

UConn

AN ONGOING CE PROGRAM
of the University of Connecticut
School of Pharmacy

EDUCATIONAL OBJECTIVES

- At the end of this continuing education activity, pharmacists and pharmacy technicians will be able to
- Discuss vaccine hesitancy and its frequency and risk factors
 - Recognize vaccine hesitancy in pharmacy customers and patients
 - Explain techniques to reduce vaccine hesitancy.
 - Differentiate vaccine hesitancy from vaccine refusal



The University of Connecticut School of Pharmacy is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education.

Pharmacists and pharmacy technicians are eligible to participate in this application-based activity and will receive up to 0.2 CEU (2 contact hours) for completing the activity, passing the quiz with a grade of 70% or better, and completing an online evaluation. Statements of credit are available via the CPE Monitor online system and your participation will be recorded with CPE Monitor within 72 hours of submission

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Immunization: Recognition & Approaches to Reduce COVID 19 Vaccine Hesitancy in Different Populations

ABSTRACT: Public health initiatives have all but eradicated many once-prolific contagious diseases pursuant to wide scale immunization. Current medical advances from medicine to vaccination have significantly reduced the population mortality rate and outbreak rates during the COVID 19 pandemic. But in spite of this health prosperity, an increasing number of patients are becoming more reluctant to receive the COVID 19 vaccination, either delaying or fully refusing vaccination when offered. These individuals are commonly defined as vaccine hesitant. This occurrence is growing rapidly due to a collection of personal, social, political, and cultural factors. With the continuing COVID-19 pandemic, it is more important than ever to address vaccine hesitancy to ensure effective population coverage. This continuing education activity will address the vaccine hesitancy phenomena including frequency, risk factors, and effective techniques to reduce public hesitancy.

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INTRODUCTION

Although the COVID-19 pandemic appears to be receding in areas where the proportion of Americans who are vaccinated increases, pharmacy teams are still on the forefront of care. Pharmacy immunization efforts, which had slowed in the early spring as fewer eligible older adults need “the shot,” have redoubled. With President Biden’s executive order for all 50 states to offer the vaccine to adults older than age 16 by May 1, 2021, and the Center for Disease Control and Prevention’s (CDC) recommendation to offer the Pfizer-BioNTech COVID-19 vaccine for 12- through 15-year-old adolescents,¹ the focus has moved to younger people. Research in younger children continues, and perhaps all children will be able to be vaccinated soon. In addition, the media and the medical research community are already talking about booster shots for the COVID vaccines.² Once researchers identify the ideal interval for booster shots, pharmacy immunizers will be inundated again.

With recent and possible changes, pharmacy's focus has changed. This continuing education activity discusses populations that now need and deserve pharmacy teams' best efforts: certain adults and adolescents, or their parents, who are vaccine hesitant.

VACCINE HESITANCY

Vaccine hesitancy is increasing in many communities. The World Health Organization (WHO) recognized vaccine hesitancy as one of the top 10 threats to global health in 2019. More than 90% of countries have reported vaccine hesitancy.^{3,4} Various barriers either prevent or discourage people from receiving a COVID-19 vaccine. All healthcare providers must address these barriers and try their best to validate the patient's hardships while emphasizing vaccination's importance. Misinformation spreads too easily, and we must dispel common misconceptions.

Hesitancy or outright refusal to become vaccinated can be dangerous. When an outbreak of measles occurred in 2019, 71 people became infected—mostly children younger than 10 who had not yet received the measles, mumps, and rubella (MMR) vaccine.⁵ Not only do outbreaks threaten the patient's health, but a parent or caregiver then must stay home to care for the patient. This causes economic and productivity losses, as the parent or caregiver loses a workday or more. Public health initiatives must address the ripple effects of vaccine hesitancy so patients can understand the urgency of completing mass vaccination, especially during the COVID-19 (and future) pandemics. Vaccines are a key strategy toward the fight to end the pandemic, even with implementation of prevention strategies and risk mitigation. However, vaccine hesitancy reduces overall vaccine coverage and hinders herd immunity (see the **SIDEBAR**), prolonging the pandemic indefinitely.

