

Sins of Omission

How Government Failures to Track Covid-19 Data Have Led to More Than 1,700 Health Care Worker Deaths and Jeopardize Public Health





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EXECUTIVE SUMMARY

The rights of registered nurses (RNs) and other health care workers (HCW) in the United States are being violated. Under the Occupational Safety and Health Act of 1970, employers have a “general duty” to provide safe workplaces. The right to a safe workplace includes the right to information. There is widespread resistance on the part of the health care industry to transparently provide information on nurse and other health care worker fatalities due to Covid-19. At the same time, federal, state, and local governments have failed to compel health care facilities to provide this data.

As of Sept. 16, 2020 we found that an estimated 213 registered nurses have died of Covid-19 and related complications and an estimated 1,718 health care workers, including RNs, have died of Covid-19 and related complications. While this figure for all health care workers is higher than has been reported elsewhere, National Nurses United (NNU) believes it is a conservative estimate. These cases have been documented by NNU using media reports, social media, obituaries, union memorials, federal and state reporting, and NNU internal reporting.

Of the 213 registered nurses who have died of Covid-19 and related complications, 124 (58.2 percent) are nurses of color, reflecting the broader disproportionate impact of Covid-19 on communities of color in the United States. Just under one quarter (24.1 percent) of registered nurses in the United States are people of color.

Comprehensive disclosure and transparency with respect to Covid-related health care worker deaths have been all too rare. These deaths frequently have been met with silence or outright denials. If hospitals are not widely required to publicly disclose their deaths and infection rates, they lack important incentives not to become zones of infection. We cannot allow the more than 1,700 deaths, many of them avoidable, to be swept under the rug, and vanished from our collective memory by the health care industry.

NNU continues to call on the federal government to greatly expand domestic production of personal protective equipment through the Defense Production Act of 1950 as well as to mandate that the federal Occupational Safety and Health Administration (OSHA) establish an emergency temporary standard on infectious diseases.



KEY FINDINGS

In the United States as of Sept. 16, 2020:

- » At least 213 registered nurses have died of Covid-19 and related complications.
- » 124 (58.2 percent) of the 213 RNs who have died of Covid-19 and related complications are nurses of color, reflecting the broader disproportionate impact of Covid-19 on communities of color in the U.S.¹ Just under one quarter (24.1 percent) of registered nurses in the United States are people of color.²
- » 67 (31.5 percent) of the 213 registered nurses who have died of Covid-19 and related complications are Filipino. Filipinos make up 4 percent of registered nurses in the United States.³ More than half of registered nurses of color who have died to date have been Filipino (54.0 percent).
- » 38 (17.8 percent) of the registered nurses who have died of Covid-19 and related complications are Black. Black nurses make up 12.4 percent of RNs in the United States.⁴ Nearly one-third of RNs of color who have died to date have been Black (30.6 percent).
- » At least 1,718 health care workers, including registered nurses, have died of Covid-19 and related complications.
- » Of the 1,515 health care workers, including registered nurses, for which facility information is available, 448 (29.6 percent) worked in hospital settings and 1,067 (70.4 percent) worked in nursing homes, medical practices, for emergency medical services (EMS), and in other care settings.
- » Nearly one-third of the hospital health care workers who have died were registered nurses: 143 (31.9 percent) of 448 total.
- » There are at least 258,768 cases of Covid-19 infection in health care workers, 166 percent of the 156,306 cases reported by the U.S. Centers for Disease Control and Prevention (CDC).

“Nursing, and nurses, are not valued. It’s a shame, and maybe even a deadly shame, that hospital leaders don’t care about nurses like we care for our patients.”

— Jaclyn O’Halloran, nurse in Covid-19 unit⁵

INTRODUCTION

Registered nurses and other health care workers in the United States have had their rights systematically violated by federal and state governments and the health care industry during the Covid-19 pandemic. As a recent Amnesty International report on the widespread failure to protect health care and essential workers states: “The right to health includes ‘The right to healthy natural and workplace environments,’ which includes ‘preventive measures in respect of occupational accidents and diseases’ and ‘safe and hygienic working conditions.’”⁶

A survey released July 28 by National Nurses United (NNU) found that just “24 percent of nurses think their employer is providing a safe workplace” and that “87 percent of nurses who work in hospitals report reusing at least one piece of PPE.”⁷ Most alarmingly only “23 percent of nurses reported being tested.”⁸

Under the Occupational Safety and Health Act of 1970 employers have a “general duty” to provide safe workplaces.⁹ On Aug. 9, NNU registered nurses and our allies delivered more than half a million signatures calling for a congressional mandate ordering the Occupational Safety and Health Administration (OSHA) to issue an emergency temporary standard to ensure that employers protect frontline workers during the Covid-19 pandemic.¹⁰ NNU believes the standard must incorporate the evidence being gathered that the Covid-19 virus transmission is likely airborne,¹¹ and as reflected in the arguments presented in the early July 2020 letter sent to the World Health Organization (WHO) by 239 scientists from 32 countries calling on WHO to “recognize the potential for airborne spread of Covid-19.”¹²

Unfortunately, despite the hospital, nursing home, and other industries’ rampant failures, OSHA and their many counterparts at the state level are missing in action and failing health care and other essential workers who desperately need assistance and workplace protections.¹³ “OSHA is AWOL,” bluntly states David Michaels, former OSHA head under the Obama administration.¹⁴

As of Sept. 16, we find that an estimated 213 registered nurses and an estimated 1,718 health care workers, including registered nurses, have died of Covid-19 and related complications while working in health care settings. NNU has documented these cases using media reports, social media, obituaries, union memorials, federal and state reporting, and our own internal reports. (*Please see Appendix III for a full description of our methodology.*)

Although the 1,718 figure for all health care workers is higher than has been reported elsewhere, NNU believes it is a conservative estimate. First, many cases are not being reported by traditional news sources. Second, it appears that many deaths are not reported by public agencies. For instance, the CDC reports 690 health care worker deaths as of Sept. 16, but their data fails to collect occupational status in most cases.¹⁵ Currently, whether or not someone is a health care worker is included in just 24 percent of the nearly five million cases reported on, and of that 24 percent of cases reported on, just 71 percent included data on whether or not the health care worker had died.¹⁶ Data in which the occupational status is unavailable in more than three out of four cases suggests a substantial undercount, an undercount the CDC itself acknowledges.¹⁷

Further, federal and state agencies do not reconcile their publicly reported information. For example, as of Sept. 15, the CDC reports the death of 690 health care workers overall, while the Centers for Medicare & Medicaid Services’ (CMS) Covid-19 nursing home dataset reported 843 deaths just of nursing home workers on Aug. 30.¹⁸ For this paper we utilized CMS’s Covid-19 nursing home dataset for the week ending Aug. 30 released on Sept. 10.¹⁹ (*See Appendix III for our methodology.*) Notably, the CMS nursing home dataset excludes assisted living facilities.²⁰ CMS also did not require nursing homes to provide information, including data on total health care worker deaths prior to May.²¹ By the beginning of May, it should be remembered, overall deaths reported in New York had reached 18,231 in and in New Jersey had already reached 7,228, many in nursing homes, which presumably includes some nursing home health care workers.²² While there were some initial problems flagged with respect to overreporting some total health care worker deaths, we have adjusted for this by removing nursing homes reporting in excess of four deaths per facility.²³

In California, the California Department of Public Health (CDPH) does not appear able to reconcile total health care worker deaths reported for skilled nursing facilities (SNFs) in California with CDPH totals for all health care worker deaths reported by local health departments included in CDPH’s daily press release.²⁴ As of Sept. 16, CDPH was reporting 167 deaths for all health care workers (Sept. 14 data) and 146 deaths for SNFs (Sept. 15 data), which would suggest that just 21 health care workers have died who did not work at SNFs in California. While

a majority of the health care workers who have died in California may have been nursing home workers, we have documented the deaths of 44 health care workers in California who did not work in nursing homes, which is itself likely an undercount. Our finding calls into question the reliability of either figure reported by CDPH.

The widely cited “Lost on the Frontlines” project of *The Guardian* and *Kaiser Health News (KHN)*, reports that as of Sept. 16, they are investigating 1,198 health care workers “who likely died of Covid-19 after helping patients during the pandemic.”²⁵ *The Guardian* and *KHN’s* reporting does not adequately acknowledge the existence of the many hundreds of anonymous health care workers whose Covid-19 related fatalities have been reported by CMS, the U.S. Department of Veterans Affairs (VA), numerous state agencies, and news reports. (*Full disclosure*: In the interest of bringing attention to this important story, NNU provided a list of the names of 654 registered nurses and other health care workers to *KHN* (Aug. 4), and *The Wall Street Journal* (Aug. 6).)

There is widespread resistance in the hospital industry to transparently provide information on nurse and other health care worker fatalities. Meanwhile, federal, state, and local governments have failed to compel them to do so. This lack of transparency only aids and abets the hospital industry’s continuing efforts to evade accountability for its ongoing failures to adequately protect nurses and other health care workers in the face of the Covid-19 pandemic. If hospitals are not widely required to publicly disclose their deaths and infection rates, they lack important incentives to avoid becoming zones of infection.

The success that some East Asian countries have had in combating Covid-19 may come in part from their recognition that hospitals cannot be allowed to become significant zones of transmission for infectious diseases. In South Korea, encounters with H1N1, SARS, and the Middle East Respiratory Syndrome (MERS) forced a recognition that maintaining the health and safety of health care workers is vital to preventing the spread of disease. As one Korean expert put it in particular, “MERS was transfixing

and frightening to Koreans, because the disease was spreading through crowded hospitals and their waiting rooms ... [p]eople were getting sick, but they were also afraid of going to the hospital for fear that it would make them even more sick.”²⁶

Even U.S. hospitals with top reputations are not disclosing enough, nor are they being required to do enough. For example, Johns Hopkins Hospital in Baltimore, which prides itself on its national and international reputation, internally provided a Hospital Epidemiology and Infection Control (HEIC) presentation on June 3, documenting a 9 percent infection rate among tested Johns Hopkins Medicine staff as of May 6.²⁷ Johns Hopkins University’s now world-famous coronavirus tracker data had the number of infected for the city of Baltimore as a whole on May 6 at 2,800.²⁸ That’s approximately 0.47 percent of the city’s population or 18 times less the 9 percent reported in the HEIC presentation. What, if any, attempts, were made to warn the Baltimore community of the high rate of infection in one of Baltimore’s and Maryland’s major health care providers?

