# NEW JERSEY Social Isolation Study April 2023

### NJ DHS Office of Research & Evaluation



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#### Introduction

In January 2020, the New Jersey Legislature passed a law that "requires DHS to study social isolation occurring in certain population groups."<sup>1</sup> The law requires the Commissioner of the Department of Human Services (DHS) to submit a report to the Governor and the Legislature and to publish it on the DHS website. DHS was tasked with conducting this survey because the Department provides many services across several divisions that indirectly and sometimes directly reduce social isolation for the vulnerable populations in this study.

DHS's Division of Medical Assistance and Health Services (DMAHS) oversees the state's Medicaid program providing health insurance to about 1 in 5 low and moderate income children and individuals. Medicaid beneficiaries are enrolled in managed care which coordinates a person's health care needs.

The Division of Family Development (DFD) provides leadership and supervision to the public and non-profit agencies that deliver financial assistance and critical safety net services to individuals and families in New Jersey. These programs include Work First New Jersey/ Temporary Assistance for Needy Families, Work First New Jersey General Assistance, NJ SNAP, Child Support and Child Care services.

The Division of Mental Health and Addiction Services (DMHAS) oversees the New Jersey adult system of community based behavioral health services. They provide a full array of services including substance abuse prevention and early intervention, emergency screening, outpatient and intensive outpatient mental health and addictions services, partial care and partial hospitalization, case management, medication assisted treatment for substance abuse, and long and short term mental health and substance abuse residential services, in addition to other evidence-based practices such as the Program for Assertive Community Treatment (PACT), supported employment and education, and supportive housing.

Additionally, the Department includes the Division of Developmental Disabilities (DDD) which provides public funding for services for adults with intellectual and developmental disabilities to live independently as possible through Home and Community Based Services and Supports. DDD provides eligible individuals with a budget that they can chose to spend money on many types of community-based services that would directly and directly provide opportunities to socialize with other community members.

The Division of Disability Services (DDS) provides a single point-of-entry for New Jerseyans seeking information about programs, services and supports available to residents with disabilities. Focused on promoting independence for individuals with

<sup>&</sup>lt;sup>1</sup> See https://pub.njleg.state.nj.us/Bills/2018/AL19/499\_.PDF



disabilities in all areas of life, DDS aims to streamline the pathway to information and services, as well as to advance greater access, equity and inclusion.

The Division on Aging Services (DoAS) administers a number of federal and state-funded programs that make it easier for older adults to live in the community as long as possible with independence, dignity and choice. They provide oversight of the home and community-based programs provided through New Jersey's 21 county offices on aging known as Area Agencies on Aging (AAA) and Aging/Disability Resource Connection (ARDC). New Jersey's DoAS specifically funds Assistance for Community Caregiving, Congregate Housing Services Program (CHSP), Statewide Respite Care Program, Alzheimer's Adult Day Services Program, weekend home-delivered meals, the Lifeline Utility Assistance program, Hearing Aid Assistance to the Aged and Disabled, and two state prescription assistance programs. The quality assurance and clinical eligibility for Managed Long-Term Services and Supports (MLTSS) is also conducted by DoAS. They also house the Office of the Public Guardian and Adult Protective Services.

The Commission for the Blind and Visually Impaired (CBVI) provides services that are designed to enable consumers to achieve full inclusion and integration in society through success in employment, independent living and social self-sufficiency. Services include vocational rehabilitation, educational services, independent living skills training, eye health services and more.

The Division of the Deaf and Hard of Hearing (DDHH) works to ensure deaf and hard of hearing individuals have equal access to services through sensitivity training, administers hearing aids to low income residents and serves the ASL educational community by providing free, easy-to-use reference and learning tools to enhance in-classroom learning for ASL educators and their students.

Through its eight divisions, DHS provides numerous programs and services designed to give eligible individuals and families the help they need for economic and health challenges. By addressing economic and health needs DHS aims to reduce social isolation and increase social inclusion. Additionally, DHS provides opportunities for individuals to engage with other community members and the needed supports such as communication devices, assistive technology and more so that all residents can socialize and participate in their communities as they wish.

This report presents a review of relevant literature and analyses of a statewide public survey and a statewide agency questionnaire. It addresses topics mandated in the legislation and focuses on four vulnerable populations: individuals who are 65 years of age or older; individuals with disabilities; individuals with mental illness; and active-duty military and veterans who served in the Army, Navy, Air Force, Marines, Coast Guard of the United States, a reserve component thereof or the National Guard. This report assesses the nature and frequency of social isolation in the State of New Jersey and discusses frequency, demographics, symptoms and other indicators, as well as



circumstantial and situational factors. Finally, it discusses the resources that are available to help with identifying, addressing and recovering from social isolation.

#### Background

#### CHARACTERISTICS OF SOCIAL ISOLATION

Social isolation is often conceptualized as a deficiency in the quality and quantity of interpersonal relationships (De Jong Giervald, Van Tilburg, & Dykstra, 2006; Zavaleta, Samuel, Mills, 2017). Loneliness, or subjective isolation, describes a lack of meaningful social connections and the experiential element of relating to others. Social isolation, or objective isolation, refers to the size of one's social network and the frequency of one's contact with others. Although the two concepts are related, loneliness and social isolation may exist independently of each other, depending on demographic or situational context. Someone may have a large social network or frequent social contact with others, but perceive them as being insufficient or superficial with regard to their emotional or instrumental support needs (Fiorillo & Sabitini, 2011; Valtorta, Kanaan, Gilbody, & Hanratty, 2016).

#### **NEGATIVE IMPACTS OF SOCIAL ISOLATION**

Social isolation has a negative impact on various health indicators and contributes to increased mortality rates (Hämig, 2019; Holt-Lundstad, Smith, Baker, Harris, & Stephenson, 2015; Steptoe, Shankar, Demakokos, & Wardle, 2012). There is mixed evidence as to whether social isolation or loneliness is more strongly related to health outcomes and mortality, as individual studies conclude social isolation is a more significant factor while some meta-analytic studies conclude both measures are equal (Holt-Lundstad et al., 2015; Leigh-Hunt, Bagguley, Bash, Turner, Turnbull, Valtorta, & Caan, 2017; Steptoe et al., 2012).

Hämig (2019) found that social isolation was strongly associated with depression, poor self-rated health, and cumulative health problems. This study was unique in that it measured negative health effects of social isolation across different age groups. Much of the research linking social isolation to health and increased morality typically study older adults aged 50 and older (Hawkley, Thisted, Masi, & Cacioppo, 2010; Luo, Hawkley, Waite, & Cacioppo, 2012; Steptoe et al., 2012). This research demonstrates a link between high levels of social isolation and increased systolic blood pressure over time independent of cardiovascular risk factors, medications, and other confounding variables (Hawkley et al., 2010); a 29% increase in cardiovascular hearty disease risk; and a 32% increase in stroke risk (Valtorta, Kanaan, Gilbody, & Hanratty, 2016). In terms of increased mortality, social isolation is linked to increased mortality for both men and women aged 50 and older, independent of chronic illness and demographic factors (Luo et al., 2012; Steptoe et al., 2012). Social isolation was also found to be a greater risk factor for early death compared to obesity and people who were socially connected were



found to have a 50% reduced of early death (Flegal, Kit, Orpana, & Graubard, 2013; Holt-Lundstad, Smith, & Layton, 2010).

Nationwide studies of social isolation and loneliness have consistently shown how these two phenomena are linked to negative physical and mental health outcomes (Cigna, 2018; Cox, Streeter, & Wilde, 2019; DiJulio, Hamel, Munana, & Brodie, 2018). Fair or poor health was linked to an 11-point increase in loneliness compared to those who rated their health as good, very good or excellent (Cigna, 2018). Social isolation and loneliness were found to have a significant negative impact on various aspects of life, with 58% of Americans reporting these conditions negatively impacted their mental health, while 55% reported a negative impact on physical health, 49% reported a negative impact on their personal relationships, and 33% reported a negative impact on their ability to do their job. Social isolation has been linked to increased thoughts of self-harm, increased risk of major depressive disorder, dysthymic disorder, social phobia, and generalized anxiety disorder (Chou, Liang, & Sareen, 2011; DiJulio et al., 2018).

#### SOCIAL ISOLATION RISK FACTORS

Researchers have proposed various risk factors that contribute to social isolation. These risk factors include: low socioeconomic status, low educational status, living in a rural or urban area lacking resources and or safety, having a chronic physical or mental illness, lack of transportation, and marital status (Anderson & Thayer, 2018; Cacioppo & Cacioppo, 2014; Latham & Clarke, 2016; Stewart, Makwarimba, Veenstra, Raphael, & Love, 2009).

Low socioeconomic and educational status can induce social isolation, as individuals may lack the resources to participate within their communities and have concerns about personal safety (Kearns, Whitley, Tannahill, & Ellaway, 2015; Klinenberg, 2001). Concerns about personal safety and subsequent withdrawal from community engagement are particularly salient to older adults with low socioeconomic status living in impoverished urban areas. Living in high crime urban areas or urban areas with highly differentiated neighborhoods can contribute to higher levels of social isolation (Portacolone, Perisssinotto, Yeh, & Greysen, 2018; Tung, Hawkley, Cagney, and Peek, 2019). Consequently, living in a rural area with low population density and limited transportation links can also increase the likelihood of social isolation (Henning-Smith, Ecklund, Lahr, Evenson, Moscovice, & Kozhimannil, 2018; Henning-Smith, Ecklund, & Kozhimannil, 2018).

