



Wisconsin Immunization Neighborhood
880 Independence Lane
Sauk City, Wisconsin 53583

February 23, 2021

Dear Chairman Neal, Ranking Member Brady, and Members of the House Ways and Means Health Subcommittee,

I am grateful to present to you on behalf of the Wisconsin Immunization Neighborhood (WIN), a coalition with pharmacists, public health, associations, and health care providers formed in 2020 to address vaccine hesitancy in Wisconsin. WIN has the goal of a Wisconsin free from preventable infectious diseases. We are especially grateful for Representative Kind for his attention to rural issues.

WIN recognizes the significant benefits that immunizations provide to individuals and their communities and that vaccines provide us a pathway to resume life as we knew it. The economic and personal benefits of vaccination are second to none, and we have a vaccine program that used the available science to deliver a vaccine in record time. As the vaccine program matures, there are reasonable policy stances that will help us to ensure the program is successful. My testimony will include a brief overview of the economic benefits of vaccines, early challenges for rural communities, current challenges, and future challenges and opportunities with a final set of recommendations to help support a robust COVID-19 vaccination campaign.

Economic Benefits

An analysis by GAVI, the Vaccine Alliance, has shown that in developing countries for every one dollar invested in immunizations, a minimum of \$21 dollars in direct health care costs is avoided. When considering the total value of statistical life (VSL) which includes items such as lost wages, social safety net expenses, and cost of infectious illnesses, vaccines return an amazing \$54 per dollar invested.ⁱ While the GAVI numbers are associated with lower-income countries, COVID-19 has demonstrated that preventing infectious disease can avert serious, negative economic consequences for high-income countries as well. On a dollar-for-dollar investment basis, investments in vaccines offer the best return on investment. The economic costs of 2020 have been multifaceted from parents leaving the workforceⁱⁱ to costs incurred by health systems by canceling or delaying elective surgeries in the spring.ⁱⁱⁱ The economic benefits pale in comparison to the families who have lost loved ones due to the pandemic, but we must consider the overall benefits of robust vaccine infrastructure as we plan for recovery.^{iv}

Early Challenges and Background

My employer, the Rural Wisconsin Health Cooperative (RWHC) was savvy enough to recognize the value that vaccines offered when they identified immunization disparities between counties that abut Dane County, the home of Wisconsin's Capitol, and those that had significant disparities when it came to childhood immunizations.^v They invested in developing the Southern Wisconsin Immunization Consortium (SWIC), the predecessor to the Wisconsin Immunization Neighborhood, to address these rural specific challenges. The consortium worked together to address access and attitudes toward immunizations including access and acceptability issues. WIN continues to identify the urgent need to address childhood immunizations even as our most pressing priority is the COVID-19 vaccination program.^{vi}

The response to the COVID-19 vaccine has been informed by the policies and practices that drove rural disparities in the 2009 H1N1 Influenza pandemic. RWHC staff has sought to address potential issues in the early days of planning for a vaccine and during the first vaccine allocation deliveries. A much-anticipated vaccine with so many moving parts required significant advocacy in the early days by RWHC staff to ensure that the system supported rural populations.

The first challenge RWHC staff anticipated was the minimum order for vaccines. We anticipated that in the early weeks of a campaign the vaccine would need to be highly targeted to health care personnel. The minimum order size could have disadvantaged rural communities by requiring staff to travel to centralized hubs and does continue to disadvantage some rural communities. In addition, I leaned on my experience in responding to the 2009 H1N1 in California. I remember the minimum order significantly disadvantaged rural Tulare County in California, delaying their access to the 2009 H1N1 vaccine for many weeks because they did not have a high enough population eligible for the vaccine. The RWHC staff spent most of our fall conducting an advocacy campaign to raise awareness around the potential impacts of a large minimum order for rural areas.

RWHC adopted the position that ultra-cold storage was a secondary factor to the large minimum orders. Both potential vaccines were stable for several days with normal refrigeration, the more concerning issue was the minimum order that would require ultra-cold to ensure the vaccine did not go to waste. RWHC staff was able to work with our state and industry partners to ensure that rural communities implement a hub and spoke model to ensure rural areas received vaccine products. The hub and spoke model now ensures that a minimum order of 50 is able to be delivered to many vaccinators across Wisconsin serving vulnerable populations such as free clinics. A 50-dose minimum order also ensures that the vaccine reaches communities with smaller populations ensuring access is equitable across geographic areas. We would recommend federal partners continue to work with our industry partners to ensure minimum orders are flexible and adaptable to the needs of rural communities, particularly if additional doses are added to vials.

