Nursery Schools, the Township Youth Services Commission, the Municipal Alliance, Faith-Based Leaders, and School Nurses), and conversations with business leaders and staff from agencies that serve members of the community in various ways. To update the assessment, qualitative data were obtained through members of the Hillsborough Health (formerly COVID) Collaborative, which includes members from the focus groups mentioned above in addition to pharmacists and other community members and organizations that have assisted the LHOT in their response efforts.

The 2018 ALICE data indicate that in Hillsborough, 2.5% (342) live at the poverty level and 20% (2,726) are ALICE households. In Flagtown, the data indicate no one living at the poverty level but 73% (96) ALICE households. In Millstone Borough the data are similar with 2.6% (4) living at the poverty level and 26% (41) that are considered Alice households. These are often the families that fall through the cracks as they make too much money to receive many social services support and too little money to adequately sustain their families. They are particularly disproportionately affected in a situation like the COVID pandemic as they were already stretched thin financially and emotionally. We continue to work on reaching this population through a variety of activities.

While Hillsborough is ethnically diverse, it is predominately white (67%) and English speaking (77.1%). However, 20.6% of Hillsborough residents are foreign-born. Other population groups of note are: 19% who identify as Asian with 5.9% speaking the languages of India; 3.1% who speak Chinese, and 2.7% who speak other Asian languages; 8.5% identify as Hispanic/Latino with 5.4% speaking Spanish. Over 4% identify as Black or African-American. The areas of non-English speaking and bilingual families, and minoritized communities have been groups we currently and will continue to focus on in our action plan.

As seen in the data on age in this assessment, the negative health impacts on people 60 years and older have been significant. Those 80 years and older experienced a 35% mortality rate from COVID. We learned from nursing home/residential care/long-term care and group home staff that COVID had a devastating effect on the senior population and was exacerbated in those with comorbidities.

In summer 2022, we began sharing information related to tickborne diseases with our community members, primarily through our Health Collaborative members, the Hillsborough Mayor's weekly newsletter, and our partners' social media channels. This has included the development of educational and informational flyers and digital public service announcements. We also distributed these educational tools in print to our youth summer camps. Looking ahead, we plan to promote additional community education and awareness about tickborne diseases, working with our various partners, including our Health Collaborative and its members.

Recurring Themes from our Focus Groups

In the 8 focus groups we had originally conducted in 2021, we encountered notable recurring themes. One recurring theme was that the mental/emotional toll on children and adults has been significant and the worst may not yet have been seen. A second recurring theme was the impact in multiple aspects of the lives of the elderly: they often

lack understanding of/access to technology, food insecurity that was attributed to lack of transportation or limited finances, and social isolation. This includes the elderly living alone and in residential facilities.

A third theme surrounded the area of education and childcare. There were concerns by school leadership and staff that many children have had a poor experience with virtual and hybrid schooling and may not be at grade level. There are also concerns about the mental/emotional state of students (and their parents). We will want to find or develop emotional support systems, in addition to the ones already in the school system, that can help return impacted families to a healthy equilibrium.

Related to mental health, a fourth recurring theme was the significant hidden and underreporting of mental health and substance use issues among community members. So far, this has been difficult to tease out quantitatively, but we will see how these issues progress as the state reopens, and businesses and schools get back to normal operation.

Between 2021 and 2022, Hillsborough continued to see some progress in these recurring themes. In-person healthcare visits were expanded and fully implemented, and the school district moved to full day school attendance as the final phase after hybrid schooling. These changes have all had a positive impact on the community and its residents. Some specific impacts, however, will not be able to be assessed for quite some time (year or more).

COVID-19 Vaccination Concerns/Issues

There has been a significant drop in barriers to the vaccine. Hillsborough has one of the highest vaccine rates in the county and state for the 18+ population (93%). There is still vaccine hesitancy amongst some adults for both themselves but more particularly for their children. There also seems to be some confusion around the bivalent booster, which creates hesitancy. Currently, only 64% of eligible residents have gotten their first COVID-19 vaccine booster. In 2021, there was still an issue of hesitancy among municipal workers in Hillsborough Township, with an estimated 70% of municipal workers having been vaccinated—only a slight increase over the 50% reported in spring 2020. We remain in anticipation of 2022 COVID vaccination rates among municipal workers. Also impacting COVID-19 vaccinations is the start of flu vaccine season. Many residents do not want to have both vaccines at the same time, which is now creating a lag in boosters and new vaccinations.

To continue addressing COVID misinformation and vaccine hesitancy, the LHOT has held some educational and informational workshops but has concentrated more of their efforts in the social media realm. One project that was launched in 2021 is a campaign with local Hillsborough residents stating why they got the vaccine. The testimonials have been shared on the Township's website and Facebook page. We are also planning a similar campaign for parents of children under five.

We know from our community sources which areas and demographics we need to continue to focus on, which include some high-risk, disproportionately affected groups and individuals. Various partners have indicated an interest in participating in such workshops and presentations. Community stakeholders have indicated a preference for an online/virtual educational/information session as well as information that we can share electronically. In this work, it is paramount we recognize the historical and current structural racism, ableism and other forms of oppression that have made it difficult for some communities (such as ethnic minoritized communities like people of color and people with disabilities) to fully trust the public health, medical and scientific communities. As a local health department, we have been very cognizant, open and honest about the safety and development of the COVID-

19 vaccine and boosters—what we know and what we do not know as things change and progress, and to listen to and try to understand individual concerns about the vaccine as well.

Looking Ahead

We have collected a wide variety of different types of data and continue to do so. From this, we will continue to update our comprehensive action plan to meet the needs of the populations most disproportionately affected by COVID-19, tickborne diseases and influenza in Hillsborough. In conjunction with our diverse variety of community partners, including community-serving and social service agencies, the school district, residential facilities, faith-based groups, insurance providers, pharmacies, clinical partners, etc., we will continue to advance our efforts in meeting the needs of many of those in Hillsborough who are disproportionately affected by COVID-19, tickborne diseases and influenza.