With certain COVID-19 vaccines becoming available for adolescents (aged 12 to 17) it is important to recognize how parents who are hesitant about vaccinating their children can affect overall vaccination rates. Northwestern and affiliated universities conducted a survey of 19,700 individuals to determine if parents are more resistant of the COVID-19 vaccine than other adults. Survey results show that, across different socioeconomic and demographic groups, parents are more hesitant about receiving the COVID-19 vaccine for themselves and their children than adults without children. This disparity is exemplified in how mothers between ages 18 and 35 were shown to be "a third less likely to get the vaccine as soon as it becomes available and nearly a third more likely to refuse it altogether."⁶ This degree of vaccine hesitancy among parents can have a significant effect on overall vaccination rates, especially among minors. It's essential to understand the concerns that lead to the hesitancy and develop plans to alleviate them.

SIDEBAR: What is herd immunity?^{7,8,9}

Herd immunity, or population immunity, occurs when high rates of community vaccination or previous contraction of the disease creates immunity in a population of individuals and indirectly protects the majority of the population (those who are immune and those who are not) from an infectious disease.

A certain proportion of the population must be vaccinated or immune through exposure to achieve herd immunity. One aim of vaccination, especially with the COVID-19 vaccine, is to keep vulnerable populations who cannot receive the vaccine (due to health problems or allergies to vaccine components) protected from the disease.

Each disease state requires a different percentage of the population to be vaccinated to achieve herd immunity. For example, the threshold for the flu vaccine is about 50% according to the National Foundation for Infectious Diseases. Experts believe that more than 70% of the population must be vaccinated with a COVID-19 vaccine (Janssen, Moderna, Pfizer, etc) to return to a pre-pandemic lifestyle. This estimate may change as variants develop and infect the population.

The World Health Organization prefers immunity through vaccination to achieve herd immunity to prevent unnecessary sickness and death in populations. Natural immunity comes with a cost. Patients must be infected and may suffer significant consequences. With lethal diseases like COVID-19, the cost can be quite high. Vaccines are far safer than acquiring immunity by becoming ill.



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Figure 1. Vaccine Hesitancy Spectrum

PAUSE AND PONDER: Match patients you have encountered to different points on the vaccine hesitancy spectrum. How many fall at or to the left of the middle?

VACCINE HESITANCY AND REFUSAL

Vaccine hesitancy is a complex concept that occurs along a spectrum in terms of patient indecision. This continuum can range from total refusal to full acceptance of all vaccines with many degrees of uncertainty in between. While the population of patients who accept vaccines is quite large and obvious, a small population of patients completely reject the concept and many fall between, expressing some extent of vaccine hesitancy. **Figure 1** illustrates how hesitancy may take many forms, including refusal of specific vaccines, worried acceptance, and personal refusal but broad acceptance, among many others. Individuals are not necessarily stagnant on this spectrum. Over time, individuals can move forward and backward due to a variety of factors including presentation of new information, and public or personal influence.

RECOGNIZING VACCINE HESITANCY IN THE PHARMACY

Recognizing vaccine hesitant patients helps address concerns and public health impact properly. Although vaccines are among the most effective tools in infectious disease prevention, population immunity depends on public acceptance and coverage.

A question that may cross many healthcare professionals' minds is, "Can I actually convince someone to be vaccinated?"

Health care providers' impact on vaccine acceptance is immense and shouldn't be underestimated. According to a 2009 CDC survey of parents whose children did not receive the Tdap and meningococcal vaccines, 87.9% and 90.6% reported not receiving any recommendation from a healthcare professional.¹⁰ A clinical report published in 2017 by the American Academy of Pediatrics (AAP) compiled data that showed parents were "significantly more likely to report the intention to vaccinate their child if they received a health care provider recommendation, compared with parents who received no provider recommendation (48.9% vs 33.6%; $P < .001$)."¹¹

Additional evidence corroborates further vaccination encouragement with successful vaccination. Although some patients refuse vaccinations, it is essential to, at every appropriate time, continuously offer the vaccine with perseverance. A survey conducted by the AAP in 2006, supplemented with a follow-up survey in 2013, reported that pediatricians were able to persuade around 30% of parents to vaccinate their children after initial refusal.¹² Another AAP study furthers this point in finding that, after pursuing their original recommendations, providers were able to convince upwards of 47% of initially resistant patients to accept vaccination.¹³

Vaccine hesitancy correlates only indirectly with vaccine refusal as people who are hesitant may accept recommended vaccines even if they have doubts. Unfortunately, an increase in vaccine hesitancy leads to a general population-wide reduction in vaccine uptake. This reduction compromises herd immunity, putting the unvaccinated population at risk of disease outbreak as a result.