RWHC and the Wisconsin Hospital Association (WHA) staff worked closely with Kent Hunter, one of Pfizer's Vaccine Medical Directors, to bring just in time training on how to handle ultra-cold vaccines to rural sites who had invested in the ultra-cold storage to allow their communities to receive access. This training was a significant benefit and only days after the initial Federal Food and Drug Administration (FDA) authorization. We are very grateful for Pfizer's continued commitment to assisting our state's rural vaccine efforts.

The just-in-time nature of this training highlights the challenges of a vaccine program that moved swiftly from development to approval to distribution during a global pandemic. Information about vaccine development was shared across many channels throughout the development process. Until a final authorization had been granted, no specific information could be implemented to aid the deployment of the vaccine. Both early vaccine candidates went through several possibilities for temperature stability prior to final submission to the FDA, and only once the authorization was granted could we finalize the storage and handling recommendations, training and technology. These seemingly minor delays and changes certainly required time being spent to address these seemingly minor issues. The rapid implementation created on-the-ground learning opportunities for organizations through trial and error that resulted in delays in providing vaccine services.

In October, Wisconsin convened the Wisconsin State Disaster Medical Advisory Committee Vaccine Distribution Subcommittee ('Subcommittee') with the Wisconsin Department of Health Services (WI-DHS) to advise the state on vaccine prioritization. I was asked to be the co-chair and to help provide a rural perspective to the Subcommittee. The Subcommittee reviewed the Advisory Committee on Immunization Practice (ACIP) recommendations and provided technical expertise to the Department of Health Services on COVID-19 prioritization. The Subcommittee's recommendations followed ACIP as closely as possible to avoid public confusion and frustration, but even recommendations from ACIP changed as additional information became available. The inclusion of long-term care residents into Phase 1a is one such example.

Federal policy actions have influenced the ability of states to adapt the different recommended priority groups. ACIP reviewed priority groups to avoid unduly delaying vaccine access to other high priority groups. These issues are particularly important to understand given that the ACIP had reviewed, evaluated, and recommended certain age cohorts along with jobs with high levels of exposure or important societal functions to be vaccinated.

ACIP adopted an age model as the data supported evidence of older age (75 plus) is a reasonable proxy for additional accumulated disease without the need for a medical diagnosis which could continue to disadvantage some populations for priority in Phase 1b.^{vii} Our Subcommittee had reviewed the data and was prepared to recommend that all individuals 70 and above receive the vaccine based on epidemiology in Wisconsin. Those 70 and above accounted for 72% of hospitalizations and over 78% of deaths.^{viii} We examined the cohort of 65-70-year-olds. This 5 year age segment alone increased the eligible population in Wisconsin by approximately 337,445 individuals or roughly 4.8 weeks of their federal distribution at 70,000 doses per week.^{ix} The Subcommittee did

not want to unduly delay access to the vaccine by other high-priority groups, for example, those who are immunocompromised. However, WI-DHS implemented an age-based recommendation that included all over age 65 to align with federal recommendations. WI-DHS made an additional decision to prioritize the population of 65 plus over essential workers to decrease demand on vaccination services due to the current limitations with vaccine supply.^x

The age-based strategy has allowed Wisconsin to significantly improve the number of doses given per day,^{xi} DHS is mindful of health disparities that an age-based approach might reinforce and has initiated multiple strategies to address, for example, making doses to Federally Qualified Health Centers (FQHCs) a priority. The data shows that communities of color have shorter lifespans^{xii} and are lagging in doses administered as a percent of the population.^{xiii} Rural communities in particular have younger Hispanic populations working in agricultural and other frontline essential jobs.

Rural communities on the other hand may receive slight benefits from an age-cohort model as 35.1% of Wisconsin's population over age 65 live in rural communities.^{xiv} This allows some rural communities to benefit from a larger portion of their community being eligible immediately for vaccination, but eligibility is balanced with limited supply resulting in the phrase, "eligibility does not equal accessibility." One rural community nurse disclosed that their waitlist for those 65 and above is over 10,000 people long. The careful balancing of projected vaccine supply against population cohorts by ACIP has been undone by lowering the age limit to 65. In addition to direct federal vaccine allocations to FQHCs, WIN recommends expanding this partnership to include rural health clinics.