Conditions for nursing home workers have been particularly deadly, in part because so many Covid-19-stricken elderly were treated in their nursing homes, rather than transferred to hospital emergency rooms and intensive care units (ICUs).²⁹ A June 16 article in *The Washington Post* explained that in recent years, “‘Treat in place’ was the mantra pushed by federal health agencies, academic researchers and geriatric physicians who argued that hospitals are not friendly environments for the frail and elderly... [and so] when the novel coronavirus pandemic struck, nursing homes did not swamp hospitals with patients...[nor] did they prevent the deaths of more than 30,000 of their residents...”³⁰ Nursing home residents, as well as nursing health workers, are bearing the brunt of this continuing calamity. As a July 28 commentary noted, “If [nursing home staff] deaths continue at this pace over a full year, it will equate to more than 200 fatalities per 100,000 workers. This would more than double the rate of previous years’ deadliest occupations...”³¹



Table 1. **Covid-19 Health Care Worker Deaths: Registered Nurses and Other Health Care Workers, as of Sept. 16, 2020**

	Registered Nurses, Deceased	Other Health Care Workers, Deceased	Total — Nurses & Other Health Care Workers, Deceased
Current Total — U.S.	213	1,505	1,718
Hospitals	143	305	448
Nursing Home, Medical Practice, EMS, and Other Settings	61	1,006	1,067
Unknown	9	194	203

As of Sept. 16, 2020, 1,718 total health care workers, including registered nurses, working in health care settings have died of Covid-19 and related complications. For 1,515 of the total health care workers, facility information was available: 448 (29.6 percent) of the 1,515 registered nurses and other health care workers who have died were working in hospital settings, while 1,067 (70.4 percent) worked in nursing home, medical practice, emergency medical services (EMS), and other settings. Nearly a third of the health care workers who have died, who worked in hospital settings are registered nurses: 143

(31.9 percent) of 448 total. It is extremely likely that a larger number of hospital workers have died, but have gone unreported, due to the nearly complete absence of establishment-level reporting for the hospital industry, in comparison to what CMS has required for nursing homes since May. Among hospital systems, only the VA provides somewhat greater transparency by regularly reporting their health care worker death figures on a dedicated website at regional system levels.³²



INADEQUATE DATA COLLECTION AND DISCLOSURE

The human rights of registered nurses, health care workers, and the broader communities they serve are being violated with respect to access to information. A core human rights obligation is to provide “education and access to information concerning the main health problems in the community, including methods of preventing and controlling them.”³³ And, as the writer Milan Kundera famously pointed out, the struggle against power “is the struggle of memory against forgetting.” We cannot allow the more than 1,700 deaths, many of them avoidable, of registered nurses and other health care workers, to be swept under the rug and vanished from our collective memory by the health care industry. While the government deserves its share of blame, the health care industry is also guilty of grievous misconduct. Hospital and other health care industry executives would prefer to shed all accountability for their scandalous mismanagement and overwhelming lack of preparedness in the face of the Covid-19 pandemic. If allowed, the health care industry will gladly cover its tracks with one hand and keep reaching out for more bailout funds with the other.

Comprehensive disclosure and transparency with respect to Covid-19-related health care worker deaths have been all too rare. These deaths have been too often marked with silence or outright denials.³⁴ “Few medical facilities acknowledge the workers’ deaths in public, much less that they could have been infected on the job,” reports *The Atlanta-Journal Constitution* on the situation in Georgia,³⁵ a summary that accurately describes the entire country. Data collection is woefully inadequate, particularly within the hospital industry, which has been given a free pass on establishment-level infection and health care worker death reporting. Few health systems have been as open about the death of their health care workers as Northwell Health which held a “Day of Remembrance” on June 25 to “honor the memories and celebrate the lives of the 20 team members who died from coronavirus disease 2019 (Covid-19)” as of that date.³⁶ Far more typical is the response of Banner Health to the passing of Arizona nurse Shawna Snyder due to Covid-19 on July 3.³⁷ Banner would only acknowledge Snyder’s employment when asked by a reporter, and refused to comment further, citing “privacy concerns.”³⁸ This lack of transparency on the part of the hospital and health care industry engenders a dangerous lack of accountability and is an unaddressed threat to public health.

Some of the hospital industry’s reluctance to acknowledge health care worker deaths, as well as infections, likely comes from their interest in putting up barriers to Covid-19-related workers’ compensation for registered nurses and other health care workers in many states.³⁹ Proving that one became infected by Covid-19 at work is a nearly impossible standard to meet. For example, a hospital might insist that an RN never came into contact with a Covid-19 patient because they did not work in a Covid-19 ward. But a recent study from Spain suggested that the Covid-19 virus may be circulating rapidly throughout hospitals. In the hospital that was studied, medical/surgical non-Covid-19 areas had about the same percentage of infections (16.1 percent) as the Covid-19 areas (18.7 percent).⁴⁰ In response to similar anecdotal examples: “...you have to use PPE throughout the hospital all the time... you just have to presume that everyone has Covid,” states Dr. Eric Toner of the Johns Hopkins Center for Health Security.⁴¹

To add insult to injury, a number of states, including California, have laws that grant presumptive eligibility for workers’ compensation to some public safety employees. These occupations, such as police officers and firefighters, have predominately male workforces. However, nurses and other health care workers in the predominately female health care workforce have not been granted such protections, even though, by the nature of their work, they suffer some of the highest risks of injury and illness of any profession.

In our methodology, we are building on the example set by the Colorado Department of Public Health & Environment (CDPHE) whose data collection and reporting notes that while “...[i]t is possible that a person may have been exposed elsewhere (and we can rarely prove where any individual was exposed with a person-to-person pathogen)...when a person worked/lived/spent time in a facility with a known outbreak, we attribute their illness to the outbreak even if there is no definitive determination that the case acquired the illness at the facility.”⁴² However, even CDPHE’s definition is too restrictive, as it unreasonably presumes knowledge of such outbreaks. In an environment of extraordinarily insufficient testing, a large number of asymptomatic cases,⁴³ in which asymptomatic individuals have been found to carry comparable viral loads as those with symptoms,⁴⁴ and when dealing with Covid-19’s lengthy incubation period, we believe a more reasonable standard is to assume that persons

actively working or volunteering as health care workers broadly defined, may have been infected in a health care delivery setting. We include all such persons in our count. We recognize that the hospital and health care industry, as well as many in government, may find this politically inconvenient in their attempts to sweep the impact of Covid-19 on health care workers under the rug, but we believe that it better reflects the reality of the situation health care workers find themselves in.

State agencies have nearly uniformly bent over backwards to enable the hospital industry's lack of transparency. In one fleeting, apparent, breakthrough for public transparency, on April 20, Ohio Governor Mike DeWine announced his intention to release hospital-level infection data stating that: "... in plain English, you will be able to see by hospital the number of their health care staff that, if any, have come down with Covid-19."⁴⁵ However, months have passed, and this initiative appears to have been quietly snuffed out.

Florida has been among the most obstructive of states: It recently rejected the *Miami Herald's* public records information act request for the state's internal count of health care worker deaths, on the grounds that the data does not exist.⁴⁶ However, in mid-May reporters received state information through unofficial channels that 25 health care workers had died according to one report; the numbers was 60, according to another source.⁴⁷ According to Rebekah Jones, whistleblower and ex-Florida Department of Health (DOH) employee,

who ran the state's Covid-19 dashboard for Florida's DOH: "DOH keeps detailed data about every Covid-19 victim, including occupation and profession, and any insinuation they don't is a bold-faced lie."⁴⁸ This rampant obstruction is happening, as Zenei Cortez, RN, a president of National Nurses United puts it, because "[t]hey don't want to take the blame for the number of deaths, because they have failed the workers."⁴⁹ In Florida, NNU has documented 100 health care worker deaths due to Covid-19 through Sept. 16, 2020.

Far more transparency has been required of the nursing home industry. In May, CMS began requiring nursing homes to provide publicly available establishment-level Covid-19-related health care worker infection and mortality data to CMS.⁵⁰ As noted previously, however, CMS did not require nursing homes to provide information, including data on total health care worker deaths prior to May. The states of Colorado, Kentucky, Michigan, New Jersey, Nevada, Maryland, and South Carolina as well as the District of Columbia provide establishment-level Covid-19-related health care worker infection and mortality data for nursing homes, and in some cases (Colorado, Nevada, and Maryland) data from other congregate living facilities that is regularly updated and publicly available. For its part, the California Department of Public Health renders its data virtually unusable by masking establishment-level data for nursing homes with Covid-19-related infections and deaths numbering less than 11.⁵¹



COVID-19 REGISTERED NURSE FATALITIES

As of Sept. 16, 2020 an estimated 213 registered nurses have died of Covid-19 and related complications. This figure includes 11 members of NNU and its affiliates. *(Please see Appendix I. Registered Nurse Covid-19 Memorial for a listing of their names.)*

NNU believes many of these deaths would have been prevented if greater effort had been made to plan for and overcome the pitfalls of just-in-time supply chain management. Scaling up the capabilities for the stockpiling and rapid distribution of personal protective equipment (PPE) must be among the highest priorities of the hospital and nursing home industries and federal and state agencies going forward. We continue to call on the federal government to greatly expand domestic production of PPE through the Defense Production Act as well as to mandate that the federal OSHA establish an emergency temporary standard on infectious diseases. The ongoing failure to take action is costing the lives of registered nurses, other health care workers, and patients.

As of Sept 16, 2020, six states (New York, New Jersey, California, Illinois, Texas, and Florida) account for 131 (61.5 percent) of the 213 total registered nurse fatalities.

Table 2. Covid-19 Registered Nurse Fatalities by State

	Registered Nurse Fatalities	%
Total	213	100%
New York	58	27.2%
New Jersey	23	10.8%
California	17	8.0%
Illinois	13	6.1%
Texas	10	4.7%
Florida	10	4.7%
Michigan	7	3.3%
Maryland	5	2.3%
Ohio	5	2.3%

Table 2 Covid-19 Registered Nurse Fatalities by State

	Registered Nurse Fatalities	%
South Carolina	5	2.3%
Pennsylvania	4	1.9%
North Carolina	4	1.9%
Alabama	4	1.9%
Mississippi	4	1.9%
Arizona	4	1.9%
Connecticut	3	1.4%
District of Columbia	3	1.4%
Georgia	3	1.4%
Massachusetts	3	1.4%
Nevada	3	1.4%
Louisiana	2	0.9%
Tennessee	2	0.9%
Virginia	2	0.9%
Washington	2	0.9%
Arkansas	2	0.9%
Colorado	2	0.9%
Indiana	2	0.9%
Missouri	2	0.9%
Delaware	1	0.5%
Idaho	1	0.5%
Kentucky	1	0.5%
Nebraska	1	0.5%
New Hampshire	1	0.5%
Oklahoma	1	0.5%
Puerto Rico	1	0.5%
Rhode Island	1	0.5%
Guam	1	0.5%

IMPACT OF COVID-19 ON U.S. REGISTERED NURSES OF COLOR

Just under a quarter (24.1 percent) of registered nurses in the United States are persons of color.⁵² But as of Sept. 16, 2020, 124 (58.2 percent) of the 213 registered nurses who have died of Covid-19 and related complications are nurses of color, reflecting the broader disproportionate impact of Covid-19 on communities of color in the United States.⁵³ By comparison, just over three-quarters (75.9 percent) of registered nurses are white, but so far have accounted for 84 (39.4 percent) of the deaths.⁵⁴

Sixty-seven (31.5 percent) of the 213 registered nurses who have died of Covid-19 and related complications are Filipino. They make up 4 percent of registered nurses in the United States.⁵⁵ More than half (54.0 percent) of the registered nurses of color who have died to date have been Filipino.

