



INTERNATIONAL  
LONG TERM CARE  
POLICY NETWORK

# COVID-19 and Long-Term Care in the US State of Minnesota

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## **ltccovid.org**

This document is available through the website [ltccovid.org](http://ltccovid.org), which was set up in March 2020 as a rapidly shared collection of resources for community and institution-based long-term care responses to Covid-19. The website is hosted by CPEC at the London School of Economics and Political Science and draws on the resources of the International Long-Term Care Policy Network.

Corrections and comments are welcome at [info@ltccovid.org](mailto:info@ltccovid.org). This document was last updated on July 27, 2020 and may be subject to revision.

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## 1. Key points

### 1.1. Prevalence of COVID-19 in Long-Term Care

- Minnesota's COVID-19 cases began in early March 2020; the daily average of new cases peaked at 840 in mid-May, while new deaths peaked at 39 in early June. However, by July cases were on the rise again.
- According to cumulative totals on May 30, 2020, older people in long-term care facilities accounted for over four-fifths of total COVID-19 deaths: 56% of total deaths were in nursing facilities, 22% were in assisted living facilities, 3% were in memory centers, and only 19% were in community settings.
- The distribution of COVID-19 cases and deaths in long-term care facilities was highly skewed: some facilities had large numbers, but most facilities had only a few cases and deaths.
- COVID-19 cases and deaths, both overall and in long-term care, were concentrated in Minnesota's major urban area (Twin Cities) containing the cities of Minneapolis and St. Paul.
- Racial and ethnic minorities in the Twin Cities had dramatically higher rates of COVID-19 cases overall than did whites. Yet, the prevalence of COVID-19 cases and deaths in Twin City nursing facilities did not differ by their percentage of minority group residents.

### 1.2. Minnesota's Response

- The Minnesota Department of Health (MDH) has adopted a Five-Point Battle Plan for Prevention and Support of COVID-19 in Long-Term Care. The Plan's goals are to ensure long-term care facilities can safely accept and care for residents discharged from the hospital; reduce COVID-19 transmission among residents and staff; quickly identify facilities needing special support; and help facilities plan for and manage COVID-19 infections.
- An MDH case manager works with each facility that has a COVID-19 case to assist in implementing infection control and managing care.
- The MDH has supplied facilities with a comprehensive COVID-19 Toolkit, with guidelines for contact tracing, risk assessment, protective equipment, testing, cohorting, and family visits.
- The state and Federal governments have provided expedited and advance payments to nursing and other long-term care facilities for emergency expenses incurred because of COVID-19.
- The state appropriated \$150 million for health care response expenses in health and long-term care.

### 1.3. Programmatic and Structural Challenges

- Minnesota faces continued policy and programmatic challenges in long-term care, particularly if COVID-19 cases surge in the fall or winter. The challenges include: ensuring access to testing, PPE, and infection control support; addressing staff

shortages; balancing social distancing policies with patient rights and family visitation; and returning to “normal” once the COVID-19 pandemic subsides.

- The state also faces fundamental structural challenges in long-term care including: chronic staffing shortages due to low wages, inadequate sick leave or health insurance, and unfavorable working conditions; racial disparities; problems in care transitions to and from hospitals; increasing resident acuity without accompanying increases in skilled nursing and medical care capacity; and financial instability from occupancy declines combined with strained Medicaid budgets.

## 2. Introduction

Minnesota is located in the upper mid-west United States, with its sparsely populated northern region bordering Canada. Approximately 65% of the state’s 5.6 million population is in the Minneapolis and St. Paul (Twin Cities) metropolitan area. Sixteen percent of Minnesota’s population is age 65 or older, while 4% is age 80 or older. <sup>1</sup>

Residents of long-term care facilities in Minnesota, like the rest of the United States and much of the world, have suffered disproportionately from the COVID-19 pandemic. <sup>2</sup> More than 40% of COVID-19 related deaths in the US are estimated to have been among residents of nursing and other long-term care facilities. <sup>3</sup> The combination of advanced age, chronic disease complications, residential density, and movement of visitors and care workers in and out of the facilities heightens the risk of COVID-19 infection and severity among the long-term care population. Moreover, the public health system and health providers in the US and Minnesota were caught off guard by the pandemic. Considerable attention was given initially to the capacity of hospitals to care for critically ill patients. Less attention was given to spread of infections and the high fatality rates among long-term care facility residents.

COVID-19 still presents a challenge to the health and long-term care systems. In early July, both acute and long-term care facilities continued to experience problems in access to testing, protective equipment, and other resources. <sup>4</sup> It was not until late May, four months into the pandemic, that the US had a national system for recording and reporting on deaths among nursing home residents. <sup>5</sup>

Nonetheless, as we will show in this report, Minnesota has made substantial progress in responding to the COVID-19 crisis. The objectives of this report are to: (1) describe the prevalence of COVID-19 in nursing homes and other long-term care facilities in Minnesota; (2) present the state’s strategy for dealing with the crisis; and (3) identify remaining programmatic and structural challenges for the long-term care system.

### 3. Impact of COVID-19 on long-term care users and staff so far

#### 3.1. Number of positive cases in population and deaths

##### 3.1.1. COVID-19 cases began in March and peaked in mid-May, while deaths peaked in June.

Similar to the majority of states, the COVID-19 outbreak in Minnesota began in mid-March. As of July 12, Minnesota had a cumulative total of 41,609 COVID-19 cases and 1,537 deaths. The average number of new cases reached its peak at 840 on May 23 (Figure 1) and deaths peaked at 39 on June 10 (Figure 2). The daily new case count held steady in Mid-June; however, by the end of June it was trending upward again.<sup>6</sup>

Figure 1.