Income differences were linked to variations in social isolation levels (Anderson & Thayer, 2018; Cox et al., 2019; DiJulio et al., 2018). Lower income is linked to higher levels of social isolation, with 58% of lower income individuals indicating social isolation compared to 21% of middle income individuals and 11% of high income individuals (DiJulio et al., 2018). For people aged 50 and over, 50% of those who earned less than \$25,000 a year were lonely compared to 37% who earned \$25,000 to \$49,900, 31% who earned \$50,000



to \$74,900, and 31% who earned \$75,000 or above (Anderson & Thayer, 2018). These findings correspond with those of individuals who are not exclusively aged 50 and above, as 56% of Americans earning less than \$30,000 a year are lonely compared to 31% who earned \$75,000 to \$100,000 (Cox et al.,2019).

There also appears to be an inverse relationship between social isolation and education, with higher levels of social isolation common among people with less education (Anderson & Thayer, 2018; Cox et al., 2019; DiJulio et al., 2018). Based on two national samples, between 47% to 56% of people with a high school education or less are socially isolated, between 35% to 41% of people with some college or an associate's degree are socially isolated, and between 17% to 28% of college graduates are socially isolated (Cox et al., 2019; DiJulio et al., 2018).

Chronic physical and mental illness may impose limitations on an individual's ability to socialize with others, both in terms of their ability to travel and the potential for encountering stigma (Hall, 2009; Linz & Strum, 2012). People with chronic physical and serious mental illness reported higher levels of social isolation compared to individuals without these conditions. Depending on the study, up to 45% of individuals reporting a serious disability or chronic illness are socially isolated while this figure ranges 47% to 58% of individuals who report a mental health condition (Anderson & Thayer, 2018; DiJulio et al., 2018).

Marital status is another strong predictor for social isolation, with single adults who have never married and separated or divorced adults reporting more social isolation. Social isolation for adults who have never married ranges from 32% to 51%, compared to 26% to 46% for those who were separated or divorced, 17% to 31% for married adults, and 7% to 14% who are cohabitating with a partner (Anderson & Thayer, 2018; Cox et al., 2019, DiJulio et al., 2018).

#### **Social Isolation Survey**

#### **INTRODUCTION**

The legislation directed the Department of Human Services to "consult with members of vulnerable populations who are currently seeking treatment or care for social isolation, and, to the extent practicable, consult with the family members or caregivers of such individuals". In response, the Department conducted a survey to obtain information from the public and the individuals described to obtain the required information. The following section of the report describes the survey and the results as directed by in the legislation.

#### **METHODOLOGY**

DHS constructed a statewide, web-based survey and collected 1,328 responses between October 22, 2021 and February 26, 2022. Three versions of the survey were developed including one English version, one Spanish version and one accessible version more



compatible with screen readers.<sup>2</sup> The Department promoted the SurveyMonkey link on the DHS social media platforms and through email blasts to partner agencies. Partner agencies worked with their constituents to fill out the survey as well as promoting the survey through their own networks through newsletters, email chains, social media posts and more.

#### **RESPONDENT CHARACTERISTICS**

Individuals were asked to identify the county and ZIP Code in which they lived. Cities with the highest number of responses included Old Tappan (n=32), Englewood (n=29), Lakehurst (n=16), Galloway (n=12) and Jamesburg (n=11). Bergen County had the highest number of responses followed by Middlesex and Ocean counties. Salem and Warren counties had the fewest number of responses with fewer than 10 responses each. Relative to the overall county population, Atlantic County had the highest rate of responses with 29.5 responses per 100,000 people. Salem, Essex and Passaic counties had the lowest number of responses relative to their overall county population.



Figure 1 Survey responses by county



**Figure 2** Survey responses per 100,000 county population

<sup>&</sup>lt;sup>2</sup> See appendix for English version of the survey



New Jersey's population is 51.1% female however, survey respondents were much more likely to be female (67.1%). About a third (32.6%) of the respondents were male compared to 48.9% of New Jersey's population. Three individuals, or 0.3% of all of the survey respondents identified as Transgender, Gender-fluid or Gender non-binary.



Figure 1 Survey respondent and overall NJ gender identity<sup>3</sup>

Analysts calculated the age that respondents would turn in 2022 using the year of birth provided in the survey. As shown in Figure 4, compared to New Jersey's overall population <sup>4</sup>, the survey represented more older adults, generally over the age of 65 and fewer people under the age of 65. About 75% of the individuals who responded to the survey were over 65 while only about 16% of the overall population in New Jersey is 65 years or older <sup>5</sup>. The average age of respondents was 67.6 while New Jersey's average age is 40.0. The median age of the survey respondents was 70.0 and 67 was the mode. The skew in age distribution was not unexpected due to the inclusion of older adults as one of the vulnerable populations targeted by the research.

<sup>&</sup>lt;sup>3</sup> The American Community Survey does not collect data on transgender, gender fluid or non-binary individuals so those data are not available at the statewide level for comparison

<sup>&</sup>lt;sup>4</sup> Note that the New Jersey population estimates was based off of the 2020 Census and the survey was conducted in 2022 so age comparisons may be slightly skewed

<sup>&</sup>lt;sup>5</sup> American Community Survey 2020 5-year estimate. See:

https://data.census.gov/cedsci/table?q=Age%20and%20Sex&g=0400000US34&tid=ACSST5Y2020.S010

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The survey over-sampled White respondents. Because the survey used a crowd-sourced, convenience sample, it did not go out to a random sampling of NJ residents, which would have been more statistically desirable. Consequently, White respondents were over-represented among returned surveys. Either the survey did not reach other, non-White populations, those populations declined to participate or some combination of the two was at work. The truth is difficult to determine. 81.6% of the survey respondents were White while only 65.6% of New Jersey's population is White. Hispanic or Latino individuals make up 20.5% of New Jersey's population while only 4.4% of the survey respondents identified as such. 13.1% of New Jersey's population is Black or African American while 7.0% of the survey respondents identified as such. New Jersey's population is also 9.8% Asian while only 3.4% of the respondents were.





What is your race/ethnicity?

Figure 3 Race of survey respondents and overall NJ population

Compared to the overall New Jersey population, the survey reached more individuals with incomes of \$49,000 or less. 10.9% of the survey respondents had incomes below \$15,000 and 28.1% had incomes between \$15,000 and \$49,000.That compares to 7.8% and 22.3%, respectively for New Jersey households overall. This is contrary to what might have been expected with non-probability sampling which tends to under sample lower income individuals (Patrick, Pruchno & Rose, 1998).





Figure 4 Household income of survey respondents and overall NJ population

#### **MEASURING LONELINESS**

The legislation defines social isolation as "aloneness or sequestration that is not chosen or wanted; that stems from or results in the virtual absence of interaction with others, beyond those interactions that are required for the sequestered person to perform basic life functions; and that has a negative or threatening effect on the sequestered person". A person might have little to no social interaction but might not feel lonely. On the other hand, a person could have a great deal of social interaction but still feel alone. The survey attempted to measure both subjective and objective social isolation. The following section analyzes subjective data obtained using the UCLA Three-Item Loneliness Scale (Hughes, et al. 2004).

The Three-Item Loneliness Scale is an abbreviated version of the UCLA-R 20-item scale and was originally designed to be administered by telephone. It comprises three questions. and was determined to be valid and reliable (Hughes, et al., 2004). Three questions are asked and respondents can check "Never", "Hardly Ever", "Some of the Time" or "Often". "Never" and "Hardly ever" are scored as a 1, "Some of the Time" is scored as a 2 and "Often" is scored as a 3. Responses to the three questions are summed, resulting in a score from 3 to 9. Researchers calculate a dichotomous measure using any score of 6 and above as lonely and scores of 5 and less are not lonely.

The first question asked was, "How often do you feel isolated from others? Being isolated means having no contact or meaningful connection with others." 37.2% of individuals who answered this question replied hardly ever or never. 40.0% answered some of the time and 22.8% said they often feel isolated from others. Next, respondents were asked, "How



often do you feel left out?" Responses were similar; 38.5% said hardly ever or never, 40.3% replied some of the time and 21.1% answered often. The final question asked, "How often do you feel that you lack companionship?" 37.4% of respondents lacked companionship never or hardly ever, 37.8% replied some of the time and 24.8% often lacked companionship.



Figure 5 Three-Item Loneliness Scale responses

How often do you feel left out? (n=960)



Figure 6 Three-Item Loneliness Scale responses



Figure 7 Three-Item Loneliness Scale responses



Figure 10 shows the distribution or the 960 valid scores summed from the individual Three-Item Loneliness Scale responses. Because the three most common overall scores were 3, 6 and 9, it is likely that most people answered each of the questions with all 1s (never or hardly ever), 2s (some of the time), or 3s (often). 256 responses (26.7%) scored a 3 indicating that they responded never or hardly ever for all three items. 211 responses (22.0%) had a score of 6 and 136 responses (14.2%) scored the maximum score of 9 indicating that they answered often for all three items. The average score for all respondents was 5.56 and the median was 6. When the scores were aggregated and recoded into the dichotomous measure, 454 individuals, or 47.3% were coded as not lonely (scores of 3 to 5) and 506 individuals, or 52.7% were coded as lonely (scores of 6 to 9).



Figure 8 UCLA loneliness score of all responses

People living with mental illness had the highest likelihood of being isolated with 83.5% of the respondents meeting the criteria for being lonely. 71.1% of the respondents with a disability were lonely, 44.3% of the older adults and 37.6% of the individuals currently serving or who had ever served in the military were lonely.

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#### Lonely by population

Figure 9 Percentage of respondents that are lonely by population

#### **CHARACTERISTICS OF LONELY RESPONDENTS**

The following section examines respondent characteristics that might be associated with loneliness, starting with employment status. Being retired was the most common employment status for both lonely (54.5%) and non-lonely people (66.1%). Being unemployed, however, was more common for lonely people (22.1%) than not lonely people (4.6%). There was a slightly larger number of people who were non-lonely (24.4%) when they were employed compared to lonely people (19.2%). The employment status of lonely respondents was statistically significantly different from the respondents who were non-lonely<sup>6</sup>. These findings seem to indicate that when a person is employed, they are less likely to be lonely and more likely to be lonely when they are unemployed.