In WIN's opinion, the worst policy decision is to continue to allow populations to become eligible while vaccine supply remains limited when demand remains high in the current population. This results in provider and patient frustration. Our natural champions who are early vaccine adopters share stories not of success, for example, a senior who went for their vaccine and it was so easy. Instead, our natural champions may experience frustration with the inaccessibility of the vaccine, for example, they was on hold for three hours and was told they would get a call back next week.^{xv} These are impossible situations for both our patients and providers, and we hope the vaccine becomes more widely available soon.

Another challenge that impacted rural access to the vaccine were the required minimums to activate the Federal Long-Term Care Partnership Program ('Partnership Program'). The formula required a total population number (for example 100,000), once the program was begun, each State needed to set aside 50% of the total population (50,000 doses) in week one and 25% in two subsequent weeks (25,000 respectively)^{xvi} to provide vaccines to the Partnership Program. WI-DHS data estimates 4,000 entities in Wisconsin were eligible for this program.^{xvii} The challenge with so many small facilities being served by centralized locations is the time and distance required to transport staff and vaccines to each location reduced the effectiveness of the program in the 4,000 locations in Wisconsin. There was a bit of a delay while rural hospitals determined how to engage with the program to serve their community. In addition, vaccine hesitancy among health care workers in long-term care settings reduced vaccine

uptake, which reduced the number of vaccines needed to cover the population. The ultimate result of this partnership was to lock away doses in a location serving a very specific population reducing flexibility within the vaccine supply to be mobilized. In rural communities, WIN recommends local vaccinators has the potential to increase acceptance by using known sources rather than having outsiders come in to vaccinate the community who may not have the same level of trust.

Summary of Key Recommendations: Early Challenges

1. Federal partners should continue to work with our industry partners to ensure minimum orders are low, flexible, and adaptable to the needs of rural communities, particularly if additional doses are added to vials.
2. Expand the direct federal allocations to include rural health clinics, in addition to FQHCs.
3. Do not add additional federal priority groups until vaccine supply expands or current federal priority groups have more vaccine uptake.
4. Use local vaccinators to enhance trust in communities.

Current Challenges

WIN is delighted the early growing pains of a rapidly implemented vaccine program are beginning to stabilize, and in Wisconsin, our rural partners have not been seriously disadvantaged by policy decisions. Our partners are delighted to be able to provide their concerns about current federal policy initiatives.

The newly announced Walgreens-Federal Partnership program should be crafted carefully to avoid any disadvantage for rural communities. Many of our rural communities struggle with access to broadband, so an online registration portal disadvantages these communities.^{xviii} For communities with dial-up, accessing a web-based system may be the barrier to care that results in lower immunization rates. This concern is particularly relevant for our older generation who may not have a smartphone with web services built as a way to overcome a lack of broadband access.^{xix} Even more concerning are solo agers who do not have a family member who can navigate the different websites from local health departments, hospitals, clinics, and public health mass vaccination sites and are without internet access of their own.^{xx} These individuals are at high risk of being disadvantaged by a web-based signup system. WIN recommends any vaccine portal created by a federal contractor should be easy to access, have low literacy levels, and be translated into multiple languages.

WIN is concerned the reach of national chain pharmacies may not adequately serve rural America. There is not a Walgreens in every town in rural communities. Local or regional pharmacy chains may be able to provide additional access to these communities who might otherwise be underserved. WIN recommends expanding the national pharmacy partnerships to these local and regional chains.

Much of the consumer frustration centers on a lack of a national vaccine locator. Vaccine Finder is a website supported by the CDC intended to provide a unified location to access finding vaccines near the user.^{xxi} The current statement on the website includes a notice that COVID-19 vaccines will not be listed until they are widely available to the public. In Wisconsin, those over age 65 are 17.5% of the population. Vaccine Finder's lack of availability has required state and local governments to develop resources to locate vaccine clinics. The result is communities have invested scarce time and resources into solving a problem that could be solved using federal resources. WIN recommends turning on Vaccine Finder and ensuring it is translated into multiple languages. In addition to these concerns, the new vaccine monitoring program, V-Safe, has only been rolled out in English. To maximize trust and transparency, V-Safe must be translated into additional languages as soon as possible.

Communities are trying to address the issues of a web-based vaccine campaign. Some communities are exploring collaborations with a 2-1-1 system to help address the issue of limited broadband connectivity. Vaccine Finder being a reliable and coordinated source of information would speed this process. WIN recommends exploring opportunities to fund federal insurance navigators to assist with COVID-19 locations. Wisconsin is exploring options with the insurance navigator network, and funding such options would be excellent policy solutions to a complex and challenging issue for navigating the COVID-19 marketplace. Supporting this innovation through funding opportunities would help communities on the ground. West Virginia's vaccine hotline and high immunization rates show this model has success. WIN recommends funding vaccine hotlines.