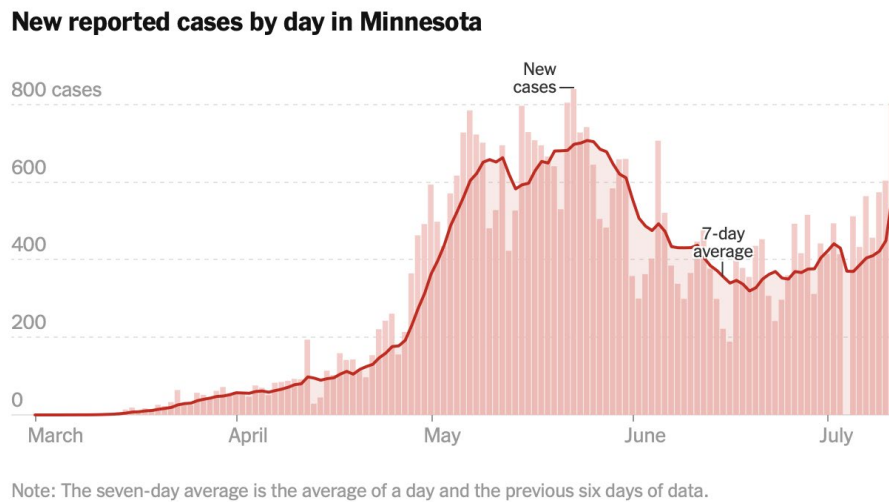
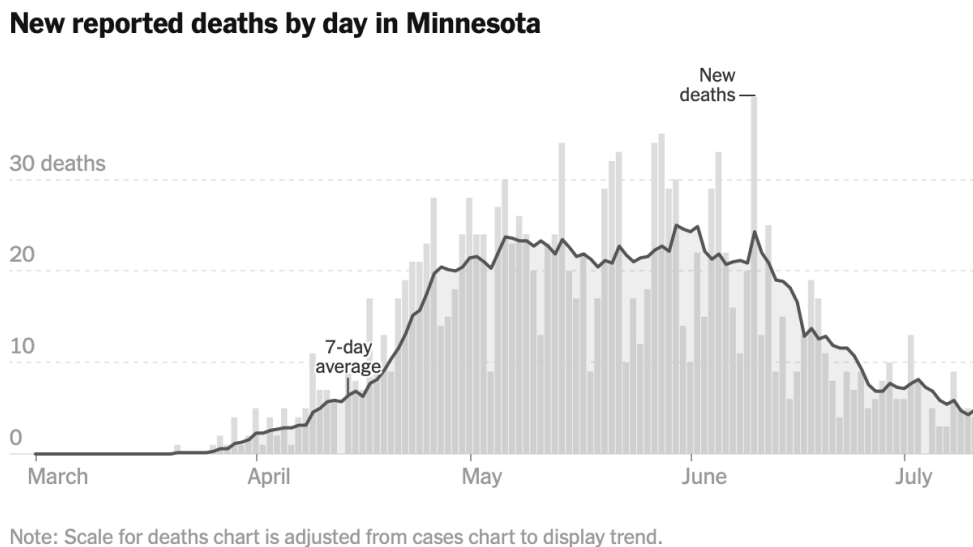
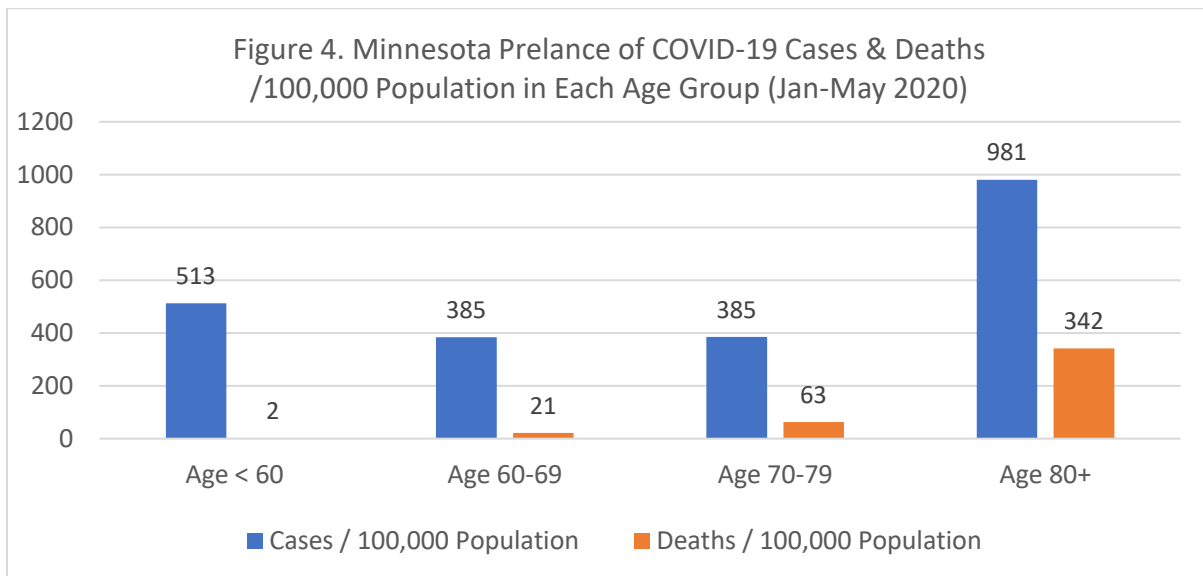
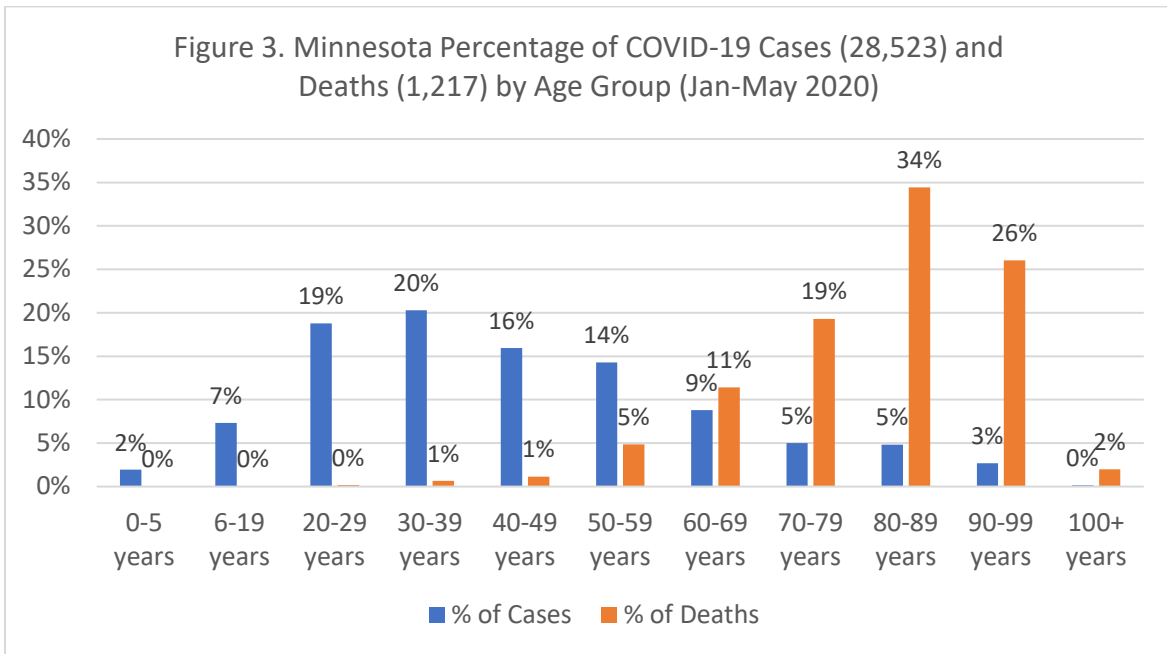


Figure 2.



### 3.1.2. COVID-19 death rates were strongly related to age.

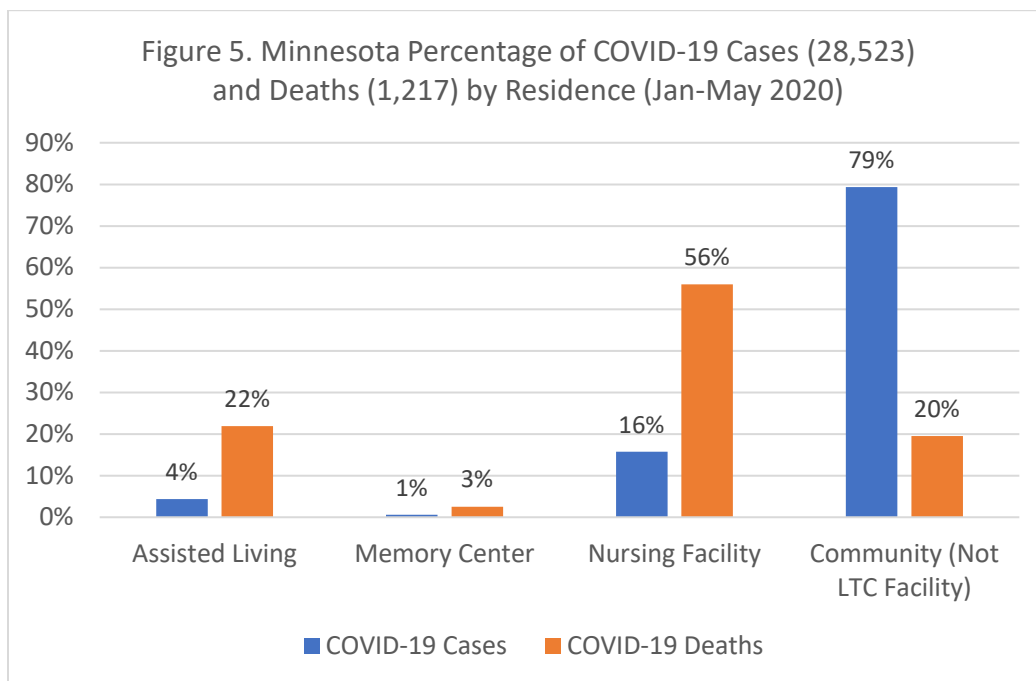
In the period January through May 2020, 78% of Minnesota’s 28,523 COVID-19 cases were recorded for individuals younger than age 60 (Figure 3). In contrast, 93% of 1,217 deaths were recorded for people 60 or older, and 62% of deaths were of people 80 and older. The prevalence of cases per 100,000 in each age group was 513 cases for ages 1-59, 491 cases for age 60 and older, and 981 cases for age 80 and older (Figure 4). Mortality per 100,000 was 2 deaths for age 1-59, 91 deaths for age 60 and older, and 342 for age 80 and older.<sup>7</sup>



### 3.2. Rates of infection and mortality among long-term care users and staff

#### 3.2.1. Residents in long-term care facilities accounted for only 21% of total COVID-19 cases, yet they experienced over four-fifths of total COVID-19 deaths.

There were striking differences in the distribution of resident cases and deaths by the setting in which people resided (Figure 5). Of Minnesota’s total COVID-19 cases through May 2020, 22,625 (79%) were among people residing in community settings (private residences), while 2,973 (16%) of cases were nursing facility residents or staff, 1,243 (4%) were assisted living residents or staff, and 179 (1%) were memory center residents or staff. In sharp contrast, only 238 deaths (19%) were among individuals in the community. Among the 913 deaths in long-term care, 615 (56%) were residents of nursing facilities, 267 (22%) were residents of assisted living facilities, and 31 (3%) were residents of memory centers. During the same 5-month period in 2019, an estimated 7,073 nursing facility residents died. No comparable mortality figures are available for assisted living facilities or memory centers. Also, we did not have sufficient data to estimate excess mortality in 2020 compared to prior years.