<sup>&</sup>lt;sup>6</sup> Per analyses (using Pearson's chi-square).





Figure 10 Loneliness by employment status

Figure 13 shows the relationship between household income and loneliness. A larger share of the lonely respondents had lower incomes of \$15,000 to \$29,999 (19.4%) and under \$15,000 (16.6%) compared to the respondents who weren't lonely. The percentages were similar for income ranges between \$30,000 and \$99,999. There was a larger percentage of non-lonely individuals with higher income ranges of \$100,000 or more. 15.2% of the lonely individuals and 24.7% of the non-lonely individuals selected "Chose not to answer". These differences between the lonely group and the non-lonely group were statistically significant. This may indicate an inverse relationship between income and loneliness.





There were some differences in loneliness across racial and ethnic groups. As shown in Figure 14, White respondents were more likely to be non-lonely (84.4%) compared to lonely (79.1%). The differences in loneliness by race were far less pronounced for all



other races. 10.3% of the respondents who were lonely by definition selected "choose not to answer" while 5.3% of the people who weren't lonely chose the same.

Because respondents could check more than one response for the race/ethnicity question, each race was recoded into a binary variable for the purpose of significance testing. Due to low numbers of American Indian/Native Alaskan and Native Hawaiian/Other Pacific Islander responses, those data were not suitable for significance testing. "Choose not to answer" and "Two or more races" were likewise untested. Of the four races that were tested for significance with loneliness, White and Hispanic/Latino were statistically significant while Black/African American and Asian were not. These findings suggest that White respondents were less likely to be lonely and by contrast, Hispanic/Latino respondents were more likely to be lonely.

What is your race/ethnicity?



Figure 12 Loneliness by race/ethnicity

#### **HEALTH AND WELLNESS**

The survey included a series of health questions<sup>7</sup> asking the participant to rate how true or false a statement was over the last month. Responses included "Definitely true", "Mostly true", "Don't Know", "Mostly false", and "Definitely false". Figures 15 through 21 show the ratings of lonely and non-lonely participants. The prevailing trend evident in these health data is that the lonely participants rated their health poorer than the people who did not meet the definition of being lonely.

<sup>&</sup>lt;sup>7</sup> https://www.rand.org/health-care/surveys\_tools/mos/36-item-short-form/survey-instrument.html



Three negative statements were rated by respondents; "I seem to get sick a little easier than other people", I expected my physical health to get worse" and "I expected my mental health to get worse". Disagreement with each statement indicated better health.<sup>8</sup>

136 (14.5%) out of 936 respondents answered "Don't know" to the statement "I seem to get sick a little easier than other people". 58.3% of the people who were not lonely responded "definitely false" to the statement compared to 27.0% of the lonely respondents. The lonely respondents were more likely to respond with "Definitely true" (10.6%) and "Mostly true" (16.5%) compared to the lonely participants (2.5% and 5.6%, respectively).



Figure 13 Ratings for the statement "I seem to get sick a little easier than other people"

A large share (277 or 29.3%) of respondents answered "Don't know" to the statement "I expected my physical health to get worse". Overall though, lonely participants were more likely to agree with the statement compared to the participants who weren't lonely. 13.3% of the lonely respondents answered "Definitely true" and 21.2% of the non-lonely participants answered "Definitely false".

<sup>&</sup>lt;sup>8</sup> The two statements "I seem to get sick a little easier than other people" and "I expected my health to get worse" were from the 36-Item Short Form Survey Instrument (SF-36). The statement "I expected my mental health to get worse" was added by DHS researchers in order to distinguish between physical and mental health outcomes and indicators.





Figure 14 Ratings for the statement "I expected my physical health to get worse"

A large share (219 or 23.2%) of respondents answered "Don't know" to the statement "I expected my mental health to get worse". The greatest disparity in responses between the lonely group and the non-lonely group was in "Definitely false" answers. 50.1% of the non-lonely group and only 12.0% of the lonely group answered "Definitely false".





Figure 15 Ratings for the statement "I expected my mental health to get worse"

Three positive statements were rated by respondents; "I am as healthy as anybody I know", "My physical health is excellent" and "My mental health is excellent" <sup>9</sup>. Respondents could answer "Definitely true", "Mostly true", "Don't know", "Mostly false" or "Definitely false".

Regardless of whether the individual was lonely or not, the most common response was "Mostly true" for the statement "I am as healthy as anybody I know". "Definitely false" was the least common response for both groups. As shown in Figure 18, the lonely participants were more likely to disagree with the statement compared to the people who were not lonely while the people who were not lonely were more likely to agree with the statement. This may indicate that lonely people may think of themselves as overall less healthy compared to others.

<sup>&</sup>lt;sup>9</sup> The two statements "I am as healthy as anybody I know" and "My physical health is excellent" were from the 36-Iten Short Form Survey Instrument (SF-36). The statement "My mental health is excellent" was added by DHS researchers in order to distinguish between physical and mental health outcomes and indicators.





Figure 16 Ratings for the statement "I am as health as anybody I know"

The most common response was "Mostly true" for the statement "I am as healthy as anybody I know" for both lonely and non-lonely respondents. As shown in Figure 19, the lonely participants were more likely to disagree with the statement compared to the people who were not lonely while the people who were not lonely were more likely to agree with the statement. This may indicate that lonely people may rate their physical health lower than not lonely people.



Figure 17 Ratings for the statement "My physical health is excellent"

Respondents were asked to rate their agreement with the statement "My mental health is excellent". There were marked differences in agreement depending on whether the

individual was lonely or not. The overwhelming majority of non-lonely respondents agreed that their mental health was excellent; 41.2% chose, "Definitely true" while 41.6% chose, "Mostly true". Lonely individuals had more varied responses. The most common response was mostly false (30.2%) followed by mostly true (28.8%). There was still 15.7% of the lonely individuals who said definitely false compared to only 2.4% of the individuals who were not lonely. These findings show the relationship between mental health ratings and loneliness.



My mental health is excellent

Responses were recoded to determine if there was a statistically significant difference between the group that was lonely and the group that was not lonely. Items were recoded into the following: "Definitely true" =4, "Mostly true" =3, "Mostly false" =2 and "Definitely false" =1. Don't know responses were excluded from the analysis. Three out of six statements were positive and the other three statements were negative. For the positive statements (green), better health would result in a higher score lower scores for negative statements. For example, the first positive statement was "I am as healthy as anybody I know" so better health would score higher. The first negative statement (red) "I seem to get sick a little easier than other people" would result in a lower score, or disagreement indicating better health. The responses to all six questions resulted in a statistically significant difference between the lonely and non-lonely groups<sup>10</sup>. In all six cases, the lonely group reported poorer health.

Figure 18 Ratings for the statement "My mental health is excellent"

<sup>&</sup>lt;sup>10</sup> T-test of difference of means for independent samples where equal variances are not assumed

**Table 1** Average health ratings by loneliness. Please note: Lower averages for red statements indicate better health while higher scores for green statements indicate better health.

Health Rating Average Scores	Not Ionely	Lonely
I seem to get sick a little easier than other people	1.48	2.13
I am as healthy as anybody I know	3.07	2.59
I expected my physical health to get worse	2.11	2.70
My physical health is excellent	2.93	2.22
I expected my mental health to get worse	1.59	2.50
My mental health is excellent	3.31	2.33

#### **RISK FACTORS**

The survey questioned respondents regarding their social interactions, their activity in the community and the environment they live in to identify potential risk factors and other characteristics of people who reported feeling lonely.

Overall, most of the respondents did not receive unpaid help from family or friends. 69.2% of the non- lonely and 58.7% of the lonely people did not receive help. However, people who met the definition of lonely were more likely to receive unpaid help from a family member or friend compared to the people who were non-lonely. These differences were statistically significant <sup>11</sup>. People who receive help at home might have ambulatory limitations, live alone, and may have more complex needs. It's possible that individuals can still feel left out, lack companionship and feel isolated if they are homebound, even when help is being provided by loved ones. Further research should investigate if these factors are confounding variables or if there's truly a relationship between receiving unpaid help from family or friends and loneliness.

To determine if providing help to family members had any influence on a person's loneliness, the survey asked if respondents provided any help to family members. 31.6% of lonely participants provided help to family "Some of the time" followed by "Never" for 26.1% of responses. The participants who were not lonely helped family "Often" in 40.3% of cases followed by "Some of the time" in 30.4% of cases. Lonely participants provided help to family less often compared to the non-lonely participants. These differences were statistically significant.

<sup>&</sup>lt;sup>11</sup> Per analyses (using Pearson's chi-square).





#### Figure 19 Receiving unpaid help from family or friends by loneliness



## Do you provide any kind of help to family members?

Figure 20 Provides help by loneliness

Survey respondents were asked if they attended religious meetings or community groups. Lonely respondents were most likely to report never attending religious or community groups with 41.7% of respondents. People who did not meet the definition of being lonely most often reported attending religious or community groups often (29.5%) followed by never (29.1%). 12.1% of lonely respondents attended religious/community groups often. There was a statistically significant difference in attendance of lonely and not lonely respondents.





#### Do you attend meetings of a religious or community group?

#### Figure 21 Attendance at religious or community groups by loneliness

Living situation and marital status could be a risk factor for loneliness so the survey collected these data to further investigate. Lonely respondents were most often single or widowed and living alone (50.0%) followed by married, living with others (13.6%) and single or widowed and living with others (13.6%).



Which of the following describes your current living situation?

Figure 22 Living situation by loneliness

Because responses included marital status and living arrangements, two new binary variables were created to test for significance separately. The first variable, marital status, was classified as married, single or widowed. Next, a binary living arrangement variable



was created and responses were coded either living alone or living with someone, which comprised living with children and living with others regardless of marital status.