A policy improvement that has happened in the past several weeks that has assisted states is the CDC providing visibility on two weeks of vaccine allocations. The hardest part of making prioritization decisions was the variability in quantity and type of vaccine available. Without knowing potential allocation numbers, each WI-DHS needed to identify how much each site is using on a weekly basis and needs to do complex math on where to ship vaccines. A more predictable supply helps the state to set allocations to vaccinators, which should result in patients being able to schedule and keep vaccine appointments, which results in more vaccine in arms. The biggest frustration from vaccinators is making appointments to provide vaccine, which makes their patients very hopeful, only needing to cancel them because of unpredictable vaccine supply. This still happens due to the lack of vaccine; WIN recommends a robust partnership with states to ensure vaccine supply is clearly communicated as early as possible to vaccinators to ensure a match between vaccine appointment availability and vaccine supply. The vaccine appointments bring hope and joy to both the health care providers offering them and the patients receiving them. The vaccinator needing to cancel the appointment that brings hope creates pain and disappointment for all involved. Yes, we do experience winter weather-related challenges, and we are looking forward to spring with more settled weather.

Diane Hall, who came to the CDC with a rural focus, has been invaluable as our rural health clinics have searched for rural-specific questions. For instance, Diane was an excellent starting point when our clinics were wondering if they were able to use

hospital non-clinic space for mass vaccine clinics. Diane was able to help locate the correct Centers for Medicare (CMS) division to ask our question. These staff responded extremely quickly and we are grateful for their clarification that rural clinics can conduct drive-through clinics and clinics in hospital non-clinic space as long as it is used exclusively for that activity.

Key Recommendations: Current Challenges

Access

1. Turn on Vaccine Finder and ensure translations are available.
2. Translate V-Safe into additional languages.
3. Any vaccine portal of federal contractors should be translated and easy to use. Provide funding to federal exchange navigators to help navigate COVID-19 appointments.
4. Fund vaccine hotlines.
5. Any vaccine portal should be easy to access, have low literacy levels, and be translated into multiple languages.

Partnership Recommendations

1. Expand the national pharmacy partnerships to these local and regional chains.
2. Partner with states to ensure vaccine supply is clearly communicated as early as possible to vaccinators to ensure a match between vaccine appointment availability and vaccine supply.

Anticipated Future Challenges

WIN looks ahead to challenges that may emerge as initial vaccine demand wanes. These challenges are the same challenges we see in our routine immunization program. They are access, payment and acceptability. Rural communities may have some challenges in terms of one or another, but you can make investments from the federal level that will make the COVID-19 campaign, and vaccines more broadly, very successful.

We have some success in the access space. The requirement that every insurer covers the vaccine, even at out-of-network locations, significantly expanded access with minimal costs and WIN applauds that policy. We recommend a national messaging campaign to raise awareness that the vaccine is available at no cost during the course of the public health emergency at any location. A few of our consumers have concerns about paying for vaccines, and a campaign would likely ease concerns. We would recommend continuing this program. Wisconsin Immunization Registry (WIR) data pulled in 2015, 2016, and 2017 positively correlated the number of access points in a community with higher immunization rates.^{xxii} Fewer access points in a community negatively correlated with childhood and flu immunization rates. Currently, our hospitals report seeing some vaccine tourists to rural areas to obtain vaccines, but we

know this won't last. Those who are vaccine-hesitant are less likely to be motivated to drive outside of their community to find an access point, so bringing vaccines to locations with easy access is critical. We would also highlight the benefits of increased access to other routine vaccines for rural communities that may not have access points.

WIN recommends mobilizing federal resources to support mobile clinics when such clinics coordinate with individuals or groups known to the community and in locations that the community has identified as a trusted location. Currently, there is much confusion from providers on whether mobile vaccine clinics are allowed due to the provider agreement because any site serviced more than twice needs to complete a provider agreement with the vaccinator WIN recommends eliminating this provision of the provider agreement. Local community hospitals, clinics, or free clinics have built trust within their communities over many years and are likely to be more trusted than a government contractor for mass immunization services. WIN recommends leveraging these partnerships to avoid alienating those who have a distrust or prefer government to have a smaller role in their lives. Vaccine hesitancy in some groups, particularly rural communities, may be driven by a distrust of institutions. Wisconsin's rural hospitals have risen to this challenge magnificently and deserve recognition for serving non-employee health care providers. They are now partnering with local public health and ensuring that their communities are served.

