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Rochelle Walensky, MD, MPH
Director
Centers for Disease Control and Prevention
1600 Clifton Rd.
Atlanta, GA 30329

Dear Dr. Walensky,

On behalf of the EveryLife Foundation for Rare Diseases and the more than 30 million Americans living with a rare disease or disorder, we are writing to urge you to take action on emerging data that shows COVID-19 vaccines may be less effective for people with some immune compromising conditions and continue to highlight and address the needs of the rare disease community in the CDC's pandemic response efforts.

EveryLife's policy priorities are informed by the needs of our community and our shared mission of advancing the equitable development of, and access to, lifesaving diagnoses, treatments, and cures. To inform our policy work, we convene the Community Congress, a forum for collaboration across stakeholders, representing over 200 individual rare disease patient advocacy organizations in addition to over 90 other healthcare and biotechnology organizations. Since March 2020, the Ad Hoc COVID-19 Response Working Group has met regularly to share community experiences, inform policy needs and coordinate efforts.

The CDC guidelines put forward on 5/13/2021, while a promising step and a testament to the effectiveness of vaccines for the general population, raise several concerns for the rare disease community. Additional clarifications and communication from your office are needed for the rare disease community to make critical health decisions for themselves and their families.

Background

The rare disease community includes more than 7,000 rare diseases with varied causes, symptoms, progression, and prognosis, more than half of which affect children.[4] As part of your ongoing efforts to advise the CDC and protect the public's health we urge you to continue to protect rare disease patients and their caregivers who are particularly vulnerable to the devastating effects of COVID-19.

Individuals with rare diseases and their families have complex health conditions, and many are significantly immunocompromised or are required to take medications that suppress their immune system. They may utilize innovative cell and gene therapies, be participating in clinical trials, and some are prohibited from receiving traditional recommended vaccines. These are just a few of the issues that are facing rare disease patients as they navigate the decision-making process to ensure a COVID-19 vaccine will be safe for them.

In previous communications to federal COVID-19 leadership, we outlined the ways in which the COVID-19 Response Team could prioritize the needs of the rare disease community during vaccine roll-out. As the research landscape on COVID-19 vaccines expands, and as we enter a new phase of the vaccine roll-out to adolescents, we are again asking for critical attention to be drawn to the rare disease population.

While state and local governments play a critical role in vaccine prioritization, communication, and distribution, early experiences have shown the importance of clear federal guidance in facilitating more widespread adoption and faster implementation. In this regard, **we request that the CDC act on the following subjects and provide guidance to states where applicable:**

1. **Issues of vaccination protection in immunocompromised individuals, both in a) public health messaging and b) robust breakthrough infection data collection**

2. **Mask wearing policies, education, and communication for immunocompromised people**

3. **Vaccination in high-risk children of all ages and vaccine accessibility efforts**

We share more details about each of these priorities and outline steps to achieve them below.

1. **Issues of vaccination protection in immunocompromised individuals**

   We urge the CDC to use the full range of available dissemination channels to notify state leadership of the concerns regarding vaccine efficacy in immunocompromised patients and to educate healthcare professionals and the public on these limitations. This is necessary so proper preventive action can be taken until this group can verify whether they are protected, particularly considering the recent updates to the CDC guidelines on mask wearing.

   Public health messaging

   Recent research has shown that individuals who are immunocompromised, have had a solid organ transplant, or are on immunosuppressive medications may produce little to no antibody response to the current mRNA vaccines.[1] This means that, despite vaccination, there may be a significant proportion of the population that is not protected from SARS-CoV-2 infection at the level described in the clinical trials.

Additionally, models have predicted that low levels of SARS-CoV-2 titers post-vaccination may have a significantly lower level of overall protection, though this work is ongoing.[2] It is crucial that CDC increase communication on this issue, not only with the public, but also with the clinicians whom the rare disease community is looking to for guidance. Given the FDA's recent statement on the use of antibody testing after vaccination, we urge the CDC to also collaborate with the FDA to build the evidence needed to inform the utility of these tests, many of which are already being utilized in the community of concern.[3]

Unfortunately, as the vaccine roll-out continues, we are hearing from our community members they are not getting the answers they need about whether they should get a vaccine and what they should do to ensure they are indeed protected. Primary care physicians and specialists are not receiving the level of clear information they need to provide complex patients with the best guidance about the safety and efficacy of the vaccine in their individual circumstances. In a survey of the rare disease community, we found that primary care and specialists were the top two sources of trusted information to help patients and caregivers decide if they will seek a COVID-19 vaccine.[4]

We urge you to work with the vaccine manufacturers and public health officials to establish robust and consistent communication with professional societies and clinicians across healthcare specialties. Physicians need access to information sources that can help them make the best recommendations for individual patient circumstances. If rare disease patients and families are not confident that the vaccine will be safe and effective given their unique health needs, they are unlikely to proceed, forcing families to make difficult decisions to continue restrictive isolation or risk their lives as society reopens and isolating becomes impossible.