Table 3. Covid-19 U.S. Registered Nurse Fatalities by Race/Ethnicity

Race/Ethnicity	Covid-19 Registered Nurse Fatalities	%
Total	213	100.0%
White	84	39.4%
Filipino	67	31.5%
Black	38	17.8%
Latinx	14	6.6%
Unknown	5	2.3%
Asian & South Asian (Non-Filipino)	3	1.4%
Native American	2	0.9%

The deadly threat of Covid-19 has also been noticed in the broader Filipino-American community. According to a July 21, article in the *Los Angeles Times*, “People with roots in the Philippines account for about one-quarter of the Asian Americans in California, yet data compiled by the *Los Angeles Times* show that Filipino Americans account for at least 35 percent of Covid-19 deaths in the state’s Asian population [and that o]f 48 Filipino Americans known to have been infected with Covid-19 in Southern California, 19 have died, according to the Philippine Consulate General of Los Angeles.”⁵⁶

Thirty-eight (17.8 percent) of the registered nurses who have died of Covid-19 and related complications are Black. Black nurses make up 12.4 percent of registered nurses in the United States.⁵⁷ Nearly one-third (30.6 percent) of registered nurses of color who have died to date have been Black.

People of color working in the medical professions elsewhere in the world have also been disproportionately struck down by Covid-19. The acronym BAME (Black, Asian, and Minority Ethnic) is used in the United Kingdom to describe non-whites. A May 25 report found that 6 in 10 (61 percent) of the 200 British National Health Service (NHS) workers who had died of Covid-19 and related complications to that date were of BAME backgrounds.⁵⁸ Similarly, an April 22 report by the U.K.-based *Health Services Journal (HSJ)* examined the first 106 Covid-19-related deaths of NHS care and social workers and found that in 63 percent of cases, the deceased were of BAME background.⁵⁹ The *HSJ* report found that while BAME nurses and midwives made up just 20 percent of these professions’ workforce, they accounted for 71 percent of the total nurse and midwives Covid-19 deaths to that date.⁶⁰

In July, a group of medical researchers associated with the British Medical Association (BMA) created a risk assessment tool for health care workers “... amid evidence that health care workers are particularly vulnerable to developing severe or fatal Covid-19, and people from BAME backgrounds [are] at particularly high risk.”⁶¹ According to the report, “In England, whereas 44 percent of medical staff are from BAME backgrounds, nearly 94 percent of the doctors who have so far died of Covid-19 and similarly disproportionately higher rates of other health care workers are of BAME heritage.”⁶²

COVID-19 U.S. HEALTH CARE WORKER FATALITIES BY STATE

As of Sept. 16, 2020, seven states (New York, New Jersey, California, Georgia, Texas, Florida, and Illinois) account for 1,049 (61.1 percent) of Covid-19 health care worker fatalities by state (including registered nurses).

Table 4. **Covid-19 Health Care Worker Fatalities by State**

Health Care Worker Deaths (includes registered nurses)	Totals	%
U.S. Total	1,718	100%
New York	310	18.0%
New Jersey	193	11.2%
California	167	9.7%
Georgia	103	6.0%
Texas	102	5.9%
Florida	100	5.8%
Illinois	74	4.3%
Massachusetts	56	3.3%
Michigan	52	3.0%
Louisiana	41	2.4%
Pennsylvania	38	2.2%
Mississippi	34	2.0%
Connecticut	31	1.8%
South Carolina	31	1.8%
Ohio	30	1.7%
Indiana	29	1.7%
Alabama	28	1.6%
Maryland	26	1.5%
North Carolina	25	1.5%
Missouri	21	1.2%
Virginia	18	1.0%
Arizona	17	1.0%

Table 4 **Covid-19 Health Care Worker Fatalities by State**
Cont.

Health Care Worker Deaths (includes registered nurses)	Totals	%
Washington, DC	15	0.9%
Minnesota	15	0.9%
Nevada	15	0.9%
Arkansas	14	0.8%
Tennessee	14	0.8%
Washington	13	0.8%
Rhode Island	12	0.7%
Colorado	11	0.6%
Iowa	11	0.6%
Oklahoma	10	0.6%
Kentucky	9	0.5%
New Hampshire	8	0.5%
New Mexico	7	0.4%
Wisconsin	6	0.3%
Nebraska	5	0.3%
North Dakota	4	0.2%
Puerto Rico	4	0.2%
Utah	4	0.2%
West Virginia	3	0.2%
Hawaii	2	0.1%
Idaho	2	0.1%
Montana	2	0.1%
Delaware	1	0.1%
Guam	1	0.1%
Kansas	1	0.1%
Oregon	1	0.1%
South Dakota	1	0.1%
U.S. Virgin Islands	1	0.1%
Alaska	0	0.0%
Maine	0	0.0%
Vermont	0	0.0%
Wyoming	0	0.0%

HEALTH CARE WORKER INFECTIONS BY STATE

As of Sept. 16, 2020, we have compiled 258,768 cases of Covid-19 infection in health care workers, 166 percent of the 156,306 cases reported by the CDC.⁶³ However, we believe this total still represents a severe undercount. Just 16 states are providing infection figures for all health care workers on a daily, semiweekly, or weekly basis.⁶⁴ An additional seven states and the District of Columbia (DC) provide infection figures regularly for nursing home workers.⁶⁵ Of these, only DC and New Jersey provide additional infection data for state health workers. For 25 states and territories that do not provide this data, we have utilized CMS’s Covid-19 nursing home workers dataset (released July 19).⁶⁶ For the remaining seven states and territories, we included May 13, CDC data that was for all health care workers in the state.⁶⁷ This data was reported in two May 20, letters to Congressmembers Robert Scott and Alma Adams from CDC Director Robert R. Redfield.⁶⁸ In these states and territories, the number of CMS-reported nursing home infections reported has not yet overtaken the CDC’s for overall workers reported in the May 13 data. Infections that have been reported periodically by the VA for its facilities were excluded from the overall total due to the possibility they were being included in state totals.

As noted previously, Florida’s reporting and lack of transparency has been particularly problematic. For example, Florida is not reporting cumulative totals for health care worker infections in long-term care facilities. Florida’s peak reported infections of 7,298 was reported on July 23, but cumulative totals for Florida reported to CMS by nursing homes for the week ending August 30 totaled 16,380.⁶⁹ We have included the latter cumulative figure from CMS in the infection total.

Table 5. **Covid-19 Health Care Worker Infections by State**

Health Care Worker Infections	Totals
U.S. Total	258,768
California	35,525
Georgia	17,317
Florida	16,380
Ohio	15,105
New York	14,336
Texas	14,152
New Jersey	13,984
Pennsylvania	10,204
Minnesota	8,948
Massachusetts	8,015
Virginia	7,749
Illinois	7,714
Alabama	7,550
South Carolina	7,175
Wisconsin	7,155
Louisiana	5,508
Arkansas	5,147
Michigan	4,573
Indiana	3,643
North Carolina	3,601
Oklahoma	3,534
Tennessee	3,376
Mississippi	3,208
Connecticut	3,034
Oregon	2,915
Missouri	2,863
Maryland	2,824
Idaho	2,440

Table 5 Covid-19 Health Care Worker Infections by State
Cont.

Health Care Worker Infections	Totals
Kentucky	2,431
Arizona	2,120
Colorado	2,087
Washington	1,904
Iowa	1,808
New Hampshire	1,787
Nevada	1,453
Rhode Island	1,112
Kansas	989
Nebraska	691
Utah	651
West Virginia	597
North Dakota	591
Delaware	546
Washington, DC	508
New Mexico	484
Maine	238
Vermont	221
Hawaii	67
Montana	67
Wyoming	59
Alaska	40
Guam	17
Puerto Rico	8
U.S. Virgin Islands	0

For the 16 states that are providing infection figures for all health care workers, the following table provides health care worker infections as a percentage of total cases. Some variation among the states may be due to more aggressive testing of health care workers in some areas. However, as noted at the outset of this report, according to NNU’s survey released on July 28, just “23 percent of nurses reported being tested.”⁷⁰

Table 6 Covid-19 Health Care Worker Infection Rates

State	Health Care Worker Infections as % of Total Cases
New Hampshire	23.1 %
Vermont	13.3%
Ohio	11.4%
Minnesota	10.9%
Oregon	9.8%
Wisconsin	7.8%
Arkansas	7.2%
Pennsylvania	6.9%
Idaho	6.8%
Georgia	5.8%
Virginia	5.7%
Oklahoma	5.6%
Alabama	5.4%
South Carolina	5.3%
California	4.8%
Colorado	3.4%

APPENDICES

Appendix I. **Registered Nurse Covid-19 Memorial**

Eleven National Nurses United (NNU) members are included in this memorial list who are believed to have died due to Covid-19 and related complications as of Sept. 16, 2020. Their names are highlighted in bold.

Note: We wish to apologize in advance for any errors or omissions. If you believe any name is included in error and would like it removed, or if you have a name you would like to be memorialized in a forthcoming version of this paper please contact: NNUMemorial@NationalNursesUnited.org.

Name	Age	Date Deceased	Employer	State of Employer
Cheryl Smith-Longfellow	60	Sept. 10	Singing River Hospital	Mississippi
Oliver Isleta	58	Sept. 1	Community Regional Medical Center	California
Neuman Kiamco	48	Aug. 30	MacNeal Hospital	Illinois
Jennifer Hayes	47	Aug. 28	Buckeye Transplant Services	Alabama
Jason Garcia	42	Aug. 26	CHRISTUS Spohn Hospital - Shoreline	Texas
Marnette Aggabao	62	Aug. 26	Guam Memorial Hospital	Guam
Wanda Key	64	Aug. 24	Center of Hope for Behavioral Health	Tennessee
Lisa Pinkstaff	52	Aug. 21	La Porte Hospital	Indiana
Ernest Garcia	39	Aug. 20	Axis Health Systems	Colorado
Bonita Long		Aug. 20	Marshall Medical Center South	Alabama
Patricia Edwards	62	Aug. 19	Bon Secours St. Francis Hospital	South Carolina
Ruth Noemi Olvera	50	Aug. 18		Texas
James White	27		Lake City VA Medical Center	Florida
Vincent DeJesus	39	Aug. 15	Sunrise Hospital and Medical Center	Nevada
Penny Scarangella Smith	48	Aug. 9	Baycare Bartow Hospital	Florida
Yolanda Coar	40	Weekend of Aug. 8-9	Augusta University Health Medical Center	Georgia
Charles Manrique	71	Aug. 8	Marion County Jail	Florida
Sandy Sarantis	61	Aug. 7	Novant Health Huntersville Medical Center	North Carolina
Daniel Morales	39	Aug. 3		Texas