Part of ensuring there is an adequate network of vaccine providers is ensuring vaccines carry adequate payment. WIN recommends adequate reimbursement levels to ensure vaccinators are appropriately compensated. Payment types should be monitored as initial demand wanes and there is more of a return to normal operations. Providers who may be conducting vaccine clinics out of their own goodwill may decide to return to other more profitable lines of business if payment is not addressed.

Vaccine acceptability is critical, and trusted community partnerships are part of this. WIN is using the Vaccinate with Confidence framework to work with our RWHC member hospitals to build trust in the medical community. The Kaiser Family Foundation evidence shows that rural residents are less likely to be early adopters of the COVID-19 vaccine than their urban peers, but many will eventually accept the vaccine.^{xxiii} Our work with hospitals has focused on a comprehensive acceptance platform by highlighting the positive hopes of early adopters and decreasing focus on hesitancy. WIN works with them to address myths and encourage them to identify trusted messengers to any specific sub-population (for example, head nurse, doctor, housekeeper) to bring a vaccine positive message to those members of staff. We also recommend adopting policies that encourage highlighting the recommendation that all individuals be vaccinated for COVID-19. One of our clinics used such a policy successfully when they had hired a vaccine-hesitant nurse. Their data showed a policy that required the nurse to highlight the vaccine recommendations made by the CDC maintained high vaccine rates in her patients. We recommend strong federal resources and funding opportunities be made to groups who are able to do this work.

WIN is proud to be part of the Immunization Action Coalition's national network of partners full list of partners is included in Appendix B. This network has been addressing vaccine hesitancy and access for years. Our partners report new groups

entering the space and are directing funding away from experienced and trusted partners. WIN recommends direct, specific, and adequate funding for coalitions who have been working in this space for years. In addition, WIN recommends additional CDC partnerships with these coalitions to address and inform their work products for the public. Finally, WIN recommends the CDC create an advisory council of immunization coalitions to help to inform the partnerships that are being developed by social media and technology partners to help them understand the impact of their policies, algorithms, and platform on public perception of vaccines.

WIN knows that we can leverage early adopters to normalize vaccination. Our campaign “Vaccine Voices. Vaccine Choices” is set to highlight those who are willing to be vaccinated early and use their acceptance to begin to sway those who want to wait and see. Early adopters are our natural vaccine ambassadors. Public health should be trying to make access as easy as possible for these community members, particularly if they are community members that touch many aspects of life (for example, an elected official, meals on wheels delivery person, volunteer), they will be able to influence their peers and provide encouragement as time elapses. As community members become vaccinated, individuals or groups who have been hesitant because they haven’t known someone personally who has been vaccinated will be more likely to accept vaccination if they know it is easy and safe.

Acceptability can be driven by media appearances and diminished by seemingly mixed messages. We need skilled science communicators working with subject matter experts to translate the science into information the public can understand and take action into a coordinated federal communications campaign and plan. Many examples of this need could be highlighted. Current messaging could focus on prioritization not equaling accessibility. Another way to increase public understanding of vaccine supply would be to refer to “complete series” rather than total doses. Large numbers reported in the media, for example the number 100 million doses, creates an expectation that there is far more robust supply than we have. Explaining when those doses are expected to be available and counting the doses as a full series (for example, a two-dose series is cut in half), would temper consumer expectations. WIN would also recommend using language around the number of first doses available and shipped to states. We say in community development that it is critical to under promise and over deliver; we would recommend adopting this as central to the communications strategy to avoid confusion over a seemingly robust supply that difficult for consumers to access.

The speed and evaluation of science is difficult to communicate to the public. Ultimately, the general public wants to get back to life as they knew it. The federal government should help the public understand why recommendations are evolving (for example, non-quarantine after exposure if you are vaccinated), and how decisions will be made. The most pressing question most people want to know is when we can remove masks. Helping signal what data points will be used to make this decision will help all of the public set reasonable expectations. WIN recommends a clear and strategic communications plan that includes the number of series available, specific decision points in relation to non-pharmaceutical interventions, and actions that can be taken by the public.