There were greater shares of lonely people who were single or widowed (72.5%) and living alone (58.9%) compared to people who weren't lonely (48.0% and 52.0% respectively). There was a statistically significant difference in marital status and loneliness but no difference for the binary living arrangement variable and loneliness.







Survey respondents were asked if the community they lived in was urban, suburban or rural. Suburban communities were the most frequent response for all individuals, 79.0% for not lonely respondents and 76.0% for lonely respondents. The differences in communities had no statistically significant differences in loneliness.





## How would you describe the community where you

#### Figure 25 Neighborhood type by loneliness

Neighborhood safety was investigated to determine if there was a relationship between loneliness and perceived safety. Lonely individuals were more likely to rate their neighborhood safety as good, fair and poor compared to non-lonely people. Fewer lonely individuals (22.1%) rated their safety as excellent compared to non-lonely individuals (39.0%). There was a statistically significant difference in responses of neighborhood safety of lonely individuals seemingly indicating that perceived neighborhood safety is a risk factor for loneliness.



Figure 26 Neighborhood safety by loneliness



#### **OBJECTIVE SOCIAL ISOLATION**

Loneliness is a subjective measure so to test the relationship between the subjective measure with the objective definition of social isolation, the survey asked about individuals' contact with others and how this measure may have changed over the past month.

Respondents were asked about the longest period of time they've gone without interacting with others outside their household or workplace. For both the lonely and nonlonely participants, a few days was the most frequent response. However, many more non-lonely respondents (71.1%) selected a few days compared to the lonely respondents (30.6%). There was greater variation or spread among lonely respondents compared to the non-lonely respondents. Lonely respondents were more likely to answer that they had gone a week, two weeks, three weeks, a month, two or three months with no interaction with others than the non-lonely respondents (Figure 29). These contrasts between the non-lonely and lonely groups were statistically significant. These results do suggest a relationship between objective and subjective social isolation.



What is the longest period of time you have gone without

Figure 27 Longest time without contact by loneliness

As shown in Figure 30, non in-person contact had mostly remained the same over the past month. Both groups, lonely and non-lonely, were more likely to report an increase in non in-person contact than a decrease in the past month. 14.4% of lonely respondents and 12.1% of non-lonely respondents said their non in-person contact increased a lot. On the other hand, 9.1% of lonely respondents indicated that their non in-person contact



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decreased a lot compared to only 1.3% of the non-lonely respondents. These differences between the lonely and non-lonely groups were statistically significant.

During the past month, how would you rate the frequency of



Figure 28 Change in non in-person contact over the past month by loneliness

#### SERVICE UTILIZATION

Survey respondents were asked about the type of services they received, what type of services they had difficulty accessing or affording and what services would improve their ability to connect with others. Binary variables were created for each service and type of transportation. If they checked off one service, it was recoded as yes and if they did not check off that service it was recoded into a no response. If the question was skipped, those data were excluded. Next, each service was tested to determine if that service had a relationship with loneliness. The following section summarizes those results

As shown in Figure 31, there was a smaller share of lonely respondents receiving Medicare and exercise classes/recreational activities and a larger share receiving Medicaid. These differences were statistically significant. Participating in exercise classes/recreational activities and receiving Medicare has a negative association with loneliness, indicating that they are helping factors. Receiving Medicaid has a positive association with loneliness so they are more likely to be lonely. This may be due to the fact that Medicaid respondents may have lower incomes and fewer resources, including time, to socialize. There were no other significant differences in the other reported services received.



## Do you receive any of the following services from a state, county, or local organization?



Figure 29 Services received by loneliness

When asked what types of services individuals had difficulty accessing, the lonely respondents reported difficulty more often than those who weren't lonely with the exception of childcare. The lonely respondents were more likely to report difficulty accessing transportation, healthcare, food, prescription medication and Internet compared to the non-lonely respondents. Non- lonely respondents were more likely to report likely to report not having difficulty accessing any of the services listed.



During the past month, have you had difficulty accessing or affording any of the following?

Figure 30 Difficulty accessing services by loneliness

When asked about the types of transportation individuals used, the lonely respondents were less likely to drive their own car and to use a train and more likely to use paratransit. Lonely respondents were also more likely to report using none of the transportation responses, possibly indicating that they are homebound. These differences were statistically significant. There were no differences between the lonely respondents and non-lonely respondents in their likelihood of being driven by a family member or friend, using rideshare services or using a bus.





#### Do you use any of the following types of transportation?

Figure 31 Type of transportation use by loneliness

After providing the type of transportation mode they used, survey participants indicated what modes of transportation they had difficulty using, if any. Non-lonely individuals were more likely to report not having any difficulty with any transportation types. In contrast, lonely individuals were more likely to report having difficulty using every mode of transportation listed; these included riding a bus, riding a train, using ride share services, driving their own car, using paratransit and being driven by a family member or friend. These differences were statistically significant.





#### Which types of transportation do you have difficulty using?

Figure 32 Reported difficulty using types of transportation by loneliness

The survey asked respondents what types of services would improve their ability to connect to others or their community. Lonely individuals were more likely to identify every service type compared to the non-lonely individuals with the exception of exercise/recreational activities which was not statistically significantly different. This may indicate that chore services, transportation, home-delivered/congregate meals, adult day health services and home health aides could reduce social isolation for lonely individuals. Despite there being no statistically significant difference in the lonely and non-lonely respondents, exercise classes or recreational activities were the most common need reported that would improve ability to connect to others and with their community.



## Would any of the following services improve your ability to connect to others or your community?



Figure 33 Services that would reduce social isolation by loneliness

#### RESULTS

The results of the survey can provide insight into the frequency of social isolation in New Jersey, demographics and other characteristics of those more likely to be socially isolated, the risk factors and situational factors, symptoms and other indicators of social isolation, services utilized and not utilized amongst the socially isolated and services that may help to improve social connectedness and reported changes in interaction over the past month.

While the results of this survey may not be as representative of New Jersey's as a random telephone survey, it is possible to roughly estimate the number of socially isolated individuals based on these data. Using the three-item UCLA Loneliness Scale, the survey provides an estimated percentage of individuals from each vulnerable group that may be lonely and socially isolated. The 2017-2018 National Survey on Drug Use and Health (SAMHSA, 2019) estimates that there were approximately 1,112,000 New Jersey residents 18 and older with mental illness. According to DHS survey respondents, 83.5%



of those with self-reported mental illness met the definition of being lonely. This extrapolates to about **928,520** New Jersey residents with mental illness who are lonely.

The Census Bureau's American Community Survey (ACS) estimates that 915,815 people in New Jersey live with a disability <sup>12</sup>. 71.1% of the survey respondents with a disability met the definition of being lonely. Applying that percentage to the ACS figure results in an estimate of **651,144** New Jersey residents with disabilities who are lonely.

The ACS estimates that 1,442,938 New Jersey residents are 65 years and older<sup>13</sup>. The survey found that 44.3% of the respondents 65 and older were lonely, which extrapolates to a total of about **639,222** lonely older adults in New Jersey.

Various sources estimate that there are about 339,115<sup>14</sup> people currently serving or who have served in the Army, Navy, Air Force/Space Force, Marines, Coast Guard, a Reserve Unit or the National Guard in New Jersey. Of those, about 37.6% or **127,507** Veterans or Military members in New Jersey are lonely using the same rate as the survey findings.

Finally, an estimated total of about 3,809,868 individuals across all four vulnerable groups may be susceptible to social isolation. Across all four vulnerable populations this **extrapolates to 2,346,393, or 26.4% of New Jersey residents estimated to be lonely**<sup>15</sup>. Using this calculation may be double counting some individuals who identify with more than one vulnerable group but conversely, due to the sampling method used, it's likely the survey under sampled the most isolated residents in New Jersey.

Vulnerable Population	Estimate in NJ	Estimated % isolated	Estimated number isolated (Estimate in NJ * estimated % isolated)
Mental illness	1,112,000	83.5%	928,520
Disabilities	915,815	71.1%	651,144
65+	1,442,938	44.3%	639,222
Military	339,115	37.6%	127,507
Total	3,809,868		2,346,393

The survey findings suggest that people who were unemployed, had lower incomes, Hispanic or Latino and Single or Widowed were more likely to be lonely. Lonely respondents were also more likely to receive unpaid help, less likely to report helping family, attending religious or community groups less often and rated their neighborhood safety lower compared to the not lonely respondents. In contrast to other research finding

<sup>&</sup>lt;sup>12</sup> US Census Bureau, American Community Survey, 2020 5-Year Estimate

<sup>&</sup>lt;sup>13</sup> See footnote 12.

<sup>&</sup>lt;sup>14</sup> This includes 313,928 Veterans (American Community Survey, 2020 5-Year Estimate), 17,322 National Guard Members (December 2021 Defense Manpower Data Center) and 7,865 Active Duty members (December 2021 Defense Manpower Data Center).

<sup>&</sup>lt;sup>15</sup> Calculated using the 2020 American Community Survey NJ population estimate of 8,885,418.



an association between community type (i.e., rural, urban or suburban) and loneliness, there was no association in these data.

The relationship this study found between income and loneliness may be explained by employment status. When a person is employed they may have more meaningful social interactions with people they work with and would also have higher incomes to spend on social events (Luhmann & Hawkley, 2016, Donovan et al., 2017, Cohen-Mansfield et al., 2016, Menec et al., 2019, Pikhartova et al., 2016, Shovestul et al., 2020).

According to Rokach (1996), religiosity is a source of coping for people who are lonely. Other studies have also found associations between religious participation and positive mental health (Hintikka et al., 2000, Mackenzie et al., 2000, Strawbridge et al., 2001, James & Wells 2003). Lauder et al., (2006) found that religion has a protective element against loneliness and the survey aligns with these findings.