No one particular group of people is hesitant about vaccines; classifying all hesitant people as having the same reason prevents effective intervention. For example, pharmacy staff should not see people on the aforementioned continuum of hesitancy collectively as ignorant or anti-vaccine. Categorizing vaccine hesitant people as "anti-vaccine" is unproductive, especially given the negative connotation with the term. Instead, all healthcare providers need to realize that often, patients' hesitancy stems from legitimate doubts about vaccines and concerns about their health and safety.

As pharmacists and general healthcare workers, taking an active interest in patients' immunization plans and status is critical. Essential steps include spreading awareness of clinics, observing individual reactions to the COVID-19 vaccine, and then educating as necessary to create a well-informed public. Being aware of vaccine hesitancy's potential risk factors and how to recognize them in patients is key for all pharmacists and pharmacy technicians to increase vaccine acceptance.

VACCINE HESITANCY: FREQUENCY AND RISK FACTORS

According to United States Census Bureau data released on June 21, 2021, 6.9% of US adults who are 18 or older reported that they are “definitely not” receiving the COVID-19 vaccination. On the other hand, 9.3% responded that they were “unsure” about or “probably not” receiving the COVID-19 vaccine.¹⁴ New Mexico is currently the state with the highest COVID-19 vaccination rates, followed by Wisconsin, Connecticut, Vermont, and Massachusetts.¹⁵ Residents of some states such as Montana and Idaho appear to be extremely resistant towards vaccinations. As much as 25% of the population in Montana is vaccine hesitant with most prevalent risk factors being mistrust in COVID vaccines/government and concerns with side effects. **Table 1** provides a more comprehensive list of reasons that explain vaccine hesitancy in certain populations.

PAUSE AND PONDER: As you read the risk factors for vaccine hesitancy, which ones are familiar in your pharmacy?

COMMUNITY AND SYSTEMIC INTERVENTIONS

Systemic racism and an underinvestment in communities of color have created gaps in healthcare, especially throughout the pandemic. Communities of color face increased likelihood of coronavirus exposure because a majority are frontline or essential workers where exposure to COVID has been high. Transmission also accelerates in communities with concentrations of crowded housing because resources that allow individuals to isolate appropriately are unavailable. Throughout the pandemic, metrics such as hospitalization rates and test positivity rates have allowed policy makers to set reasonable benchmarks. Metrics can identify gaps in healthcare in the public health response and can mark improvement in eradicating those gaps.

The National Academies of Sciences, Engineering, and Medicine acknowledges that disparities of race and ethnicity should factor into prioritization of COVID-19 vaccination. It recommends the use of the CDC’s Social Vulnerability Index, which includes the racial, ethnic, and language composition in various census tracts. It also tracks risk contributors such as poverty, dependence on public transportation, and crowded housing. Communities and their leaders must address disparities to ensure equitable vaccine allocation. Although public health officials have generally prioritized long-term care facilities for COVID-19 vaccine allocation, facilities with larger numbers of Black or Latino residents have consistently higher death rates. The use of metrics would allow public health workers to distribute vaccines to the most vulnerable neighborhoods to ensure adequate access to the vaccine. At the community level, equity metrics can identify populations either at higher risk for COVID-19 or who have inadequate access to the COVID-19 vaccine.¹⁸

Table 1. Vaccine Hesitancy Risk Factors^{16,17}

Social and Economic Barriers

- Language or literacy barriers
- Lower education level
- Lower household income
- Parental refusal for their children to receive the vaccine (believe their child is not at risk)
- Religious beliefs
- Spreading of misinformation (belief that the vaccine contains a microchip)