John Cummings	56	Aug. 2	Mercy Hospital Berryville	Arkansas
Estrella Quillopa Malimban	65		Arrowhead Regional Medical Center	California
Sonia Brown	65	July 29	Kendall Regional Medical Center	Florida
Karen Wenk Smith	56	July 29	Medical Clinic of Houston	Texas
Virginia McCamish	61	July 27	Cleveland Clinic Martin Memorial Hospital	Florida
Ed Webster	47	July 25	Southpointe Rehabilitation	South Carolina
Marco DeLeon		July 24	NYU Winthrop Hospital	New York
Rolando Clemente Jr.	41	July 23		Arizona
Marcia Barga	67	July 22	Good Samaritan Hospital	Ohio
Zalika Kaza	42		St. Cloud Regional Medical Center	Florida
Aimee Williams		July 18	Hillcrest Medical Center	Oklahoma
Janine Paiste-Ponder	59	July 17	Alta Bates Summit Medical Center- Sutter Health	California
Melinda Speers	62	July 17	Simpson General Hospital	Mississippi
Mark Sterns	64	July 15	Med Central - Orlando Health	Florida
Samantha Hickey	45	July 13	St. Luke's	Idaho
Katherine Hughart	61	July 12	Western Arizona Regional Medical Center	Arizona
Dione Malana	61	July 12	Community First Medical Center	Illinois
Marsha Nelson	66	July 11	Mcleod Health Regional Medical Center	South Carolina
Lorenza "Lori" Guerrero	72	July 7	McAllen Medical Center	Texas
Joshua Obra	29	July 6	Intercommunity Care Center	California
Francis Mee	65	July 5	Tewksbury State Hospital	Massachusetts
John "Derrick" Couch	52	July 4	Med First Medical Center	Georgia
Dana Davis	51	July 3	Baptist Health	Kentucky
Jose Ruiz III	46	July 3	Valley Baptist Medical Center	Texas
Shawna Snyder	41	July 2	Banner - University Medical Center South	Arizona
Kathy Sims		July 1	Mcleod Health Regional Medical Center	South Carolina
Loida Tobias	61	June 30	Harlem Hospital	New York

Krisalyn Viste	48	June 30	Kaiser Permanente Ontario Medical Center	California
Larry Henning	67	June 26	Rockford Memorial Hospital	Illinois
Patricia Hudgins	57	June 23	First Choice Home Healthcare	Colorado
Sybil Freeman	62	June 22	Beaufort Memorial Hospital	South Carolina
Kerri Unsworth	56	June 20	Elmhurst Extended Care, Lifespan Hospitals	Rhode Island
Jose Luiz Maza	54		Kaiser Permanente San Diego Medical Center	California
Elena-Beth Alejandre	68	June 19		Maryland
Robert “Bob” Armstrong	56	June 16	Rogelio Sanchez State Jail, Texas Tech University Health Sciences Center	Texas
Kristen Brooks	61	June 15		California
Maria Cabatu	51	June 15	Hayward Healthcare and Wellness Center	California
Ernesto Santos	47	June 8	San Dimas Community Hospital, San Gabriel Valley Hospital	California
Diane Wolfe	69	June 5	Mississippi State Hospital	Mississippi
Ellen Carandang	51	Reported June 4	CarePoint Health	New Jersey
Matthew Moeddel			Bridgeway Pointe	Ohio
Valrena “Val” Singer	57	May 30	Kayenta Health Center	Arizona
Kurt Julian	63	May 29	Evergreen Medical Center	Washington
Suzanne Koransky	62	May 29	Wayne Public Schools	New Jersey
Grace Ocampo	50	May 29		New York
Nancy Veto	65	May 26	Community First Medical Center	Illinois
Madeline Johnson	70	May 25	Marcella Center	New Jersey
Sandra Oldfield	53	May 25	Kaiser Permanente Fresno Medical Center	California
Arlene Aquino	44	May 24	Mission Community Hospital	California
George Sisnero	63	May 24	University Hospital	New Jersey
Maria “Bambi” Roaquin	59	May 22	New York Presbyterian Hudson Valley Hospital	New York
Lyubov Semidubersky	62	May 22	Visiting Nurse Service	New York
Kathy Stuart	61	May 22		New Hampshire

Bernie Hailson Jr.	61	May 20	Holy Family Haverhill Hospital	Massachusetts
Renee French	54	May 19	New York Presbyterian	New York
Kathy Nelson	61	May 19		Virginia
Aleksandr Vollmann	58	May 19	Harborview Medical Center	Washington
Bernard Atta	66	Reported May 18	Correctional Reception Center	Ohio
Denny Gilliam	53	Reported May 18		Tennessee
Ilkah Hernandez	56	May 17	Abbot Terrace Health Center	Connecticut
Ellen B. Norman	66	May 17	Keystone Medical Center	Pennsylvania
Deborah Coughlin	67	May 16	iCare Health Management	Connecticut
Judith L. Heimann	63	May 15	Carlyle Healthcare Center	Illinois
Suppee Pojjananuvat	74	May 15	Montefiore-New Rochelle	New York
Michelle Herring	52	May 14	Martine Center for Nursing Rehabilitation & Nursing	New York
Pilar Palacios Pe	64	May 14	Adventist Fort Washington Medical Center	Maryland
Milagros Abellera	65	May 13	Baptist Medical Center, Kindred Hospital	Texas
Mavis Charles	63	May 12	St. Albans Community Living Center	New York
Jina Cadabono-Sisnero	62	May 11		New Jersey
Douglas Enteman	50	May 10		Delaware
Anne (Lucia) Gerardo-Repayo	60	May 10	Department of Veterans Affairs	New Jersey
Debra Rossler	58		Mercy Medical Center	New York
Irene "Rene" Burgonio	54	May 9	Fresenius	New York
Erwin Lambrento	58	May 9	Elmhurst Hospital	New York
Kelly Mazzarella	43	May 8	Montefiore-Mount Vernon	New York
Brian Saddler	60	May 8	St. Joseph's Wayne Medical Center	New Jersey
Royce Villa		May 8	Beaumont Hospital - Royal Oak	Michigan
Rose Zubko	71	May 8	St. Joseph Hospital	New York
Danilo Bulima	54	May 7	University Hospital	New Jersey
Rose Liberto	64	May 7	Atrium Health Cabarrus	North Carolina

Barbara Ann Stewart	57	May 7	Caswell Correctional Center	North Carolina
Walter Asah	54	May 5		Maryland
Maria E. Lopez	63	May 4	University of Illinois Chicago	Illinois
Carolyn McBride	65	May 2	Eden Village Retirement Center	Illinois
Linda Morris	73	May 2	Boro Park Center for Rehabilitation and Nursing	New York
Marsha Kaye Bantle	65	May 1	Signature Healthcare of Newburg	Indiana
Angel Santa Isabel	65	May 1	Shadow Hills Convalescent Hospital	California
Sheena Miles	60	May 1	Scott Regional Hospital	Mississippi
Svetlana Vinokur	56	May 1	Coney Island Hospital	New York
Necitas Galura	61	April 30		New York
Daniel Coronel	53	April 29	Brookdale Hospital Medical Center	New York
Patrick DeGenaro	63	April 28	Hackensack University Medical Center	New Jersey
Robert David Reisinger	57	April 28	River Grove Fire Department	Illinois
Azinet Pudpud	61	April 27	Lincoln Hospital	New York
Lorna Ramirez Retener	60	April 27	Plaza Health	Florida
Maria Cabillon	63	April 26	Kings County Hospital	New York
Neff Rios	37	April 26	St. Francis Hospital	Tennessee
Romeo “Romy” Agtarap	62	April 24	New York Presbyterian	New York
Gabriel Chinwendu	60	April 24	Catholic Charities	District of Columbia
Oluwayemisi “Yemi” Ogunnubi	59	April 24	Assigned to Symphony of Morgan Park, employed by Concerto Renal Services	Illinois
Imelda Tangonan	53	April 24	Blythedale Children’s Hospital	New York
Samantha Collings Wissinger	29	April 24	Beaumont Hospital - Troy	Michigan
Joyce Pacubas-Le Blanc	53	April 23	University of Illinois Chicago	Illinois
Carolyn Ettinger	53	April 22	Verrazano Nursing Home	New York
Steven Malagraph	55	April 22	Nyack Hospital	New York
Jose Mendeja	48	April 22		New Jersey

Lydia Tandoc Macuja	73	April 22	Beaumont Hospital - Royal Oak	Michigan
Paulette Thomas-Mickell		April 22	Amita Health St. Mary	Illinois
Celia Yap Banago	69	April 21	Research Medical Center	Missouri
Felicia Ailende	68	April 20	BRIA of Forest Edge	Illinois
Marlino Cagas		April 20	Harlem Hospital	New York
Cristino Fabro	70	April 20	Long Island Care Center	New York
David Blagrove	55	April 19	Kirby Psychiatric Center	New York
Virdree Burns Jr		April 19	Wellcare	New York
Sheila Faye Christian	66	April 19	Care Pavilion Nursing and Rehabilitation Center	Pennsylvania
Karla Dominguez	33	April 19	Providence Children's Hospital - Providence Memorial Campus	Texas
Maria Grace Esteves Laureta			St. Barnabas	New York
Lisa Micek		April 19	CHI St. Francis	Nebraska
Emma Goolsby	56		Bellevue Hospital	New York
David Perea	35	April 19	Lakeside Health & Wellness Suites (MAS Medical Staffing)	Nevada
Taiwo Alubajo	54	April 18	Manorcare Health Service - Yeadon	Pennsylvania
Lois Ashcroft-Merrell	57	April 18	Pine Bluffs Regional Medical Center	Arkansas
Roxanne Bent	48	April 18	Brooklyn Methodist	New York
Corazon Espinosa	62	April 18		New York
Faye Jackson	75		Crown Healthcare of Mobile	Alabama
Victor Sison	64	April 18	Complete Care Hamilton Plaza	New Jersey
Ryan Slattery	43	April 18	Jefferson Frankford	Pennsylvania
Renato Garcia	59		Newark Beth Israel Medical Center	New Jersey
Celia Lardizabal Marcos	61	April 17	CHA Hollywood Presbyterian Medical Center	California
Rosemary Sell	81	April 17		New York
Rebecca Yee	48	April 17	Mount Sinai	New York
Robert Tarrant	66		Robert Wood Johnson Barnabas Health	New Jersey