The association between receiving unpaid help and loneliness may be associated due to the fact that homebound individuals would be more likely to receive help in their home making it more difficult for that individual to interact with others in person and to participate in community programming. On the other hand, if a person feels as though someone relies on them for help they may have a meaningful connection to that recipient thereby reducing isolation.

#### LIMITATIONS

The non-probability, convenience sampling method used here may have failed to reach the most socially isolated individuals because respondents were most likely to complete the survey if they were already connected to a community-based organization. As a result, survey findings presented here may underestimate the prevalence and severity of social isolation due to the sampling method.

The Social Isolation Survey was administered in New Jersey while there was a surge in COVID-19 cases attributed to the Omicron variant. Because of the surge and incumbent fear of spreading the virus during holiday gatherings, people may have felt especially lonely when time is traditionally spent with family and friends. This could have resulted in more individuals feeling lonely and reporting higher severity of loneliness.<sup>16</sup>

It was clear that the survey over-sampled White respondents and under-sampled Black, Hispanic/Latino, Asian and multi-racial individuals. Because of this limitation, the differences in solutions and characteristics of social isolation in these populations warrant further investigation. A future telephone survey with stratified screening may provide a significantly better representative sample of New Jersey demographics.

<sup>&</sup>lt;sup>16</sup> See the New Jersey Department of Health COVID-19 Information Hub for case trends and statistics: https://covid19.nj.gov/forms/datadashboard


Because of conflicting geographic definitions and individual perceptions of what constitutes urban, suburban and rural communities, it's unclear to what extent the survey under-sampled urban and rural communities. Regardless, there is a need for further investigation into the nature of social isolation in urban and rural communities to gain greater insight into the true extent of social isolation and the potential solutions and remedies.

## **Agency Questionnaire**

#### INTRODUCTION

The legislation mandating this study called for the Department to "consult with appropriate professionals, organizations and agencies throughout the State that provide counseling, health care, mental health care, support care, or other daily living assistance to members of vulnerable populations" and to "consult with other State, county, and municipal departments and agencies to gather information, data, and materials on social isolation". The following section will cover the Agency questionnaire that was designed to fulfill these requirements.

#### **METHODOLOGY**

The Department developed a Social Isolation Agency Questionnaire<sup>17</sup> that was shared with the DHS Board of Directors, including a member from each county representing their corresponding county board of social services or Department of Human Services. Recipients of the survey were asked to complete the questionnaire and forward the survey to all relevant agencies in their area that provide services to the vulnerable populations.

The questionnaire was sent out using an emailed link to SurveyMonkey on May 26, 2022. 66 responses were collected from May 26 through July 17, 2022, a period of 53 days. The average length of time spent completing the questionnaire was five minutes. The response rate is unknown due to the sampling method; there is no exact count of how many people were invited to complete the questionnaire.

#### RESULTS

Of the 66 responses, 25 (37.9%) were deemed invalid because the agency indicated that they didn't serve one of the identified vulnerable populations or because the survey was left blank. There were 41 remaining responses representing State, County, Municipal and stakeholders serving one of the identified populations. Respondents were asked to identify the vulnerable populations that their program served. The most common vulnerable population was older adults (73.2%) followed by people living with a disability (70.7%). 48.8% of the responding agencies served people living with mental illness and

<sup>&</sup>lt;sup>17</sup> See appendix for Social Isolation Agency Questionnaire

31.7% served Veterans and/or active duty military.<sup>18</sup> Another 12 responses, or 29.3% indicated that they served an "other" vulnerable population. Other populations included blind and visually impaired, high school and transition-aged individuals or other age specifications, people with substance use disorder, people who are unemployed, dual diagnosis, people with HIV, and low income families with children.







#### **PROGRAM BARRIERS**

The questionnaire comprised two large sections seeking to identify programs or services they oversee that may reduce isolation and to identify barriers and solutions to barriers for each of the programs. The first section lists indirect programs or services that might reduce social isolation: health insurance, mental health and/or substance use treatment, child care, transportation, internet access, food, prescription medication, home and community based services and supports (HCBS), housing assistance, utility assistance, cash assistance, job training & placement/ vocational rehabilitation/ supported employment, education, public safety and translation/ interpretation/communication access. The types of barriers they could select were expanded eligibility (income, immigration status, etc.), improved access (translation, interpretation, application process, etc.), increased and/or targeted outreach, more funding, greater collaboration with other programs/supports and increased staffing. If a respondent did not provide a listed service or program, they were given the choice of selecting "we do not provide this service". If there were no barriers they chose "we provide this service but there are no barriers".

The most commonly reported services or programs were home and community based services and supports (63.4%), transportation (51.2%) and translation/interpretation/communication access (46.3%). More funding and greater

<sup>&</sup>lt;sup>18</sup> Percentages sum to greater than 100 because respondents could check more than one vulnerable population



collaboration were the top two identified barriers with 57.7% of HCBS programs followed by increased staffing (53.8%). Transportation was the second most common service identified with greater collaboration (52.4%), increased staffing (47.6%) and more funding (42.9%) being the most common solutions to barriers. Greater collaboration was the top barrier in 6 out of the top 8 most commonly provided services followed by more funding (top 3 barrier in 5 out of 8 top provided services) and increased staffing (top 3 barrier in 4 out of 8 top provided services). <sup>19</sup>

Program or Service	n (%) of responses provided	Top barrier n (%)	Second barrier n(%)	Third barrier n (%)
Home & Community Based Services & Supports (HCBS)	26 (63.4%)	More funding * 15 (57.7%)	Greater collaboration * 15 (57.7%)	Increased staffing 14 (53.8%)
Transportation	21 (51.2%)	Greater collaboration 11 (52.4%)	Increased staffing 10 (47.6%)	More funding 9 (42.9%)
Translation/interpretatio n/communication access	19 (46.3%)	Improved access 8 (42.1%)	Greater collaboration 7 (36.8%)	*
Mental health and/or substance use disorder	18 (43.9%)	Greater collaboration 15 (83.3%)	More funding 10 (55.6%)	*
Education	16 (39.0%)	Greater collaboration 9 (56.3%)	More funding 6 (37.5%)	Increased staffing 6 (37.5%)
Food	15 (36.6%)	More funding 6 (40.0%)	No barriers 5 (33.3%)	*
Public safety	14 (34.1%)	Greater collaboration 8 (57.1%)	Increased staffing 6 (42.9%)	*
Internet access	14 (34.1%)	No barrier 7 (50.0%)	*	*

**Table 2** Indirect services and programs reported and top barriers <sup>20</sup>

\*Barrier was tied, see appendix for full results

The section seeking to identify barriers for indirect services or programs allowed respondents to identify any other programs or services that they may provide not already listed in the question and to identify what might be done to further reduce social isolation through indirect means. Improving public safety, greater access to and funding to

<sup>&</sup>lt;sup>19</sup> Refer to Appendix C for full results

<sup>&</sup>lt;sup>20</sup> Health insurance, housing assistance, job training & placement/vocational rehabilitation/supported employment, utilities, prescription medication, child care and cash assistance were excluded from this table due to brevity. See appendix for full results.



transport individuals to treatment programs and more transportation services with lift equipment were provided as solutions to barriers for indirect programs and services.

The other question seeking to identify barriers for programs was "Please identify any of the programs and services that you oversee that directly reduces social isolation and any barriers to that program or service (check all that apply)". The direct programs or services that might reduce social isolation in this section include recreational activities and/or exercise classes, home visitation, case management, chore services, day programming (for people with IDD), adult day programming (for older adults 65 years and older), home health aide/caregiver, home-delivered meals or congregate meals, volunteer activities or mentorship. The types of barriers respondents could select were expanded eligibility (income, immigration status, etc.), improved access (translation, interpretation, application process, etc.), increased and/or targeted outreach, more funding, subsidies to make more affordable, greater collaboration with other programs/supports and increased staffing. If a respondent did not provide the listed service or program, they were given the option to select "we do not provide this service". If there were no barriers they could chose "we provide this service but there are no barriers".

The most commonly reported direct programs or services were case management (58.5%), recreational activities and/or exercise classes (39.0%) and volunteer activities (39.0%). Greater collaboration (54.2%) and increased staffing (50.0%) were most commonly reported for case management services to increase capacity to reduce isolation in their communities. Greater collaboration (56.3%) and more funding (50.0%) were identified as means to increase capacity for recreational activities and/or exercise classes. Greater collaboration with other programs and services was the barrier most commonly identified in the top three followed by increased staffing and more funding. Greater collaboration was the chief barrier in all eight of the most commonly provided services followed by increased staffing (top three barrier in six out of eight top provided services) and more funding (top three barrier in four out of eight top provided services).



Program or Service	n (%) of responses provided	Top barrier n (%)	Second barrier n(%)	Third barrier n (%)
Case management	24 (58.5%)	Greater collaboration 13 (54.2%)	Increased staffing (12 (50.0%)	*
Recreational activities and/or exercise classes	16 (39.0%)	Greater collaboration 9 (56.3%)	More funding 8 (50.0%)	*
Volunteer activities	16 (39.0%)	Greater collaboration 9 (56.3%)	No barrier 5 (31.3%)	Increased staffing 4 (25.0%)
Home visitation	15 (36.6%)	Greater collaboration 8 (53.3%)	Increased staffing 6 (40.0%)	No barrier 5 (33.3%)
Home-delivered meals or congregate meals	15 (36.6%)	No barrier 6 (40.0%)	Greater collaboration 5 (33.3%)	Expanded eligibility 4 (26.7)
Adult day programming (for older adults)	13 (31.7%)	More funding 7 (53.8%)	Greater collaboration* 5 (38.5%)	Increased staffing* 5 (38.5%)
Mentorship	12 (29.3%)	Greater collaboration 6 (50.0%)	More funding 5 (41.7%)	Increased staffing 4 (33.3%)
Home health aide/caregiver	11 (26.8%)	Increased staffing 6 (54.5%)	More funding 5 (45.5%)	Greater collaboration 4 (36.4%)

Table 3 Direct services and programs reported and top barriers <sup>21</sup>

Respondents listed some other solutions to barriers their program or area faces which could reduce social isolation. Patient education, mental health treatment, more opportunities for undocumented individuals and transportation options with lift equipment were all potential solutions listed.