Clinical Concerns in Vaccine

- Anxiety about vaccine side effects
- Belief that natural occurrence of the disease is more beneficial than receiving immunity through a vaccine
- Concerns about the effectiveness of the COVID-19 vaccine
- Concerns about the mechanism of action of the vaccine (ex: new mRNA technology)
- Concerns with pregnancy, breastfeeding, and fertility
- Concerns with vaccine components/ingredients
- Fear of long-term effects of the vaccine
- J&J vaccine risk of blood clots or Guillian-Barre Syndrome
- Mistrust of the healthcare system
- Concerns about the rapid development of the COVID-19 vaccine

Personal Barriers

- Adolescent belief that they are invincible to COVID-19
- Belief that COVID-19 is not a real disease
- Belief that the disease is not dangerous and easily preventable
- Complacency
- “I already had COVID-19 so why do I need the vaccine?”
- Inconvenience in accessing vaccines
- Lack of trust in healthcare workers
- Low self-perceived risk of COVID-19 infection and symptoms associated
- Lack of confidence in the health service response to the pandemic

Healthcare providers need to remember that vaccines are at the core of preventive care and adolescents are a key target population. Healthy People 2020 lists three adolescent health indicators that are critical for excellent preventive health: (1) well visits, (2) medical insurance, and (3) vaccination coverage.¹⁹ However, studies have shown a significant downward trend in healthcare utilization from childhood to early adulthood. According to a 2014 study, younger adolescents (11 to 14 years old) had three times more preventive visits than older adolescents.²⁰

Vaccine hesitancy in adolescents can be difficult to address, but healthcare providers need to strongly recommend vaccines as important for adolescent health. Offering vaccines as optional allows the patient to dismiss or refuse vaccines easily. Focusing



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on vaccines' benefits can help educate the patient and family on the disease the vaccine prevents. For example, patients and families are more likely to be receptive if the healthcare provider informs them that the HPV vaccine can prevent cancer.

Every office visit presents an opportunity to update or complete an adolescent's immunizations. It is important to build rapport with patients to create trusting relationships. Healthcare providers can also emphasize that they give the same vaccines to their own families to increase patient confidence in vaccines. By law in most states, confidentiality ensures adolescents can feel comfortable sharing their perspectives on vaccines without parental influence. Parents should be asked to leave the room so a portion of the office visit can be between the healthcare provider and the adolescent.

Missed opportunities for adolescent immunizations are increasingly common. Strategies to reduce missed opportunities are key to improving immunization rates. Thus, healthcare visits should be seen as a chance to review immunization records, provide vaccines that are due, and catch up on missed immunizations. Concomitant administration of vaccines, when possible, is also key to reducing missed vaccinations. Patients are more inclined to receive three vaccines at the same visit than return for three separate visits. Pediatric offices should also have access to the adolescent's daily schedule including school hours, extracurricular activities, and work hours to arrange appointments that work for the patient. Postal mail, email, and text message reminders for patients are another helpful tool for increasing adolescent vaccination rates. Most families have easy access to phones and find it more convenient to communicate through this method.¹¹

Schools and pharmacies, mobile vans, pop up clinics, and shelters are all resources that can facilitate adolescent immunization. Schools can partner with public health departments to identify under-immunized adolescents and provide routine immunizations and COVID-19 vaccinations, at minimal expense to the patient. School nurses can be an integral part of achieving high immunization coverage due to their extensive knowledge of the school, students, and access to immunization systems. One survey showed that most parents (78%) preferred going to a doctor's office for adolescent vaccinations; however 74% would accept vaccination in public health clinics and 70% in school

health clinics.²¹ Several surveys have shown that adolescents feel comfortable seeking health care at school, especially if they do not have a primary care provider.²² Many pediatric patients do not go to primary care providers due to low-income status, lower educational level, Hispanic ethnicity, residence in the western US, or native language other than English.^{23,24} Systemic interventions can drastically increase adolescent vaccination rates, protecting health at the individual, familial, and community levels.

Resources for patients and families can improve educational vaccine knowledge and can help decrease vaccine refusal. The College of Physicians of Philadelphia has created an interactive website on vaccines (historyofvaccines.org).²⁵ The CDC has an Assessment, Feedback, Incentives, and Exchange (AFIX) quality-improvement program for vaccine providers that has had significant success in boosting childhood immunization rates.²⁶ The program assesses vaccine coverage in the provider's patients and creates defined, measurable short- and long-term program objectives that align with federal and state quality improvement goals. Providers can use it to guide and conduct in-person or electronic consultation or followup at the patient's convenience.