#### 3.2.2. The rates of COVID-19 cases and deaths in nursing facilities far exceeded rates in the community.

Based on our estimate of the total number of nursing facility residents at any time from January through May 2020 (24,755 residents on January 1 plus 26,430 new admissions = 51,185), we calculated the rates of COVID-19 cases and deaths per 1,000 nursing facility residents. During the five-month period we estimated a prevalence of 143 cases per 1,000 residents and 28 deaths per 1,000 residents. These rates per 1,000 nursing facility residents are substantially

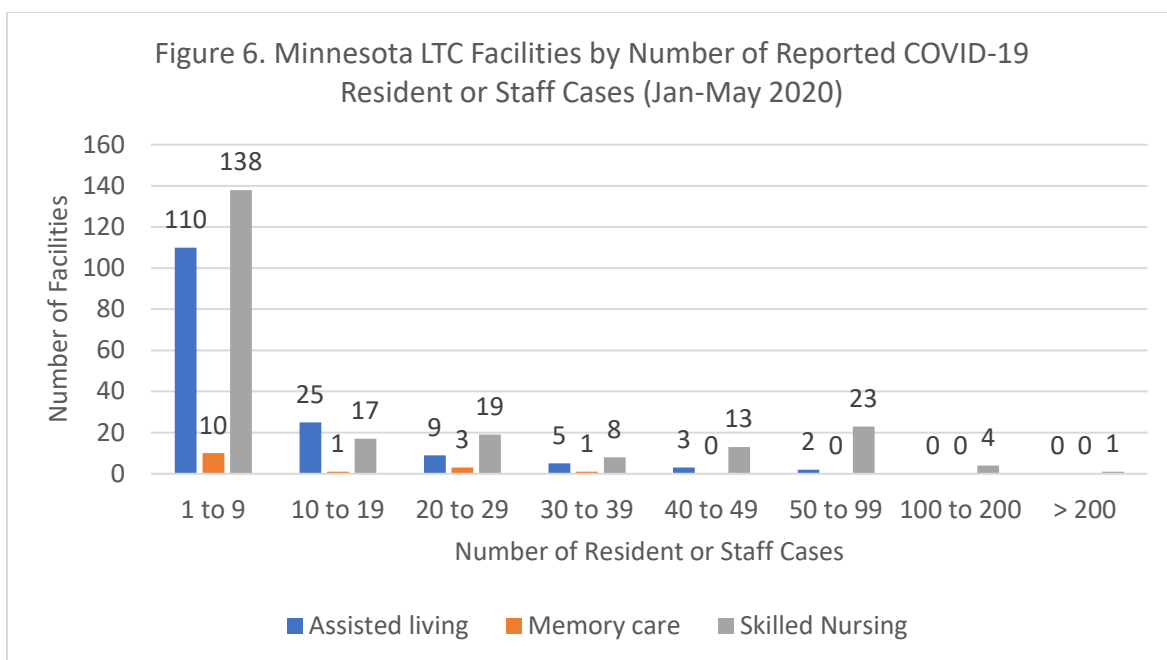
higher than the overall COVID-19 rates for elderly individuals in the general population. The cases per 1,000 persons by age group in general population were: .513 cases for ages 1-59, .491 cases for age 60 and older, and .981 cases for age 80 and older. The deaths per 1,000 persons by age group in general population were: .002 deaths for ages 1-59, .009 deaths for age 60 and older, and .034 deaths for age 80 and older.

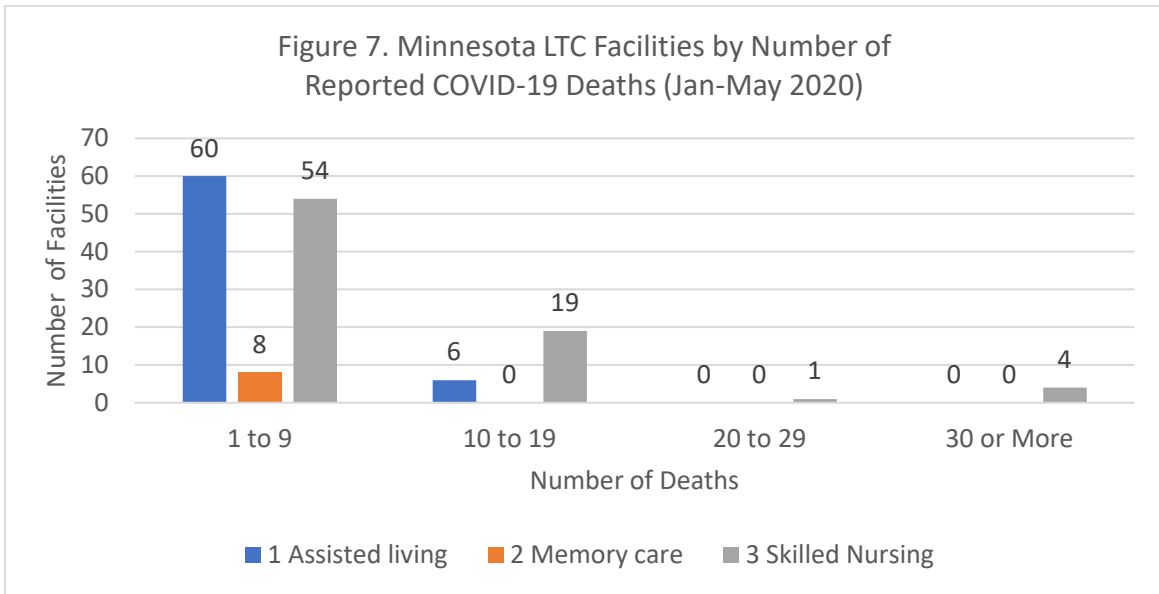
**3.2.3. The number of COVID-19 cases among facility staff was highly correlated with resident cases in long-term care facilities.**

One of the major sources of COVID-19 transmission to facility residents is through the facility staff. A large number of cases, both confirmed and suspected, were reported among the staff of LTC facilities from January through May. Of the 1,449 reported staff cases, 942 were in nursing facilities, 444 in assisted living facilities, and 63 in memory centers. The number of cases among staff in a facility was highly correlated with cases among its residents:  $r=.828$  for nursing facilities,  $r= .750$  for assisted living facilities, and  $r= .578$  for memory centers.

**3.2.4. The distribution of COVID-19 cases and deaths was skewed: some facilities had large numbers, but most facilities had relatively small numbers of cases and deaths.**

A total of 424 long-term care facilities reported one or more resident or staff cases through May 2020. Cases were recorded for 255 out of a total of 356 certified nursing facilities and 154 out of a total of 1,786 licensed assisted living facilities or dementia units. The majority of facilities had only 1 to 9 cases (Figure 6). However, 28 facilities experienced large numbers of cases: 5 with more than 100 cases and 23 with 50-99 cases. A total of 154 long-term care facilities had resident deaths (Figure 7). Deaths were reported in 78 nursing facilities, 66 assisted living facilities, and 8 memory centers. The majority of facilities had 1 to 9 deaths, while 4 facilities, all nursing facilities, had 30 or more deaths.





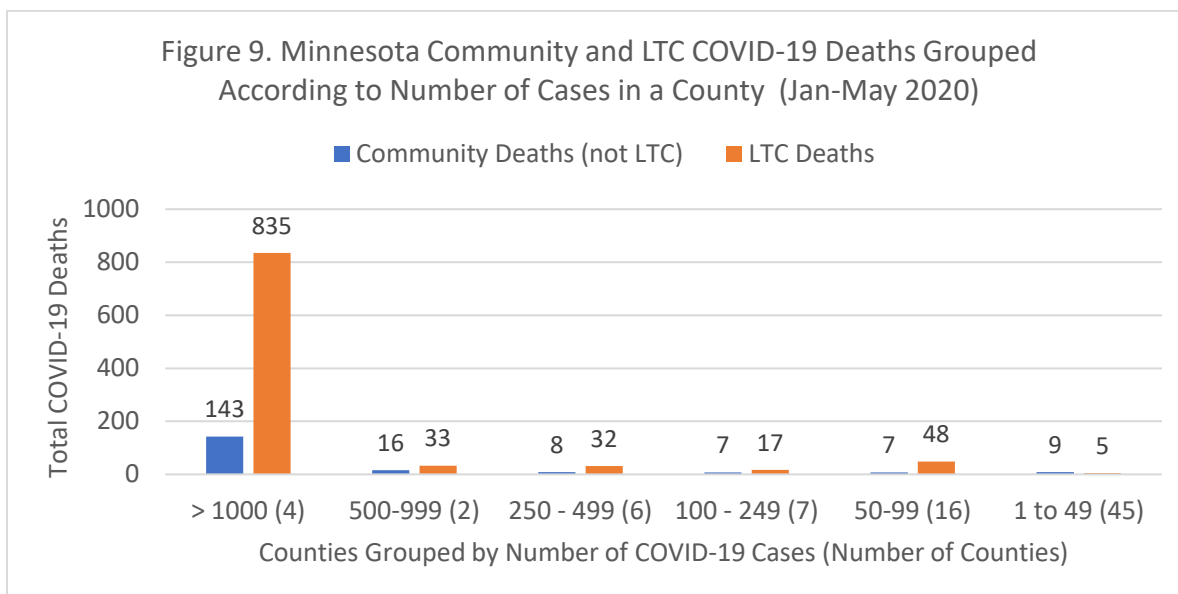
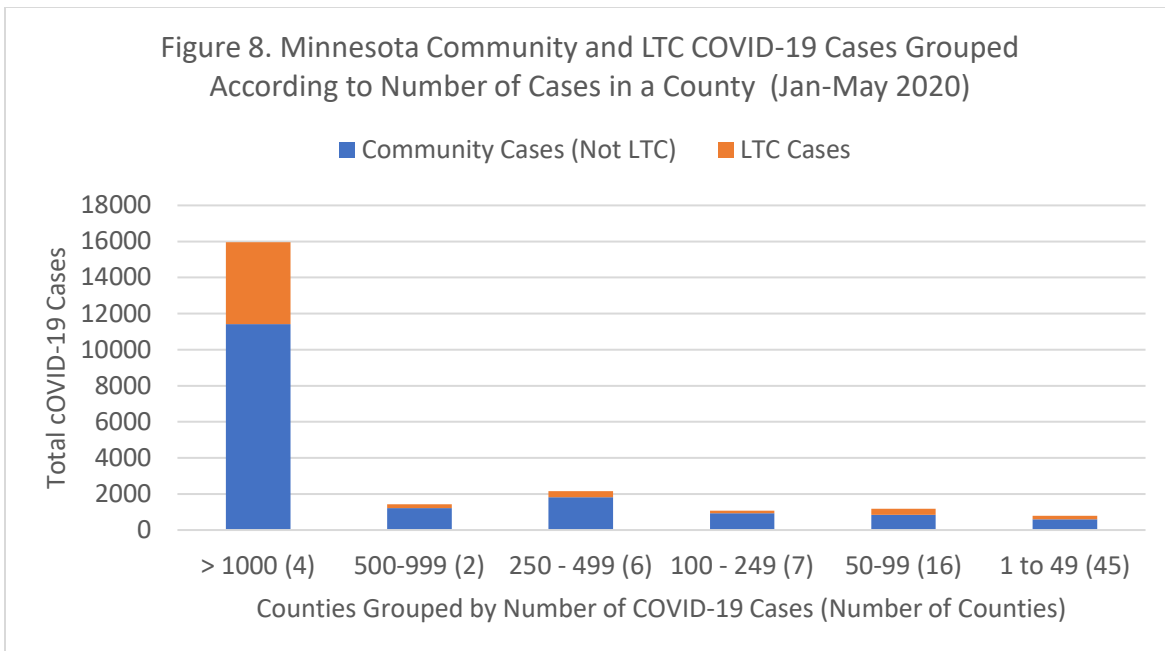
**3.2.5. COVID-19 cases and deaths were concentrated in Twin Cities area, particularly Hennepin, Ramsey and surrounding counties.**

