AARP Nursing Home COVID-19 Dashboard
November 12, 2020

Overview

More than 91,000* residents and staff of nursing homes and other long-term care facilities have died from COVID-19, representing 40* percent of all coronavirus fatalities in the U.S., according to Kaiser Family Foundation's most recent analysis released on November 9. Yet federal policymakers have been slow to respond to this crisis, and no state has done a good enough job to stem the loss of life. AARP has called for the enactment of a 5-point plan to protect nursing home and long-term care facility residents—and save lives—at the federal and state levels:

- Prioritize regular and ongoing testing and adequate personal protective equipment (PPE) for residents and staff—as well as inspectors and any visitors.
- Improve transparency focused on daily, public reporting of cases and deaths in facilities; communication with families about discharges and transfers; and accountability for state and federal funding that goes to facilities.
- Ensure access to in-person visitation following federal and state guidelines for safety, and require continued access to virtual visitation for all residents.
- Ensure quality care for residents through adequate staffing, oversight, and access to in-person formal advocates, called long-term care Ombudsmen.
- Reject immunity for long-term care facilities related to COVID-19.

The federal government has taken some action, such as requiring nursing homes to self-report COVID-19 cases and deaths at the federal level, ordering testing, and providing limited PPE and other resources to nursing homes as well as issuing guidance for in-person visitation to resume. But, as cases and deaths continue to rise more must be done. AARP continues to urge elected officials to take action to combat this national tragedy—and to ensure that public funds provided to nursing homes and other long-term care facilities are used for testing, PPE, staffing, virtual visits, and for the health and safety of residents.

COVID-19 cases across the U.S. are on the rise, reaching record highs in the last week. Nursing homes remain a hotbed for the virus; after declining in the summer, cases in nursing homes are beginning to rise again, among both residents and staff. AARP will continue to shine a light on what's happening in nursing homes so that families have the information they need to make decisions, and lawmakers can be held accountable. For more information, visit aarp.org/nursinghomes.

The Dashboard

AARP fought for public reporting of nursing home COVID-19 cases and deaths. Using this data, the AARP Public Policy Institute, in collaboration with the Scripps Gerontology Center at Miami University in Ohio, created the AARP Nursing Home COVID-19 Dashboard to provide four-week snapshots of the virus' infiltration into nursing homes

and impact on nursing home residents and staff, with the goal of identifying specific areas of concern at the national and state levels in a timely manner.

This second dashboard aggregates and analyzes self-reported data from nursing homes available from the Centers for Medicare & Medicaid Services (CMS), covering three 4-week time intervals from mid-summer into fall:
- July 26 to August 23
- August 24 to September 20
- September 21 to October 18

The dashboard is specific to nursing homes and contains 5 key measures:
- Resident deaths per 100 residents
- Resident cases per 100 residents
- Staff cases per 100 residents
- Percentage of nursing homes without a one-week supply of PPE
- Percentage of nursing homes with staffing shortages

Dashboard data as well as 33 additional data points providing more information about each category are available online at aarp.org/NursingHomeDashboard. The dashboard will continue to be updated every month to track trends over time and will evolve to include more categories to follow other measures of interest.

Key Findings
The AARP Public Policy Institute is analyzing data and reporting on key findings as the dashboard is reported over time. For the second dashboard, these include:
- At the national level, nursing home resident COVID-19 deaths and cases and staff cases had been declining during the summer. In the last four weeks, this is no longer the case. The rate of nursing home deaths is no longer declining, and resident and staff cases have begun to tick upward. Community spread of the virus continues to rise rapidly throughout much of the country; these rising infection rates present a considerable risk to nursing homes, residents, and staff.
- State trends vary dramatically; many states that had elevated death and infection rates in the summer have improved in the most recent four weeks ending October 18. However many other states – particularly in the Midwest – have rapidly increasing rates of deaths and cases in nursing homes.
- There is considerable variation across states. COVID-19 deaths in the September 21 to October 18 reporting period averaged 0.47 per 100 residents across the nation (about 1 out of every 215 residents). At the state level, the death rate was as high as 1.92 per 100 residents (about 1 out of 52), and several states reported no resident deaths in the last month.
- Direct care staff continue to be infected at a very high rate. In the four weeks ending October 18, more than one-quarter (26%) of nursing homes had at least one confirmed COVID-19 case among residents, and twice as many (53%) had at least one confirmed staff case; in the hardest-hit state, more than 90% of nursing homes had staff test positive for the virus. Per 100 nursing home residents, there were 2.8 COVID-19 resident cases and 2.7 staff cases,

corresponding to a total of more than 60,000 cases nationally, up from 55,000 the preceding four weeks.

