Introduction to Vaccine Policy for State Legislators

BY KATE BRADFORD AND TAHRA JOHNSON
Overview

Vaccines are considered among the most significant public health achievements of the 20th century. These safe and effective tools play a critical role in keeping individuals and communities healthy by providing immunity against potentially dangerous diseases.

Thanks to vaccination programs, once prevalent diseases such as measles, mumps, whooping cough and chickenpox are becoming rare and some have been eliminated altogether. For example, the United States has been polio-free for more than 30 years because of a successful vaccination program. Routine vaccination is estimated to prevent 419 million illnesses, 26.8 million hospitalizations and 936,000 premature deaths among children born in the United States between 1994 and 2018, translating to hundreds of billions of dollars in direct cost savings. Globally, immunization prevents 4 million to 5 million deaths each year.

The Centers for Disease Control and Prevention sets the U.S. adult and childhood immunization schedules based on updated recommendations provided by the Advisory Committee on Immunization Practices. There are vaccine recommendations for more than 20 dangerous or deadly diseases, depending on age and travel situation. The advisory committee recommends children be vaccinated against 16 vaccine-preventable diseases, including measles, tetanus and seasonal influenza. Adults are also recommended to receive annual flu vaccines, in addition to others depending on their age, health conditions, job, lifestyle or travel habits.

Although most children receive recommended vaccines, tens of thousands of Americans get sick from vaccine-preventable diseases every year. Vaccination rates remain lower among adults, and disparities in racial and ethnic populations and geographic regions persist among all age groups. Some communities have immunization rates below recommended levels or high levels of individuals refusing vaccines, placing them at risk for outbreaks. Like many public health programs, immunization programs are invisible when they are working well. Measles outbreaks or emerging viruses like COVID-19 serve as reminders of the important role immunization plays in protecting the public’s health.

This toolkit is intended to provide state policy options related to vaccines, including background information and key considerations for state legislators. Each section includes policy options lawmakers may consider to create effective and equitable immunization programs that address the unique characteristics of their state.

This section of the toolkit includes context related to the legislature’s role in vaccine policy; important geographic, demographic and historical considerations; and an overview of the key state and federal partners working on immunization programs.

The Vaccine Policy Toolkit includes five sections:

1. Introduction to Vaccine Policy for State Legislators
2. Routine Child Vaccination
3. Flu Vaccination
4. Pandemic Vaccination
5. Vaccine Messaging and Communication
The State Legislature’s Role

States play an important role in determining and enforcing vaccine policy. All 50 states have laws requiring certain vaccines for students in K-12 public and private schools and day care facilities, and many require a meningococcal vaccine for admission to colleges and universities. All states allow medical exemptions from these requirements, and most also grant religious or philosophical exemptions.

State vaccine policy tends to focus on childhood vaccination, particularly the exemption process, vaccine access and insurance coverage. Lawmakers can increase awareness of vaccine recommendations through public awareness campaigns and direct state and federal dollars to support state and local vaccination programs and research for vaccines. State legislatures may play a key role in crafting policy in these areas, in addition to partnering with stakeholders, building vaccine confidence and prioritizing health equity. Sections 2-5 of this toolkit include many examples of state policy related to these areas.

Consideration for Your State

Each state has unique demographic characteristics—including differences in racial and ethnic minority populations, and rural or urban areas—which can create varying considerations around vaccine accessibility. For example, the South and southwestern United States have higher populations of Black, Hispanic or Indigenous communities—groups that may face barriers to access or distrust health care systems due to a variety of factors, including historic and contemporary inequities. Vaccine coverage among these populations is generally lower, even after controlling for other characteristics such as insurance coverage and employment status.

Rural communities also face distinct challenges, including higher rates of some chronic diseases and limited access to health care. Policymakers may consider particular vaccine access challenges that apply to their specific state populations to provide equitable vaccination and reduce the incidence of vaccine-preventable disease throughout their communities.
Key Partners at the State Level

A wide array of state and local partners stand behind successful vaccine programs, working together to keep communities healthy. Immunizations are provided and administered by a broad range of stakeholders, from state and local health departments to community health centers, private providers and pharmacists.

State and territorial health officials have the primary responsibilities of monitoring vaccine safety and effectiveness, building strong partnerships to ensure vaccine accessibility, and preparing for and responding to infectious disease outbreaks. These officials provide relevant guidance and information about vaccines and the important role of immunization. In particular, immunization managers play a key role in managing vaccine programs, coordinating statewide efforts and providing educational materials for health care providers and the general public. With firsthand knowledge of and close connections to their communities, local health departments are also important stakeholders who help maintain or increase vaccination rates through several activities, including organizing and implementing school-located influenza vaccination programs and engaging the community to increase vaccine confidence.

Many responsibilities of governors affect the status and success of immunization programs, such as setting the state health agency agenda and creating annual budget requests for programs and departments. Governors can help ensure systems for coordination across agencies and the private sector are in place and may collaborate with partners to conduct certain vaccine efforts. During the COVID-19 pandemic, for example, governors were responsible for a wide variety of activities to ensure successful distribution and administration of COVID-19 vaccines.

There are several other key players helping to shape vaccine policy, including state Medicaid agencies, state and local immunization coalitions, community-based organizations, health care systems and academic institutions, to name a few. State legislators can collaborate with these partners to ensure adequate resources for programs, reduce barriers to accessibility and help disseminate important information about vaccines.