The CDC needs to work with states to provide information on what is known and what is still under study about vaccine efficacy in immunocompromised populations. The CDC should also leverage available mechanisms for reaching professional societies and healthcare professional groups to provide this information to primary care and specialists since we know this is where the rare disease patient population is turning for information. Two important avenues that CDC should use to disseminate this information include: 1) CDC Clinician Outreach and Communication Activity calls and 2) CDC and CMS partner outreach calls and other digital updates that have been used to inform community partners and healthcare professionals throughout the pandemic.

We understand the nuances of introducing a message specific to people who are immunocompromised or on certain medications into the public health communications about the vaccine, but the early studies on this topic are too powerful to ignore. Removing preventive practices because one assumes there is no reason to worry about their level of protection after vaccination can have devastating consequences on individuals and families with rare diseases and they need to know that this risk exists and what they can do to stay safe while getting the answers they need. Additionally, this will raise public awareness that the SARS-CoV-2 infection is still a threat to many and important for the general public to not minimize mask wearing.

Robust breakthrough infection data collection

Currently, the data available on the CDC's COVID-19 Vaccine Breakthrough Case Investigation and Reporting page does not report comorbidities or disclose the rate of breakthrough infections in the immunocompromised population. We urge the CDC to add fields to the REDCap database requesting additional health information including the use of immune-compromising drugs that have been correlated with lower antibody production[2] and comorbidities that have immune-compromising effects.

As the vaccinated public begins to adopt the new CDC guidance, the rare disease community, and particularly those who are immunocompromised, will need to make difficult decisions for themselves, their children, and their families. Understanding the rate of breakthrough infections in the immunocompromised population is critical for the body of research on this topic as well as for risk assessment and decision-making on the individual level.

We ask CDC to continue coordinating with state and local officials to track and report breakthrough infection cases, especially those occurring in immune compromised individuals. Additional fields should be added to the REDCap database to record use of immunosuppressant medications and/or underlying immunocompromising health conditions. More communication from CDC is needed around best practices for breakthrough surveillance to create consistency in data collection and contribution at the state and local level.

2. Mask wearing policies, education and communication for immunocompromised people

We urge the CDC to clarify the role that continued mask wearing plays in protecting vulnerable, unvaccinated, and immunocompromised populations, including the available evidence on the degree to which mask wearing will protect the mask wearer if they are exposed to COVID-19-positive individuals who are not wearing masks.

The U.S. has made remarkable progress in the fight against COVID-19 thanks in part to the CDC's leadership and coordination of a robust vaccine rollout. Despite this progress, the CDC's abrupt reversal on mask directives has left the rare disease and immunocompromised populations confused, fearful, and deflated as they attempt to understand the ramifications of decreased masking in their communities.

Throughout the pandemic, the conventional mask message has focused on the role mask wearing plays in protecting others around you rather than on the individual protection afforded to the mask wearer. In the new CDC guidance on mask wearing and in subsequent public comments about the change, the message appears to shift and now insinuates that a mask should be worn to protect the unvaccinated wearer. Lost in the new guidance is the fact that millions of vulnerable children are not eligible for vaccines yet and many who are eligible and have indeed been vaccinated, may not be protected in the same way as the public.

There is a great deal of fear and dismay in the rare disease community about the changes, with many reporting they will be forced to return to highly restrictive levels of precaution to keep themselves or their children safe as more unmask with no way to know who is vaccinated. It is imperative that the CDC provide easy to understand guidance that provides the best available information on the level of protection continued masking will offer these populations if they are forced to be in the presence of unmasked and unvaccinated individuals.

Further, CDC should do more to tell the public about the risks to children and the immunocompromised individuals if unvaccinated people decide to go unmasked despite the CDC's guidance that they continue to wear them. Many will not understand the ramifications of their choice without this aggressive communication effort and individuals in our community will be at-risk through no fault of their own. Without sharing this type of information, the rare disease community faces the added risk of discrimination because they continue to wear masks while others abandon them.

3. Vaccination in high-risk children of all ages and vaccine accessibility efforts

We urge the CDC to reinforce the importance of vaccinating high-risk children, such as those with rare diseases, and stress that state plans should ensure that eligible vulnerable children and their families (including healthy siblings) have access to the vaccine at safe and accessible sites, regardless of their geographic location, physical mobility, or technological and literacy levels.