An important factor contributing to COVID-19 outbreaks in LTC facilities is the spread of COVID-19 in the local community. The best available Minnesota data on community cases and deaths are at the county level. Figure 8 shows the number of COVID-19 cases and number of facilities (in parentheses) for counties grouped by their total COVID-19 cases. Figure 9 has the same information for COVID-19 deaths. The top grouping of counties (counties having > 1000 total COVID-19 cases) contains 4 counties with a total of 15,968 cases (11,416 community and 4,452 long-term care) and 978 deaths (143 community and 835 long-term care).

Hennepin County, where Minneapolis is located, had 9,372 of these cases (6,293 community and 3,079 long-term care), and Ramsey County, where St. Paul is located, had 3,507 cases (2,639 community and 868 long-term care). The other two counties, Anoka and Dakota, adjoin Hennepin and Ramsey counties. The next two county groupings (250-999 cases per county) had a combined 8 facilities and 3,592 cases (3,037 community and 555 long-term care) and 89 deaths (24 community and 65 long-term care). Five of these counties were in the Minneapolis/St. Paul metropolitan area. The bottom grouping (1-49 cases) had 45 facilities with only 794 cases (594 community and 200 long-term) and 14 deaths (9 community and 5 long-term care).

Six mainly rural counties containing 7,205 cases (excluded from Figures 9 and 10) had large numbers of community cases but relatively few long-term care cases. These counties had major COVID-19 outbreaks centered in a large prison (Rice County) and meat processing plants (Todd, Stearns, Nobles, Kandiyohi and Mower counties). Thirteen of the 32 long-term care facilities in these counties had a total of 69 resident cases, and 5 facilities had a total of 9 deaths.

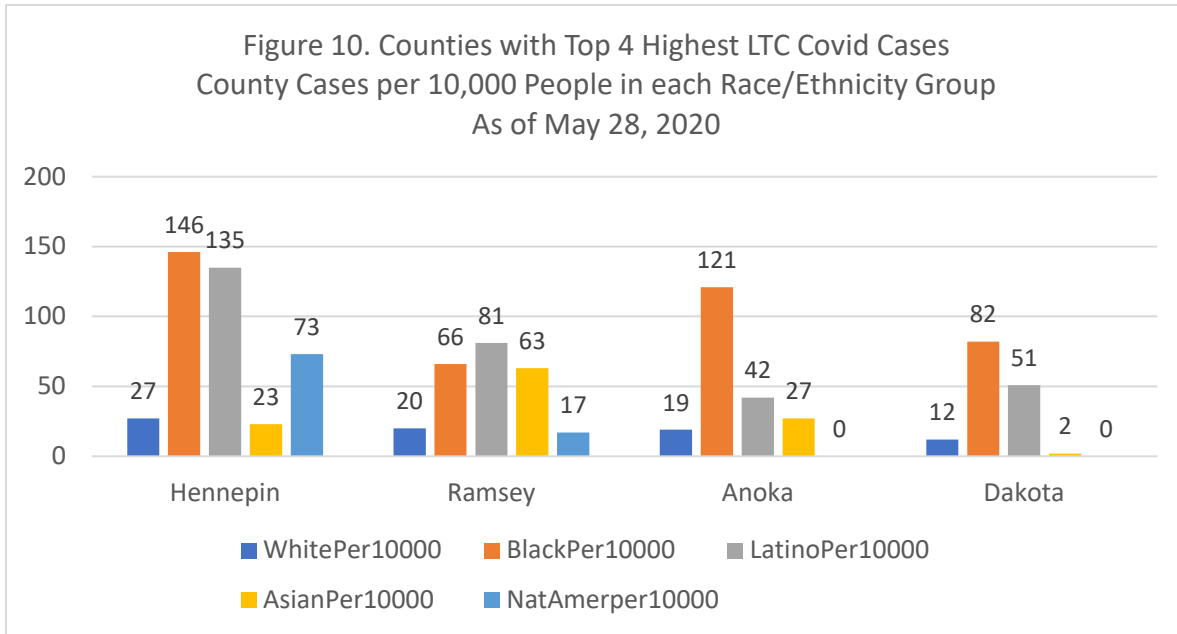




**3.2.6. Racial and ethnic minorities in Twin City counties had dramatically higher rates of COVID-19 cases than did whites.**

The four counties in Twin Cities (Hennepin, Ramsey, Anoka, and Dakota) had both the largest number of COVID-19 cases and the largest minority population in the state. Using data published in the NY Times on COVID-19 cases for racial/ethnic groups in selected counties nationally <sup>8</sup>, we created data tables for Minnesota counties with numbers of COVID-19 cases and rates for Whites, Blacks, Latino, Asian, and Native American. Figure 10 presents COVID-19 case prevalence per 10,000 population for the four Twin Cities counties. These figures are

striking. In Hennepin County, which has the largest number of cases and minority group members, COVID-19 prevalence was more than 5 times higher for Black/African Americans and more than 4 times higher for Latinos than for Whites. The rates were also dramatically higher in the other 3 counties, particularly for Black/African Americans.



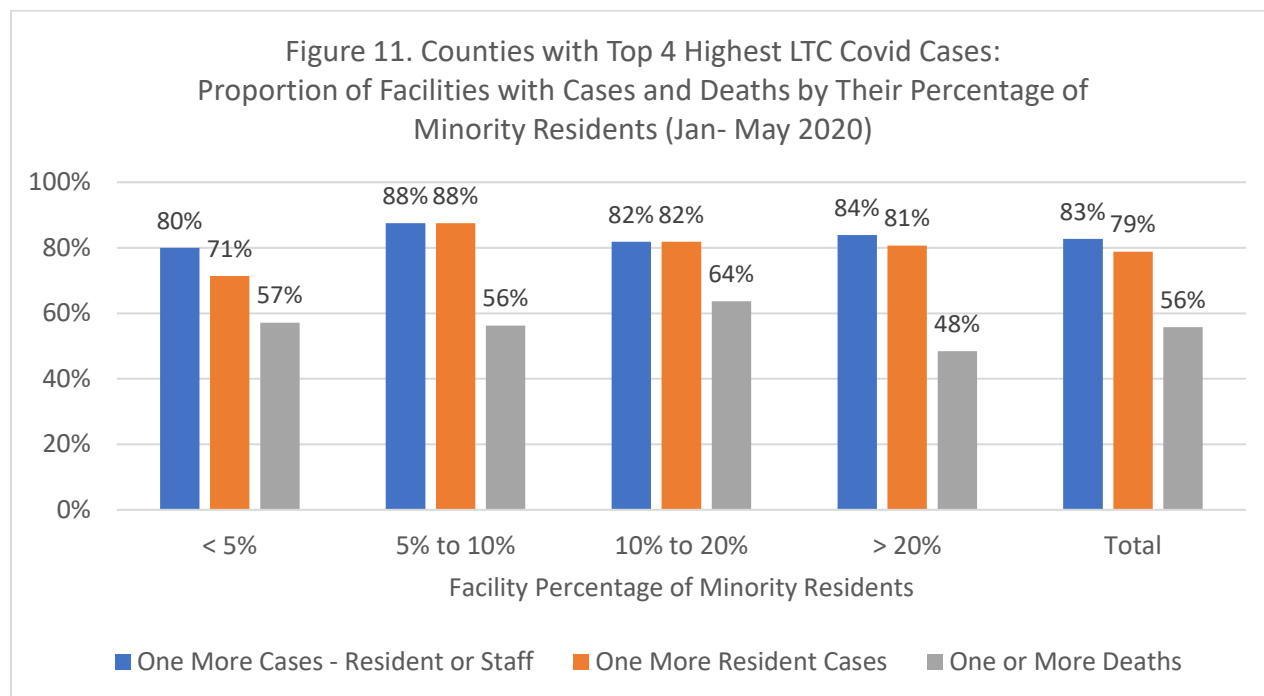
**3.2.7. Prevalence of COVID-19 cases and deaths in Twin City nursing facilities did not differ by their percentage of minority group residents.**