Key Recommendations: Anticipated Future Challenges

Access

1. Eliminate the CDC provision that requires mobile vaccinators to register every location serviced.

Payment

1. Ensure adequate reimbursement for vaccine providers.
2. Begin a national messaging campaign to raise awareness that the vaccine is available at no cost during the course of the public health emergency at any location.

Partnership Recommendations

1. Fund coalitions who have been working on vaccine hesitancy.
2. The CDC should deepen partnerships with existing/new coalitions to inform their work products.
3. Invite coalition partners to work with the CDC, particularly in discussions with social media companies to help social media companies understand the impact of algorithms on pro-vaccine efforts.

Communications

1. Create a strategic federal communications plan used by technical experts and other spokespeople to avoid creating confusion in the public.

I am honored to be able to provide a rural perspective of the COVID-19 program. We have come far in developing the largest public health campaign our nation has seen. We had the opportunity to learn as the vaccine was deployed, and we can plan ahead for the future. As we look to ending the COVID-19 pandemic, I urge policymakers to invest in vaccine infrastructure. We need support to provide lifesaving vaccines on a routine basis. We need the support to help communities understand the science of vaccines to help them make informed choices. This money will provide the best return on investment we can offer.

Sincerely,

Ann Lewandowski

Ann Lewandowski

Executive Director

Wisconsin Immunization Neighborhood

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Appendix A – All Recommendations

General Access

1. Federal partners should continue to work with our industry partners to ensure minimum orders are low, flexible, and adaptable to the needs of rural communities, particularly if additional doses are added to vials.
2. Expand the direct federal allocations to include rural health clinics, in addition to FQHCs.
3. Do not add additional federal priority groups until vaccine supply expands or current federal priority groups have more vaccine uptake.
4. Eliminate the CDC provision that requires mobile vaccinators to register every location serviced.

Internet Access Considerations

1. Turn on Vaccine Finder and ensure translations are available.
2. Translate V-Safe into additional languages.
3. Any vaccine portal of federal contractors should be translated and easy to use. Provide funding to federal exchange navigators to help navigate COVID-19 appointments.
4. Fund vaccine hotlines.
5. Any vaccine portal should be easy to access, have low literacy levels, and be translated into multiple languages.

Payment

1. Ensure adequate reimbursement for vaccine providers.
2. Begin a national messaging campaign to raise awareness that the vaccine is available at no cost during the course of the public health emergency at any location.

Partnership Recommendations

1. Use local vaccinators to enhance trust in communities.
2. Expand the national pharmacy partnerships to these local and regional chains.

3. Partner with states to ensure vaccine supply is clearly communicated as early as possible to vaccinators to ensure a match between vaccine appointment availability and vaccine supply.
4. Fund coalitions who have been working on vaccine hesitancy.
5. The CDC should deepen their partnerships with existing coalitions to inform their work products.
6. Invite coalition partners to work with the CDC, particularly in discussions with social media companies to help social media companies understand the impact of algorithms on pro-vaccine efforts.

Communications

1. Create a strategic federal communications plan used by technical experts and other spokespeople to avoid creating confusion in the public.

Appendix B Immunization Coalitions^{xxiv}

Active Immunization Coalitions (Excluding Disease Specific Coalitions)

Arkansas: Arkansas Immunization Action Coalition (Immunize AR)

Arizona: The Arizona Partnership for Immunization (TAPI), MCChIP Maricopa Co Childhood Immunization Partnership

California: Immunization, Coalition of Los Angeles County (ICLAC), Immunization for San Diego Kids, Immunize LA Families, Imperial County Immunization Coalition, Inland Empire Immunization Coalition, Marin Immunization Coalition, Orange County Immunization Coalition, San Francisco Immunization Coalition (SFIC), Stanislaus County Immunization Coalition, California Immunization Coalition, Monterey County Immunization Coalition, San Diego Immunization Coalition (SDIC), Vaccinate California

Colorado: Boulder County Immunization Coalition, Immunize Colorado, Colorado Adult Immunization Coalition

Connecticut: Vaccine Alliance of CT

District of Columbia: Immunization Coalition of Washington, DC

Delaware: Immunization Coalition of Delaware

Florida: Broward County Immunization Action Coalition, FL LINC (Florida's Leading Immunization Network of Coalitions), Collier County Immunization Coalition, Highlands County Immunization Task Force, PITCH (Partners Immunizing Towards Community Health)

Georgia: Georgia Immunization Coalition, Everybody Counts Immunization Coalition

Hawaii: Hawaii Immunization Coalition

Iowa: Pottawattamie County Immunization Task Force, Iowa Immunizes,

Idaho: Canyon Area Immunization Coalition, Eastern Idaho Immunization Task Force, Idaho Immunization Coalition