Joyce Brown-Wigfall				New York
Helen Gbodi	55	April 16	Medstar Washington Hospital Center	District of Columbia
Maureen Lunney	59	April 16	Richmond University Medical Center	New York
Mike Marceaux	49	April 16	Christus Hospital	Louisiana
Anjanette Miller			Community First Medical Center	Illinois
Pamela Orlando	56	April 16	Valley Hospital	New Jersey
Livette Plan		April 16	Orange Regional Medical Center	New York
Barbara Birchenough	65	April 15	Clara Maas Medical Center	New Jersey
Ellyn T. Schreiner	68	April 14	Crossroads Hospice	Ohio
Ernesto "Audie" DeLeon		April 13	Bellevue Hospital	New York
Irena Hartell	68	April 12		New York
Rose Taldon	63	April 12	New England Baptist Hospital	Massachusetts
Evelyn Caro	69	Weekend of April 11-12	Capital Women's Care	Maryland
Quen Agbor Ako	53	April 10	Future Care - Old Court	Maryland
Yaw Asante	60		Lincoln Hospital	New York
Susan Sisgundo	51		Bellevue Hospital	New York
Paul Anthony Camagay		April 9	Emanate Health Inter-Community Hospital	California
Rosemary Coutou-Figaro	52	April 9	KingsBrook Jewish Medical Center	New York
Felicisimo "Tom" Luna	62	April 9	Trinitas Regional Medical Center	New Jersey
Elvira Pagala	69	Death reported April 9	Rehab at River's Edge	New Jersey
Mary Ellen Porter	65	Death reported April 9	Richmond University Medical Center	New York
Whitney Ballance	37	April 8	Mission Health	North Carolina
Theresa Berbano	58	April 8	New York Presbyterian	New York
Aleyamma John	65	April 7	Queens Hospital Center	New York
Thyce Mattiss	60	April 7	Montefiore-Moses	New York
Gloria Minor	65	April 7	Metropolitan Hospital	New York

Unknown Nurse		Reported by VA April 7	Michael E. Debakey Medical Center	Texas
Vianna Thompson	52	April 7	VA Northern Sierra	Nevada
Divina “Debbie” Accad	72	April 6	VA John D. Dingell Medical Center	Michigan
Rose Harrison	60	April 6	Marion Regional Nursing Home	Alabama
Earl Bailey	56	April 5	Florida Medical Center, Palmetto General Hospital	Florida
Daisy Doronila	60	April 5	Hudson County Jails	New Jersey
Angela Lewis		April 5	Visiting Nurses Association of Staten Island	New York
Edwin Montanano	73	April 5	Hudson County Jails	New Jersey
Ali Dennis Guillermo	44	Week of April 5-11	Long Island Community Hospital	New York
Patrick Cain	52	Weekend of April 4-5	McLaren Flint	Michigan
Angeline Bernadel*	52	April 4	West River Healthcare Center	Connecticut
Susan Cicala	60	April 4	Clara Maas Medical Center	New Jersey
Elizabeth Bartolome Del Mundo	59	April 4	Crane’s Mill (Nursing Home)	New Jersey
Marilyn Howard	53	April 4	Spring Creek School	New York
Sonia Roman		Reported April 3	El Hospital Auxilio Mutuo	Puerto Rico
John Abruzzo	63	April 2	Huntington Hospital	New York
Mark Leighton Bowen	54	April 2	Highland Care Nursing Home	New York
Lisa Ewald	54	March 31	Henry Ford Hospital	Michigan
James House	40	March 31	Omni Continuing Care Nursing Home	Michigan
Nicanor “Nick” Baltazar	60	March 30	Long Island Care Center	New York
Kevin Graiani	56	March 30	Rockland Medical Group	New York
Unknown Nurse		Week of March 29-April 4	Los Angeles County Jails	California
Unknown Nurse		Week of March 29-April 4	Piedmont Henry	Georgia
Larrice Anderson	46	March 31	New Orleans Hospital East	Louisiana
Maria Luisa Lopez		March 31	Bayonne Medical Center	New Jersey
Jeff Baumbach	57	March 30	St. Joseph’s Medical Center	California

Unknown Nurse		Reported March 30		Ohio
Rosary C. Castro-Olega	63	March 29	All Care & Core Med Staffing Agencies	California
Freda Ocran	50	March 28	Jacobi Medical Center Psychiatric Unit	New York
Araceli Buendia Ilagan	63	March 27	Jackson Memorial Hospital	Florida
Cynthia "Chi" Mendoza	68	March 27	Sentara Leigh Hospital	Virginia
Noel Sinkiat	64	March 27	Howard University Hospital	District of Columbia
Kious Kelly	48	March 24	Mount Sinai West	New York
MaryBeth Pappetti	65	March 24	CareOne at Livingston Assisted Living	New Jersey
Theresa Lococo	68	Week of March 22-28	Kings County Hospital	New York
Judy Wilson-Griffin	63	March 20	SSM Health St. Mary's Hospital	Missouri

**Angeline Bernadel was very close to becoming a registered nurse and as such is included.*



Appendix II. Health Care Worker Covid-19 Memorial

This memorial list includes the names of 617 health care workers who are believed to have died due to Covid-19 and related complications as of Sept. 16, 2020.

Note: We wish to apologize in advance for any errors or omissions. If you believe any name has been included in error and would like it removed, or if you have a name you would like to be memorialized in a forthcoming version of this paper please contact: NNUMemorial@NationalNursesUnited.org.

Name	Employer	State
Jerry Alford	DCH Regional Medical Center	Alabama
Candace Allen		Alabama
Dr. Chaihan Korn		Alabama
Jacques Mcconico	Diversicare of Riverchase	Alabama
Casadear “Ceda” Williams	Mobile Metro Jail	Alabama
Arniece Brown	Little Colorado Medical Center	Arizona
Bricias Gallegos		Arizona
Emilia Mathos	Yuma Regional Medical Center	Arizona
Josephine Arnold Morante		Arizona
Dr. Nick Rizos	Havasu Regional Medical Center	Arizona
Cheryl Thinn	Tuba City Regional Health Care Corporation	Arizona
Corrinna Thinn	Tuba City Regional Health Care Corporation	Arizona
Patricia Wilke	Winslow Safeway	Arizona
Michael Willis	Copper Queen Community Hospital	Arizona
Shanta Batchelor	Arkansas Children’s Hospital	Arkansas
Dr. Robert “Ray” Hull		Arkansas
Bruce Hutcheson	Community Blood Center of the Ozarks	Arkansas
Dr. Roy Lee	Mediquick Urgent Care	Arkansas
Cheryl Morrow	Batesville Family Practice Clinic	Arkansas
Kay Parker	Dardanelle Nursing and Rehabilitation	Arkansas
Richard Richardson	Central Arkansas Community Correction	Arkansas
Dr. Thomas Rose	Dale Medical Center	Arkansas
Clint Watson II	Baptist Health - Conway	Arkansas
Dulce Aguilo	Belmont Village	California
Christina Baldado		California

Scott Blanks		California
Garry Bowie	Being Alive	California
Brittany Bruner-Ringo	Silverado Beverly Place	California
Eligio Cabuncal		California
Dr. Paul Constantine		California
Vivian Fierro	Impact Drug and Alcohol Treatment Center	California
Donna Frey	Adventist Health Lodi Memorial	California
Emmanuel Gomez	UCLA Ronald Reagan Medical Center	California
Lepe Wightman Hakai		California
Aldo Iniguez	Care Ambulance	California
Sally Lara	Riverside Community Hospital	California
Da-wei Liang	Garfield Medical Center	California
Rosa Luna	Riverside Community Hospital	California
Rick Malacas	Scripps Mercy Hospital Chula Vista	California
Adan Maldonado	El Centro Regional Medical Center	California
Jean Paul Martinez	Department of Veterans Affairs	California
Marcus Mckesson		California
Anthony Navata		California
Thong Nguyen	Garfield Medical Center	California
Gaby O'Donnell	City of Hope (satellite clinic)	California
Alex Palomo	Garfield Medical Center	California
Eyvette Pascascio	Country Villa Terrace Healthcare Center	California
Jose Perez	Los Angeles Fire Department	California
Gwendolyn Robinson	Yountville Veterans Home	California
Adena Rodriguez	Kaiser Ontario	California
Sarah Roncskevitz		California
Juan Segundo Sr.	Alta Bates Summit	California
Maria Sigala	Monterey Park Hospital	California
Antonia "Tony" Sisemore	Woodland Senior Living Facility	California
Imelda Sudlra	Greater El Monte Community Hospital	California
Hernando Sumangil		California

Scott Tyrell	Walker Physical Therapy	California
Sally Vazquez		California
Roda Vicuna	Kindred Brea	California
Valeria Viveros	Extended Care Hospital	California
Alfonso Ye Jr	PalmCare Pharmacy	California
Vincent Gaines	University Park Care Center	Colorado
Brian Garrett		Colorado
Sheila Griesch	Mapleton Care Center	Colorado
Katherine Birkmaier	The Linden at Woodbridge	Connecticut
Patrick Brellis	Southbury Training School	Connecticut
Dr. Santo Buccheri		Connecticut
Sebastiana “Nella” Cardella	One Macdonough Place	Connecticut
Luann Contois	Brookdale (Assisted Living)	Connecticut
Cassandra Diaz	Chelsea Place Care Center	Connecticut
Elva Graveline	Lawrence+Memorial Hospital	Connecticut
Douglas Hickok		Connecticut
Torrin Howard	Boys and Girls Village	Connecticut
Curtis Hunt	Cornell Scott-Hill Health Center and New Reach	Connecticut
Miriam Kwentoh	Willows	Connecticut
Michael Mark	Southbury Training School	Connecticut
Glenford Morgan	St. Francis Hospital	Connecticut
Marlene Thompson	Southbury Training School	Connecticut
Nicky Leake	Medstar Washington Medical Center	District of Columbia
Veronica Norman	St. Elizabeth’s	District of Columbia
Calvin Richardson Jr.	Department of Veterans Affairs	District of Columbia
Dr. Glenn Barquet	Mercy Hospital	Florida
Alexander Bernardo		Florida
Marjorie Blackman	Seminole Pavilion and Rehabilitation Services	Florida
Romeo Bungubung	Brookdale Senior Living/Atrium	Florida
Dr. Luis Caldera-Nieves	University of Miami (UM) Health	Florida
Samantha Diaz	Dr. Nagavardhan Vasuki, MD	Florida

Evert Diazgrandados		Florida
Therese Edwards	Tallahassee Developmental Center	Florida
Dr. Orlando Espinoza		Florida
Fritzner Fabre		Florida
Devin Francis	Jackson Memorial Hospital	Florida
Shaquana Garrett	Holy Cross Hospital	Florida
Helen Gutierrez-Zwick	Infinite Ways Network	Florida
Dr. Alex Hsu	Northwest Medical Center	Florida
Ricky Maples	Clifford C. Sims State Veterans' Nursing Home	Florida
Jorge Mateo	Coral Gables Hospital	Florida
Mario Mayorga Jr.	Mt. Sinai Medical Center	Florida
Renada McGuire		Florida
William Vincent Murdock		Florida
Dr. Eddie Negron		Florida
Laudelina Ochoa	Pointe of North Gables	Florida
Juan Quintas	West Gables Rehabilitation Hospital	Florida
Robert Ruiz		Florida
Julie St. Preux		Florida
Ryan Sanders		Florida
Dr. Eugene "Gene" J. Sayfie		Florida
Dr. Sam E. Scolaro	Florida Medical Clinic	Florida
Dr. Jose Antonio Soto		Florida
Dr. Carlos "Charlie" Vallejo		Florida
Betty Cass		Georgia
Bishop Bruce Davis	Central States Hospital (Psychiatric)	Georgia
Christopher Davis	Grady Memorial Hospital	Georgia
Mark Bryson Delong	Central States Hospital (Psychiatric)	Georgia
Cathy Dunwoody	Donalsonville Hospital	Georgia
Billy Joe Gilbert	Wellstar Paulding Hospital	Georgia
Dr. Frank Lockwood		Georgia
Dr. John Marshall Jr.		Georgia

