

SUPPLEMENTAL DOCUMENT B. Target Population Group Profiles

This document reviews the target population groups in greater depth by providing detailed profiles for each of the 69 target groups. The groups listed below identify those populations that will likely meet one or more of the vaccination criteria and therefore should be targeted for vaccine during the early stages of the pandemic. The target population groups are classified by health related factors and professional roles. Groups performing professional roles are classified by the industry in which they work, the occupational setting where they work, and in some cases, the occupation or job title they hold.

Division I: Health-related characteristics¹

This group includes persons with a variety of health characteristics that may place them at higher risk of developing influenza complications as well as those who can transmit influenza to high risk persons. Specific groups within this division are the following:

- A. People with underlying chronic medical conditions**
 - 1. Persons ages 2-17 years
 - 2. Persons ages 18-64 years
 - 3. Persons ages 65+ years
- B. Pregnant Women (all ages)**
- C. Infants and Toddlers**
- D. Primary household contact of children <6 months**
 - 1. PHHC ages 2-17 years
 - 2. PHHC ages 18-64 years
 - 3. PHHC ages 65+ years
- E. Primary household contact of severely immunocompromised persons**
 - 1. PHHC ages 2-17 years
 - 2. PHHC ages 18-64 years
 - 3. PHHC ages 65+ years

Table 1 below describes these groups in greater detail.

¹ Health-characteristics are based on CDC descriptions of populations at high risk of influenza complications during interpandemic years.

Table 1: Target group descriptions for persons with HEALTH-RELATED CHARACTERISTICS

Target Group	Population Estimates ²	Target Group Descriptions
People with Chronic Medical Conditions, Ages 2 – 17	956,404	Chronic medical conditions include physician-diagnosed respiratory diseases (asthma, cystic fibrosis), any condition that compromises respiratory functioning (cognitive dysfunction, spinal cord injuries, seizure and other muscular disorders), metabolic diseases (diabetes), cardiovascular or renal diseases (congenital heart disease, other heart diseases), blood diseases (sickle cell anemia), diseases leading to immunosuppression (cancer, HIV/AIDS), and children who receive long-term aspirin therapy and may be at risk for experiencing Reyes syndrome after influenza infection
People with Chronic Medical Conditions, Ages 18 – 64	4,098,331	Chronic medical conditions include physician-diagnosed respiratory disease (asthma, cystic fibrosis, emphysema, COPD, chronic bronchitis), any condition that compromises respiratory functioning (cognitive dysfunction, spinal cord injuries, seizure and other muscular disorders), metabolic disease (diabetes), cardiovascular disease (coronary artery disease, angina, heart attack, other heart conditions), renal disease, and diseases requiring immunosuppression (cancer; excluding non-melanoma skin cancer, blood cancer, lymphoma, leukemia, HIV/AIDS)
People with Chronic Medical Conditions, Ages 65+	4,045,686	Assume this group is residing at home, in a nursing home, or in a residential care facility. List of chronic medical conditions for 65+ is same as 18-64.
Pregnant Women (all ages)	541,866	Women who will become pregnant at any time during the influenza season
Infants and Toddlers, Ages 6-23 months	542,482	Includes children who turn age 6 months during the influenza season (but would not include those children who turn 24 months during this period.
Primary household contact of children <6 months, Ages 2-17	72,957	Household contacts include the primary care giver of a child aged <6 months who is residing at home with that child
Primary household contact of children <6 months, Ages 18-64	167,341	Same as above for primary care giver ages 18-64
Primary household contact of children <6 months, Ages 65+	30,635	Same as above for primary care giver ages 65+
Primary household contact of severely immunocompromised persons, Ages 2-17	65,437	Household contacts include the primary care giver of a person receiving an organ transplant, diagnosed with AIDS or diagnosed with incident cancer.
Primary household contact of severely immunocompromised persons, Ages 18-64	150,094	Same as above for primary care givers ages 18-64
Primary household contact of severely immunocompromised persons, Ages 65+	27,477	Same as above for primary care givers ages 65+

² California Department of Labor Statistics labor market data will be used to determine population estimates for professional groups. <http://www.calmis.ca.gov/default.htm>

Division II: Professional roles within the following HEALTH industries³

Includes members of the healthy adult population (18+) participating in the labor force within medical care, public health, and commercial health professions. Specific groups within this division are the following:

A. Medical care service industry: This industry includes professionals working in the following medical care settings: general medical and surgical hospitals, psychiatric and substance abuse hospitals ambulatory care facilities, and nursing and residential care facilities.