The NY Times reported nationally that nursing facilities with a “significant number” of Black and Latino residents, were twice as likely to be hit by the coronavirus as those where the population was “overwhelmingly” white.<sup>9</sup> We wanted to see if this pattern held in Minnesota. We estimated prevalence of COVID-19 cases and deaths for minority group residents (either Black/African American, Asian/Pacific Islander, Hispanic, American Indian, or multiple races) compared to whites. Rates were calculated according to the average daily resident census for whites and minority group members. Because of their large minority populations, we focused the analysis on nursing facilities in the four Twin City counties - Hennepin, Ramsey, Anoka, and Dakota. The four counties contained 35 nursing facilities with fewer than 5% minority residents, 16 facilities with 5%-10% minority residents, 22 facilities with 10%-20% minority residents, and 31 facilities with more than 20% minority residents.

Figure 11 displays the proportion of nursing facilities in the four Twin City counties having any COVID-19 cases (resident or staff), one or more resident cases, and one or more resident deaths. When comparing the facilities in these counties, grouped according to percentage of minority group residents, we found no statistically significant difference between groupings in the proportion of facilities having a COVID-19 case or death. In a further state-wide analysis, taking into account facility clustering within counties, we found no statistically significant

relationship between a facility’s percentage of minority group residents and presence of COVID-19 cases or deaths. In an additional analysis, we examined the rates of cases or deaths for the subgroup of facilities with one or more cases. We found no significant differences between a facility’s percentage of minority group residents and the number of COVID-19 cases or deaths. Results of these analyses are available from the author on request.

As a note of caution, these analyses were at the facility level. We had no data on resident-level COVID-19 cases or deaths within nursing facilities. Therefore, we cannot draw conclusions about the risk of individual minority group residents either contracting COVID-19 or dying from the disease.



### 3.3. Population level measures to contain spread of COVID-19

#### 3.3.1. Executive Orders.

The Governor of Minnesota issued a series of Emergency Executive Orders beginning with a Peacetime Emergency Declaration on March 13, closure of public accommodations on March 16, and a stay-at-home order on March 25. The Executive Order for re-opening the economy was issued on May 13 and the re-opening is still in process. Other Executive Orders dealt with economic relief, consumer and worker protection, education, healthcare services and supplies, and healthcare workforce.<sup>10</sup>

#### 3.3.2. Public Reporting.

The Minnesota Department of Health maintains a comprehensive public reporting system that has daily updates on COVID-19 cases and mortality.<sup>7</sup> This site has tables and graphs showing

testing, cumulative cases and deaths, hospitalizations, case demographics, race/ethnicity, and geographic location. In addition, the state has a web site, Minnesota Response to COVID-19, containing information on testing and safe practices; links to COVID-19 resources for the public, businesses and organizations; and the “opening” status of workplace settings, social settings, and school settings.

## **4. Brief background to the long-term care system**

### **4.1.1. Long-Term Care Expenditures and Care Quality.**

The state’s percentage of Medicaid expenditure for long-term services and supports (LTSS) has been shifting steadily away from institutions and into home and community-based services (HCBS). In 2017 about three-fourths of the Medicaid LTSS expenditure was for HCBS <sup>11</sup>. However, most of the HCBS expenditures were for younger, disabled persons. Expenditures for nursing facilities comprised about 17% of the Medicaid LTSS budget, while elderly HCBS services comprised about 8% of the budget. In the last decade, Minnesota has consistently ranked as one of the top 2 states overall in AARP’s LTSS State Report Card <sup>12</sup>. It has been in the top quartile in categories of Affordability and Access, Choice of LTC Setting and Provider, and Quality of Life and Quality of Care.

### **4.1.2. Nursing Facilities.**

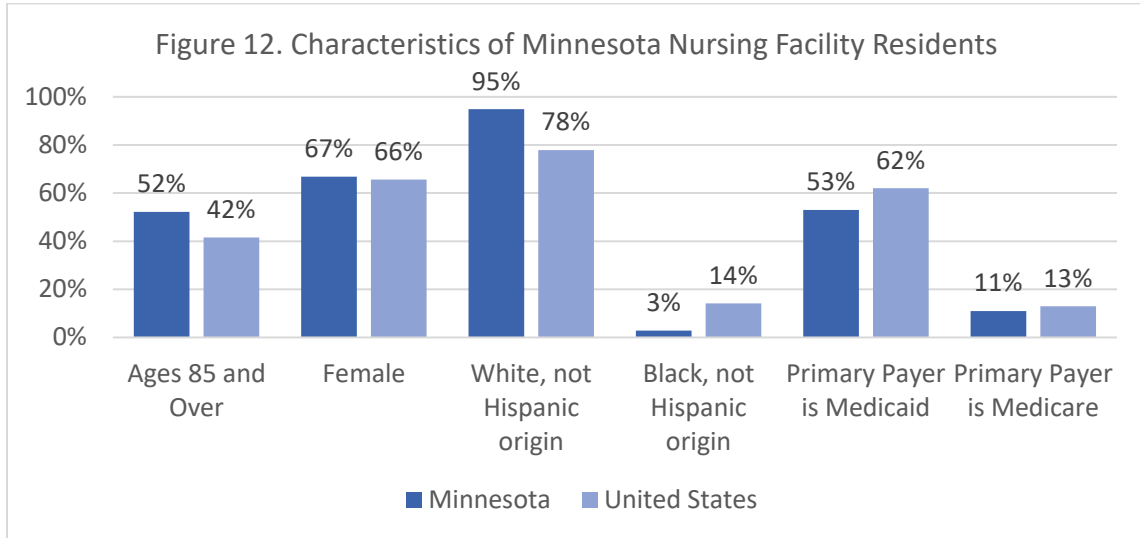
Minnesota has 368 nursing facilities, 35% of which are located in the Twin Cities, 30% in other metropolitan areas, 27% in micropolitan or small towns, and 8% in areas classified as rural. Unlike most other US states where the majority of facilities are for-profit, 60% of Minnesota’s nursing facilities are non-profit, 32% are for-profit, and 8% are governmental. In 2019, facilities averaged 67 residents per day and average occupancy (residents/beds) of 85%. The number of residents per day and occupancy rates have dropped by 5% over the last 5 years. Medicaid was the primary payer for 57% of resident days, 9% were Medicare, 25% were private pay, and 10% were other pay sources. Minnesota also differs from other US states, as it has a rate equalization policy that requires nursing facilities to charge the same daily rate (acuity-adjusted) to both privately paying and Medicaid residents <sup>13</sup>.

### **4.1.3. Transitions Between Nursing Facility, Hospital, and Community Settings.**

Minnesota nursing facilities have a considerable number of transfers between nursing facility, hospital and the community. The daily average number of Minnesota nursing facility residents in 2019 was 24,755. However, the number of individuals residing in a nursing facility at any time during the year was far greater. There were 63,433 new admissions to nursing facilities which included 40,974 first-time admissions and 22,459 individuals having a previous nursing facility stay in the prior 2 years. Eighty-eight percent of new admissions came from acute care hospitals, and the majority of these admissions were in a community setting before entering the hospital. Of the 63,683 permanent discharges during the year, 53% returned to the community, 27% died either in the facility or an acute care setting, and the remainder transferred to another facility.

#### 4.1.4. Nursing Facility Resident Characteristics.

Characteristics of nursing facility residents in Minnesota differ from national averages in important respects (Figure 1). Minnesota nursing facility residents tend to be older (52% vs. 42% age 85 or older), predominately white (95% vs. 78%), and less likely to have Medicaid as a primary payment source (53% vs. 62%)<sup>14</sup>. No comparable figures are available for assisted living or other long-term care facilities for older people.