Shameaka Montgomery	Tanner Medical Center	Georgia
David Plater	Emory Hillandale Hospital	Georgia
Deborah Stevers		Georgia
Brett Tracy	Tracy's Medicine Center	Georgia
Shameaka Montgomery	Tanner Medical Center	Georgia
Michelle Abernathy	Ludeman Developmental Center	Illinois
Lolo Ijeoma Afuke	Mado Healthcare Uptown	Illinois
Mario Araujo	Chicago Fire Department	Illinois
Joseph Bongiorno Jr.		Illinois
Timothy Branscomb		Illinois
Krist Angielan Castro Guzman	Bolingbrook Adventist Hospital	Illinois
Kenneth Cheverko	Haymarket Center	Illinois
Leola Gradey	BRIA of Forest Edge	Illinois
Sandra Green	Symphony Of Joliet	Illinois
Pamela L. Hair	Bloomington Rehabilitation & Health Care Center	Illinois
Karon M. Hoffman	Alden Terrace	Illinois
Gabrail "Gabe" Ismayl	Swedish Covenant	Illinois
Cephus Lee	Ludeman Developmental Center	Illinois
Juan Martinez	Univeristy of Illinois Chicago Hospital	Illinois
Leather Moss		Illinois
Jasslyn Saffold	Forum Extended Care Services	Illinois
Dorothy Sims		Illinois
Edward Starling	Universtiy of Illinois Chicago Hospital	Illinois
Josephine Tapiru	Park View Rehab	Illinois
Deshaun Taylor		Illinois
Walter Veal	Ludeman Developmental Center	Illinois
Jose Velez	Ludeman Developmental Center	Illinois
Ronald Whitfield	Haymarket Center	Illinois
Dr. Marques Larue Bolden		Indiana
Linda Bonaventura	Wildwood Health Care Center	Indiana

Darrell Robinson	Lake County Jail	Indiana
John Schoffstall	Terra Haute Fire Dept	Indiana
Dr. Frank Sequeira	Franciscan Health	Indiana
Sue Williams Ward		Indiana
Donald Dreesman	Harmony House	Iowa
Pamela L. Hughes	Summit Manor	Kentucky
Wanda Johnson	Medcenter Health Bowling Green	Kentucky
Dr. Rebecca Shadowen	Medcenter Health Bowling Green	Kentucky
Michelle Rose Thompson	Summit Manor	Kentucky
Sandra Rose Carter	East Jefferson General Hospital, West Jefferson Hospital	Louisiana
Roy Coleman	Overton Brooks -Department of Veterans Affairs	Louisiana
Lidia "Bibi" Angulo Everett		Louisiana
Dr. Shaban Faruqui		Louisiana
Clair Marie Fuqua		Louisiana
Richard Gabriel		Louisiana
Danielle Hanna	Glenwood Regional Medical Center	Louisiana
Dr. Paul E. Hyman	Children's Hospital	Louisiana
Jana Prince	Salvation Army	Louisiana
Shenetta White-Ballard	Legacy Nursing and Rehabilitation	Louisiana
Louella Williams	Oschner Medical Center	Louisiana
Betty Olayinka Akinkugbe		Maryland
Sean D. Boynes	AbsoluteCARE Medical Center & Pharmacy	Maryland
Dr. Joseph Costa	Mercy Medical Center	Maryland
Chantee Mack	Prince George's County Health Department	Maryland
John Mbah	UM Prince George's Medical Center	Maryland
Lawrence Nokes	Pleasant View Nursing Home	Maryland
Curtis Orr	Express Dental Laboratory	Maryland
Joyce Shorter	Sagepoint Senior Living	Maryland
Raymond Aristhomene		Massachusetts
Cathy Carey	Life Care Center of Attleboro	Massachusetts

Kettely Desire	Alliance Health at West Acre	Massachusetts
Marie Deus	Brigham and Women's Faulkner Hospital	Massachusetts
Michelle Dione	Oxford Nursing Home	Massachusetts
Robert Doiron	UMass Memorial - Marlborough	Massachusetts
Wilna Doresca	East Boston Neighborhood PACE	Massachusetts
Catherine Drouin	Palm Center	Massachusetts
Myrna Famania	Whitney Place	Massachusetts
David S. Ferranti	St. Elizabeth Medical Center	Massachusetts
James Joseph Footit	Family Medical Center	Massachusetts
Patricia Gooddale	Life Care Center of Leominster	Massachusetts
Joanne Granger	Edward M. Kennedy Community Health Center	Massachusetts
Francoise Hilaire		Massachusetts
Cheryl Ann Hodsdon	Bertram House	Massachusetts
Maria Krier	Life Care Center of Nashoba Valley	Massachusetts
Cindy Locklear	Marlborough Hills Rehab& Health Care Center	Massachusetts
Maria MacDonald	DayBrook Village	Massachusetts
Paul Moore	Charlwell House Health and Rehabilitation Center	Massachusetts
John Pope		Massachusetts
Alan Twofoot	Edith Nourse Rogers - Department of Veterans Affairs	Massachusetts
Dr. Janice Weisman	Boston University School of Medicine	Massachusetts
Rosanna "Rose" Wilson	East Longmeadow Skilled Nursing Facility	Massachusetts
Dolores Ann (McBride) Woodford	Rheumatology Consultants	Massachusetts
Lori Alioa	Department of Veterans Affairs	Michigan
Antoinette Bell	Detroit Health Department	Michigan
Catalino Buddy Bernardo		Michigan
Monica Echeverri Casarez	Harper Hospital	Michigan
Myron Dawson	Christ Child House	Michigan
Dr. Chris Firlit		Michigan
Deborah Gatewood	Beaumont Hospital - Farmington Hills	Michigan
Carrie Hennig	Covenant Healthcare	Michigan

Roger Liddell	McClaren Flint	Michigan
Lydia Lopez	Samaritas Senior Living Center	Michigan
Christopher David Matus		Michigan
Dr. Richard Miles	Wayne County Jail	Michigan
Debra Mullennix		Michigan
Edward Nelson	Hurley Medical Center	Michigan
Paul Novicki		Michigan
Lyle Ogilvie	Roosevelt Park Nursing and Rehabilitation Center	Michigan
Dr. Angelo N. Patsalis	Henry Ford Medical Center - Livonia	Michigan
Lashaun Perez	Medilodge of Howell	Michigan
Wendell Quinn	McClaren Flint	Michigan
Harold "Rex" Ruettinger	Garden City Hospital	Michigan
Jamice Sturdivant	Packard Health	Michigan
Glady Tagomila		Michigan
Darlene Williams	Walter Reuther Psychiatric Hospital	Michigan
Capt. Franklin Williams	Detroit Fire Department	Michigan
Larrydean Goodrich	North Memorial Medical Center	Minnesota
Dr. Albasha Hume	Open Cities	Minnesota
David Koleh	Glenn Hopkins Catholic Senior Communities	Minnesota
Dorothy Jean Boles	Greenwood Laflore Hospital	Mississippi
William David Martin	AMR Southwest Mississippi	Mississippi
Becky Myhand	Care Center of Aberdeen	Mississippi
Jennifer Anderson-Davis	Meremec Bluffs	Missouri
Billy Birmingham	Kansas City Fire Dept	Missouri
Marie Brumbaugh	Cox Health	Missouri
Angel Dampier		Missouri
Jazmond Dixon	Red Cross	Missouri
Brenda Susan Schaeg	Bethesda Meadow Skilled Nursing Facility	Missouri
Cynthia Whitfield	Grand Manor Nursing and Rehabilitation	Missouri
Alex Gousev	VA Northern Sierra	Nevada

Yulanda Hodge	St. Rose Dominican - San Martin	Nevada
Dr. Arthur Tayengco		Nevada
Marjorie Gardner	Villa Crest Rehabilitation	New Hampshire
Nagi Abraham	University Hospital	New Jersey
Martin Addison	St. Joseph Medical Center	New Jersey
Edgar Alberto		New Jersey
Dr. Jose Islani Allapitan Sapal Jr. (Jun)	St. Barnabas Medical Center	New Jersey
Enrique Almoite	West Caldwell Care Center	New Jersey
Francisca Amponsah		New Jersey
Darlene Andes	Mercer County Division of Public Health	New Jersey
Jenni Claire Bartolome	Emerson Health and Rehabilitation Center	New Jersey
Nestor Bautista	Clara Maas Medical Center	New Jersey
Don Ryan Bayatola	South Mountain Healthcare and Rehabilitation Center	New Jersey
Andres Benitez	Holy Name Medical Center	New Jersey
Felicia Booker	University Hospital	New Jersey
Dr. James Boudwin	RWJ Dayton	New Jersey
Michael Burgio	Newton Medical Center	New Jersey
John Careccia	Woodbridge Township Ambulance & Rescue Squad	New Jersey
Emmanuel Carrillo	Hackensack New Jersey Propsect Heights Care Center	New Jersey
John Cofrancesco	Family of Caring at Montclair	New Jersey
Dr. Kenneth Conte		New Jersey
Dr. Leo de la Cruz	Carepoint (Christ) Hospital	New Jersey
Deloris Dockery	Hyacinth Aids Foundation	New Jersey
Solomon Donald	Trinitas Regional Medical Center	New Jersey
Albert Duncan Jr.	University Hospital	New Jersey
Anissa Edwards	St. Joseph's Wayne Medical Center	New Jersey
Norman Einhorn		New Jersey
Obinna Chibueze Eke	University Hospital	New Jersey
Jessie Ferreras		New Jersey

Frank Gabrin	East Orange General Hospital	New Jersey
Dr. Joaquin B. Garcia, MD	Whippany Family Practice	New Jersey
Scott Geiger	Atlantic Mobile Health - Atlantic Health System	New Jersey
Severiana Gimenez	Holy Name	New Jersey
Dr. Michael Giuliano		New Jersey
Bruce H. Greene		New Jersey
Dr. Harvey Hirsch	Center for Health Education, Medicine and Dentistry (CHEMED)	New Jersey
Darrell Johnson	Morristown Medical Center	New Jersey
Richard Kesner	CareOne	New Jersey
Priya Khanna	Khanna Nephrology	New Jersey
Kevin Leiva		New Jersey
Peggy Levinson		New Jersey
Nancy Martell	Palisades Medical Center	New Jersey
Arriel Mascardo		New Jersey
Josephine McElveen	Christian Health Care Center - Heritage Manor East	New Jersey
Paul Moise		New Jersey
Francis Molinari	Clara Maas Medical Center	New Jersey
Dr. Godwin Molokwu		New Jersey
Dr. Gene Nebel	Greystone Park Psychiatric Hospital	New Jersey
Richard Onouah	Greystone Park Psychiatric Hospital	New Jersey
Alfredo Pabatao	Hackensack Meridian Health	New Jersey
Susana Pabatao	Bergen New Bridge Medical Center	New Jersey
Jacob Page		New Jersey
Rebecca Pina	Greystone Park Psychiatric Hospital	New Jersey
David Pinto		New Jersey
Arnold Abdullah Plant	University Hospital	New Jersey
Antoinette Matthews "Toni" Powell	Manor Health and Rehabilitation	New Jersey
Cheryl Roberts	Alaris Health at Hamilton Park	New Jersey
Angela "Anjie" Rodriguez	University Hospital	New Jersey
Sandra Hardy Rogers	Community Medical Center	New Jersey