1. Medical Care Practitioners
2. Medical Technicians and Aides
3. Medical Scientists and Laboratory Technicians
4. Mental Health and Social Service Providers
5. Health Care System Support and General Support

B. Public Health Departments: Includes professionals working in a public health department setting. Includes public health workers employed in federal, state, and local health jurisdictions that have a role within the incident command structure (ICS) for infectious disease emergencies.

1. Pre-event Public Health Emergency Responders
2. Event oriented Public Health Emergency Responders
3. Non-emergency Public Health Professionals

C. Commercial Health Industries: Includes professionals working in the following commercial health settings:

1. Medical and diagnostic laboratories
2. Manufacturing - Medical and pharmaceutical manufacturing
3. Retail Trade - Pharmacies
4. Retail Trade - Other health and personal care stores
5. Death Care Services

Tables 2, 3, and 4 below describe these groups in greater detail.

³ Industry, setting and occupation descriptions are based on the North American Industry Classification System (NAICS) definitions for 2002. See United States Census Bureau for complete list of industries and their definitions. <http://www.census.gov/epcd/naics02/naicod02.htm#N22>

Table 2: Target group descriptions for professionals working in MEDICAL CARE SERVICE INDUSTRY

Target Group	Population Estimates	Target Group Description	Level of Expertise	Sample Occupations
Medical Care Practitioners	258,600	Medical care practitioners are professionals who provide direct patient care services through the diagnosis and treatment of diseases and injuries.	Medical care practitioners hold professional degrees, have completed advanced training and function in highly autonomous roles.	Family and general practitioners, surgeons, registered nurses, and physician assistants.
Medical Care Technicians and Aides	311,100	Medical care technicians are professionals who prepare equipment for medical procedures and administer routine tests and treatments to patients. Medical aides assess and care for patients needs by carrying out treatment plans and documenting progress.	These professionals have a range of expertise from associate degrees to on-the-job training depending on occupation.	Respiratory therapists, home health aides, nursing aides, medical assistants.
Medical Scientists and Laboratory Technicians,	22,700	Medical scientists conduct research dealing with the understanding of human diseases, and laboratory technicians perform laboratory tests to diagnosis, treat, and prevent disease.	These professionals have a range of expertise from bachelor's degrees to advanced degrees and function in highly autonomous roles.	Pathologists, microbiologists, medical and clinical laboratory technicians, biological technicians.
Mental Health and Social Service Providers	34,100	This group includes professionals who provide mental health care and social support services to patients, families, and health care workers.	These professionals hold college or advanced degrees and function in highly autonomous roles.	Mental health counselors, medical and public health social workers, and social and human service assistants.
Health Care System Support and General Support	430,500	Health care system support includes professionals who perform organizational, business, financial and administrative roles. General support includes professionals who provide security, food preparation and handling, cleaning and maintenance and personal care services to support the daily operations of the medical care facility.	These professionals have a range of expertise from on-the-job training to advanced degrees depending on occupation.	Medical and health service managers, budget analysts, computer systems analysts, medical assistants, medical secretaries, Security guards, food preparation workers, janitors and cleaners, and maids and housekeeping.

Table 3: Target group descriptions for medical care professionals working in PUBLIC HEALTH DEPARTMENTS