- In every state, nursing homes indicated a shortage of PPE (defined as not having a one-week supply of N95 masks, surgical masks, gowns, gloves, and eye protection during the last four weeks). Nationally, about one in five nursing homes (20%) had a PPE shortage during the four weeks ending October 18, a marginal improvement from 1 in 4 nursing homes during the previous month. In the highest performing state, 5% of nursing homes had a PPE shortage; in the lowest-performing state, 53% did not have a one-week supply.

COVID-19 Data

Since the pandemic started, scant data has been available consistently to help gain a better understanding of the crisis in nursing homes and other long-term care facilities. The country counted mainly on the reporting of news media to glimpse the devastation caused by COVID-19. Organizations such as Kaiser Family Foundation and the COVID Tracking Project also began collecting and publishing important information from the states. It is important to note that each source collects data differently, so similar information may appear at odds due to how the measures are captured. Specific to nursing homes:
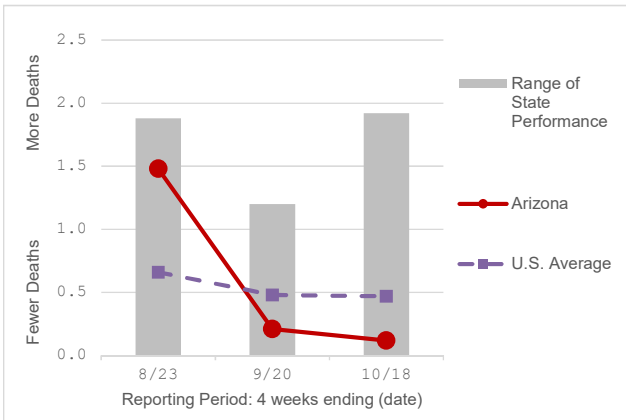
- In May, the Centers for Medicare & Medicaid Services (CMS) required nursing homes to self-report COVID-19 cases and deaths on at least a weekly basis; however, the required reporting was not retroactive. As a result, there is a significant undercounting of cases and deaths before June in this data source.
- Many states have also required self-reporting by nursing homes and/or other long-term care facilities, but the requirements vary widely. Some states combine data for nursing homes and other long-term care facilities such as assisted living; others combine resident and staff cases and deaths, while others provide limited or no data at all.
- Since June, the data reported by CMS and by individual states appear to be roughly comparable, though exact comparisons are difficult because of the inconsistency in state reporting.

*Kaiser Family Foundation: https://www.kff.org/coronavirus-covid-19/issue-brief/state-data-and-policy-actions-to-address-coronavirus/#long-term-care-cases-deaths

AARP Nursing Home COVID-19 Dashboard - Arizona State Dashboard
November 2020
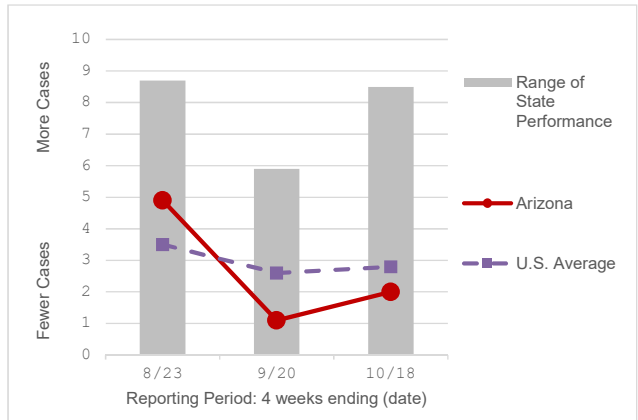
Nursing Home Resident Deaths
(resident COVID-19 deaths - rate per 100 residents)