Monemise Romelus	NJ Veterans Memorial Home at Menlo Park	New Jersey
Liana Sa	Howell Police EMS	New Jersey
Dr. Barry Sakowitz		New Jersey
Elliott Samet	St. Mary's General Hospital	New Jersey
Delores Simon	University Hospital	New Jersey
Kim King Smith	Newark University Hospital	New Jersey
Saif Titi	Noble Pharmacy	New Jersey
Israel Tolentino		New Jersey
Jesus Villaluz	Holy Name Medical Center	New Jersey
Ritchie Villena	SportsMed Physical Therapy	New Jersey
Earl A. Washington	Ann Klein Forensic Center (Psych Hospital)	New Jersey
Robert Weber		New Jersey
Sina Zaim		New Jersey
Barbara Bedonie	Cedar Ridge Inn of Farmington	New Mexico
Glovis Foster	San Juan County EMS	New Mexico
Jose Gomez	Alamo Navajo Reservation	New Mexico
Roberta Gruber		New Mexico
Brianne Laughing	Na Nihzhoozhi Center Inc (NCI)	New Mexico
Jody Mares		New Mexico
Lily Tsosie	San Juan Regional Medical Center	New Mexico
Ashraf Abdo		New York
Kwabena Acheampong	Saints Joachim & Anne Nursing And Rehab Ctr	New York
Rashida Ahmed		New York
Rukhsana Ahmed		New York
Dr. Alejandro Albano	Clove Lakes Healthcare and Rehabilitation	New York
Dr. Niaz Ali		New York
Danny Almonte	Visiting Nurse Services of New York	New York
Dr. Caleb Anya	Corning Center for Rehabilitation	New York
Nerissa Armeto	Rogosin Institute East	New York
Luis Arrellano		New York
Deyrold Arteaga	Hatzoloh EMS	New York

Earline Austin		New York
Mahdvi Aya	Woodhull Medical Center	New York
Randall Bailey	Visiting Nurse Services of New York	New York
Gerry Balasta	Wonderful Beginnings	New York
Alex Bass	Coney Island Hospital	New York
Dr. Doug Bass	Phoenix House	New York
Ketty Beaubien	Lifespire	New York
Yanick Beaubrun	Visiting Nurse Services of New York	New York
Edward Becote	Brooklyn Hospital Center	New York
Fareeda Beharry		New York
Gianmarco Bertolotti	Lennox Hill Hospital	New York
Idris Bey	New York City EMS	New York
Jadah Bey	Visiting Nurse Services of New York	New York
Dr. Neil Blatt		New York
Syed Bokhari	Woodhull Medical Center	New York
Dennis Bradt	Conifer Park Substance Rehabilitation Center	New York
Derik Braswell	Elmhurst Hospital	New York
Randy Brown		New York
Dr. François Hébert Brutus		New York
Chanda Lori Bullock-Ogburn		New York
Ishmael Burch		New York
Dr. Irving Buterman	Lennox Hill Hospital	New York
Carlos Camacho	Montefiore St. Luke's Cornwall	New York
Karen Carmello	Maria Regina Nursing Home	New York
Rafeal Cargill	Brooklyn Hospital Center	New York
Priscilla Carrow	Elmhurst Hospital	New York
Paul Cary		New York
Frank Casano		New York
Lenora Casso	New York City Department of Health and Mental Hygiene	New York
Dr. Ricardo Castaneda		New York

Eresmildo Castiblanco		New York
Paul Charon		New York
Rhena Chase	Park Gardens Rehabilitation and Nursing Home Center	New York
Dr. Sudheer S Chauhan	Jamaica Hospital	New York
Charlie Chin Song Chen	Joseph P. Addabbo Family Health Center	New York
Dr. Reza Chowdhury		New York
David Christian		New York
Dr. John Coman	NewYork-Presbyterian Medical Group Queens	New York
Lindonna Connought	Visiting Nurse Services of New York	New York
James Daniels		New York
Brian Danzinger	Medford Fire Department	New York
Denny Darby	Fulton Center	New York
Karisma Dargan	HASA Greenwood	New York
Horace Davis		New York
Christopher Dean	Department of Veterans Affairs	New York
Dr. Ydelfonso Decoo	Somos	New York
Janissa Delacruz	Montefiore Nyack	New York
Stephen Demonteverde	Mount Sinai South Nassau	New York
Andrew DiMaggio	New Rochelle Fire Department	New York
Dr. Edgar Ednalino		New York
Wayne Edwards	Elmhurst Hospital	New York
Bassey Epko	Mount Sinai Beth Israel	New York
Jeffrey Escher	Providence Rest	New York
Cristino Evangelista Fabro	Long Island Care Center	New York
Eiman Fadda	Bayberry Nursing	New York
Michael Field	Valley Stream NY	New York
Dr. David W. Finn	MMTP/HIV Primary Care Clinic Stapleton	New York
Dr. Arthur Friedman		New York
Valarie Fulton	New York Presbyterian	New York
Dr. Jay Galst	Omni Eye Services	New York

Frank Maxwell		New York
Pamela McCrory	Sisters Hospital	New York
William Mcdowell		New York
Lorna McEachron		New York
Karley Rae McGuire	Bon Secours Community Hospital	New York
Andrea McKenzie	Cliffside Nursing House	New York
Dr. Sydney Mehl	New York University Langone	New York
Yaakov Meltzer	Quality Health Care	New York
Janine Meritet	Saint Catherine of Sienna Medical Center	New York
Dr. Ashraf Metwally		New York
Hazel Mijares	Amsterdam Nursing Home	New York
Helen Monah		New York
Adiel Montgomery	Kingsbrook Jewish Medical Center	New York
Matthew Moore	Northwell Go Health Urgent Care in Eltingville	New York
Dr. Ruben Moronta		New York
Prea Nankieshore	Long Island Jewish Forest Hills	New York
Margaret Narel		New York
Joan Neudecker	McAuley Residence Nursing home	New York
Nancy Norman	Visiting Nurse Services of New York	New York
Alex Ofori	Long Island Jewish Medical Center	New York
Benjamin Onodu	City of New York	New York
Gregg Pappadake		New York
Ralph Pastena		New York
Dr. Tomas Pattugalan		New York
Barry Persard	King's County Hospital	New York
Marie Petit-Homme		New York
Keith Philip		New York
Bredy Pierre-Louis		New York
Efrain Pineda	Glengariff Rehabilitation and Healthcare Center	New York
William Plantt	Kirby Forensic Psychiatric Center	New York
John Poleon	Buffalo Medical Center	New York

Dr. Nisar Quraishi	NYU Langone	New York
Sieunarine Ramnarine	DJ Ambulette Service	New York
John Redd	New York City EMS	New York
Dr. Mark Allen Respler		New York
Khaseem Rhames	City of New York	New York
Petal Williams Richards	Bronx Lebanon Hospital	New York
Kenneth Ricketts		New York
Hector Rivera	Visiting Nurse Services of New York	New York
Dr. Ivan Rodriguez	East New York Diagnostic Treatment Center	New York
Juan V. Rodriguez	Montefiore St. Luke's Cornwall	New York
Reuben Rodriguez	New York City EMS	New York
Dr. Yves Roseus	Brookdale Hospital Medical Center	New York
Santa Russo		New York
Mario Salonga	Mount Sinai South Nassau	New York
Darrin Santos	New York Presbyterian	New York
Gary Sclar	Mount Sinai Queens	New York
Richard Seaberry		New York
Yves-Emmanuel Segui	Riverdale Pharmacy	New York
Alvin Simmons	Rochester General Hospital	New York
Lemuel Sison		New York
Dr. Javier Sloyer		New York
Corrine Smith	Visiting Nurse Services of New York	New York
Tommy Smith III	Staten Island Hospital	New York
Thomas Soto	Woodhull Medical Center	New York
Sophia Stewart	Visiting Nurse Services of New York	New York
Mary Sturdivant	New York Presbyterian	New York
Doreen Tay	Montefiore Medical Center	New York
Anthony "Tony" Thomas	NYU Langone Brooklyn	New York
Lydia Thomas		New York
William Thomas		New York
Adlin Thomspon		New York

Philip To		New York
Lolita Torres		New York
Louis Torres	Queens Boulevard Extended Care Facility	New York
Denise Turowski		New York
Jamal Uddin	New York City H.I.V./AIDS Services Administration	New York
Ronald Verrier	St. Barnabas Hospital	New York
Franz Vital		New York
Gary Washington	Allen Hospital	New York
Dr. Barry Webber	Mt. Sinai Queens	New York
Ken Whitney	NYU Winthrop	New York
Wayne Whyte		New York
Garret Williams		New York
Ian William Wilson	Isabella Nursing Home	New York
Judith Wilson	Alliance Homecare	New York
David Wolin	Brooklyn Hospital Center	New York
Ali Yasin	New York City Pharmacy	New York
Dr. Jesus Zambrano	Mount Sinai South Nassau	New York
Cirino Zapala		New York
Dulce Garcia		North Carolina
Elizabeth Edwards	CarolinaEast Medical Center	North Carolina
Reagan Henry	Deerfield Retirement Community	North Carolina
Dahir Ahmed	Family Healthcare	North Dakota
Claire Boughman	New Dawn Rehabilitation and Health Care Center	Ohio
Damon Bradley		Ohio
Jeannie Danker	Wexner Medical Center	Ohio
Tracy Heverly	Crandall Medical Center	Ohio
Raymond James Lanzo	Generation Behavioral Health	Ohio
Kipp Lyons	Ohio Living Rockynol	Ohio
Fr. Arcangelo Manzi	Cleveland Clinic Lutheran Hospital	Ohio
Lt. Richard Petras	Cleveland Fire Department	Ohio