Target Group	Population Estimates	Target Group Description	Level of Expertise	Sample Occupations ⁴
Pre-event public health emergency responders	Estimate not available	Public health workers who have a role within the incident command structure (ICS) for infectious disease emergencies and this role has been designated PRIOR TO THE EVENT occurring.	These professionals have a range of expertise from associate degrees to advanced professional degrees depending on occupation.	Medical Officers, deputy medical officers, public information officers, safety officers, bioterrorism coordinators, communicable disease epidemiologists and researchers, public health infectious disease physicians and nurses, and public health laboratory technicians and scientists.
Event oriented public health emergency responders	Estimate not available	Public health workers who have a role within the incident command structure (ICS) for infectious disease emergencies and this role has been designated DURING THE EVENT.	These professionals have a range of expertise from associate degrees to advanced professional degrees depending on occupation.	Non-communicable disease public health physicians, nurses and pharmacists, epidemiologists and researchers, environmental/occupational health inspectors, health educators, coroners and emergency logistics finance, administrative, and ITS support staff.
Non-emergency public health professionals	Estimate not available	Public health workers professionals who work in programmatic areas not affiliated with the emergency response as well as professionals who provide security, cleaning and maintenance services to support the daily operations of the health department facility.	These professionals have a range of expertise from on-the-job training to advanced professional degrees depending on occupation.	Non-emergency response health program coordinators, health educators, researchers and epidemiologists, health educators, finance administrative and ITS staff, and security guards, janitors and cleaners.

⁴ Public Health Occupations will be defined by local health jurisdictions and included in their pandemic emergency response plans.

Table 4: Target group descriptions for professionals working in COMMERCIAL HEALTH INDUSTRIES

Target Group	Population Estimates	Target Group Description	Level of Expertise	Sample Occupations ⁵
Medical and Diagnostic Laboratories	20,200	This industry comprises establishments engaged in providing analytic or diagnostic services, including body fluid analysis and diagnostic imaging, generally to the medical profession or to the patient on referral from a health practitioner.	These professionals have a range of expertise from professional degrees to on-the-job training depending on occupation.	Medical and clinical laboratory technologists and technicians, health support workers, medical secretaries, and microbiologists.
Manufacturing-Pharmaceutical and Medicine Manufacturing	39,500	This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing biological and medicinal products; (2) processing (i.e., grading, grinding, and milling) botanical drugs and herbs; (3) isolating active medicinal principals from botanical drugs and herbs; and (4) manufacturing pharmaceutical products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.	These professionals have a range of expertise from professional degrees to on-the-job training depending on occupation.	Scientists (chemists, microbiologists), biological technicians, packers, and machine operators.
Retail Trade-Pharmacies	103,600	This industry comprises establishments known as pharmacies and drug stores engaged in retailing prescription or nonprescription drugs and medicines.	Same as above	Pharmacists, pharmacy aides, cashiers.
Retail Trade-Other health and personal care stores	Population estimate included in retail trade-pharmacies	Industries in the Health and Personal Care Stores subsector retail health and personal care merchandise from fixed point-of-sale locations. Industries include: optical stores, hearing aid stores, medical equipment and supply stores, and prosthetic stores	These professionals have a range of expertise from bachelor's degrees to on-the-job training depending on occupation.	Opticians, audiologists, optometrists, respiratory cashiers.
Death Care Services	10,600	This industry comprises establishments primarily engaged in preparing the dead for burial or interment and conducting funerals Funeral homes combined with crematories are included in this industry.	The majority of these professionals have had on-the-job-training.	Funeral service directors, morticians, embalmers.

Division III: Professional roles within Public Administration, Safety, and Justice

Includes members of the healthy adult population (18+) participating in the labor force within public administration, justice and safety professions. Specific groups within this division are the following:

⁵ Public Health Occupations will be defined by local health jurisdictions and included in their pandemic emergency response plans.

A. Public Administration: Includes professionals working in the following government settings:

1. Executive Offices
2. Legislative Bodies and Offices
3. Tribal Governments
4. Public Finance Services

B. Public Safety and Justice: Includes professionals working in the following industries

1. Judicial and Legal Services
2. Police Protection
3. Fire Protection/EMT
4. Corrections
5. Emergency and Disaster Management Services

Tables 5 and 6 below describe these groups in greater detail.