#### PROGRAMS & SERVICES: WHAT'S AVAILABLE AND WHAT'S NEEDED?

Program and/or service respondents were asked to estimate the total number of people they served over the past year. Of the 41 responses, the total number of people they served was provided for 33 responses totaling over 81,000 people. Because this questionnaire was a sample of all of the programs and services available in the state, the total number of people in the state treated for social isolation could not be reliably

<sup>&</sup>lt;sup>21</sup> Chore services and day programming were excluded from this table due to brevity. See appendix for full results.



estimated. The actual number of people served is likely to be much higher than the estimated 81,000 people served by the respondents in the DHS survey.

The last section of the questionnaire sought to identify other programs in the state that are available for individuals and what other programs may be needed to reduce social isolation. Some programs that were identified as current services or programs are shown in Table 4.

**Table 4** Services and Programs respondents provided that reduce social isolation

### Services & programs available to reduce social isolation

- Department of Human Services, County Board of Social Services, federal programs
- Mental Health Association Journey to Wellness
- Churches, Synagogues, other faith based institutions
- Reentry services
- Community self-help programs
- Monmouth County Office on Aging
- RAINE Foundation (nutrition, clothing, volunteerism)
- Jersey City Office of Senior Affairs
- Hudson County & Jersey City One Stop Career Center
- Jersey City Employment & Training
   Partnership
- Employment and training centers
- Hudson County Office of Inclusion of Accessibility
- Volunteers of America
- Princeton Senior Resource Center
- Congregate meal settings
- ACCESS Link (transportation)

- Fulfil (nutrition)
- Interfaith Neighbors (housing assistance, nutrition and more)
- Libraries
- Adult day programs
- Home health aides
- Senior Centers
- Domestic violence agencies
- Caregiver Volunteers of Central Jersey (Volunteerism, Caregivers)
- SCUCS (transportation, support coordination for individuals with I/DD, case management, housing assistance, nutrition program & more)
- Trinity Health (healthcare)
- St. Francis (healthcare)
- Kings Things Thrift Store
- NY Services for Handicapped Camp
- Pet therapy groups
- Blue Claws Baseball Organization
- Elks Lodges
- Care Management Organizations
   (CMO's)
- Senior Corps (volunteerism)
- Schools

Because the questionnaire responses represented only a sample of all of the NJ agencies that serve the vulnerable populations, the list above is an incomplete accounting of all of the programs and services currently available that aim to reduce social isolation. Some of the responses included specific programs in concentrated areas serving defined communities and other responses included broad resources that are generally available in most communities, such as libraries, schools and senior centers.



Respondents provided other feedback, suggestions or ideas on new programs, models or services that may reduce social isolation. Their responses are summarized in Table 5.

Table 5 Services and programs that are needed to further reduce social isolation

Services & programs needed to	further reduce social isolation
<ul> <li>More transportation</li> <li>Homemakers (non-family)</li> <li>Program to get older adults out of their home, outside and socialize with supervision</li> <li>More funding for older adults who are not eligible for Adult Day Care pro- grams</li> <li>Increased compensation &amp; improved benefits for staff</li> <li>Restorative justice and other supports for domestic violence survivors</li> <li>Recruit and train more CDL drivers</li> </ul>	<ul> <li>Increased access to transportation</li> <li>In-home recreation &amp; social programming</li> <li>Identifying socially isolated, examine interests and share information resources</li> <li>Expanded access to internet and technology</li> <li>Electronic and virtual communication resource training (internet, wifi, smart phones, social media, for underserved populations)</li> <li>More programs for Blind and Visually Impaired that are integrated with other disability populations</li> </ul>

There were both specific and broad examples of programs available in communities that already exist that are already doing important work in their communities to integrate socialization for vulnerable populations. Additionally, there were many creative suggestions for programs that may further connect individuals with others within their communities. Considering these creative ideas and finding ways to implement them and addressing the barriers identified within existing programs can further improve vulnerable New Jersey resident's social connectedness and community participation.

#### **Possible Interventions to Reduce Social Isolation**

There are a variety of possible interventions to reduce social isolation. These interventions vary in focus, by attempting to improve the mental health and social skills of people who are socially isolated or by providing opportunities to engage in the community (Mann, Bone, Lloyd-Evans, Frerichs, Pinfold, Ma, Wang, & Johnson, 2017; Massi, Chen, Hawkley, & Cacioppo, 2011).

Some direct, individual level interventions are informed by the premise that a person's mental health condition, such as depression or anxiety, has a negative impact on their capacity to socialize (Cruwys, Haslam, Dingle, Jetten, Hornsey, Chong, & Oei, 2013; Hawkley & Cacioppo, 2010). Mental health conditions such as anxiety or depression can result in an increased sensitivity to social threats, which result in withdraw from interpersonal contact or behaviors that decrease the likelihood of positive interactions



(Hawkley & Cacioppo, 2010). To remedy this situation, some clinicians have used Cognitive Behavioral Therapy in conjunction with social skills training to help individuals change the maladaptive thought processes that interfere with social interaction and to adopt new positive behaviors. Interventions based on this premise have shown some effectiveness in reducing social isolation, especially when conducted in groups. The majority of research conducted on this psychotherapeutic approach was conducted using a group setting, making it difficult to separate out the effect of the treatment independent of the group setting (Massi et al., 2011).

Another approach to reducing social isolation entails providing opportunities to engage in the community, such as participating in group activities and increasing communication with relatives via technology. Creating opportunities for people to socialize, in the form of coffee clubs, exercise classes, volunteering, has been shown to reduce social isolation for people over 65. Providing transportation for seniors and individuals with disabilities facilitates opportunities for community participation. The creation of community based opportunities for social interaction should take into account accessibility, providing both meaningful and enjoyable activities along with easy access.

Program accessibility should be considered in the physical sense as well as communication access. Increased communication access might mean increased translation services, closed captioning, interpreting services, communication through several modalities (print, audio, video, etc) and more. Depending on the intended demographic, group functions and activities reflect the unique needs of their participants, such as facilitating intergenerational contact between seniors and younger people or learning a new skill such as carpentry (Cordier & Wilson, 2013; Dinkins, 2019; OPM, 2016). For individuals who are socially isolated due to decreased mobility, advances in internet enabled technology can allow them increased communication with family and friends (Khosravi, Rezvani, & Wiewora, 2016; Neves, Franz, Munteanu, & Baecker, 2018). Specially designed tablet computers and apps can reduce social isolation for seniors, as long as the interface is designed with seniors in mind and the technology is adopted by both seniors and their relatives (Neves, Franz, Munteanu, & Baecker, 2018).

Designing programs and services to ensure the target population is truly able to participate meaningfully is critical. Even if a program or activity is physically accessible it won't have the intended impact if the activity wasn't designed specifically for the population. Ensuring activities are interesting to participants, the level of difficultly is appropriate and other needed supports are available all contribute to an accessible opportunity. Additionally, designing programs to include immigrant populations and populations with language access needs will cultivate meaningful community integration.

Social isolation could also be addressed on a macro level, looking at broader environmental conditions. For social isolation occurring in urban areas, policymakers could prioritize the creation of public green spaces to facilitate a greater sense of community and provide an area for residents to exercise, as well as increase efforts to



reduce crime or assure residents that their communities are safe (Jennings & Bamkole, 2010; Klinenberg, 2001; Portacolone et al., 2018). For social isolation in rural areas, increasing transportation access and connecting residents with community activities and healthcare may prove effective (Henning-Smith, Ecklund, Lahr, Evenson, Moscovice, Kozhimannil, 2018; Kelly, Steiner, Mazzei, & Baker, 2019).

A number of studies have surveyed social isolation mitigation efforts in the US and abroad to determine the most effective practices and strategies. Shields-Zeeman, et al. (2021) interviewed 14 experts in the U.S. and abroad to identify the best strategies to reduce the effects of social isolation. Tailoring programs to meet need, identifying policy supports to sustain programs, leveraging existing community services and fully evaluating program efficacy were the most essential components cited. The Arizona Department of Health Services (Gallaway and Davidson, 2022) conducted a 50-state review of programs and initiatives to address social isolation. Categories included hotlines, community initiatives, strategies for older adults and models for identifying at-risk populations. The national advocacy group, ADvancing States, summarized efforts to mitigate social isolation in senior populations in twelve states (Addressing Social Isolation for Older Adults During the COVID-19 Crisis, 2020). Programs were largely telephone or Internet-based and also tied-in to meal delivery. A Council of State Governments report outlined programs and initiatives at various levels of government to reduce social isolation among older adults, veterans and other vulnerable populations (Kirby and Sloan, 2021). Their work called for greater inclusion of at-risk populations in testing interventions and determining health effects.