TECHNIQUES TO REDUCE VACCINE HESITANCY

According to a survey sent out by CVS Caremark to patients in November 2020, 55% of the responders consider themselves to be a part of the "moveable middle" – a group of individuals who are still debating whether they wanted the COVID-19 vaccine.²⁷ Within this group, 20% were skeptical while 30% were open but uncertain about the COVID-19 vaccine.²⁸ It is important to reach out and address this group before misinformation sways their views in the wrong direction.

A basic, critical tenet of healthcare is that prevention is better than treatment. It improves the patient's quality of life and saves money! We currently do not know COVID-19's long-term effects; therefore, it is extremely important to prevent it. As the most accessible healthcare professionals, pharmacists and technicians need to know techniques that can reduce vaccine hesitancy. Two approaches can often help vaccine hesitant individuals make more informed choices. The first is the ProTCT Framework.

PrOTCT Framework²⁹

The PrOTCT Framework is a step-by-step approach used to communicate with vaccine hesitant patients. It engages patients to converse with pharmacists about their questions and/or concerns. By using the approach, pharmacy teams can address the issues and facilitate trust.

- 1. Proactive/Presume:** Pharmacists and technicians can start conversations about the vaccine, reaching out rather than waiting for patients to ask about the vaccine. They can reassure patients that the vaccine is beneficial. With adolescents, healthcare providers and pharmacists should be an advocate for vaccines so parents feel more comfortable giving it to their kids.¹¹
- 2. Offer:** Pharmacists and pharmacy technicians can offer to tell patients information about the vaccine. When talking about the vaccine, they should let patients lead the conversation, giving patients facts patients want to know rather than telling patients everything they know about the vaccine. Often with adolescents, parents just want more information about the vaccine.¹¹ Healthcare professionals need to be entirely transparent (presenting all facts honestly) and stress the importance of preventive treatments.

Pharmacists may end the conversation here if the patient is an anti-vaxxer. Communication only works if the patient is open (even slightly) to the idea of the vaccine. Once you establish that a person disagrees with the use of vaccinations wholeheartedly, end the conversation respectfully. Then, let the person know that you'll always be available if they have any questions pertaining to the COVID-19 vaccine.
- 3. Tailor:** Next, the pharmacy team should focus the information about the vaccine around the patient, selecting relevant facts based on the patient's comorbidities and surrounding environment such as work and family. For example, pharmacists should appeal to hesitant adolescents by explaining the health risks if they have elderly family members at home. In this case, the pertinent facts for these patients should be information about how asymptomatic patients can still spread disease to a high-risk population.
- 4. Concerns:** In this approach, healthcare providers will address the patient's concerns only after completing the first three steps, which increase the patient's trust and reliability in the provider. Healthcare providers who answer questions directly and succinctly can often increase patients' acceptance of the COVID-19 vaccine.
- 5. Talk:** The last step is to talk to the patient about a clear vaccination plan. Patients appreciate healthcare professionals considerably more when they feel included in the plan going forwards. The pharmacy team can either provide a vaccination immediately or help patients schedule a dose at a more convenient time.

PAUSE AND PONDER: How can YOU advocate for the COVID vaccine to your vaccine hesitant patients?

Motivational Interviewing

The second approach is motivational interviewing, a skill that many pharmacists have heard about but may need help perfecting. The motivational interviewing method focuses directly on the patient, exploring and enhancing the patient's intrinsic motivation to change. It is a non-confrontational communication style aimed to empower patients by listening and providing information that can help increase their readiness for change (see **SIDEBAR**, next page).

The Spirit of Motivational Interviewing³⁰

Collaboration between the healthcare professional and the patient

Motivational interviewing is done in partnership *with* the patient. It centers around the patient's thoughts and experiences, rather than those of the practitioner. The whole therapeutic process focuses on mutual trust and understanding since change can only successfully happen when patients want the change.