In the last month (4 weeks ending 10/18/20) in Arizona there were 0.12 COVID-19 deaths per 100 nursing home residents

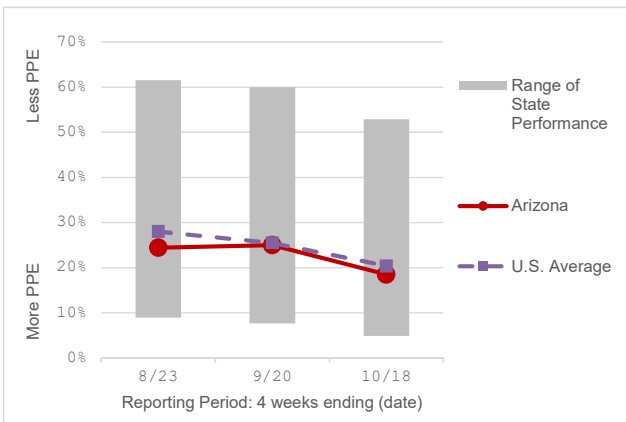**Nursing Home Resident Cases**
(confirmed resident COVID-19 cases - rate per 100 residents)

In the last month (4 weeks ending 10/18/20) in Arizona there were 2 new confirmed COVID-19 cases per 100 nursing home residents
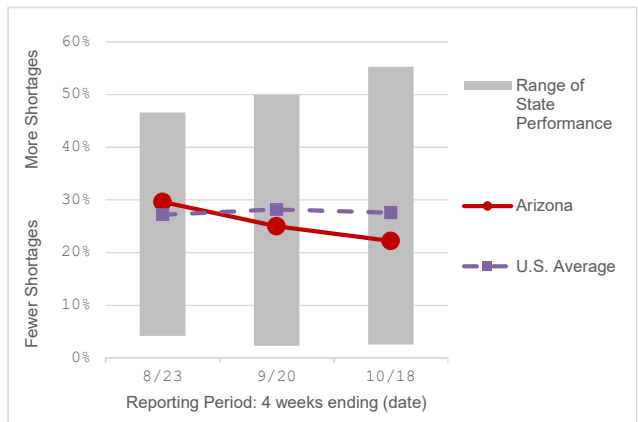
Personal Protective Equipment (PPE)
(% of facilities without at least a 1 week supply of all PPE types)

18.5% of nursing homes in Arizona did not have a one week supply of all PPE during the 4 weeks ending 10/18/20
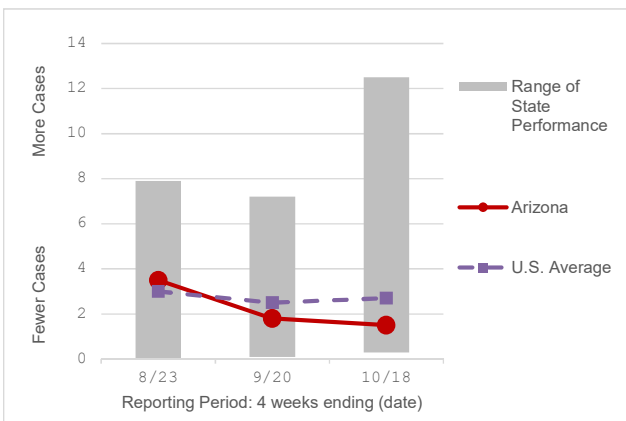
Staffing Shortages
(% of facilities with a shortage of nurses and/or aides)

In the 4 weeks ending 10/18/20, 22.2% of nursing homes in Arizona had a shortage of direct care workers (nurses and/or aides)

Staff COVID-19 Cases
(confirmed staff COVID-19 cases - rate per 100 residents)

In the last month (4 weeks ending 10/18/20) in Arizona there were 1.5 new confirmed nursing home staff cases per 100 residents

About this Dashboard
Released November 12, 2020

This year, the COVID-19 virus has swept the nation, killing more than 230,000 Americans. Nursing home residents and staff are particularly vulnerable.

This dashboard looks at state-level impacts of the COVID-19 pandemic on nursing homes, residents, and staff in 5 categories. The dashboard currently captures impacts and trends from mid-summer through early fall and will be updated on a monthly basis to track these impacts over time.