In 2020, as a result of the COVID-19 pandemic, New Jersey's Long-Term Care Ombudsman rolled out a Social Isolation Project which seeks to ensure facilities are doing what they can to "maximize residents' rights". The Program receives complaints and staff will visit the facilities to ensure resident's visitation rights, rights to meaningful activities and rights to access outside areas are being upheld. The Program also monitors compliance with the LGBTQ and HIV+ Bill of Rights in Long Term Care legislation.<sup>22</sup>

The New Jersey Legislature passed a bill <sup>23</sup> in 2020 requiring long-term care facilities, as a condition of licensure, to implement policies to prevent social isolation. Facilities are required to adopt and implement written policies to provide the technology and staffing to prevent social isolation. It entails in-person communications, religious and recreational activities with other residents, family members, friends and external systems. When in-person activities can't be provided due to restrictions or regulations, they are permitted to use all forms of technology to provide such activities. Access to assistive technology or other communication devices is required for residents with disabilities that may impede their ability to communicate so that they can fully participate in activities. Staff are required to regularly assess individual needs and preferences of the individuals' social interactions,

<sup>&</sup>lt;sup>22</sup> See https://www.nj.gov/ooie/specialproject.shtml

<sup>&</sup>lt;sup>23</sup> https://www.njleg.state.nj.us/bill-search/2020/S2785/bill-text?f=PL20&n=113\_



religious and recreational activities and ensure the means to provide these are sufficiently in place. Each resident is required to have an individualized visitation plan which reflects the visitation needs and preferences of the resident and their family members, addresses a visitation schedule if appropriate. Further, the visitation plan describes the location and modalities used in the visitation which includes all staff member roles and responsibilities clearly defined. The legislation also requires facilities to designate one staff member to provide direct assistance to ensure all residents are able to use and access all forms of technology.

## Conclusion

This report concludes that there are an estimated 2,346,393 vulnerable residents or 26.4% of all New Jersey residents who are socially isolated. Some suggestions to reduce isolation are provided. Some of those suggestions include increasing access to mental and behavioral health supports, ensuring more equitable access to health insurance, improving economic and financial security for low-income individuals and families and providing more community based programming to connect individuals with other community members. Situational or environmental factors, demographics and risk factors are presented from the Social Isolation Survey results and should be used by communities to identify, assess and treat isolated individuals.

Results from the Social Isolation Survey indicate assisting eligible low income individuals access cash assistance programs and other programs to lower monthly costs may reduce social isolation. If people have greater financial stability they will have greater freedom to spend money on extra trips into their communities, technology to facilitate virtual social interaction and other activities that come with out of pocket fees, such as recreation classes or bus trips.

The survey found that there was a relationship between isolation and poorer health ratings. Increasing equitable access to health insurance and quality health providers means that people won't be living with unmanaged chronic illnesses and untreated mental and behavioral health challenges improving their ability to integrate and interact with other community members. Ensuring vulnerable populations have equitable access to health services is critical especially in times where there are emerging health epidemics and ongoing fears and avoidance of in-person interactions to reduce the spread of COVID-19.

Feedback from partners and stakeholders indicated several means of increasing capacity to further reduce isolation. The top solutions included increased staffing, more funding and greater collaboration with other services and/or programs. Responses from partners and stakeholders suggests that increasing funding specifically to recruit and retain staff, improving transportation access for all and expanding access and training for virtual communication and technology could reduce social isolation for vulnerable populations.



Based on this evidence, social isolation is prevalent in all communities across the state and efforts may be focused in the future on evaluating interventions and programs to determine what is the most effective way at reducing isolation for specific groups and specific communities.



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## **Appendix A: Social Isolation Survey**



Social Isolation Survey

#### Introduction

The New Jersey Legislature passed a law that requires the New Jersey Department of Human Services (DHS) to study social isolation among four specified groups: seniors age 65 and older, individuals with disabilities, individuals with mental illness, and those who have or currently serve in the military.

For this study, social isolation is defined as a lack of contact or meaningful connection with others. Social isolation may have varying effects on someone's quality of life and well-being. By studying how widespread social isolation is and determining related risk factors, it is hoped that services can be improved or introduced to improve people's lives.

Your participation in this survey is completely voluntary. Your responses will not affect the services you receive. If you are helping someone to complete the survey, please make sure you are providing their responses and not your own.

All responses provided are anonymous and will be reported in an aggregated manner. Any questions regarding this survey can be sent to Oresp@dhs.nj.gov.

Si usted prefiere una versión en español para la encuesta, use este enlace: <u>Versión en español</u> If you are using screen-reader software such as JAWS, please use this link: <u>Accessible survey</u>

Thank you for your participation.



Social Isolation Survey
1. Please select all that apply:     I am a person living with mental illness   I am a person living with a disability   I am a person 65 years or older   None of these apply
2. Have you ever served in the Army, Navy, Air Force, Marines, Coast Guard, a Reserve unit, or the     National Guard of New Jersey?     Yes     No
3. Are you currently a member of the Army, Navy, Air Force, Marines, Coast Guard, a Reserve unit, or the National Guard of New Jersey? Yes No



Human Services	
	do you feel isolated from others? Being isolated means having no contact or
-	nnection with others.
O Never	
Hardly ever	
Some of the	time
Often	
* 5. How often d	do you feel left out?
O Never	
Hardly ever	
O Some of the	time
Often	
t 6 How often d	do you feel that you lack companionship?
Never	o you leef that you lack companionship?
Hardly ever	
<ul> <li>Some of the</li> </ul>	
Often	
0	
* 7. In which co	ounty do you live?
<b></b>	
What is your ZIF	P code?
That is your Zir	
0.1111-01-00	ere you born?



* 10. I identify myself as:	
Female	
Male	
Transgender	
Other (please specify)	
111 De constituire d'accettante de collecte	
* 11. Do you attend meetings of a religion Never	us or community group?
č	
Hardly ever     Game of the time	
Some of the time	
Often	
* 12. Which of the following describes yo	our current living situation?
O Married, living alone	Single or widowed, living alone
O Married, living with children	Single or widowed, living with children
<ul> <li>Married, living with others</li> </ul>	Single or widowed, living with others
* 13. Do you provide any kind of help to a help with things around the house.	family members? For example, are you asked for advice
O Never	
Hardly ever	
Some of the time	
Often	
14. How would you describe the commu	nity where you currently live?
🗇 Urban	
🔘 Suburban	
Rural	



Excellent Very good Good Fair Poor 16. What is the longest period of time you have gone without interacting with people outside of your provide the your people outside my household or workplace 17. During the past month, have you had difficulty accessing or affording any of the following? I select all that apply: Food Prescription medication Healthcare Childcare Transportation None of these Internet Other (please specify) Securing the past month, how TRUE or FALSE are each of the following statements for you? 8. During the past month, how TRUE or FALSE are each of the following statements for you? I am as healthy as anytody i know I am as healthy as anytody i know I am as healthy as anytody i know I an as healthy to get O on one of the people outside my provide the people outside my household or workplace		ou rank the safe	ty of your neigh	borhood?		
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	Very good					
	Good					
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	Definitely true	Mostly true	Don't know	Mostly false	Definitely false
expected my mental ealth to get worse	0	0	0	0	0
ly mental health is xcellent	0	0	0	0	0
20. During the past telephone, email,				on in-person co	ntact (such as
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<ul> <li>Increased a litt</li> </ul>	le				
The same					
O Decreased a lit	ttle				
O Decreased a lo					
0					
21. Do you use an	y of the followin	g types of trans	portation? Pleas	e select all that	apply.
Driving your ov	wn car		Riding a tra	in	
Being driven by	y a family member o	or friend	Using parat	ransit	
Using a ride sh	are service, such a	s Uber or Lyft	None of the	se	
Riding a bus					
22. Which types o	of transportation	do you have dif	liculty using? Plo	ease select all th	at apply.
Driving your ov	wn car		Riding a tra	in	
Being driven by	y a family member o	or friend	Using parat	ransit	
Using a ride sh	are service, such a	s Uber or Lyft	None of the	se	
Riding a bus					



23. Do you receive any of the following service: select all that apply.	s from a state, county, or local organization? Please
Medicare	
Medicaid	
Home Health Aide	
Home-Delivered or Congregate Meals	
Adult Day Health Services	
Transportation	
Chore Services	
Exercise Classes or Recreational Activities	
None of the above	
Other (please define)	
24. Would any of the following services improv Please select all that apply.	e your ability to connect to others or your commun
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	e your ability to connect to others or your commun
Please select all that apply.	_
Please select all that apply.  Home Health Aide	Transportation
Please select all that apply.         Home Health Aide         Home-Delivered Meals or Congregate Meals	Transportation Chore Services
Please select all that apply.         Home Health Aide         Home-Delivered Meals or Congregate Meals         Adult Day Health Services	Transportation Chore Services
Please select all that apply.         Home Health Aide         Home-Delivered Meals or Congregate Meals         Adult Day Health Services         Other (please define)	Transportation Chore Services Exercise Classes or Recreational Activities with unpaid help? For example, helps with cooking
Please select all that apply.         Home Health Aide         Home-Delivered Meals or Congregate Meals         Adult Day Health Services         Other (please define)         25. Does a family member or friend provide you picking up groceries, taking you to the doctor, of Yes	Transportation Chore Services Exercise Classes or Recreational Activities with unpaid help? For example, helps with cooking
Please select all that apply.         Home Health Aide         Home-Delivered Meals or Congregate Meals         Adult Day Health Services         Other (please define)         25. Does a family member or friend provide you picking up groceries, taking you to the doctor, of Yes         No	Transportation Chore Services Exercise Classes or Recreational Activities with unpaid help? For example, helps with cooking
Please select all that apply.         Home Health Aide         Home-Delivered Meals or Congregate Meals         Adult Day Health Services         Other (please define)         25. Does a family member or friend provide you picking up groceries, taking you to the doctor, or yes         No         * 26. What is your employment status?	Transportation Chore Services Exercise Classes or Recreational Activities with unpaid help? For example, helps with cooking
Please select all that apply.         Home Health Aide         Home-Delivered Meals or Congregate Meals         Adult Day Health Services         Other (please define)	Transportation Chore Services Exercise Classes or Recreational Activities with unpaid help? For example, helps with cooking



Under \$15,000	Between \$75,000 and \$99,999
Between \$15,000 and \$29,999	Between \$100,000 and \$150,000
Between \$30,000 and \$49,999	Over \$150,000
Between \$50,000 and \$74,999	Choose not to answer
8. What is your race/ethnicity? (Please	select all that apply)
Hispanic or Latino	
White	
Black or African American	
Asian	
Native Hawaiian or Other Pacific Islander	
American Indian or Native Alaskan	
Two or More Races	
Choose not to answer	
). I consider myself to be:	
Heterosexual/Straight	
Lesbian/Gay	
Bisexual	
Unsure	
Other (please specify)	



## **Appendix B: Agency Questionnaire**<sup>24</sup>



**Social Isolation Agency Questionnaire** 

#### Introduction

The New Jersey Legislature passed a law that requires the New Jersey Department of Human Services (DHS) to study social isolation among four specified groups: seniors age 65 and older, individuals with disabilities, individuals with mental illness, and those who have or currently serve in the military.