Key Partners at the Federal Level

Although states are on the front lines of immunization programs, federal efforts support vaccine programs in a number of ways, including through funding opportunities, research projects and ensuring vaccine safety. State-federal partnerships are vital in ensuring comprehensive vaccine infrastructure for routine programs and during public health emergencies when the scale and speed of an infectious disease outbreak requires optimized coordination. During the COVID-19 pandemic, for example, the federal government worked with state and private partners to develop, manufacture and distribute safe and effective vaccines, and provide updated guidance to support state, territorial, tribal and local public health vaccination planning.

The Centers for Disease Control and Prevention, the Federal Drug Administration and the National Vaccine Advisory Committee offer a variety of guidance and programs related to vaccines. The Vaccines for Children program and Section 317 of the Public Health Services Act finance approximately 95% of all publicly funded vaccinations, helping to provide vaccines to different population groups, including uninsured children and adults. The federal government also sponsors the Vaccine Adverse Event Reporting System, which serves as an early warning system to detect problems that may be related to vaccines, and the Vaccine Safety Datalink project, which helps the CDC assess whether an adverse reaction is purely coincidental or is directly linked to an immunization.

The Vaccines National Strategic Plan 2021-2025, developed through input from many state, territorial and local partners, articulates a comprehensive strategy to provide safe and effective vaccination. State-federal immunization partnerships can promote vaccines and provide robust solutions to address pressing issues such as vaccine hesitancy, disparities in vaccination coverage and emerging public health threats. Key stakeholders at all levels of government can work together to ensure broad immunization against potentially dangerous diseases, avoiding costs and keeping communities safe.

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Routine Child Vaccination

BY ERIK SKINNER
Overview

Vaccination ranks among the most significant public health achievements of the 20th century, according to the Centers for Disease Control and Prevention. Child vaccination saves the lives of 2 to 3 million children per year. Child vaccination rates in the United States hit the CDC’s target of about 95% for the 2019-2020 school year, and 20 states exceeded that rate— despite a decrease in spring 2020 because of the COVID-19 pandemic. The vaccines recommended for children guard against preventable illnesses such as measles, mumps, chickenpox, pertussis and many others.

When immunization rates are high, community immunity—or herd immunity—develops. The immunized people in a population stop the spread of viruses, which protects unvaccinated individuals. When immunization rates are low, disease outbreaks may occur, causing human and economic losses. In the last several years, communities in Minnesota, New York and Washington experienced outbreaks of measles due to low vaccination rates among certain populations.

To improve vaccine safety and public confidence in vaccines, the Food and Drug Administration puts vaccines through rigorous testing prior to licensure. However, like any medication, they can cause side effects. The most common side effects are mild and typically resolved within a few days.

Within the CDC, the Advisory Committee on Immunization Practices develops recommendations for the appropriate use of vaccines in different patient populations. Medical and public health experts make up the committee membership. The CDC director, under the Department of Health and Human Services, reviews and approves the recommendations, and the CDC publishes the final official recommendations. State governments rely on these recommendations, as well as their own decision-making processes, to choose their own required or recommended vaccines for children and adults.

In terms of financing vaccines, the Vaccines for Children Program makes shots available at no cost for eligible children (Medicaid eligible, uninsured, underinsured, American Indian or Alaska Native) under the age of 19. The program is a major

FIGURE 1
States with Laws Referring to the Federal Advisory Committee on Immunization Practices Guidance (as of January 2021)

These states reference the federal Advisory Committee on Immunization Practices guidelines in their state law (31 states).

Includes procedures for adding diseases/immunizations to state recommendations or requirements (5 states)

Addresses modifying or adding diseases/immunizations to state recommendations or requirements (42 states and D.C.)

No mention of processes for adding diseases/immunizations to state recommendations or requirements (3 states)

SOURCE: School of Public Health at the University of Illinois Chicago
vaccine supplier for state health agencies, and certain local and territorial health agencies. States have a variety of options for financing and supplying vaccines for private and public providers that elect to enter the program.

Despite public and private efforts to make vaccines more accessible, the COVID-19 pandemic caused routine child vaccination rates to decrease sharply in 2020. During the ensuing year, providers and public health officials worked to communicate directly with families about the importance of staying up to date on vaccinations. State lawmakers can support these efforts in places such as schools, pharmacies, community clinics, hospitals and other settings by considering the full array of routine vaccine policy options and determining what best fits their state’s circumstances.

Policy Options

States play a significant role in determining, implementing and enforcing child vaccination policies. All 50 states currently require certain vaccines for K-12 school entry. All state policies feature medical exemptions. In total, 44 states permit vaccine exemptions on religious grounds, and 15 states allow exemptions for personal or philosophical reasons. Adding or removing an exemption for state vaccine requirements can be a contentious process. As a result, more states focus policy changes on the process for obtaining an exemption, increasing access to vaccines and insurance coverage.

In recent years, states have changed how residents obtain immunization exemptions and changed the enforcement process for school vaccine requirements. Some states operate online education modules for parents who choose to go through the exemption process to learn about vaccines and their effectiveness. These policies can accompany other vaccine-related requirements.

In addition to exemption policy, addressing the size of the vaccinating workforce can improve access and increase vaccination rates. Pharmacists’ vaccination authority makes up the vast majority of state vaccine workforce legislation. Each state regulates pharmacists’ administration of vaccines differently. States can choose the age groups, types of vaccines and clinical requirements when considering policies to authorize pharmacist-administered vaccines.