Data were analyzed by Scripps Gerontology Center at Miami University; additional analysis and dashboard preparation by the AARP Public Policy Institute.

Original data source: https://data.cms.gov/stories/s/COVID-19-Report-Archived-Datasets/dyvx-s2qr/; downloaded on 10/29/2020.

AARP Nursing Home COVID-19 Dashboard - Arizona State Fact Sheet
November 2020

Nursing Home Resident Deaths

			Low State	USA	High State
Nursing home COVID-19 deaths (4 weeks ending 10/18/20)	12			5,114	
Rate per 100 residents	0.12		0.00	0.47	1.92
% of all COVID-19 deaths in state *	3%		0%	27%	100%
Nursing home COVID-19 deaths (total since 6/1/20)	518			33,103	
% of all COVID-19 deaths in state *	11%		5%	29%	71%
Nursing home COVID-19 deaths (total since January)	634			61,727	
% of all COVID-19 deaths in state *	11%		5%	28%	59%

Nursing Home Resident Cases

	YES	NO	Low State	USA	High State
Nursing homes with confirmed cases (4 weeks ending 10/18/20)	16.3%	83.7%	2.9%	25.7%	54.5%
Nursing homes with confirmed cases (since January)	84.0%	16.0%	17.1%	70.5%	94.4%
Confirmed nursing home resident cases (4 weeks ending 10/18/20)	193			30,788	
Rate per 100 residents	2.0		0.0	2.8	8.5
Confirmed nursing home resident cases (total since 6/1/20)	2,613			169,011	
% of all COVID-19 cases in state *	1.2%		0.2%	2.7%	8.2%
Confirmed nursing home resident cases (total since January)	3,029			268,620	
% of all COVID-19 cases in state *	1.3%		0.3%	3.3%	10.8%

Staff COVID-19 Cases & Deaths

	YES	NO	Low State	USA	High State
Nursing homes with confirmed staff cases (4 weeks ending 10/18/20)	31.9%	68.1%	8.6%	52.6%	90.8%
Confirmed staff cases (4 weeks ending 10/18/20)	146			29,907	
Rate per 100 residents	1.5		0.3	2.7	12.5
Confirmed staff cases (total since 6/1/20)	2,071			162,932	
% of all COVID-19 cases in state *	1.0%		0.7%	2.6%	7.4%
Nursing home staff COVID-19 deaths (4 weeks ending 10/18/20)	0			111	
Rate per 10,000 residents	0.0		0.0	1.0	8.6
% of all COVID-19 deaths in state *	0.0%		0.0%	0.6%	12.5%
Nursing home staff COVID-19 deaths (total since 6/1/20)	3			644	
% of all COVID-19 deaths in state *	0.1%		0.0%	0.6%	2.5%

Personal Protective Equipment (PPE)

For the 4 weeks ending 10/18/20, the percentage of nursing facilities in which staff did not have a one week supply of

	Shortage	1+ week	Low State	USA	High State
N95 masks	16.3%	83.7%	2.3%	16.1%	47.0%
surgical masks	11.1%	88.9%	0.0%	10.3%	42.4%
eye protection	8.9%	91.1%	0.0%	9.3%	42.9%
gowns	14.1%	85.9%	1.9%	11.8%	44.3%
gloves	8.1%	91.9%	0.0%	6.6%	14.9%
all PPE (all 5 categories above)	18.5%	81.5%	4.9%	20.4%	52.9%
hand sanitizer	6.7%	93.3%	0.0%	5.6%	15.7%

Staffing Shortages

For the 4 weeks ending 10/18/20, the percentage of nursing facilities with a shortage of direct care workers

	Shortage	NO	Low State	USA	High State
nurses	20.0%	80.0%	1.6%	22.7%	47.6%
aides	20.0%	80.0%	2.4%	26.0%	52.9%
nurses and aides	17.8%	82.2%	1.4%	20.6%	44.4%
any shortage	22.2%	77.8%	2.6%	27.6%	55.3%

Context Data

		Low State	USA	High State
Statewide positivity rate ** (cumulative through 10/18/20 - not NH specific)	14.1%	1.1%	7.0%	14.8%
Percent of nursing homes responding all 4 weeks ending 10/18/20	93.1%	83.6%	94.9%	100.0%

Data Sources

Data Documentation

All nursing home data are from the Centers for Medicare & Medicaid Services (CMS) Nursing Home COVID-19 Public File (downloaded most recently on 10/29/2020). These data are self-reported by facilities to the Centers for Disease Control and Prevention (CDC) weekly. All five Dashboard measures use this CMS data source.