Tina Reeves	Pickaway Correctional Institute	Ohio
Jackie Scott	Suburban Healthcare and Rehabilitation Center	Ohio
David Stanford	Lima Memorial Health System	Ohio
Fernando Tanner	Physicians Ambulance	Ohio
Faye Deason	Wilma P. Mankiller Health Center	Oklahoma
Janita Fields-Yanez	WW Hasting Hospital	Oklahoma
Dr. Robert Oglesbee		Oklahoma
Courtney Van Buren	Seiling Nursing Center	Oklahoma
Raven Voice		Oklahoma
Paul Odighizuwa	Oregon Health Sciences University	Oregon
Falneisha Adams	Children's Hospital of Philadelphia	Pennsylvania
Tamajin Ali	Centennial Healthcare and Rehabilitation Center	Pennsylvania
James Anderson	St. Mary's Medical Center	Pennsylvania
Brad Blackman	Swarthmore Fire and Protective Association	Pennsylvania
Kevin Bundy	Mercy Fitzgerald Hospital	Pennsylvania
Lisa Burhannan		Pennsylvania
Chad C. Eddinger	Department of Veterans Affairs	Pennsylvania
Jeremy Emerich	Lehigh Valley Health Network MedEvac	Pennsylvania
Eric Gore	Philadelphia Fire Department	Pennsylvania
Troy Hughes	City of Philadelphia	Pennsylvania
Keith A. Jones		Pennsylvania
Trudy Klinger	Susquehanna Nursing Home	Pennsylvania
Adrienne Kulak	Green Valley Skilled Nursing	Pennsylvania
Elizabeth Levan		Pennsylvania
Marilyn Long	Attleboro Nursing Home	Pennsylvania
Vincent Spellman Sr.		Pennsylvania
Walter Ulmer	Abington Hospital	Pennsylvania
Elizabeth Wiles	Brighton Rehabilitation and Wellness Center	Pennsylvania
Robert Zerman		Pennsylvania
Dr. Rubio Burgos		Puerto Rico
Victor de Jesus		Puerto Rico

Jerald Ferreira	Our Lady of Fatima Hospital	Rhode Island
María Hernández Rodríguez		Puerto Rico
Joan Kershaw Swann	Kent Hospital	Rhode Island
Nancy Macdonald	Orchard View Manor	Rhode Island
Suchendra Singh	Memorial Hospital of Rhode Island	Rhode Island
Keith Brown	Medtrust Medical Transport	South Carolina
Joshua Bush		South Carolina
Donna Dehart	Veteran's Victory House	South Carolina
John Granger	VitalCare	South Carolina
Aaron Lorick		South Carolina
Tuan Nyugen		South Carolina
Sandra Priester	Babcock Center	South Carolina
Mack Timothy Brooker	G. Werber Bryan Psychiatric Hospital	South Carolina
Louvenia White Shuler		South Carolina
Robert Calhoun	Trousdale Medical Center	Tennessee
Yvette Forest	West Tennessee Healthcare	Tennessee
Lameisha Polk		Tennessee
Donna Smith	Rhea County Primary Care	Tennessee
Dr. Sithipol "Sid" Tantiachai	Rhea County Primary Care	Tennessee
Dana Vega	Spring Meadows Healthcare Center	Tennessee
Adolfo Alvarado Jr.		Texas
Bryant Anderson		Texas
Anthony "Tony" Brooks Tsai	San Antonio Military Medical Center	Texas
Cynthia Brown Druery	CHI St. Joseph	Texas
Alex Cardenas	Superior and Apollow Ambulance Services	Texas
Robin Carson		Texas
Jessica Cavazos		Texas
Dr. Leroy Collum		Texas
John Cooke	UT Health East Texas	Texas
Dorothy Davis	Southeast Nursing & Rehabilitation	Texas
Maurice Dotson	West Oaks Nursing and Rehabilitation Center	Texas

Jessica Fajardo	Center for Hypertension and Internal Medicine	Texas
Enriqueta Ines Gonzalez	Laredo Medical Center	Texas
Esther Gonzalez	Nix Health	Texas
Dr. Antonio Guzman	Corpus Christi Medical Center	Texas
Yolanda Huron	San Antonio State Hospital	Texas
Elida Jimenez	Valaverde Regional Medical Center	Texas
Larry Lucio	Houston Fire Department	Texas
Natividad Luevano	El Paso Psychiatric Center	Texas
Diane Martinez		Texas
Erika Martinez	Daybreak	Texas
Darlene McCarty	Texas Oncology - Garland	Texas
Monica Montgomery	The Arbor Assisted Living & Memory Care	Texas
Gerardo "Jerry" Pacheco	Houston Fire Department	Texas
Isabelle Papadimitriou	Baylor, Scott and White	Texas
Dr. Ruben Perchero	Rio Grande Valley Orthopaedic Center	Texas
Cathy Peeler	Regency Manor Nursing Home	Texas
Dr. Manuel Perez		Texas
David Prasifka	Atascosa County	Texas
Mary Rice		Texas
Irma Santellanes	Valaverde Regional Medical Center	Texas
Tommy Searcy	Houston Fire Department	Texas
Rodolfo Solano	Texas Oncology	Texas
Cindy Thomas		Texas
Dr. Gary Wright, D.O.	University of Texas Medical Branch (UTMB)	Texas
Silvia D. Melendez		Utah
Paul Mokofisi		Utah
Ana Paz	Alta View Hospital	Utah
Patrick Reginald Richards Jr.	Juan F. Luis Hospital	Virgin Islands
Seth Annan	Mount Vernon Healthcare Center	Virginia
Joseph Carson		Virginia
Dr. Theodore Corcoran		Virginia

Barbara Finch	Southern Virginia Regional Medical Center	Virginia
Nina Forbes	Silverado Senior Living Inc	Virginia
Denise Hargrove	City of Richmond	Virginia
Gail Hicks	Kenner Army Health Clinic	Virginia
Deborah Patterson	Southern Virginia Mental Health Institute	Virginia
Dr. Steven John Perez	Medical Center of Annandale	Virginia
Clea Alberto-Hume	Queen Anne Health care	Washington
Esquequi "Zeke" Cisneros	Eastern State Hospital (Mental Health Facility)	Washington
Dawn Nichols		Washington
Dr. Stephen Schwartz		Washington
James Simpson	Sunstone Youth Treatment Center	Washington
Stephen Collis	West Virginia University Medicine East	West Virginia
Dr. Leonardo J. Aponte M.D.	Clinica Latina	Wisconsin



Appendix III. Methodology

Registered nurse and other health care worker accounts collected come from media reports, obituaries, union memorial pages, GoFundMe campaigns, and social media (primarily Facebook, Twitter and Reddit). Included in the totals are health care workers, broadly defined as all workers in care settings, including hospitals, medical practices, nursing homes, other health related congregate-living and home health care settings, who were actively working and reportedly died of Covid-19/Covid-19-related complications.

In our methodology we are following in large part the example set by the Colorado Department of Public Health & Environment whose data collection and reporting noted that [while] "...[i]t is possible that a person may have been exposed elsewhere (and we can rarely prove where any individual was exposed with a person-to-person pathogen) ... when a person worked/lived/spent time in a facility with a known outbreak, we attribute their illness to the outbreak even if there is no definitive determination that the case acquired the illness at the facility."⁷¹ However, even CDPHE's definition is too restrictive as it unreasonably presumes knowledge of such outbreaks. In an environment of extraordinarily insufficient testing, a large number of asymptomatic cases,⁷² in which individuals have been found to carry comparable viral loads to those with symptoms,⁷³ and when dealing with Covid-19's lengthy incubation period, we believe a more reasonable standard is to assume that persons actively working or volunteering as health care workers broadly defined may have been infected in a health care delivery setting. We include all such persons in our count.

Our broad definition of health care workers includes registered nurses, licensed practical nurses, nursing assistants, emergency medical service personnel, physicians, technicians, therapists, phlebotomists, pharmacists, social workers, trainees, and persons not directly involved in patient care, but who could be exposed to infectious agents that can be transmitted in the delivery of health care such as clerical, dietary, environmental services, laundry, security, engineering and facilities management, administrative, billing, and volunteer personnel.

CMS data provides totals by nursing home facility for health care worker deaths due to Covid-19.⁷⁴ For this paper we utilized CMS's

Covid-19 nursing home dataset for the week ending Aug. 30, released on Sept. 10.⁷⁵ Importantly, the CMS nursing home dataset excludes assisted living facilities and other group home settings.⁷⁶ Employee fatality totals by nursing home facility are compared to the collected health care worker accounts to identify which have been previously identified and which have not yet surfaced. In order to reconcile the totals, the previously identified health care workers are subtracted from the facility and resulting state-level totals. In the instances where place of employment is not identified in a particular health care worker account, they are subtracted from the overall CMS state total.

Due to issues identified with high facility-level miscounts in the initial CMS reporting of state-level totals, especially in Massachusetts,⁷⁷ health care worker death figures greater than four per facility are excluded from the CMS data included in this report. Notably, CMS did not require nursing homes to provide information on health care worker deaths prior to May, by which time reported overall deaths in New York had reached 18,231 and New Jersey had already reached 7,228, many in nursing homes.⁷⁸

Some states are releasing data identifying the long-term care facility employer of health care workers who died. Where detailed state data is available, this data was used instead of reporting to CMS. These states include Colorado, Florida, Kentucky, Maryland, Michigan, New Jersey, Nevada, and South Carolina as well as the District of Columbia. The data from these states is reported for nursing homes and in some cases (Colorado, Nevada, Maryland) other health-related congregate living settings. These states all report deaths by employer establishment, making it possible to reconcile these deaths with news reporting and other sources.

As mentioned previously, only the VA provides somewhat greater transparency than the states by reporting health care worker deaths at regional system levels.⁷⁹ Data from California, Georgia, New Hampshire, and Oklahoma is used instead of CMS reporting because these states are regularly releasing totals for all deceased health care workers, including hospital and outpatient settings as well as congregate living settings. However, in the cases of Georgia, New Hampshire, and Oklahoma, establishments are not reported by name, and in the case

of California, though skilled nursing facility establishments are named, fatality figures below 12 are masked, rendering reconciliation by establishment impossible. For California we are using the overall totals reported to the California Department of Public Health by local health departments, and not the SNF data. For these four states all case counts collected were subtracted from the overall totals.

Health Care Worker Infections

As of Sept. 16, 2020, we have compiled at least 258,768 cases of Covid-19 infection in health-care workers, 166 percent of the 156,306 cases reported by the CDC. However, we believe this represents a severe undercount. Just 16 states are providing infection figures for all health care workers on a daily, semi-weekly, or weekly basis.⁸⁰ An additional seven states and the District of Columbia provide cumulative infection figures regularly for nursing home workers.⁸¹ Of these, the District of Columbia and New Jersey provide additional infection data for some public-sector health workers. For 25 states

and territories we utilize CMS's Covid-19 nursing home dataset for the week ending Aug. 30 released on Sept. 10.⁸² For the remaining seven states and territories we included May 13 CDC data that was included in a letter dated May 20, from CDC Director Robert Redfield addressed to Congressmembers Robert Scott and Alma Adams.⁸³ In these seven states and territories the number of nursing home infections reported has not yet overtaken the CDC's May 13 data for all health care settings. Infections that have been reported periodically by the VA for its health care facilities were excluded from the overall total due to the possibility they were being included in state totals.

As noted previously, Florida's reporting has been particularly problematic: The state is not reporting cumulative totals for health care worker infections in long-term care facilities. Florida's peak reported infections was 7,298 reported on July 23, but cumulative totals for Florida reported to CMS for the week ending Aug. 30 totaled 16,380.⁸⁴ We have included the latter cumulative figure from CMS in the infection total.



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