States can address access to required or recommended vaccines through the state health department, federal programs, local health departments, Medicaid and private insurance companies. State legislatures may require insurance companies to cover the full cost of child vaccines without cost sharing, or work through state and local health agencies to ensure an adequate supply.
State Examples

Vaccine Exemptions and School Entry Requirements

Between 1979 and 2015, Mississippi and West Virginia were the only states without religious or philosophical exemptions. Since 2015, four states removed a religious or philosophical vaccine exemption, including Connecticut, Maine, New York and Washington. Maine removed its religious and philosophical exemptions. New York and Connecticut removed their religious exemptions, and Washington removed its personal belief exemption.

Each state develops its own process and policies for selecting required vaccines for students. In most states, the legislature and state health officer or department of health work together to make changes to vaccine requirement statutes through legislation and administrative rule (e.g. Colorado and Wyoming). The state legislature can select the type of vaccines, such as measles, mumps and pertussis, or defer to the state health department.

Some 31 states follow the age-based vaccine guidelines recommended by the CDC’s Advisory Committee on Immunization Practices. For instance, Virginia enacted HB 1090, requiring the board of health to adopt vaccine requirements consistent with recommendations from ACIP.

The HPV vaccine provides protection against a sexually transmitted virus that can result in reproductive, oral and anal cancers. At least five jurisdictions—Hawaii, Puerto Rico, Rhode Island, Virginia and Washington, D.C.—require HPV vaccination for school attendance. Legislatures in Virginia and Washington, D.C. passed bills to require the vaccine in 2007. The Rhode Island Department of Health added the HPV vaccine to its list of required immunizations in 2015. In 2017, Puerto Rico’s department of health added the HPV vaccine requirement for students. Most recently, the Hawaii Department of Health added the vaccine to the required list through a 2019 administrative rule. The South Carolina Legislature passed a resolution calling attention to the connection between HPV and cervical and other cancers in 2020. The resolution spreads awareness of the virus and the importance of child vaccination against HPV.

FIGURE 2
Non-Medical State Exemptions from School Immunization Requirements, 2021

* The existing statute in Minnesota and Louisiana does not explicitly recognize religion as a reason for claiming an exemption, however, as a practical matter, the non-medical exemption may encompass religious beliefs.

** In Virginia, parents can receive a personal exemption only for the HPV vaccine.

*** Missouri’s personal belief exemption does not apply to public schools, only child care facilities.

SOURCE: National Conference of State Legislatures
Exemption Process
At least eight states (Arizona, Arkansas, Colorado, Michigan, Oregon, Utah, Vermont and Washington) require education during the exemption process about the benefits of vaccination or the risks of opting out. For example, Utah HB 308 requires the department of health to create an online education module regarding certain preventable diseases. It also created a new vaccination exemption form and allows for the vaccination exemption form to be completed online in conjunction with the education module. Colorado enacted HB 163 in 2020, becoming the eighth state to add some form of mandatory education to obtain an exemption. Colorado’s legislation requires a person seeking a religious or personal belief exemption to submit to the school a certificate of completion of an online educational module or a certificate of non-medical exemption, which can be obtained after speaking with a health care provider about the benefits of vaccines. The law also provides school exemption reporting requirements.

Workforce and Access
Vaccine workforce and access policies can improve childhood immunization rates by making vaccines affordable and ensuring there are enough qualified health professionals to meet demand. The following legislation addresses components of the health care system that facilitate timely access to recommended or required vaccines. State legislatures often reference federal agencies and national health care organizations in explaining their decisions related to the health care workforce and vaccine access.

West Virginia enacted SB 544 in 2020, allowing pharmacists to administer vaccines to children 11-17 with written parental consent and a doctor’s prescription, as long as they are consistent with ACIP recommendations and the pharmacist has a physician’s prescription. Montana’s 2020 legislation (HB 231) authorized the administration of vaccines by pharmacists to children. The bill states a pharmacist can administer the influenza vaccine to children 12 or older and other vaccines recommended by ACIP to children 7 or older. The legislation also requires the pharmacist to successfully complete a vaccine training course approved by the Accreditation Council for Pharmacy Education. Wisconsin enacted AB 137 in 2019, authorizing pharmacists to administer any ACIP-recommended vaccine. The bill also allows pharmacists to administer vaccines to children under 6, provided they have a prescription from a physician or other prescriber.

State legislatures can also address vaccine access for children through different parts of the health system. Oregon enacted legislation in 2019 (SB 29) requiring local public health authorities to ensure immunizations required for school attendance be available through local health care providers, the local public health authority or its contractors. Maryland’s 2020 legislation (HB 959), addresses children’s access to vaccines through private insurance. The bill prohibited carriers from excluding or limiting certain benefits, including CDC-recommended vaccines for children and adults, or denying coverage because a health condition was present before or on a certain date.

Resources
- States With Religious and Philosophical Exemptions From School Immunization Requirements, NCSL
- State Vaccination Requirements, CDC
- ACIP Recommendations and Guidelines, CDC
- Pharmacist Immunization Authority, National Alliance of State Pharmacy Associations
- COVID-19: Information and Resources, National Alliance of State Pharmacy Associations
Flu Vaccination

BY NOAH CRUZ
Overview

The annual influenza season mobilizes an international response. The World Health Organization convenes teams of epidemiologists and other experts to monitor strains and develop vaccines for the yearly outbreak of the virus commonly known as the flu. During the 2019-2020 influenza season, the flu infected an estimated 38 million people in the United States; of those, 405,000 were hospitalized, and 22,000 died. The flu presents an annual challenge for policymakers to contain its spread and mitigate its most severe outcomes.

The seasonal flu is most harmful to younger children and older adults, especially those with chronic health conditions, though it poses a risk to all demographics. Accordingly, the Centers for Disease Control and Prevention recommends everyone 6 months and older receive a flu vaccine annually.

