

Phase 1

Phase 1 includes the following groups:

- High-risk health workers;
- First responders;
- People of all ages with comorbid and underlying conditions that put them at *significantly* higher risk; and
- Older adults living in congregate or overcrowded settings.

In a limited supply scenario, high-risk and high-exposure workers in health care facilities and first responders should constitute an initial “Jumpstart” Phase 1a. This would be followed by Phase 1b, comprised of people with comorbid and underlying conditions that put them at *significantly* higher risk and older adults living in congregate or overcrowded settings.

Phase 1a would cover approximately 5 percent of the U.S. population, and in its entirety, Phase 1 would cover an estimated 15 percent. Such a structure could help kick off initial vaccine administration, while STLT authorities prepare distribution procedures for the next phases.

Phase 1a

Population: High-Risk Health Workers

This group includes frontline health care workers (who are in hospitals, nursing homes, or providing home care) who either (1) work in situations where the risk of SARS-CoV-2 transmission is higher, or (2) are at an elevated risk of transmitting the infection to patients at higher risk of mortality and severe morbidity. These individuals—who are themselves unable to avoid exposure to the virus—play a critical role in ensuring that the health system can care for COVID-19 patients.

These groups include not only clinicians (e.g., nurses, physicians, respiratory technicians, dentists and hygienists) but also other workers in health care settings who meet the Phase 1a risk criteria (e.g., nursing assistants, environmental services staff, assisted living facility staff, long-term care facility staff, group home staff, and home care givers). The health care settings employing these workers who are at increased risk of exposure to the virus may also include ambulatory and urgent care clinics; dialysis centers; blood, organ, and tissue donation facilities; and other non-hospital health care facilities. Finally, there are community and family settings where care for infected patients occurs. Not all the workers in these settings are paid for their labor, but, while they are caring for infected people, they all need to be protected from the virus.

Situations associated with higher risk of transmission include caring for COVID-19 patients, cleaning areas where COVID-19 patients are admitted, treated and housed, and performing procedures with higher risk of aerosolization such as endotracheal intubation, bronchoscopy, suctioning, turning the patient to the prone position, disconnecting the patient from the ventilator, invasive dental procedures and exams, invasive specimen collection, and cardiopulmonary resuscitation. In addition, there are other frontline health care workers who, if they have uncontrolled exposure to the patients or the public in the course of their work, should be in this initial phase. This group includes those individuals distributing or administering the vaccine—especially in areas of higher community transmission—such as pharmacists, plasma and blood donation workers, public health nurses and other public health and emergency

preparedness workers. The committee also includes morticians, funeral home workers and other death care professionals involved in handling bodies as part of this high-risk group.

Rationale

Frontline health care workers are particularly important in stemming the pandemic and preventing death and severe illness. From the beginning of the pandemic, many frontline workers have worked in environments where they have been exposed to the virus, often without adequate PPE. These individuals are critical to providing essential care, especially to older adults who are at the greatest risk of COVID-19 disease or death. Vaccinating these individuals not only enables them to provide these services, but also reduces the risk that they will spread the infection as they work in hospitals, nursing homes, assisted living facilities, home care, and group homes, and when they return to their own homes and communities.

Frontline health care workers are at significantly higher risk of becoming infected with SARS-CoV-2 compared to members of the general public. A recent cohort study using data from the United States and the United Kingdom found that frontline health care workers had nearly 12 times the risk of the general population of testing positive for COVID-19 (Nguyen et al., 2020). This risk is exacerbated by the ongoing shortage of PPE especially in nursing homes and, in a study of health care personnel at 13 academic medical centers, workers who reported inadequate access to PPE had a higher rate of detectable SARS-CoV-2 antibodies than did those who did not report a PPE shortage (McGarry et al., 2020; Self et al., 2020). Protecting health care workers will have a great impact on protecting older individuals, who receive a large share of health services and have borne a large share of the disease burden from COVID-19.

In the first months of the pandemic, some hospitals were unprepared for the large number of COVID-19 cases. Exposure of hospital workers was often poorly controlled, and many workers had inadequate PPE. Tens of thousands of hospital workers have been infected, and many hundreds have died, although there are no accurate data on these cases. While there is still a severe national PPE shortage, it appears that many hospitals are now better able to protect members of their workforce who directly work with COVID-19 patients. However, this is not true uniformly across the country, and, even better-equipped hospitals still leave some workers exposed. Nursing homes have struggled with having adequate PPE since the beginning of the pandemic and some continue to do so (Clark, 2020; McGarry et al., 2020). Individuals who provide home care or work in hospitals, nursing homes, and assisted living (or similar) facilities—who are also at higher risk for severe illness and death because of comorbid conditions and age—should be among the first to receive the vaccine.

Vaccination is not a substitute for non-medical or (non-therapeutic) preventive policies and equipment. All exposed workers should, for example, be provided an adequate supply of appropriate PPE. It is vitally important that the prospect of vaccination not supplant efforts to either assure adequate supplies of PPE or continue mitigation strategies after vaccination.

In considering those health care workers who are at an elevated risk of transmitting the infection to patients at higher risk of mortality and severe morbidity, it is also important to note that nursing home residents and staff have been at the center of the pandemic since the first reported cases. Nearly 80 percent of all COVID-19 deaths in the United States have occurred in people over the age of 65 (CDC, 2020g). As of September 8, 2020, there were 331,864 confirmed or suspected COVID-19 cases and 51,700 deaths among nursing home residents, according to the Centers for Medicare & Medicaid Services (CMS, 2020a), and these numbers are likely to be underreported (Ouslander and Grabowski, 2020). Nursing home workers are at