#### 4.1.5. Assisted living Facilities.

Minnesota has a large number of assisted living facilities, which provide housing and certain supportive services, such as meals, laundry, housekeeping, and arranging for medical services, social services, or transportation. Some facilities specialize in dementia care. They may be referred to as memory centers, or they may have a dementia unit within the assisted living facility. In contrast to nursing facilities, assisted living facilities are not required to provide 24-hour nursing care. Compared to nursing facilities, assisted living facilities have less stringent licensing requirements, they are subject to few regulations, and they are populated by a wide range of income groups. Less information is publicly available on their residents or services.

#### 4.1.6. Home and Community-Based Services

Minnesota offers a rich array of home and community-based services to both old and younger people who meet financial eligibility guidelines. Services include home nursing care, personal care, adult day care, homemaking and chore assistance, transportation and care management.

### 4.2. Minnesota’s Strategy to Address COVID-19.

The Minnesota Department of Health (MDH) has taken the lead in Minnesota in developing and implementing mitigation strategies against COVID-19 in long-term care facilities. Although many components of the strategy were in place earlier, on May 5 the Commissioner of MDH released a formal document outlining a Five-Point Battle Plan for combatting COVID-19 in nursing homes and other long-term care facilities<sup>15</sup>.

The goals of the MDH Battle Plan are to preserve hospital bed capacity by ensuring long-term care facilities can safely accept and care for residents who don't need to be in the hospital; reduce COVID-19 transmission among residents and staff; quickly identifying facilities needing special support; and help facilities plan for and manage COVID-19 infections.

#### *Five-Point Battle Plan*

1. Expand testing for residents and workers in long-term care facilities  
Issue new guidance on testing, screening and monitoring, with requirements for long-term care facilities to:
  - Institute consistent “active screening” practices for residents and staff
  - Expand testing to all symptomatic residents and staff, as well as facility-wide testing when a case is confirmed or when multiple people develop symptoms
  - Continue routine testing of residents/staff meeting specific risk criteria
  - Amplify, expand, and accelerate work on facilities’ action plans for COVID- 19 cases among residents or staff, including steps for dealing with many cases
  - Continue to ensure staff are trained on proper use of masks and other protective equipment
2. Provide testing support and troubleshooting to clear barriers faster
  - Work with health systems to create “strike teams” that quickly conduct on-site testing and necessary follow-up
  - Coordinate with regional health care coalitions for immediate response and resources
  - Coordinate with Testing Command Center to ensure testing supplies move efficiently where they are needed
3. Get personal protective equipment to facilities when needed
  - Maintain state-managed cache of masks and other personal protective equipment for emergency use when a facility exhausts its supplies and is unable to restock
  - Push out needed equipment for facilities facing outbreaks and make it available to other facilities based on availability
4. Ensure adequate staffing levels for even the hardest-hit facilities  
Use the right mix of strategies to get staffing support to facilities in crisis. This may include:
  - Establishing a fund and contracts to support “bridge staffing teams” of health care workers to provide temporary staffing
  - Aggressively advocating for increased state and federal resources
  - Activating the Minnesota National Guard
  - Using databases to “call out” healthcare workers that can take on-call shifts
  - Using incentives to encourage health care systems to provide crisis staffing to facilities
5. Leverage our partnerships to better apply their skills and talents
  - Partner with local public health to coordinate support and provide on-site technical assistance for facilities
  - Launch a new case management model at facilities, leveraging local public health and regional coalitions to provide guidance, monitoring, and support

- Make sure that facilities maintain strong preparedness plans, including plans to reduce disease transmission and limit exposure risks
- Require facility commitment to reduce transmission by excluding ill workers and those testing positive, and by excluding workers with unprotected exposure

The Battle Plan’s metrics for success include: maintenance of low numbers of positive cases after an outbreak begins; reduction in the proportion of positive tests in LTC; onsite infection prevention support provided to LTCs with even one COVID-19 case; all skilled nursing facilities having updated preparedness plans for COVID-19; all facilities are able to access staffing support without unnecessarily transferring residents to other sites for care; and a decrease in regulatory infection control citations below pre-pandemic level.

### **4.3. Helping Long-Term Care Facilities Prevent and Address COVID-19**

The MDH, in collaboration with long-term care facilities, has taken many concrete steps to implement the mitigation strategy. These steps have included outreach and education, case managers assigned to facilities with COVID-9 cases, response guidance, and investigations <sup>16</sup>.

#### **4.3.1. Outreach/Education.**

Since March 4, MDH has held weekly calls with long-term care facilities and provider organizations. Calls have relayed up-to-date information about the outbreak and guidance from MDH or CDC. Calls have averaged more than 1,500 participants.

#### **4.3.2. MDH Case Managers.**

Each facility that has an outbreak is assigned an MDH case manager that works with the facility daily. The case manager helps the facility implement MDH and CDC (see below) guidance with facility requirements and needs, and to reach out to MDH or State Emergency Operations Center (SEOC) depending on problems/needs. The case manager also assists facilities with the safe transfer of patients with COVID-19 to their facility, or the transfer of a resident from a facility with an ongoing COVID-19 outbreak to a facility without an outbreak.

#### **4.3.3. Response Guidance.**

To ensure the facilities have the tools and resources they need to safely care for residents, the MDH has developed a COVID-19 Toolkit with guidelines for resident, healthcare personnel, staff contact tracing and exposure risk assessment <sup>17</sup>. The Toolkit and associated documents cover areas such as:

- Isolation or cohorting of ill residents and quarantine for exposed residents
- Precautions and types of personal protective equipment
- Visitor restrictions and canceled activities
- Disinfection and cleaning
- Virtual facility infection control assessment by infection prevention team
- Monitoring tools for health care workers to look for COVID-19 symptoms.

#### **4.3.4. Investigations.**

Upon notification of confirmed COVID-19 in an LTC setting, MDH initiates an investigation. The investigation includes: initial calls with facility administrators and clinical staff and MDH surveillance; infection prevention; healthcare worker exposure workgroups; and case interview and contact tracing to identify exposed residents and healthcare staff.

#### **4.3.5. Regulatory Action.**

Between March 24 and June 2, the MDH's Division of Licensure and Certification conducted or had underway 430 nursing facility surveys focused on infection control or stand-alone complaints<sup>18</sup>. Thirty-nine percent of these surveys resulted in findings that the facility was not in compliance with infection prevention and control practices required by the CMS. The facilities were issued 163 deficiency citations for infection control, each of which necessitated corrective action by the facility.

#### **4.3.6. Testing.**

The MDH Tool Kit, released in May, offered guidance for a point-prevalence survey, followed by re-surveys at 7 and 14 days. This testing process is directed to facilities with one or more COVID-19 positive test or symptoms among residents or staff<sup>17</sup>. Facilities receive support in testing from MDH if they have a positive or symptomatic COVID-19 case (resident or staff), have had an infection-related deficiency, or are considered high risk by the MDH case manager. Most facilities have arranged on their own for testing of residents and staff. The state has also offered testing carried out by Minnesota National Guard troops. The MDH reported on June 5 that cumulatively 25,928 tests had been performed (14,237 staff, 10,223 residents, and 1,468 unknown) in 189 facilities<sup>18</sup>. Nearly all (99%) of Minnesota's nursing facilities reported having access to resident testing in the facility according to the CMS/CDC COVID-19 data system through June 14<sup>19</sup>.

In order to expand testing capacity, the MDH is establishing contracts with health systems to deploy a swabbing team to perform tests in congregate facilities in each region of the state. Health system teams or facilities testing on their own can use the laboratory capacity at the University of Minnesota and Mayo Clinic for analyzing samples. Testing costs not covered by Medicare or private insurance will be covered by the state<sup>18</sup>.

#### **4.3.7. Cohorting, Personal Protective Equipment (PPE) and Infection Control.**

The MDH Toolkit offers guidance on dealing with COVID-19-positive residents. It recommends grouping of residents, or "cohorting," to separate COVID-19-positive residents from residents who are not affected<sup>17</sup>. The facility should dedicate a unit or part of a unit as the care location for residents with COVID-19. Examples include a block of rooms at the end of a hallway, separate wing, or separate floor. The unit should be closed off to prevent spread of the virus from ill residents to non-ill residents. Symptomatic residents and exposed roommates should be confined largely to their rooms. The unit should include dedicated equipment and controlled air flow. Staff working on a COVID-19 unit should not be assigned to work in other areas of the facility, if at all possible. If feasible, the facility should also establish an observation area for new admissions and readmissions with unknown COVID-19 status.



Following the Toolkit guidelines, all staff members caring for residents diagnosed, suspected or under observation for COVID-19 should wear personal protective equipment (e.g., facemask, eye protection, gown, and gloves). Similarly, residents should wear PPE if they come in contact with residents having or suspected of having COVID-19. The MDH provides standards for different types of PPE <sup>17</sup>. By June 3 the MDH had fulfilled 868 requests for PPE from long-term care facilities <sup>18</sup>. Items included 126,000 cloth masks, 605,000 face masks, 10,000 face shields or eye protectors, 3.4 million gloves, and 100,000 gowns, and 108,000 N95 or similar respirators. Nonetheless, as late as the middle of June, almost a fourth (24%) of Minnesota nursing facilities reported having less than a week's supply of one or more PPE items <sup>19</sup>. The percentage of nursing facilities with a week's supply was: 84% for N95 masks, 95% for surgical masks, 94% for eye protection, 89% for gloves, 89% for gowns, 94% for hand sanitizer.