Private manufacturers produce and distribute the flu vaccine in the United States. The number of flu vaccine doses distributed has, on average, trended upward since 2009, with 174.5 million doses distributed during the 2019-2020 flu season—the most to date. Flu vaccination and prevention efforts took on greater urgency during the COVID-19 pandemic. Policymakers and health care providers adapted to new physical and social limitations to provide such essential public health services.

Most private and public insurers cover the cost of the flu vaccine. Medicare covers the cost of the vaccine for people over 65, and Medicaid covers the cost for enrolled adults and children. Uninsured or underinsured children can receive the vaccine through the Vaccines for Children Program, though it may be accompanied by an administrative fee. For adults without insurance, major pharmacies generally offer the vaccine for a small cost. Some states, including Pennsylvania and Washington, offer the vaccine to uninsured adults at little to no cost.

Although international and national efforts to address influenza are important components of the response, states have substantial authority in determining the scope and substance of flu vaccination efforts.
Policy Options

Key state strategies to slow the spread of influenza include increasing the immunization workforce, making sure those most at risk have access to the flu vaccine and supporting public information campaigns that communicate the importance of receiving the vaccine.

To increase access to the vaccine, states can expand the number of qualified health care workers who can administer it. States have increasingly turned to pharmacists and other non-physician providers to expand access to immunizations. Pharmacies offer a variety of unique qualities, such as expanded evening and weekend hours and locations near patients, and typically do not require an appointment. In 2017, a Johns Hopkins University study found that authorizing pharmacists to deliver influenza vaccines during a severe influenza pandemic could mitigate up to 23.7 million symptomatic influenza cases and save up to $2.8 billion.

Some populations, such as residents in long-term care facilities, adults 65 years and older, young children and those with chronic conditions, are at higher risk for complications related to the flu. States can increase access to flu vaccines to manage the spread of the disease and prevent severe complications in these vulnerable populations.

States can also remind residents of the importance of receiving the flu vaccine through public information campaigns. Increasing knowledge about and visibility of the vaccine can help dispel misinformation and increase confidence in the flu vaccine.

State Examples

Administration

Non-physician providers are important partners to consider in efforts to expand access to the flu vaccine. All states permit pharmacists to administer the flu vaccine, although the age groups they allow pharmacists to vaccinate vary. Some states have expanded the population of qualified vaccine administrators. For example, Indiana HB 1207 allows pharmacy technicians to administer the flu vaccine. New Hampshire HB 1639 and West Virginia SB 544 authorize qualified pharmacy interns to administer the vaccine. Ohio SB 178 allows podiatrists to administer the flu vaccine, and Virginia HB 2493 allows “persons who are otherwise authorized to administer controlled substances in hospitals” to administer it.
Vulnerable Populations

Policymakers can take steps to mitigate the spread of the flu in populations more at risk of developing complications. For example, Kentucky HR 278 emphasizes the risk adults aged 65 years and older face from influenza and underscores the importance of immunizations.

New Jersey AB 4476 seeks to further protect vulnerable populations in long-term care facilities by tracking the number of employees who have received the influenza vaccine and the medical exemption status of those who have not. Virginia HB 5041 requires certified long-term care facilities to provide or arrange for the administration of the flu vaccine for their residents. New Mexico HB 274 requires hospitals to offer the influenza vaccine to patients over 65 upon discharge.

Information Campaigns

States can act to keep citizens informed about the importance of vaccination and the availability the flu vaccine. New York J 2387 memorializes Immunization Awareness Month to increase public knowledge of the importance of receiving the seasonal flu vaccine, among others. South Dakota’s Department of Health utilizes CDC resources to support state efforts to inform residents about flu prevention and vaccination. The Michigan Department of Health and Human Services launched a statewide media campaign that emphasized the importance of getting vaccinated to avoid straining the state’s economy and health care system during the COVID-19 pandemic.

Resources

- Preventing and Mitigating the Flu, NCSL
- Influenza (Flu), CDC
- Flu Activity & Surveillance, CDC
- Flu Efforts During a Pandemic: State Roles in Influenza Response, NCSL
- Digital Media Toolkit, CDC
- Communication Resource Center, CDC
Pandemic Vaccination

BY KATE BRADFORD
Overview

Although pandemics occur infrequently, they have the potential to cause substantial morbidity and mortality, placing extraordinary demands on public health and health care systems. Vaccination is one of the most effective public health interventions to prevent potentially life-threatening diseases and plays a key role in the multifaceted approach of pandemic response. Effective distribution and administration of vaccines to protect against a novel virus are critical to protecting the public, helping the population reach herd immunity and eventually ending a pandemic.

Jurisdictional public health emergency preparedness and response programs are experienced and equipped to respond to infectious disease outbreaks. Yet the scope and speed of vaccination efforts against a pandemic call for optimized coordination and support by national, state and local officials. State policymakers can work with their state health agencies to identify policies that remove barriers and streamline access to and public confidence in a pandemic vaccine.

The process of developing new vaccines and eventually injecting doses into hundreds of millions of arms is incredibly complex, even with preparation. Despite decades of planning for an influenza pandemic, the nation’s policies to address the 2009 H1N1 influenza pandemic did not fully anticipate or address the particular circumstances that unfolded. During the COVID-19 pandemic, similar challenges—such as funding, limited state and local resources, workforce capacity and logistical issues with vaccine distribution and storage—slowed the rollout of the COVID-19 vaccine. The shared understanding and application of lessons learned by public health leaders and policymakers will continue to influence the successes and challenges of future pandemic response.