Illinois: Public Health Initiative of EverThrive Illinois, Asian Health Coalition,

Indiana: Indiana Immunization Coalition, Inc., Hoosiers Vaccinate

Kansas: Immunize Kansas Coalition

Kentucky: Let's Immunize Very Early or L.I.V.E. Coalition, Kentucky Immunization Coalition, Let's Immunize Northern Kentucky (LINK) Coalition

Louisiana: Louisiana Shots for Tots Coalition Inc

Massachusetts: Massachusetts Adult Immunization Coalition, Massachusetts Chapter of the AAP (MCAAP) Immunization Initiative

Maryland: Maryland Partnership for Prevention, Inc.

Maine: Maine Immunization Coalition

Michigan: Bay County Immunization Coalition, Tuscola County Health Department Immunization Coalition, Washtenaw Immunization Action Coalition, Alliance for Immunization in Michigan, Saginaw County Immunization Coalition

Minnesota: Southeast Minnesota Immunization Connection (SEMIC), Minnesota Childhood Immunization Coalition

Missouri: Generate Immunizations Initiative, Mid America Immunization Coalition, Missouri Immunization Coalition

Mississippi: Mississippi Immunization Task Force

Montana: Flathead County Immunization Coalition

North Carolina: Henderson County Immunization Coalition

North Dakota: Richland-Wilkin County Immunization Action Plan Committee, Center for Immunization Research and Education at NDSU

Nebraska: Nebraska Immunization Advisory Committee (NIAC), Immunization Task Force - Metro Omaha (ITF)

New Hampshire: Granite State Immunization Partnership

New Jersey: Essex Metro Immunization Coalition, New Jersey Immunization Network

New Mexico: New Mexico Immunization Coalition

North Carolina: North Carolina Immunization Coalition

Nevada: Immunize Nevada

New York: Finger Lakes Area Immunization Coalition, Immunization Coalition of Tompkins County, New York City Adult Immunization Coalition, Onondaga County Immunization Coalition, Rockland County Adult Immunization Coalition, Western New York Adult Immunization Coalition, Western New York Pediatric and Adolescent Coalition (WNYPAC), Broome County Adult Immunization Coalition

Ohio: Fairfield Immunization Coalition, Greater Cincinnati Immunization Coalition, Shots 4 Tots n Teens (Lucas County), Adult Immunization Coalition of Central Ohio, Immunization Coalition of Central Ohio, ImmunizeOhio.org , Also known as the consortium for Healthy & Immunized Communities, Inc., Ohio Parents Advocating for Vaccines (PA4V)

Oklahoma: Central Oklahoma Immunization Coalition, Cleveland County Immunization Coalition, Oklahoma Alliance for Healthy Families, Tulsa Area Immunization Coalition

Oregon: All Marion Immunization Coalition, Deschutes County Immunization Coalition, Jefferson County Immunization Coalition, Union County Immunization Coalition, Immunize Oregon, Boost Oregon

Pennsylvania: Allegheny County Immunization Coalition (ACIC), Cumberland Valley Immunization Coalition (CVIC), Northwest Immunization Coalition--Vaccine Education Partnership, Southwest Immunization Coalition, Berks Immunization Coalition, Bucks County Immunization Coalition, Chester County Immunization Coalition, Delaware County Immunization Coalition, Immunization Coalition of Erie County PA, Lancaster County Immunization Coalition, Lehigh Valley Immunization Coalition, Montgomery County Immunization Coalition, Northeast Immunization Coalition, Pennsylvania Immunization Coalition, Philadelphia Immunization Coalition, Schuylkill County Immunization Coalition, Tioga County Partnership for Community Health—Safe Kids Workgroup

Porto Rico: VOICES- Immunization Coalition of Puerto Rico

Rhode Island: Ocean State Immunization Collaborative (OSIC)

South Carolina: South Carolina Immunization Coalition, South Carolina Parents for Vaccines

South Dakota: Lake County Immunization Coalition, Immunize South Dakota

Tennessee: ImmunizeTN

Texas: Immunization Coalition of Greater Houston, Immunize San Antonio (IZSA), Texas Immunization Stakeholder Working Group (TISWG), TMA's Be Wise – Immunize Vaccine Awareness Coalition, Immunization Collaboration of Tarrant County, The Immunization Partnership