#### **4.3.8. Managing staff availability.**

The MDH and the Minnesota Department of Human Services (MDHS) has attempted to shore up nursing facility staff, while at the same time screening for COVID-19 and making sure staff with a positive test or symptoms did not work in the facility. Most of the support has come from the lifting of regulatory requirements and emergency relief payments. The CMS issued temporary regulatory waivers and new rules at the end of April that gave physicians the ability to delegate tasks and allow for physician visits by physician assistants, nurse practitioners, or clinical nurse specialists; waived training and certification requirements for nursing assistants under certain circumstances; and allowed physician visits be made via telehealth <sup>20</sup>. Earlier in April, a Minnesota Governor's Emergency Executive Order expanded the flexibility of nursing facilities to employ supplemental nursing services agency staff (pool staff), including staff from other health care settings <sup>21</sup>. Despite these efforts, on June 14, 26% of Minnesota's nursing facilities reported a shortage of nursing staff, 3% a shortage of clinical staff, 29% a shortage of aides, and 16% a shortage of other staff <sup>19</sup>.

#### **4.3.9. Resident Life.**

COVID-19's biggest impact on resident life is probably restrictions on visitors that have been imposed by Federal and state guidelines. At the end of March, visitors and volunteers, including family members and friends, were not allowed to visit residents of long-term care facilities except under compassionate care such as end-of-life situations <sup>22</sup>. In addition, residents were not allowed to leave the facility except for essential outings such as chemotherapy, dialysis, or emergency medical appointments, or to pick up a prescription at the pharmacy. Residents were allowed to have a camera placed in their rooms. On June 16, restrictions were eased somewhat with allowances for window visits, including open windows when both parties wear masks. Then on June 19, restrictions were further eased by allowing supervised outdoor visits in designated areas with social distancing and each individual wearing a mask. On June 6, beauty shop services also resumed under controlled conditions <sup>23</sup>.

### **4.4. Financial Support**

The state and Federal governments provided payments to nursing homes and other long-term care facilities for emergency expenses incurred because of COVID-19. Minnesota's COVID-19

payment programs were administered by the Minnesota Department of Human Services (MDHS) and MDH <sup>17</sup>.

#### **4.4.1. Reimbursement for COVID-19 Nursing Facility Expenses.**

Expedited reimbursement for costs related to COVID-19 have been made available to licensed Medicaid nursing facility providers for incremental increases in costs for staffing, PPE, and other necessary supplies because of COVID-19. Expenses had to be incurred on or after March 13. The reimbursement is for additional reasonable staffing costs to properly care for the residents during the COVID-19 national emergency declaration. They may include an increase in staff hours, staff wages, over-time pay, and sick leave.

#### **4.4.2. COVID-19 Communicative Technology Grants for Virtual Social and Telehealth Visits.**

Medicaid-certified nursing facilities are eligible to receive up to \$3,000 in Civil Money Penalty (CMP) funds to purchase communication technology. This technology is intended to enable residents to conduct “virtual” visits with family and friends and to participate in telehealth visits. This program was initiated in response to the restrictions placed on visitors to nursing homes, in order to prevent the spread of COVID-19. These funds may be used by nursing facilities to purchase tablets, iPads, and similar devices, as well as some types of accessories <sup>24</sup>.

#### **4.4.3. Minnesota Department of Health COVID-19 Health Care Response Grant.**

The state appropriated \$150 million for health care response expenses by health and long-term care facilities through a rolling program of competitive grants. By the end of May, 162 assisted living facilities had received \$9.6 million out of a total of \$97 million awarded <sup>25</sup>.

#### **4.4.4. CARES Act Provider Relief Fund.**

Almost all nursing facilities in Minnesota also received funds under the Federal government’s CARES Act through Provider Relief Fund and expansion of the Accelerated and Advance Payment Program. <sup>17</sup>.

## **5. Lessons learned so far**

### **5.1. Progress to Date**

Minnesota has made substantial progress in its response to COVID-19 in nursing homes and other long-term care facilities. Facilities appear to be far better prepared now to address the pandemic than they were in March when it began. Due in large part to tragic news stories, the public and state officials have become aware of toll that COVID-19 has taken on long-term care facility residents. The Minnesota Department of Health has developed and at least partially implemented a strategic plan, including its Five-Point Battle Plan, for COVID-19 prevention and support of long-term care facilities. The Minnesota Department of Human Services has channelled financial resources into nursing facilities to cover their staffing and other emergency costs due to the COVID-19. Faced with another surge in COVID-19 this fall and winter, facilities should be in a much better position to protect their residents. Despite progress in combatting COVID-19, Minnesota faces continued challenges.

## 5.2. Short-term calls for action -- policy and programmatic challenges

- Ensuring access to personal protective equipment and infection control support for staff and residents. As recently as mid-June a small but significant number of long-term care facilities reported an inadequate supply of PPE.
- Expanded and reliable testing. COVID-19 testing, although generally available to facilities, is prioritized for situations where a facility has a documented or suspected case. This strategy may be ineffective in preventing the introduction of COVID-19 cases by individuals who are asymptomatic or pre-symptomatic.
- Balancing social distancing policies with patient rights and family visitation. The extended period of physical and social isolation of nursing home residents is taking a psychological toll on residents and family members. Communication devices and opening up for supervised outdoor visits is probably helping with this situation. More might be done with comprehensive resident and family member testing or dedicated indoor spaces for visits.
- Returning to “normal” once the COVID-19 pandemic subsides. A one-time infusion of financial or other resources by the state may be accompanied by problems in winding down and return to an earlier resource level. COVID-19 related resource needs may continue beyond the point that the epidemic, itself, is under control.
- Reinstating and perhaps strengthening regulatory standards. The lifting of regulations on nursing staff, particularly greater flexibility to employ pool staff and waiver of training and certification requirements for nursing assistants, was intended to be temporary in order to deal with COVID-19. These regulations need to be reinstated when feasible. These regulations promote care quality by ensuring proper training of direct care staff and providing for a permanent, stable workforce.

## 5.3. Longer term policy implications - structural challenges

- Addressing ongoing staffing challenges. Long-term care facilities will probably continue to experience chronic staffing shortages and instability due to historically low wages, inadequate sick leave or health insurance, and unfavorable working conditions. Fear of infection may discourage workers from taking jobs in nursing or other long-term care facilities.
- Eliminating racial disparities. Rates of COVID-19 are dramatically higher among minority groups in the Twin Cities and other parts of the state. Although we found no evidence that facilities serving a higher percentage of racial or ethnic minorities had higher COVID-19 cases or deaths, this issue warrants further study with more recent, resident-specific data.
- Achieving financial stability. The long-term care system is likely to experience financial instability from occupancy declines combined with strained Medicaid budgets. Utilization of nursing and other long-term care facilities could decline, at least in the short run, because of higher resident mortality; fear of entering a facility; fewer hospital discharges for post-acute care; and inability to hire and retain staff. At the same time, reimbursement rates by Medicaid or other pay sources may remain flat or decline because of strains on state budgets.

- Mitigating against indirect COVID-19 effects. Much of the effort to deal with COVID-19 has focused on direct effects, such as COVID-19 incidence, hospitalizations, and death. Yet, COVID-19 can have substantial indirect effects in exacerbating other pre-existing health conditions or leaving the surviving individual with ongoing health problems. Other negative effects can come from delays in care, psychological distress, or breakdowns in care quality as facilities respond to the pandemic. An important component of a strategy toward COVID-19 (or other future epidemic) is addressing its full range of effects.
- Improving care quality. A facility's effectiveness in dealing with COVID-19 will likely be influenced overall care quality and it will depend in part on the facility's history of care quality, expenditure patterns, acuity, and profit/non-profit status.
- Enhancing facility capacity to deal with high acuity residents. Nursing facilities are being called upon increasingly for provision of post-acute care. Yet, greater resident acuity in nursing facilities has not been accompanied by enhanced skilled nursing and medical care capacity.
- Greater integration between the acute and long-term care systems. Infection control and management of COVID-19 and other conditions require active involvement of medical providers (medical directors, community physicians, and nurse practitioners). Similarly, stronger relationships with hospitals necessary to improve care transitions.