Based on research from past pandemics, the federal government has developed several resources and tools to help guide planning and response efforts, including for vaccine allocation and administration. Although these resources outline protocols for influenza pandemics, the strategies can inform responses to any infectious disease with pandemic potential. Vaccine policy considerations during pandemic responses to H1N1 and COVID-19 included similar approaches, such as targeting vaccination phases and priority groups to vulnerable populations, utilizing pharmacies and other partners to contribute to mass vaccination, and frequently and effectively communicating about vaccine safety and efficacy. State policymakers can play an integral role in these and other areas to ensure a smooth, efficient and equitable rollout of vaccines during a pandemic.

Policy Options

Mass allocation and administration of a pandemic vaccine is a major undertaking. State capacities to carry out certain functions—for example, to enroll providers for administration, conduct public education and outreach, set up temporary mass vaccination sites and track these activities—can determine the speed and success of a response. Policies that affect a range of related areas such as public health infrastructure, state vaccination plans, health care workers’ scope of practice and public outreach are all integral components to achieving widespread and effective pandemic vaccination.

Public Health Infrastructure and Funding

As with testing supplies and personal protective equipment distribution, many challenges with a massive vaccine rollout involve logistics around supply chains and states’ abilities to receive, store and distribute large amounts of vaccine. Many state responsibilities around pandemic vaccination surround infrastructure needs, such as receiving allocations from the federal government; managing systems for ordering, distributing and monitoring vaccines; and engaging with communities that may face barriers to access or be hesitant to receive the vaccine. While planning for COVID-19 vaccine distribution, a number of states cited lessons learned from H1N1, seasonal flu and other preparedness activities—such as recent hepatitis A outbreaks—which highlight the need to anticipate reporting capacity, respond to low public demand, and augment funding and resource logistics. Lawmakers may consider strategies to ensure adequate resources for programs and boost health system capacity.
Distribution Plans

The overarching goal in pandemic vaccination is to immunize all people who want a vaccine. However, vaccine demand is likely to exceed supply at the onset of a pandemic, and priority access is generally recommended for critical workers and groups at high risk of severe illness—for example, young children and pregnant women during the H1N1 pandemic, and older adults and people with medical conditions during the COVID-19 pandemic. The Centers for Disease Control and Prevention’s Advisory Committee on Immunization Practices provides updated vaccine recommendations and creates guidelines to inform vaccine use and prioritization. State and territorial health officials ultimately craft their own plans around who will be vaccinated first based on ACIP’s guidance and their state needs. State policymakers can play a role in this process by considering their population’s unique characteristics in planning and outreach efforts.

Underlying health and social inequities place many racial and ethnic minority groups at increased risk of certain diseases and play a role in considerations for vaccine distribution. Both H1N1 and COVID-19 disproportionately affected Black, Hispanic and Latino communities through higher infection rates, hospitalizations and deaths. People with developmental or intellectual disabilities may be at increased risk for illnesses like COVID-19, and many are homebound or receive care through congregate living facilities. Rural communities also face distinct challenges, including higher rates of some chronic diseases and limited health care access. These vulnerable or underserved groups already facing a higher risk of infection may encounter certain barriers accessing vaccines during a pandemic.

Distribution of pandemic vaccine and supplies


†VTcks is the Vaccine Tracking System and IIS refers to Immunization Information Systems.
Policies to address such state-specific populations may include strategies to engage vulnerable or underserved communities and provide outreach to those who distrust public health systems. CDC’s Social Vulnerability Index can help states identify areas of high need where vaccine efforts could be focused. Lessons learned from prior mass vaccination campaigns include efforts to utilize existing systems, leverage relationships with community groups, and provide up-to-date, transparent information using pre-established, evidence-based criteria in allocation.

Access and Administration

As vaccines become more widely available during a pandemic and more people become eligible to receive doses, ensuring the public can easily access vaccines can help achieve a more efficient public health response. To prevent costs from deterring individuals from receiving a vaccine, federal rules required private insurance and public programs to provide coronavirus vaccines free of charge. To help alleviate strain on the health care system during a public health emergency, bolstering the number of health care workers authorized to administer vaccines may further streamline immunization efforts. National public health agencies including the CDC identified pharmacists as key partners in the prevention and control of disease. As noted in other sections, pharmacists have the authority to administer certain vaccines in all 50 states, depending on the type of vaccine or the age of the patient, and may play an expanded role during a pandemic. Pharmacies offer a variety of unique benefits, such as expanded evening and weekend hours, convenient locations and vaccinations without an appointment.

In response to the 2009 H1N1 pandemic, states modified their scope of practice policies more broadly than in prior public health emergencies, primarily to increase the number of vaccinators available to meet demand. Pharmacists and emergency medical technician personnel were the two groups states most frequently addressed, though some states authorized other health care workers, including dentists and medical students, to administer the H1N1 vaccine. During the COVID-19 public health emergency, the federal government expanded access through amendments to the Public Readiness and Emergency Preparedness Act, by allowing qualified professionals such as licensed pharmacists, paramedics, dentists and veterinarians to order and administer coronavirus vaccines in every state. Modifying provider scope of practice laws, and certain programs—such as the Federal Retail Pharmacy Program for COVID-19 Vaccination—can help make pandemic vaccines more widely accessible.
State Examples

Public Health Infrastructure and Funding

The federal government allocated billions of dollars to state and local governments to respond to ongoing and emerging pandemic outbreaks during H1N1 and COVID-19.