Table 5: Target group descriptions for medical care professionals working in PUBLIC ADMINISTRATION INDUSTRIES

Target Group	Population Estimates	Target Group Description	Level of Expertise	Sample Occupations
Executive Offices	2,100	This industry comprises government establishments serving as offices of chief executives and their advisory committees and commissions. This industry includes offices of the governors, and mayors, in addition to executive advisory commissions.	These professionals have a range of expertise from professional degrees to on-the-job training depending on occupation.	Governor, mayors, city and county commissioners, executive advisors and staff.
Legislative Bodies and Offices	3,100	This industry comprises government establishments serving as legislative bodies and their advisory committees and commissions. Included in this industry are legislative bodies, such as state legislatures, county and city councils, supervisor boards, and advisory and study legislative commissions.	Same as above	City, county and state legislators and their staff.
Tribal Governments	34,800	This industry comprises American Indian and Alaska Native governing bodies. Establishments in this industry perform legislative, judicial, and administrative functions for their American Indian and Alaska Native lands. Included in this industry are tribal councils, courts, and law enforcement bodies.	Same as above	Tribal government officials and personnel.

Target Group	Population Estimates	Target Group Description	Level of Expertise	Sample Occupations
Public Finance Services	32,000	This industry comprises government establishments primarily engaged in public finance, taxation and monetary policy. Included are financial administration activities, such as monetary policy; tax administration and collection; custody and disbursement of funds; debt and investment administration; auditing activities; and government employee retirement trust fund administration.	Same as above	Budget analysts, financial managers, and public fiscal and administrative staff.

Table 6: Target group descriptions for medical care professionals working in PUBLIC SAFETY AND JUSTICE INDUSTRIES

Target Group	Population Estimates	Target Group Description	Level of Expertise	Sample Occupations
Judicial and Legal Services	28,400	This industry comprises civilian courts of law as well as government establishments primarily engaged in providing legal counsel or prosecution services for the government.	These professionals have a range of expertise from professional degrees to on-the-job training depending on occupation.	Judges and magistrates, public prosecutors and defenders, professionals working in courts, attorney general and district attorney offices.
Police Protection/ Law Enforcement	96,000	This industry comprises government establishments primarily engaged in criminal and civil law enforcement, police, traffic safety, and other activities related to the enforcement of the law and preservation of order.	Same as above	Detectives and criminal investigators, police and sheriff patrol officers, police dispatchers.
Fire Protection/EMT	55,100	This industry comprises government establishments primarily engaged in fire fighting and other related fire protection activities. Government establishments providing combined fire protection and ambulance or rescue services are classified in this industry.	Same as above	Fire fighters, fire inspectors and investigators, emergency medical technicians, ambulance drivers, fire and ambulance dispatchers.
Corrections	55,600	This industry comprises government establishments primarily engaged in managing and operating correctional institutions. The facility is generally designed for the confinement, correction, and rehabilitation of adult and/or juvenile offenders sentenced by a court.	Same as above	Correctional officers and jailers, managers of correctional officers, administrative and personal care service staff of correctional institutions.

Target Group	Population Estimates	Target Group Description	Level of Expertise	Sample Occupations
Emergency and Disaster Management Services	500	This industry comprises government establishments who prepare emergency plans and procedures for natural, wartime, or technological emergencies, hazardous disasters or hostage situations.	Same as above	State and local emergency management planners as well as other professionals working in federal, state and local emergency and disaster management operations centers and offices.

Division IV: Professional roles within NON-HEALTH commercial industries

Includes members of the healthy adult population (18+) participating in the labor force within non-health and commercial industries. Specific groups within this division are the following:

- A. Agriculture Industry**
- B. Information Industry**
- C. Educational Services**
- D. Financial and Insurance Services**
- E. Community Care Services**
 - 1. Religious Organizations
 - 2. Emergency Relief Services
 - 3. Non-emergency Social Assistance Services
- F. Transportation and Warehousing Services**
 - 1. Postal Services
 - 2. Air, Rail, Water, and Truck Transportation & Support Activities
 - 3. Transit and Ground Passenger Transport
 - 4. Couriers and Messengers
 - 5. Warehousing and Storage
- G. Manufacturing Industries - Food Manufacturing only**
- H. Retail Trade - Food, Beverage, and Grocery Stores only**
- I. Utility Industries**
- J. Waste Management and Remediation Services**

Table 7 below describes these groups in greater detail.