## 6. References

1. U.S. Census Bureau: Population Division. *Annual Estimates of the Resident Population for Selected Age Groups by Sex for Minnesota: April 1, 2010 to July 1, 2019* June 2020 2020.
2. International Long Term Care Policy Network. LTC Responses to COVID-19. <https://ltccovid.org>. Published 2020. Accessed July 18 2020.
3. New York Times. More Than 40% of U.S. Coronavirus Deaths Are Linked to Nursing Homes. <https://www.nytimes.com/interactive/2020/us/coronavirus-nursing-homes.html>. Published 2020. Accessed July 16 2020.
4. New York Times. Grave Shortages of Protective Gear Flare Again as Covid Cases Surge. <https://www.nytimes.com/2020/07/08/health/coronavirus-masks-ppe-doc.html>. Published 2020. Accessed July 16 2020.
5. Centers for Disease Control and Prevention. National Healthcare Safety Network: LTCF COVID-19 Module. <https://www.cdc.gov/nhsn/ltc/covid19/index.html>. Published 2020. Accessed July 12 2020.
6. New York Times. Minnesota Coronavirus Map and Case Count. <https://www.nytimes.com/interactive/2020/us/minnesota-coronavirus-cases.html#cases>. Published 2020. Accessed July 12 2020.
7. Minnesota Department of Health. Situation Update for COVID-19. <https://www.health.state.mn.us/diseases/coronavirus/situation.html>. Published 2020. Accessed July 12 2020.
8. New York Times. The Fullest Look Yet at the Racial Inequity of Coronavirus. <https://www.nytimes.com/interactive/2020/07/05/us/coronavirus-latinos-african->

- [americans-cdc-data.html?action=click&module=Top%20Stories&pgtype=Homepage](#).  
Published 2020. Accessed July 5 2020.
9. New York Times. The Striking Racial Divide in How Covid-19 Has Hit Nursing Homes. <https://www.nytimes.com/article/coronavirus-nursing-homes-racial-disparity.html>.  
Published 2020. Accessed July 7 2020.
  10. Minnesota Legislative Reference Library. Executive Orders 1967 to Present. <https://www.leg.state.mn.us/lrl/execorders/eoresults?gov=all>. Published 2020.  
Accessed July 25 2020.
  11. Minnesota Department of Human Services. *Legislative Report: Status of Long-Term Services and Supports*. Saint Paul MN August 2017 2017.
  12. Reinhard SC, Accius J, Houser A, Ujvari K, Alexis J, Fox-Grage W. Picking Up the Pace of Change, 2017: A State Scorecard on Long-Term Services and Supports for Older Adults, People with Physical Disabilities, and Family Caregivers. <http://www.longtermscorecard.org/2017-scorecard>. Published 2017. Accessed.
  13. Arling G, Hass Z, Woodhouse M. *Evaluation of the NF Payment Reform Legislation: Background for the 2019 Report to the Legislature*. Purdue University School of Nursing; January 2019 2019.
  14. Kaiser Family Foundation. State Health Facts. <https://www.kff.org/statedata/>. Published 2020. Accessed July 12, 2020.
  15. Minnesota Department of Health. Minnesota's Five-Point Battle Plan to Protect our Most Vulnerable. <https://www.health.state.mn.us/diseases/coronavirus/hcp/lcplan.pdf>. Published 2020.  
Accessed July 12 2020.
  16. Minnesota Department of Health. Helping Long-Term Care Facilities Prevent and Address COVID-19. <https://www.health.state.mn.us/diseases/coronavirus/hcp/helpptc.pdf>. Published 2020.  
Accessed July 12 2020.
  17. Minnesota Department of Health. COVID-19 Toolkit for Nursing Facilities. <https://www.health.state.mn.us/diseases/coronavirus/hcp/lctoolkit.pdf>. Published 2020. Accessed July 12 2020.
  18. Minnesota Department of Health. COVID-19 Report to the Legislature (Letter to Senator Karin Housley), June 5, 2020. <https://www.documentcloud.org/documents/6938319-060520-Sen-Housley-Response-Letter-FINAL.html>. Published 2020. Accessed June 12 2020.
  19. Centers for Medicare and Medicaid Services. COVID-19 Nursing Home Data. <https://data.cms.gov/stories/s/COVID-19-Nursing-Home-Data/bkwz-xpvg>. Published 2020. Accessed July 12 2020.
  20. Centers for Medicare and Medicaid Services. Long Term Care Facilities (Skilled Nursing Facilities and/or Nursing Facilities): CMS Flexibilities to Fight COVID-19. <https://www.cms.gov/files/document/covid-long-term-care-facilities.pdf>. Published 2020. Accessed July 12 2020.
  21. Minnesota Department of Health. Supplemental Nursing Services Agency Waiver. <https://www.health.state.mn.us/facilities/regulation/snsa/docs/snsawaiver.pdf>.  
Published 2020. Accessed July 12 2020.

22. Minnesota Department of Health. COVID-19: Visitation Restriction Guidance for Residential Care Facilities in Minnesota. <https://www.health.state.mn.us/diseases/coronavirus/hcp/lcvisitors.pdf>. Published 2020. Accessed July 12 2020.
23. Minnesota Department of Health. Beauty Shop Guidance for Long-term Care Facilities. <https://www.health.state.mn.us/diseases/coronavirus/hcp/lcbeauty.pdf>. Published 2020. Accessed July 12 2020.
24. Minnesota Department of Human Services. CMP Application for Communicative Technology Requests Frequently Asked Questions (FAQs) for State Medicaid Agencies. [https://mn.gov/dhs/assets/COVID-19-Application-FAQ-final-508\\_20200416\\_tcm1053-430718.pdf](https://mn.gov/dhs/assets/COVID-19-Application-FAQ-final-508_20200416_tcm1053-430718.pdf). Published 2020. Accessed July 12 2020.
25. Minnesota Department of Health. COVID-19 Health Facilities Response Grant. <https://www.health.state.mn.us/facilities/ruralhealth/funding/grants/covidlong.html>. Published 2020. Accessed July 12 2020.

## **ANNEX 1.**

### **7. Data Sources for Minnesota COVID-19 Cases and Deaths, Overall and in Long-Term Care Facilities**

#### **7.1. Publicly Available Data**

Minnesota Department of Health maintains a comprehensive public reporting system that has daily updates on COVID-19 cases and mortality<sup>7</sup>. This site has tables and graphs showing testing, cumulative cases and deaths, hospitalizations, case demographics, race/ethnicity, and geographic location. The site contains a list of long-term care facilities with one or more resident or staff cases.

The only facility-specific information on number of COVID-19 cases and deaths was released by MDH on June 7 in response to an inquiry by a Legislative Committee<sup>18</sup>. The MDH has not updated figures on long-term care COVID-19 cases and deaths since May. Although the MDH provides information over time on the cumulative number of cases and deaths overall, no information is available longitudinally on cases or deaths in long-term care facilities. The MDH is the only potential public source of information on cases and deaths in assisted living facilities. The absence of this information makes it difficult to evaluate the level of success in containing the spread of COVID-19 or reducing fatality in long-term care facilities.

The CMS and CDC in late May launched the National Healthcare Safety Network (NHSN), which includes a national nursing facility COVID-19 tracking system<sup>5</sup>. The CMS is requiring nursing facilities to report confirmed or suspected cases and deaths among residents or staff to the CDC, health department, families or legal representatives. Nursing homes must inform residents and their representatives within 12 hours of the occurrence of a single confirmed infection of COVID-19, or three or more residents or staff with new-onset of respiratory symptoms, that occur within 72 hours. Also, updates to residents and their representatives must be provided weekly, or each subsequent time a confirmed infection of COVID-19 is

identified and/or whenever three or more residents or staff with new onset of respiratory symptoms occurs within 72 hours. Facilities must include information on mitigating actions implemented to prevent or reduce the risk of transmission, including if normal operations in the nursing home will be altered.

## **7.2. Data for this Report**

Much of our analysis is based on data provided by the MDH to the Minnesota Legislature on June 5<sup>18</sup>. The MDH Commissioner released figures on the number of COVID-19 cases and deaths in Minnesota's nursing facilities, assisted living facilities and memory centers. Deaths were reported according to where individuals resided when they died and not where the death occurred. Therefore COVID-19 deaths among long-term care residents included deaths occurring hospitals, as well as in the facilities.

We merged Minnesota MDH nursing facility data with the nursing facility data collected through the Center for Disease Control's National Healthcare Safety Net (NHSN)<sup>5</sup> and made available from the Center for Medicare and Medicaid Services (CMS) data<sup>19</sup>. We relied primarily on the MDH data because we found that the NHSN system recorded fewer COVID-19 deaths compared to the MDH data system. Most facilities in the NHSN/CMS data set appeared to have reported on their history of cases and deaths prior to May 2020, although they were not required to report historical information. Only 19 facilities had more COVID-19 cases in the NHNS/CMS data than in the MDH data, and only 2 of these facilities were off by 5 or more cases. Thirty-four facilities had more cases in the MDH than in the NHNS/CMS data, 10 facilities were undercounted by 5-9 cases, 5 facilities by 10-20 cases, and two facilities by 20 or more. Through newspaper accounts, we were able to verify most facilities with a difference of 10 or more cases.

The NHSN/CMS data set adds value because it separates confirmed from suspected cases for both residents and staff, while the MDH reports resident and staff cases in total. The CMS data also include information about testing, protective equipment, and staff shortages.