Several states supplemented federal support with additional state funds during COVID-19, such as Michigan and Massachusetts—which provided millions of state general fund dollars to support the coronavirus vaccine rollout. Massachusetts lawmakers appropriated $1 million to support the design, development, implementation and oversight of a COVID-19 vaccine distribution plan, prioritizing culturally and linguistically focused public awareness campaigns. Michigan allocated more than $48 million to bolster health system capacity to manage the administration of coronavirus vaccines to all Michigan residents, and $2.6 million for administrative staff and contract support costs.

A similar bill in South Carolina appropriated over $100 million from the state’s Contingency Reserve Fund to administer the statewide coronavirus testing plan and expand statewide coronavirus vaccination capacity. This law allocated an additional $100 million to create a COVID-19 Vaccine Reserve Account to pay for the costs of administering the coronavirus vaccine and to reimburse staffing, facility rental, storage and transportation costs, including to purchase and staff mobile health units. In Georgia, an appropriations bill included funding to issue temporary permits for nurses to administer the coronavirus vaccine and monitor patients for any adverse reactions.

Distribution Plans

Most states followed ACIP’s guidance for COVID-19 vaccine allocation, although—especially beyond the initial 1A phase—several diverged from federal guidance and from one another by priority group designation and timeline. One common theme across state plans was the prioritization of health care workers, long-term care residents, teachers and other child care workers. All states’ COVID-19 vaccine distribution plans included older adults and those living in nursing homes in top priority phases. Some states explicitly prioritized people in congregate residential settings, communities of color or people with disabilities.

A National Governors Association analysis of state and territorial COVID-19 vaccine plans found most state plans utilized the CDC’s Immunization (IZ) Gateway, a portfolio of components to support the exchange of immunization data between immunization information systems and other organizations. In addition, many states outlined plans to use their National Guard to support vaccine distribution efforts through transportation and administration efforts. A law enacted in Pennsylvania directed the state National Guard to help plan community distribution and administration operations.

Several other states established allocation committees, task forces or advisory groups to make recommendations on vaccine allocation. The Maryland Vaccine Equity Task Force, for example, was created by the governor’s office and the state National Guard General to focus vaccination efforts on underserved, vulnerable and hard-to-reach populations. In Missouri, an Advisory Committee on Equitable COVID Vaccine Distribution partnered with community stakeholders to ensure accessibility at mass vaccination sites and to vaccinate the homebound, among other actions. The state’s Get a Ride resource provides a list of free and low-cost transportation options across the state to help Missourians find a ride to their vaccine appointment.

Some state legislatures created certain requirements for their state COVID-19 vaccine plans. Lawmakers in Virginia, for instance, enacted a law convening a work group to identify and develop plans to ensure coronavirus vaccines are equitably distributed across the state. Another Virginia bill required the state to include funeral service licensees as essential workers who are included in priority groups regarding access to PPE and vaccines. In California, a law required 10% of the first available doses to be offered to child care and K-12 education workers.

Access and Administration

During the H1N1 pandemic, some states modified scope of practice to increase the number of vaccinators to support mass immunization efforts. For example, the Illinois Department of Public Health issued a proclamation to authorize emergency medical technicians (EMTs) to administer H1N1 and seasonal influenza vaccines. The governor of Ohio issued a similar emergency proclamation to authorize qualified EMTs to perform H1N1 immunizations during the public health emergency.
Several states, including California, Minnesota, New Hampshire and New York, enacted legislation to expand pharmacists’ authority around COVID-19 vaccine administration before the first vaccines to protect against the coronavirus were authorized for emergency use. North Carolina included a process for authorizing pharmacists to administer a COVID-19 vaccine through a statewide standing order. As the vaccine rollout accelerated across states and localities, many additional states modified provider scope of practice for COVID-19 vaccines or during public health emergencies. For example, Indiana, Minnesota and Wisconsin authorized dentists to administer coronavirus vaccinations or other vaccinations during an emergency.

Virginia established a program to enable eligible health care providers to volunteer and undergo training to administer the coronavirus vaccine to residents. Under this law, an eligible health care provider—including a licensed provider, an employee of a pharmacy or hospital, or any health professions student enrolled in an accredited program who is trained in vaccine administration—may administer the COVID-19 vaccine during a state of emergency. South Carolina lawmakers authorized podiatrists to administer premeasured doses of the vaccine, in addition to several other providers, including optometrists; dentists; retired physicians, physician assistants or nurses; students enrolled in an accredited medical school, physician school or nursing program; or unlicensed personnel with current certification and documented training in intermuscular injections.

Mobile vaccination clinics provide increased accessibility to populations who live in rural areas, have trouble accessing transportation or otherwise face challenges leaving their home. Several states included mobile efforts to bridge gaps in COVID-19 vaccine access for high-risk or hard-to-reach populations. For instance, Colorado provided access to free rides to vaccination sites and established mobile COVID-19 vaccination clinics across the state. The Minnesota Metro Transit converted underutilized buses into mobile vaccination clinics and utilized state data, input from community partners and CDC’s Social Vulnerability Index to select locations. In Washington state, residents can fill out a form to request a home-based COVID-19 vaccination. Additional programs in states such as Delaware, Louisiana and New York offered mobile options for people who are homebound.