Table 7: Target group descriptions for professionals working in NON-HEALTH COMMERCIAL INDUSTRIES

Target Group	Population Estimates	Target Group Description	Level of Expertise	Sample Occupations
Agriculture	372,308	The Agriculture sector comprises establishments primarily engaged in growing crops, raising animals, harvesting timber, and harvesting fish and other animals from a farm, ranch, or their natural habitats.	The majority of these professionals have had on-the-job-training.	Farmers, farm workers, ranchers, fishermen, and loggers.
Information Industry (broadcasting, publishing and telecommunications)	342,100	The main components of this sector are the publishing industries, including software, paper and internet publishing; the broadcasting industries, including traditional broadcasting and broadcasting over the Internet; the telecommunications industries; the industries known as Internet service providers and web search portals, data processing industries, and the information services industries.	These professionals have a range of expertise from professional degrees to on-the-job training depending on occupation.	Radio and television broadcasters, newspaper and internet publishers, and telecommunications engineers
Educational Services	245,500	The Educational services sector comprises establishments that provide instruction and training in a wide variety of subjects. This instruction and training is provided by specialized establishments, such as schools, colleges, universities, and training centers. These establishments may also offer food and accommodation services to their students.	These professionals have a range of expertise from professional degrees to on-the-job training depending on occupation.	Teachers, professors, educational administrators, food service workers, school psychologists, and security guards.
Financial and Insurance Services	584,600	The Finance and insurance sector comprises establishments primarily engaged in financial transactions (transactions involving the creation, liquidation, or change in ownership of financial assets) and/or in facilitating financial transactions. The sub-sectors within the finance and insurance industry include: credit intermediation, financial investments, insurance carriers, and financial vehicles (funds and trusts).	These professionals have a range of expertise from professional degrees to on-the-job training depending on occupation.	Bankers, tellers, insurance underwriters, and financial analysts.

Target Group	Population Estimates	Target Group Description	Level of Expertise	Sample Occupations
Community and Individual Care Services- Religious Organizations	89,000	This industry comprises (1) establishments primarily engaged in operating religious organizations, such as churches, religious temples, and monasteries and/or (2) establishments primarily engaged in administering an organized religion or promoting religious activities.	These professionals have a range of expertise from professional degrees to on-the-job training depending on occupation.	Clergy, religious counselors, volunteers, administrative staff.
Community and Individual Care Services- Emergency Relief Organizations	14,600	This industry comprises establishments primarily engaged in providing food, shelter, clothing, medical relief, resettlement, and counseling to victims of domestic or international disasters or conflicts.	These professionals have a range of expertise from professional degrees to on-the-job training depending on occupation.	Nurses, family social workers, mental health counselors, administrative and finance staff, personal care service staff.
Community and Individual Care Services- Non-emergency social assistance services	173,500	Industries in the community and social assistance subsector provide a wide variety of social assistance services directly to their clients including: individual and family services, vocational and rehabilitation services and child day care services.	These professionals have a range of expertise from professional degrees to on-the-job training depending on occupation.	Social workers, rehabilitation counselors, vocational assistants, and childcare workers.
Transportation and Warehousing- Postal Services	74,200	This industry comprises establishments primarily engaged in operating the National Postal Service. Establishments primarily engaged in performing one or more postal services, such as sorting, routing, and/or delivery.	The majority of these professionals have had on-the-job-training.	Postal service clerks, mail carriers, mail sorters and machine operators.
Transportation and Warehousing- Air, Rail, Water, Pipeline, and Truck Transportation & Support Activities	263,800	This subsector includes industries providing transportation of passengers and cargo using aircrafts, railroads, pipelines, watercrafts, and motor vehicles as well as support activities involving the routine repair and maintenance of transportation equipment.	The majority of these professionals have had on-the-job-training.	Aircraft pilots, truck drivers, sailors, railway engineers, freight workers, laborers
Transportation and Warehousing- Transit and Ground Passenger Transport	35,900	Industries in the transit and ground passenger transportation subsector include a variety of passenger transportation activities, such as urban transit systems; chartered bus, school bus, and interurban bus transportation; and taxis.	The majority of these professionals have had on-the-job-training.	Taxi drivers, bus drivers (school and mass transit), toll booth operators