Evocation of the patient's ideas about change

Healthcare professionals need to draw out the individual's reasons to change and be vaccinated. Focus on the patient's individual reasons on why he/she may contemplate vaccination whether it is due to family or risk factors. The patient's own positive motivations are much more persuasive than any reasons you may give.

Respect the patient's autonomy

Do not judge patients when conversing with them about vaccinations. Recognize and accept patients' decisions since they have the freedom to ultimately decide whether the vaccine is appropriate for them.

Practice compassion throughout the conversation

Compassion is the ability to actively promote others' well-being and best interests. It is shown when one takes the time to seek to understand suffering and offers to provide help to the patients.

TABLE 2. Examples of Reflective Listening

<ul style="list-style-type: none">• That’s a good description of the problem...• I’m sensing...• I wonder if...• I get the impression that...• As I hear it, you...• From your point of view...• In your experience...• I’m picking up on that...	<ul style="list-style-type: none">• You mean...• Could it be that...• Let me see if I understand. You...• You feel...• From where you stand...• You think...• What I think I hear you saying...• As you describe it, it sounds...
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Core Skills of Motivational Interviewing – OARS³¹

Asking open-ended questions: Asking patients open-ended questions (questions that cannot be answered with yes or no) can encourage engagement that provides more information. The pharmacy team can facilitate conversation and explore the patients’ thoughts and beliefs about the COVID-19 vaccine. Open-ended questions often start with words such as:

- “How do you feel about the COVID-19 vaccine?”
- “What are your concerns about the COVID-19 vaccine?”
- “Why do you believe that to be true?”

Affirming: Healthcare providers also need to sincerely show that they understand and acknowledge patients’ concerns and doubts. They need to express affirmations about their willingness to engage in a conversation about the vaccine and explore the issues. Positive messages from a healthcare professional can reassure the patient that receiving the vaccine is the right move.

Reflective listening: A key step is to restate the meaning of the patient’s statements to demonstrate that the healthcare professional heard and understood the patient accurately (see [Table 2](#)). It helps clarify the patient's emotions and thoughts and reassures the individual that they presented their point of view well.

Summarizing: The final step is to select pertinent pieces of information the patient has expressed concern about the vaccine. By summarizing the information and advice discussed with the patient, healthcare providers can enhance patients’ motivation to receive the vaccine.

DIFFERENT APPROACHES FOR DIFFERENT AUDIENCES

Techniques used to reduce vaccine hesitancy must differ when targeting different audiences. Each population and individual within the population has unique collective or individual concerns about receiving the COVID-19 vaccine. To spread the word about the vaccine, we need to think about the specific targets.

Adolescents: Technology is key in reducing vaccine hesitancy. Social media and online platforms need to spread reliable and legitimate information about the vaccine to combat the spread of misinformation. We need to use these tools to spread awareness about the urgency of COVID-19 vaccination. By having celebrities endorse the vaccine and share reliable resources, we’ll share more information with adolescents. Some campaigns that show adolescents who are doing things in groups with partici-



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SIDEBAR: Example Conversation between Vaccine Hesitant Parent and Pharmacist

Situation: Parent presents to the pharmacist with concerns about a child who is eligible for the COVID-19 vaccine.

Pharmacist: What are your concerns about your child receiving the COVID-19 vaccine?

Parent: My child is perfectly healthy, and I just don’t believe there is any reason she should receive this vaccine when COVID isn’t dangerous to her. She can get sick and develop natural immunity without a vaccine.

Pharmacist: Sounds like you are trying to do what is best for your child’s health. It’s good that you came in today to talk to me about your concerns so that you can make the best decision. I have had a lot of parents come in with very similar concerns, so you aren’t alone. While one may think that healthy individuals are not at risk for serious complications from COVID, I’ve seen cases of infected individuals needing hospitalization. In addition, vaccinating your child will protect at-risk people in your family and community.

Parent: I understand. I will talk to my partner and seriously consider having my child get the vaccine.

Pharmacist: Thank you for being receptive to what I have shared today. Many parents are facing the same considerations as you and have similar concerns. But as I’ve stated, being a healthy individual does not ensure your child is risk-free with COVID-19. Receiving the vaccine protect kids and the people around them.

pants reminding the viewer that taking the shot can get us back to normal appear successful.