To help further ensure broad accessibility, California and New York enacted laws requiring paid sick leave for employees obtaining a coronavirus vaccine, including for workers experiencing related symptoms. Under the American Rescue Plan Act of 2021, employers may claim refundable tax credits that reimburse them for the cost of providing paid leave to employees who take time off related to COVID-19 vaccinations. While federal rules require coronavirus vaccines to be provided at no cost, some states pursued their own requirements. For example, bills enacted in Maine and Maryland required health insurance carriers to provide coverage for COVID-19 vaccines with no cost-sharing. In Minnesota, a law increased the Medicaid reimbursement rate for coronavirus vaccine administration.
Resources

- State Action on Coronavirus, NCSL
- COVID-19: State Health Actions, NCSL
- State COVID-19 Vaccine Resources, National Governors Association
- COVID-19 Social Media Toolkit, CDC
- Characteristics of Homebound Older Adults: Potential Barriers to Accessing the COVID-19 Vaccine, Office of the Assistance Secretary for Planning and Evaluation (April 2021)
- Interim Updated Planning Guidance on Allocating and Targeting Pandemic Influenza Vaccine During an Influenza Pandemic, CDC (last reviewed 2020)
- Roadmap to Implementing Pandemic Influenza Vaccination of Critical Workforce, CDC (2018)
- Memorandum of Understanding Toolkit for Public Health Agencies and Pharmacies, Association of State and Territorial Health Officials (August 2018)
- Pandemic Influenza Plan, U.S. Department of Health and Human Services (updated 2017)
- Assessing Policy Barriers to Effective Public Health Response in the H1N1 Influenza Pandemic, Association of State and Territorial Health Officials (June 2010)
- Preparing for a Pandemic Influenza: A Primer for Governors and Senior State Officials, National Governors Association (2006)
Vaccine Messaging and Communication

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Overview

Effective communication and messaging is a key component of state vaccination programs and policies. Confusion, misinformation and questions around vaccine efficacy and safety are common and can impact immunization levels in a community or state.

Immunization rates for vaccine-preventable diseases vary significantly by age, race or ethnicity, or location, often due to misinformation, mistrust or a lack of appropriate messaging. For example, while human papillomavirus (HPV) vaccination rates are on the rise, the numbers are still low and vary greatly for different demographic groups. Overall, 49% of adolescents were up to date on the vaccine in 2017, but rates were lower for adolescents in rural areas, non-Hispanic white adolescents and males. For influenza, immunization rates during the 2019-2020 season increased from 49% to nearly 52%, the highest season coverage to date. While rates increased overall, Black and Hispanic adults have lower flu vaccination coverage than white adults, as do Black children compared to other racial and ethnic groups.

Similar disparities exist with COVID-19 vaccinations. A Census Bureau survey indicated significant differences in the percentage of adults who stated they would “definitely” get the COVID-19 vaccine by age, race and ethnicity. Younger respondents, non-Hispanic Black adults, non-Hispanic adults of other races or two or more races, and Hispanic adults were less likely to indicate that they would get a vaccine compared to older respondents, non-Hispanic Asian adults and non-Hispanic white adults. This may result in lower vaccination rates among populations that also experience disproportionately higher rates of hospitalization and death from COVID-19.

One key factor that contributes to low vaccination rates and disparities is confidence in vaccines. State legislatures, state agencies, health care providers and community organizations may seek to increase vaccination rates by building and maintaining confidence in vaccines through communication and messaging efforts. These may encourage the public or specific populations to get vaccinated, dispel vaccine myths or misinformation, or provide accurate information to achieve recommended levels of vaccination.

Understanding why vaccination rates remain low is important when considering immunization messaging. In the Census Bureau survey, respondents who indicated uncertainty about receiving a COVID-19 vaccination were most likely to report concerns about possible side effects and plans to wait to see if the vaccines are safe. These results, coupled with lower vaccination rates for vulnerable populations across vaccine-preventable diseases, indicate the potential role robust, high-quality communication efforts may play in increasing confidence in vaccines.

Building vaccine confidence, combating misinformation and ensuring health equity are all key aspects of state immunization messaging and communication. Public awareness campaigns that include communities of color and other disenfranchised groups in their creation can stress scientific rigor and the safety of vaccines in a culturally sensitive way.

Communities may have significantly different immunization rates by age, race or ethnicity or location, often due to misinformation or a lack of messaging.
State Policy Options and Examples

State legislative strategies to address vaccine communication and messaging include raising public awareness, combating misinformation, building vaccine confidence in all demographics and addressing health equity.

States have raised public awareness around vaccinations by calling attention to specific vaccines, diseases or populations. For example, Illinois adopted HR 196 in 2019, declaring a week in August as Adolescent Immunization Week to increase public awareness of the importance of preteens and adolescents receiving vaccines against meningococcal disease, HPV, influenza, tetanus, diphtheria, pertussis, measles, mumps and rubella, and to promote outreach and education efforts concerning vaccination. The legislation also encourages dissemination of educational resources on infectious disease. South Carolina HR 5226, adopted in 2020, calls attention to the connection between HPV and cervical and other cancers and spreads awareness of vaccine protection.

Policies can also play a role in disseminating accurate information and combating vaccine misinformation. For example, several states proposed or enacted legislation to specifically combat COVID-19 vaccine misinformation. Arkansas HB 1547, enacted in 2021, requires all data and information about the safety and effectiveness of any FDA-approved vaccine be available on a public website maintained by the health department. Florida enacted HB 9 in 2021, prohibiting the dissemination of false or misleading vaccine information with specified intent. New Jersey AB 5203 proposed requiring public awareness campaigns regarding potential fraud related to the COVID-19 vaccine.