For this multi-faceted study, social isolation is defined as a lack of contact or meaningful connection with others. Social isolation may have varying effects on someone's quality of life and well-being. We're hoping that with your input, we can identify the resources that are already available in the state and what might be needed to further reduce social isolation.

For this questionnaire we will be asking you to identify services and programs your area provides that may indirectly reduce isolation such as health insurance, mental health services, cash assistance and the like. We will also ask you to identify programs offered by our partners that specifically organize social interaction and community integration such as recreational activities to any of the specified groups, transportation to events, home visitations, etc. Lastly, we will ask how existing programs can be enhanced and improved and what types of services and programs might be lacking in the State. Any ideas are appreciated and doesn't necessarily have to fall within the area of which you manage and oversee.

All responses will be aggregated and summarized as appropriate. Any questions regarding this questionnaire can be sent to Oresp@dhs.nj.gov.

Please complete the survey by July 15, 2022.

The DHS Office of Research & Evaluation thanks you for your ongoing support on this project.

<sup>&</sup>lt;sup>24</sup> Actual appearance may differ because survey was completed by respondents in a web browser



State of New Jersey	
Social Isolation Agency	Questionnaire
Human Services	
Please provide the Department, Divis	ion and/or program you oversee:
2. Please identify the specified group	s your area focuses on (check all that apply
People living with mental illness	Veterans and/or active-duty military
People living with a disability	None of these apply
Older adults (65 years and older)	
Other (please specify)	



State a	of New Jersey
	DAS
	Department of
	Human Services

**Social Isolation Agency Questionnaire** 

The next two questions will ask you to think about barriers individuals face in accessing the services and supports you provide. The first question will focus on supports that indirectly reduce social isolation by enabling people to more fully participate in community life. The second question will focus on supports that directly reduce social isolation by connecting people with others.

3. Indirect supports: Please identify any of the programs and services that you oversee that *indirectly* reduces social isolation and any barriers to that program or service (check all that apply):

		We provide this						
	not provide this	are no	-	Improved access (translation/interpretation, application process, etc)	-	More funding	Greater collaboration with other programs/supports	Increased staffing
Health insurance and/or health care								
Mental health and/or substance use treatment and support								
Child care								
Transportation								
Internet access								
Food								
Prescription medication								
Home and Community Based Services and Supports								
Housing assistance								
Utilities								
Cash assistance								
Job training & placement/ vocational rehabilitation/ supported employment								
Education								
Public safety								
Translation/Interpretation/communication access								
f your program, service or a barrier to acce	ss isn't l	isted abo	ove, please p	rovide additional informatio	in here.			



	nol provide lhis	but there pre np	eligibility (income, immigration	Improved access (translation/interpretation, application process, etc)	-	More funding Lo serve more people	Subsidies Lo make more affordable	Greater collaboration with other programs/supports	Increased
Recreational activities and/or exercise classes									
Home visitation									
Case management									
Chore services									
Dəy programming (for people with IDD)									
Adult day programming (for Older Adults 65 years and older)									
Home health aide/caregiver									
Home- delivered meals or congregate meals									
Volunteer activities									
Mentorship									





Social Isolation Agency Questionnaire

5. Please estimate the total number of people that your area served in the past year.

6. Please list all agencies and/or programs from outside of your area that specifically aim to reduce social isolation for the specified populations:

7. Please provide any other feedback, suggestions or ideas on new programs, models or services that may reduce social isolation, if any.

## **Appendix C: Agency Questionnaire Results**

Results to the question: "Please identify any of the programs and services that you oversee that indirectly reduces social isolation and any barriers to that program or service (check all that apply)"

Program or Service	N*	We provide this service but there are no barriers	Expanded eligibility	Improved access	Increased and/or targeted outreach	More funding	Greater collaboration	Increased staffing
						15		14
HCBS	26	3 (11.5%)	6 (23.1%)	10 (38.5%)	10 (38.5%)	(57.7%)	15 (57.7%)	(53.8%)
							, , , , ,	10
Transportation	21	5 (23.8%)	4 (19.0%)	6 (28.6%)	6 (28.6%)	9 (42.9%)	11 (52.4%)	(47.6%)
Translation/ interpretation/								
communication access	19	4 (21.1%)	3 (15.8%)	8 (42.1%)	4 21.1%)	6 (31.6%)	7 (36.8%)	6 (31.6%)
Mental health and/or substance use treatment						10		
and support	18	1 (5.6%)	6 (33.3%)	8 (44.4%)	6 (33.3%)	(55.6%)	15 (83.3%)	8 (44.4%)
Education	16	4 (25.0%)	4 (25.0%)	4 (25.0%)	5 (31.3%)	6 (37.5%)	9 (56.3%)	6 (37.5%)
Food	15	5 (33.3%)	3 (20.0%)	4 (26.7%)	4 (26.7%)	6 (40.0%)	4 (26.7%)	2 (13.3%)
Public safety	14	2 (14.3%)	1 (7.1%)	3 (21.4%)	4 (28.6%)	4 (28.6%)	8 (57.1%)	6 (42.9%)
Internet access	14	7 (50.0%)	2 (14.3%)	2 (14.3%)	3 (21.4%)	3 (21.4%)	3 (21.4%)	1 (7.1%)
Health insurance	13	3 (23.1%)	6 (46.2%)	7 (53.8%)	5 (38.5%)	5 (38.5%)	7 (53.8%)	2 (15.4%)
Housing assistance	13	2 (15.4%)	5 (38.5%)	5 (38.5%)	7 (53.8%)	8 (61.5%)	7 (53.8%)	7 (53.8%)
Job training & placement/ vocational rehab/ supported								
employment	13	3 (23.1%)	4 (30.8%)	4 (30.8%)	6 (46.2%)	6 (46.2%)	6 (46.2%)	6 (46.2%)
Utilities	11	2 (18.2%)	4 (36.4%)	6 (54.5%)	7 (63.6%)	6 (54.5%)	6 (54.5%)	6 (54.5%)
Prescription medication	10	3 (30.0%)	4 (40.0%)	4 (40.0%)	3 (30.0%)	1 (10.0%)	2 (20.0%)	0 (0.0%)
Child care	6	0 (0.0%)	3 (50.0%)	2 (33.3%)	2 (33.3%)	5 (83.3%)	4 (66.7%)	4 (66.7%)
Cash assistance	4	0 (0.0%)	3 (75.0%)	2 (50.0%)	4 (100.0%)	3 (75.0%)	3 (75.0%)	3 (75.0%)

Note: \* Indicates the number of responses that provide the service or program and used as the denominator for all percentages. The remaining responses skipped the question or indicated that they did not provide the service or program.

Results to the question: "Please identify any of the programs and services that you oversee that directly reduces social isolation and any barriers to that program or service (check all that apply)"

		We provide this service but there are	Expanded	Improved	Increased and/or	More	Subsidies to make more	Greater	Increased
Program or Service	Ν	no barriers	eligibility	access	targeted outreach	funding	affordable	collaboration	staffing
						10			12
Case management	24	8 (33.3%)	3 (12.5%)	6 (25.0%)	10 (41.7%)	(41.7%)	4 (16.7%)	13 (54.2%)	(50.0%)
Recreational activities									
and/or exercise classes	16	4 (25.0%)	3 (18.8%)	4 (25.0%)	5 (31.3%)	8 (50.0%)	4 (25.0%)	9 (56.3%)	5 (31.3%)
Volunteer activities	16	5 (31.3%)	1 (6.3%)	2 (12.5%)	2 (12.5%)	0 (0.0%)	0 (0.0%)	9 (56.3%)	4 (25.0%)
Home visitation	15	5 (33.3%)	0 (0.0%)	2 (13.3%)	3 (20.0%)	3 (20.0%)	1 (6.7%)	8 (53.3%)	6 (40.0%)
Home-delivered meals									
or congregate meals	15	6 (40.0%)	4 (26.7%)	1 (6.7%)	1 (6.7%)	3 (20.0%)	1 (6.7%)	5 (33.3%)	2 (13.3%)
Adult day programming (for older adults)	13	4 (30.8%)	2 (15.4%)	3 (23.1%)	3 (23.1%)	7 (53.8%)	2 (15.4%)	5 (38.5%)	5 (38.5%)
Mentorship	12	3 (25.0%)	2 (16.7%)	2 (16.7%)	3 (25.0%)	5 (41.7%)	2 (16.7%)	6 (50.0%)	4 (33.3%)
Home health									
aide/caregiver	11	2 (18.2%)	3 (27.3%)	2 (18.2%)	2 (18.2%)	5 (45.5%)	2 (18.2%)	4 (36.4%)	6 (54.5%)
Chore services	10	0 (0.0%)	2 (20.0%)	1 (10.0%)	3 (30.0%)	6 (60.0%)	2 (20.0%)	7 (70.0%)	6 (60.0%)
Day programming (for									
people with IDD)	6	0 (0.0%)	2 (33.3%)	1 (16.7%)	1 (16.7%)	3 (50.0%)	1 (16.7%)	4 (66.7)	1 (16.7%)

Note: \* Indicates the number of responses that provide the service or program and used as the denominator for all percentages. The remaining responses skipped the question or indicated that they did not provide the service or program.