Minority Neighborhoods: Accessibility is a major concern in the underserved population. To increase vaccine uptake, healthcare professionals need to reach out personally in-person or by phone. A great way to help vaccinate the community is through mobile clinics where volunteers drive to the area so that local residents have easier access to the vaccine; many states and cities are coordinating these efforts. Reaching out to minority community leaders has also proven to be very successful.

Non-English Speakers: Language is a critical barrier to communicating COVID-19 vaccine information. Pharmacists and technicians should identify resources before they need them and have resources on-hand or be able to refer non-English patients to resources online. The UConn School of Pharmacy YouTube Channel (<https://www.youtube.com/playlist?list=PLtEduWAA8dJ0xM2fSzmglY6t-bLVYieY>) has videos in Cantonese, English, Mandarin, Polish, and Spanish.

Older adults: Similar to other audiences, older adults also want to know whether the vaccine is safe and effective. The “network effect” can really be a strong deciding factor with older adults since they are more likely to be receptive to the vaccine if they know that the vaccine will help prevent the disease and is safe for them.²⁷ Healthcare professionals can reassure the patients

by using anecdotes of their own older family members or friends.

Parents: In general, approximately 30% of parents are vaccine hesitant.³² The best way to reach parents is through other parents. Healthcare professionals need to work with parents to spread resources and experiences within the community to increase vaccine uptake. All parents want to hear is that the vaccine is safe for their children from someone who is also a parent.

CONCLUSION

Ultimately, it is the patient’s choice whether to be vaccinated. Healthcare professionals must encourage individuals to be vaccinated, not force people to be vaccinated. It is our responsibility to listen to the patient’s concerns and address them using credible information, tailoring the message to the individual’s experiences and background.

Vaccine hesitant individuals are usually on the fence about vaccination. Pharmacists should be proactive and offer any support they can to increase patients’ intrinsic motivation. Pharmacy staff can refer patients to many credible resources online if they want to know more about the COVID-19 vaccines (e.g., UConn Pharmacy YouTube Channel). Each patient will be different; therefore, it is very important to use communication techniques that help facilitate conversation about the vaccine and explore areas of concern in vaccine hesitant patients.

Figure 2. The Pharmacy Team’s Role in Vaccine Hesitancy

Best

- 1 **BE COMMUNITY CHAMPIONS.** Talk with parents, school nurses, and local officials to spread the word that vaccines are safe and necessary.
- 2 **Always remind people that vaccination is safer than natural immunity!** Infection can have deadly consequences.
- 3 **Keep up with changes** using reliable, current sources.

Better

- 1 **Develop rapport** with your patients, even if their views differ from your own.
- 2 **Examine the spectrum of vaccine hesitancy** and try to place patients in the correct place on the spectrum.
- 3 **Counsel parents and caregivers** about the reasons to vaccinate people in their charge!

Good

- 1 **Be familiar with current COVID vaccines** and the age groups in which they are used
- 2 **Always ask patients** if they’d like the vaccine.
- 3 **Invite parents to ask questions!**

Reliable Resources for Pharmacy Team and Patients

Centers for Disease Control and Prevention

Key Things to Know about COVID-19 Vaccines

<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/keythingstoknow.html>

Children's Hospital of Philadelphia

A Look at Each Vaccine: COVID-19 Vaccine

<https://www.chop.edu/centers-programs/vaccine-education-center/vaccine-details/covid-19-vaccine>

John Hopkins Medicine

Is the COVID-19 Vaccine Safe?

<https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/is-the-covid19-vaccine-safe>

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The Facts on the COVID-19 Vaccination Playlist

<https://www.youtube.com/playlist?list=PLtEDEuWAA8dJ0xM2fSzmgly6t-bLVYieY>

World Health Organization

Coronavirus disease (COVID-19): Vaccines Safety

[https://www.who.int/news-room/q-a-detail/coronavirus-disease-\(covid-19\)-vaccines-safety](https://www.who.int/news-room/q-a-detail/coronavirus-disease-(covid-19)-vaccines-safety)

Zoe COVID Symptom Study

How have COVID-19 Vaccines been developed so fast?

<https://covid.joinzoe.com/post/how-covid-vaccine-so-fast>

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