Some states ensure that health equity is part of the conversation around vaccine access, distribution and communication. Massachusetts enacted HB 5164 in 2020 to require health equity in design, development, implementation and oversight of the state’s vaccine plan. It also requires the vaccine plan to take into consideration recommendations made by the Massachusetts health equity task force, prioritization of communities disproportionately impacted by COVID-19, and a culturally and linguistically diverse public education and outreach campaign. Minnesota proposed HF 397 in 2021 to create COVID-19 messages, information and community engagement services for diverse communities and populations.
State legislators can also assist in the spread of accurate information by communicating evidence-based messaging from the state health agency to their constituents. For example, at least 10 of the original state COVID-19 vaccination plans submitted to CDC included policymakers in the communications plan, including challenging disinformation on the vaccines or participating in a public communications plan, or both. Additionally, more than 15 plans included information on how legislators can work with health departments to increase distribution of the vaccine. By working with state health departments, state legislators can combat misinformation and build the public’s confidence in the effectiveness and safety of vaccines.

Federal, State and Private Industry Partners

In addition to working with legislative partners, state health departments often work across multiple state agencies as well as in partnership with the federal government and community and private organizations. States often leverage communication tools, messaging and resources from partners to promote accurate vaccine information.

To assist states in their messaging of vaccine safety and efficacy, federal partners offer toolkits and other communication materials that states can adapt to fit their needs. CDC produced several toolkits with sample communication materials for a range of immunizations, including seasonal influenza, routine childhood vaccinations and COVID-19. CDC’s suite of COVID-19 resources includes toolkits for varying target audiences, such as a toolkit for employers of essential workers and a toolkit for staff of organizations serving communities.

Additionally, national organizations share public engagement and communication strategies that states can use to build trust in vaccines and combat misinformation. The National Public Health Information Coalition offers a vaccine communication toolkit for parents of babies and young children with safety information and sample messaging. The American Academy of Pediatrics also provides tools and resources for communicating with parents about the importance of childhood vaccinations, as well as the HPV vaccine. The National Academy of Medicine and the American Hospital Association provide COVID-19 vaccination toolkits aimed at supporting local communities and hospital and health systems, respectively. To address higher levels of mistrust in underserved communities, the Ad Council and COVID Collaborative produced a public health toolkit offering strategies for COVID-19 vaccine messaging, including specific recommendations for communicating with Black and Latino audiences.

Many state health departments also provide sample vaccine communication materials that other states can leverage and tailor to their needs. For example, Arizona, Louisiana, Michigan and Washington all supply sample flu vaccine graphics, social media posts and messages. Michigan’s toolkit is specifically aimed at college-aged young adults and Washington’s sample materials are available in 17 languages. These messaging variations allow states to target communication efforts to specific audiences that may have shown higher levels of vaccine hesitancy in the past.

California, Indiana, Minnesota, New Jersey, Tennessee and Texas share sample COVID-19 vaccine communication materials on their health department websites. Minnesota’s toolkit is specifically designed for community organizations, including social service organizations, faith-based organizations, school organizations, meal delivery services, senior centers and other community-based organizations. Minnesota’s department of health website also houses sample HPV vaccination videos for health care providers on how to message the HPV vaccine. As an example of how states can leverage sample resources from other states for their own needs, North Dakota includes...
the HPV vaccine videos created by Minnesota on their health department website, along with other information and sample communication materials for health care providers and the public.

Several states also have public-private partnerships in place to assist with vaccine communication. The Immunize Kansas Coalition (IKC) is made up of a diverse group of health care providers, local health departments, researchers, health care payers, advocacy groups, nonprofit organizations and other stakeholders with the goal of improving vaccination rates across all vaccine-preventable diseases in Kansas. IKC provides toolkits for the HPV, meningococcal and Tdap vaccines. The California Immunization Coalition (CIC) is a nonprofit public-private partnership governed by a volunteer board of directors with the aim of full immunization protections for all Californians. CIC collaborates with the California Department of Public Health on a Don’t Wait Vaccinate campaign that includes a toolkit and sample social media messages and images.

At the national level, CommuniVax is a coalition of social scientists, public health experts and community advocates. CommuniVax’s goal is to strengthen equitable vaccination rollout by involving historically underserved Black, Indigenous and Latino communities in the process. Local, state-based teams engage communities of color to identify improvements to vaccine delivery and communication strategies in their communities.

States have many vaccine communication and messaging tools at their disposal. Policies that build trust and tackle misinformation can be coupled with inclusive public awareness campaigns and messaging on vaccine safety to create a comprehensive vaccination communication plan.

**Resources**

- Flu Vaccine Communications Resource Guide, Association of Immunization Managers (AIM)
- Communicating Effectively About Vaccines: New Communication Resources for Health Officials, Association of State and Territorial Health Officials (ASTHO)
- Finding Credible Vaccine Information, Centers for Disease Control and Prevention
- Building Confidence in COVID-19 Vaccines, Centers for Disease Control and Prevention
- National Immunization Awareness Month, Centers for Disease Control and Prevention
- Building COVID-19 Vaccine Confidence, National Academies of Sciences, Engineering, and Medicine, Societal Experts Action Network (SEAN)
- Local Public Health: An Integral Partner for Increasing Vaccine Confidence, National Association of County and City Health Officials (NACCHO)
- COVID-19 Vaccine Communications Resources, National Governors Association (NGA)
- COVID-19 Vaccination Communication: Applying Behavioral and Social Science to Address Vaccine Hesitancy and Foster Vaccine Confidence, National Institutes of Health (NIH)
- Vaccine Central, National Resource Center for Refugees, Immigrants, and Migrants (NRC-RIM)
- Resources, Public Health Communications Collaborative
- Effective Communication and Consistency in Increasing Rural Vaccination Rates, Rural Health Information Hub