We ask the CDC to help ensure accessible and safe vaccine administration sites, taking into consideration the needs of the blind, disabled, cognitively impaired, and elderly, learning from the lessons of the initial phase of roll-out and expanding successful accessibility and equity focused programs.

Since the initiation of COVID-19 vaccine programs, adults with rare diseases and families with vulnerable children have faced several roadblocks that caused unnecessary delays in vaccination. While we recognize that most states do not have plans to create tiered prioritization as the ages eligible for vaccination decrease, states must account for the increased risk faced by kids with rare diseases and the family members who have regular exposure to vulnerable children.

It is important to note that the conditions identified in the CDC's evidence table[6] supporting ACIP's initial prioritization groups have many parallels in pathophysiology and symptomology to rare diseases, thus it is reasonable to assume these individuals are also at higher risk of severe outcomes from SARS-CoV-2 infections. Additionally, the very nature of living with multiple rare diseases and the frequent healthcare services they need, results in these individuals having increased risks of exposure to COVID-19 in the home and in healthcare settings.

Rare disease patients and families have exercised great caution to avoid COVID-19 exposure, and many have unique needs that severely limit mobility, time out of the home and the ability to participate in the standard consenting process. In most states, there have been limited efforts to address the needs of individuals for whom accessing a vaccine clinic is impossible, though we are pleased to see these programs expand in the recent weeks.

While we recognize the challenges of distributing the currently approved vaccines to more accessible locations and into the home, we urge you to rapidly identify safe vaccine sites for the rare disease population. Safe vaccine administration sites can also include qualified homecare, primary care and specialist offices, and other trusted community providers that can focus on meeting the needs of these vulnerable groups (including limiting time spent in lines and/or waiting rooms with other unvaccinated individuals). Additionally, because many rare disease families are not able to return to in-person school, regardless of their district's reopening status, school-based vaccine distribution will not meet the needs of this community and further efforts are needed to ensure equitable distribution to the school-aged rare disease community.

To minimize the additional risks associated with vaccination, we encourage you to expand support of mobile vaccination programs to reduce delays in access for those patients who are homebound. Additionally, we ask that you instruct vaccination sites to reserve separate hours dedicated to vaccination of high-risk children and their families. Since the start of the pandemic, grocery stores and other essential services have restricted specific store hours to accommodate safe and distanced shopping for seniors and high-risk individuals. This successful initiative should be used as a model for ensuring safe and equitable distribution of vaccines to rare disease and high-risk communities.

In our US Rare Disease COVID-19 Vaccine Survey, patients and caregivers reported that safety in clinical trials and in real world evidence were the two most important factors in their decision, closely followed by effectiveness in trials and in real-world evidence.[4] We also learned that about 3 out of 4 respondents considered their primary care clinicians, clinical specialists, and the CDC as important information sources to guide their decisions. As you consider strategies to increase vaccine acceptance, we encourage you to leverage this trust in specialty providers to incentivize and equip them for proactive outreach to their patient panels, especially Medicaid beneficiaries.

We understand the task of coordinating the distribution of a new vaccine and continued health communication during this public health emergency is monumental, and the road will have twists and bumps as we move forward. We appreciate the focus on providing clear guidance to the states on how to approach complicated pandemic related initiatives and we urge you to consider the aforementioned requests as you continue this communication with state leaders and the public.

The EveryLife Foundation and the hundreds of partners in the rare disease community stand ready to assist federal and state leaders as you continue to refine the vaccine allocation and administration plans. Please contact Jamie Sullivan, Director of Public Policy, at jsullivan@everylifefoundation.org or by phone at 202-445-4009.

Sincerely,

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CC:

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References

1. Boyarsky, B. J., Werbel, W. A., Avery, R. K., Tobian, A. A., Massie, A. B., Segev, D. L., & Garonzik-Wang, J. M. (2021). Antibody Response to 2-Dose SARS-CoV-2 mRNA Vaccine Series in Solid Organ Transplant Recipients. *Jama*.
2. Khoury, D.S., Cromer, D., Reynaldi, A., Schlub, T.E., Wheatley, A.K., Juno, J.A., Subbarao, K., Kent, S.J., Triccas, J.A., Davenport, M.P. (2021). Neutralizing antibody levels are highly predictive of immune protection from symptomatic SARS-CoV-2 infection. *Nature Medicine.*
3. https://www.fda.gov/news-events/press-announcements/fda-brief-fda-advises-against-use-sars-cov-2-antibody-test-results-evaluate-immunity-or-protection
4. https://everylifefoundation.org/rare-disease-covid-19-vaccine-survey/
5. Batshaw, M. L., Groft, S. C., & Krischer, J. P. (2014). Research into rare diseases of childhood. *Jama*, *311*(17), 1729-1730.
6. https://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/covid-19/evidence-table-phase-1b-1c.html