Several data points in the state fact sheets include general population state data (that is, not limited to nursing homes) as a denominator or stand-alone measure. These data are from the COVID Tracking Project (statewide positivity rate; downloaded most recently on 11/2/2020) and USAFacts (total deaths and cases in the state; downloaded most recently on 11/2/2020).

Data were analyzed by Scripps Gerontology Center at Miami University in Ohio; additional analysis and preparation of the dashboard by the AARP Public Policy Institute.

Key Definitions
- COVID deaths (residents): Total number of residents with suspected COVID-19 or a positive COVID-19 test result who died in the facility or another location as a result of COVID-19 related complications.
- Total deaths (residents): This count includes new COVID-19 related deaths and non-COVID-19 related deaths. Includes residents who died in another location, such as a hospital.
- COVID deaths (staff): The number of deaths for staff and facility personnel with suspected COVID-19 or a positive COVID-19 test result.
- COVID cases: Number of residents, or staff and facility personnel, with new laboratory positive COVID-19 test results, as reported by the facility.
- PPE shortage: Having no supply, or not enough supply of each type of PPE for at least one week for conventional use, for at least one week out of the four weeks in the reporting period. For the "all PPE" measure, a shortage refers to having a shortage of one or more of the five categories: N95 masks, surgical masks, eye protection, gowns, and gloves.
- Staffing shortage: Identified staffing shortage for each personnel category based on facility needs and internal policies for staffing ratios for at least one week out of the four weeks in the reporting period.

CDC has issued detailed instructions to nursing homes for reporting these data:
- Resident deaths and cases;
- Staff deaths, cases, and shortage;
- PPE.

Inclusion Criteria
For the four-week measures, nursing facilities were included only if the facility reported to CDC for all four weeks (nationally, 95% of facilities for the most recent four-week period, for states ranging from 84% to 100%). If a nursing facility reported, but had missing data for a specific measure (this is rare), that facility is excluded from the calculation of that measure for the Dashboard.

Aggregate counts of deaths and cases may be an undercount if there are facilities that are not reporting. Percentages or rates might be slightly biased if the average of non-reporting facilities differs significantly from the average of reporting facilities.

For the "since 6/1/2020" and "since January" measures, all nursing homes reporting at least one week of data are included. The national response rate is 99% for both measures.

<u>Comparability to Other Data Sources</u>
The first reporting date for the CMS Nursing Home COVID-19 data was May 24, 2020, and includes all cases and deaths since the beginning of the year that were reported; however, retroactive reporting is not mandatory and the accuracy of reporting is unknown. Data prior to the first reporting date, including the "since January" counts of resident cases and deaths in the Dashboard, is not reliable. At least at the national level, the CMS data source gives a significant undercount of the number of cases and deaths before June, and results in a lower total count than has been reported by other sources in real time.

Since June, the CMS data are much more reliable and at the national level track well against data reported by the states (comparisons to individual states are difficult because each state categorizes and reports the data differently).

The state fact sheets include several measures of the percentage of total state deaths and cases that occurred among nursing home residents and nursing home staff. Because numerator and denominator data are from different sources, the reported data may result in a percentage greater than 100%, which is impossible. The value of each such measure is capped at 100%. These measures should not be used to compute the number of cases or deaths occurring outside of nursing homes.

<u>Changes since Previous Monthly Dashboards</u>
Compared to the October 14 release of the AARP Nursing Home Dashboard, there has been a minor change to the calculation of the staffing shortage dashboard measure, and a major change in the calculation of individual PPE type measures in the state fact sheet (the dashboard PPE shortage measure is unchanged). Prior period data points, where included in the current data release, have been updated to reflect the current calculation.