Target Group	Population Estimates	Target Group Description	Level of Expertise	Sample Occupations
Transportation and Warehousing- Couriers and Messengers	72,500	Industries in the couriers and messengers subsector provide intercity and/or local delivery of parcels. This includes the establishments that perform intercity transportation as well as establishments that, under contract to them, perform local pick-up and delivery. Messengers, which usually deliver within a metropolitan or single urban area, may use bicycle, foot, small truck, or van.	The majority of these professionals have had on-the-job-training.	See target group description
Transportation and Warehousing- Warehousing and Storage	57,900	Industries in the warehousing and storage subsector are primarily engaged in operating warehousing and storage facilities for general merchandise, refrigerated goods, and other warehouse products. These establishments take responsibility for storing the goods and keeping them secure.	The majority of these professionals have had on-the-job-training.	Laborers, packers and packagers, sales managers, and security guards
Manufacturing- Food Manufacturing	156,200	Industries in the food manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.	The majority of these professionals have had on-the-job-training.	Butchers, bakers, and food batchmakers.
Retail Trade- Food, Beverage and Grocery Stores, <i>including those with pharmacies</i>	263,600	Industries in the food and beverage stores subsector usually retail food and beverages merchandise from fixed point-of-sale locations. Establishments in this subsector have special equipment (e.g., freezers, refrigerated display cases, refrigerators) for displaying food and beverage goods. They have staff trained in the processing of food products to guarantee the proper storage and sanitary conditions required by regulatory authority.	The majority of these professionals have had on-the-job-training.	Cashiers, packers, food preparation workers, and pharmacists

Target Group	Population Estimates	Target Group Description	Level of Expertise	Sample Occupations
Retail Trade- Gasoline Stations	56,800	Industries in the gasoline stations subsector group establishments retailing automotive fuels (e.g., gasoline, diesel fuel, gasohol) and automotive oils and retailing these products in combination with convenience store items. These establishments have specialized equipment for the storage and dispensing of automotive fuels.	The majority of these professionals have had on-the-job-training.	Service station attendants, mechanics, and cashiers
Utility Industries	54,800	The utilities sector comprises establishments engaged in the provision of the following utility services: electric power, natural gas, steam supply, water supply, and sewage removal. Within this sector, the specific activities associated with the utility services provided vary by utility: electric power includes generation, transmission, and distribution; natural gas includes distribution; steam supply includes provision and/or distribution; water supply includes treatment and distribution; and sewage removal includes collection, treatment, and disposal of waste through sewer systems and sewage treatment facilities.	These professionals have a range of expertise from bachelor's degrees to on-the-job training depending on occupation.	Power plant operators, civil engineers, water control and valve installers, administrative staff.
Waste Management and Remediation Services	35,300	Industries in the waste management and remediation services industry engage in the collection, treatment, and disposal of waste materials. This includes establishments engaged in local hauling of waste materials; operating materials recovery facilities; providing remediation services; and providing septic pumping and other miscellaneous waste management services.	These professionals have a range of expertise from bachelor's degrees to on-the-job training depending on occupation.	Occupational roles may include: refuse collectors, truck drivers, waste treatment plant operators, hazardous materials workers.

Division V: Other healthy populations

Includes persons with NO underlying health characteristics that put them at high risk of influenza complications and those 18+ who are NOT EMPLOYED in the professional occupations and industries identified above. Specific groups within this division are the following:

A. Healthy Children, Ages 2 - 5

B. Healthy Children, Ages 6 – 17

C. Healthy Adults, Ages 18 – 64

D. Healthy Adults, Ages 65+

Table 8 below describes these groups in greater detail.

Table 8: Target group descriptions for HEALTHY POPULATIONS

Target Group	Population Estimates	Target Group Descriptions
Healthy Children, Ages 2-5	1,830,707	Healthy children ages 2-5 years with no underlying health conditions that put them at high risk of influenza complications
Healthy Children Ages 6-17	6,321,500	Healthy children ages 6-17 years with no underlying health conditions that put them at high risk of influenza complications and those 18+ who are not employed in the professional occupations and industries identified above
Healthy Adults, Ages 18-64	18,527,395	Healthy adults ages 18-64 years with no underlying health conditions that put them at high risk of influenza complications and who are not employed in the professional occupations and industries identified above
Healthy Adults, Ages 65+	0 (All adults 65+ included in People with Chronic Medical Conditions, Ages 65+)	Same description as above for adults ages 65+