Utah: Southwest Immunization Coalition for Children, Utah County Immunization Coalition, Utah Immunization Special Interest Group (UISIG), Greater Salt Lake Immunization Coalition, Northern Utah Immunization Coalition, Utah Adult Immunization Coalition

Virginia: ImmunizeVA

Washington: Clark County Immunization Coalition, Immunization Action Coalition of the Inland Northwest, Pierce County Immunization Coalition, Immunization Action Coalition of Washington, PKIDs

Wisconsin: Wisconsin Immunization Neighborhood (WIN), Coulee Region Immunization Coalition, Immunize Milwaukee!, Manitowoc County Immunization Coalition, Northeast Wisconsin Immunization Coalition (NEWIC), Partners in Prevention, Saint Croix Valley Immunization Coalition, Columbia County Immunization Coalition, Dane County Immunization Coalition, Langlade County Immunization Coalition, Northwoods Immunization Coalition, Racine County Immunization Coalition, Sheboygan County Immunization Coalition, Tri-County Immunization Coalition (Waukesha, Ozaukee, Washington)

West Virginia: West Virginia Immunization Network (WIN)

National Coalitions: 317 Coalition, National Foundation for Infectious Diseases (NFID), Vaccinate Your Family, Immunization Action Coalition, Vaccine Ambassadors, Voices for Vaccines

Inactive Coalitions (Likely due to inadequate funding)

Oregon: Oregon Adult Immunization Coalition

Pennsylvania: Dauphin County Immunization Task Force, York Adams County Immunization Coalition (YACIC)

South Carolina: Tri-County Immunization Coalition

South Dakota: Davison County I-3 (Infant Immunization Initiative), Howard Immunization Coalition

Texas: Big Country Immunization Coalition, Brown County Immunization Coalition, City of Amarillo Health Department Stakeholder's Group, Denton County Immunization Coalition

Laredo Health Coalition, McLennan County Immunization Coalition, S.O.S. (Shots On Schedule Lubbock), South Texas Immunization Coalition

Wisconsin: Washington County Immunization Coalition, Kenosha Immunization Coalition (KIC)

References

- i <https://www.gavi.org/vaccineswork/new-evidence-shows-investments-vaccination-produce-even-greater-returns-previously>
- ii <https://www.rand.org/blog/2020/11/women-are-leaving-the-labor-force-in-record-numbers.html>
- iii <https://www.aha.org/guidesreports/2020-05-05-hospitals-and-health-systems-face-unprecedented-financial-pressures-due>
- iv https://covid.cdc.gov/covid-data-tracker/#cases_casesper100klast7days
- v Wisconsin Immunization Registry Data. Pulled 2011.
- vi <https://www.dhs.wisconsin.gov/immunization/index.htm>
- vii <https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2020-12/slides-12-20/02-COVID-Dooring.pdf>
- viii https://censusreporter.org/data/table/?table=B01001&geo_ids=04000US55,01000US&primary_geo_id=04000US55#valueType|estimate
- ix <https://www.dhs.wisconsin.gov/covid-19/cases.htm#youth>
- x <https://www.dhs.wisconsin.gov/covid-19/vaccine-about.htm>
- xi <https://www.jsonline.com/get-access/?return=https%3A%2F%2Fwww.jsonline.com%2Fstory%2Fnews%2Fpolitics%2F2021%2F02%2F08%2Fwisconsin-now-tops-nation-per-capita-daily-covid-19-vaccine-shots%2F4433825001%2F>
- xii <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-019-7145-y>
- xiii <https://www.dhs.wisconsin.gov/covid-19/data.htm>
- xiv <https://www.census.gov/library/stories/2019/10/older-population-in-rural-america.html>
- xv Conversation Reported by Ms. Cherise Easley, February 10, 2021.
- xvi Email from Jon Temte, MD. December 2, 2020.
- xvii <https://www.dhs.wisconsin.gov/covid-19/vaccine-ppp.htm>
- xviii <https://broadbandnow.com/Wisconsin>
- xix <https://www.pewresearch.org/internet/fact-sheet/mobile/>
- xx <https://www.hindawi.com/journals/cggr/2016/4723250/>
- xxi <https://vaccinefinder.org>
- xxii Wisconsin Immunization Registry Data, Sauk and Grant County, Pulled August 2015.
- xxiii <https://www.kff.org/coronavirus-covid-19/poll-finding/vaccine-hesitancy-in-rural-america/>
- xxiv Thank you to Voices for Vaccines who completed this survey on January 2021.