1. Hello and welcome to this webinar. My name is Lieutenant Commander Neil Murthy, and I am a U.S. public health service medical officer at the Centers for Disease Control and Prevention. COVID-19 vaccines are critical tools to protect populations and save lives, and in this webinar, we’re going to discuss what you as frontline healthcare providers need to know about these vaccines and becoming a COVID-19 vaccinator.
2. Before we begin, the COVID-19 pandemic is a rapidly evolving situation, and this webinar was recorded in June 2021. As such, vaccine-specific information presented in this webinar may change.
3. As a healthcare provider, it is critical that you are knowledgeable about the specific COVID-19 vaccines that your practice will carry. Please refer to the website presented here for the most up-to-date product information.
4. The ongoing COVID-19 pandemic has placed a great strain on our nation’s public health and healthcare systems.
5. The Food and Drug Administration (FDA) has authorized multiple COVID-19 vaccine products for emergency use. Over half of the US population has now received at least one dose of a COVID-19 vaccine.
6. As a health care provider, you play a critical role in helping to end the COVID-19 pandemic. For patients, you are one of the most trusted sources of information when it comes to vaccines. You can help them understand the importance of COVID-19 vaccination, provide your strong recommendation, and build confidence in the vaccines.
7. In this webinar, we will understand how you can become a COVID-19 vaccination provider, be aware of and comply with COVID-19 Vaccination Program requirements, learn how COVID-19 vaccines work, and know the special considerations for storing, handling, and administering these vaccines so that you will be able to educate your patients about COVID-19 vaccines.
8. For the purposes of this webinar, we will assume that you regularly administer routine vaccinations, such as flu or childhood vaccines, as part of your normal work duties. We will therefore focus our discussion only on considerations specific to the COVID-19 vaccines. Let’s get started!
9. There are many key concepts that we will introduce to you in this webinar. A thorough discussion into each of these concepts is beyond the scope of this presentation, but we will provide resources for you throughout and at the end of this webinar to learn more.
10. Let’s start with becoming a vaccinator.
11. There are two major steps to become a COVID-19 vaccination provider
12. You first must sign the CDC COVID-19 Vaccination Program Provider Agreement.
13. And make sure that you are enrolled in your jurisdiction’s immunization information system or IIS.
14. Let’s start with signing the provider agreement.
15. To become a COVID-19 vaccinator, you first must be licensed to administer vaccines in the jurisdiction where you are practicing.
16. Although the Vaccines for Children, or VFC, program is another federal program that provides vaccines, the enrollment process for the CDC COVID-19 Vaccination Program is entirely different and you will NOT be automatically enrolled in the COVID-19 Vaccination Program even if you are VFC provider.
17. The COVID-19 Vaccination Program has its own set of requirements, and you as an independent provider, or your health care system, are required to sign and abide by the terms of the agreement.
18. For more information on the enrollment process, please access the website listed here.
19. This website has a widget with a dropdown menu that allows you to select your state to learn more about your state's electronic enrollment process.
20. When signing the provider agreement, there are certain considerations to keep in mind. Let’s start with vaccine costs and reimbursements.

COVID-19 vaccines are free for vaccine recipients, and providers cannot deny vaccination to any patient who does not have health coverage, is underinsured, or is out of network. Additionally, providers cannot charge patients any administration fees, copays, co-insurance, or other office visit fees if the only service provided is a COVID-19 vaccination.

1. Although additional health care services may be provided at the same time of a COVID-19 vaccination and can be appropriately billed, providers cannot require additional services for a person to receive a COVID-19 vaccine.
2. If a vaccine recipient has health insurance, providers may seek appropriate reimbursement from the recipient’s plan or program for a vaccine administration fee.

If a vaccine recipient is uninsured, providers may seek reimbursement through the Provider Relief Fund. For information about this program, please refer to the website listed here.

1. Let us now turn to a few other requirements that you must abide by when you sign the provider agreement.
2. You must abide by all storage and handling requirements for each vaccine you will stock at your practice. Details of the product specific storage and handling requirements can be found at this website listed here.
3. Additionally, you need to be familiar with the preparation requirements for these vaccines. Some of the preparation requirements for COVID-19 vaccines are different from other routine vaccines, so you need to make sure that everyone in your practice is properly trained. We will discuss some of these details later in this presentation.
4. And finally, you must agree to the reporting requirements which we will discuss in greater detail later in this presentation.
5. As we learn more about COVID-19 vaccines and how to best implement the CDC COVID-19 Vaccination Program, CDC posts updates and amendments to the COVID-19 Provider Agreement on its website. COVID-19 vaccination providers are responsible for checking this web page regularly for any updates and required to comply with these updates.
6. Let us now turn to the second major step to become a COVID-19 vaccination provider, which is making sure that you are enrolled in your jurisdiction’s immunization information system, or IIS.
7. Immunization Information Systems, known as IISs, are confidential, population-based databases that record all vaccine doses administered by participating health care providers in a given area. It is important to enroll in your jurisdiction’s IIS so that you can appropriately document the vaccines you have administered. To enroll in your jurisdiction’s IIS, please contact your state or local immunization program by visiting the website provided here.
8. Now let’s review. What do you think? True or False? You can charge your patient an administrative fee for providing a COVID-19 vaccine.
9. FALSE. COVID-19 vaccines are completely free to all patients. Although additional healthcare services may be provided at the same time of a COVID-19 vaccination and can be appropriately billed, providers cannot charge the patient for the COVID-19 vaccine or any other associated administration fees. However, for patients who have health insurance, providers may bill insurance providers for administration fees and other associated fees.
10. Now that we’ve discussed the logistics of onboarding as a vaccinator, I will present a high-level overview of the vaccine types.
11. We will first begin with mRNA-based vaccines. Both the Pfizer BioNTech and the Moderna vaccines use this technology.
12. Let’s talk about how mRNA vaccines work. The SARS COV 2 virus is surrounded by spike proteins which are used as the antigenic target for these vaccines. The messenger ribonucleic acid or mRNA used in these vaccines specifically code for these spike proteins. The mRNA is surrounded by a lipid nanoparticle membrane and is injected into the deltoid muscle of the vaccine recipient. Once inside, the mRNA encased in a lipid nanoparticle membrane is taken up into the cytoplasm of an antigen presenting cell. The lipid nanoparticle membrane is then destroyed, revealing the mRNA inside. Ribosomes translate the mRNA fragment to create the spike proteins seen on the SARS COV2 virus. These spike proteins are then presented on the surface of the antigen presenting cell. After the spike proteins are presented on the surface of the cell, the person’s immune system is activated to produce antibodies against the SARS COV 2 spike protein. After the person develops immunity, if the person were to encounter the SARS COV 2 virus in the community, the body is able to quickly neutralize the virus since the person has already developed immunity.
13. Next, we will discuss the viral vector vaccines. As of this presentation, the Janssen Johnson and Johnson vaccine is the only vaccine currently authorized by the FDA that uses this technology.
14. The way these viral vector vaccines work is the DNA that codes for the SARS-CoV-2 spike proteins are surrounded by a non-replicating adenovirus vector.  The vaccine is then injected into the deltoid muscle of the vaccine recipient. Once inside, the adenovirus vector is taken up into the cytoplasm through endocytosis. The endosome containing the adenovirus vector makes its way to the cell's nucleus. After viral uncoating, the adenovirus vector DNA is released into the nucleus but does not integrate into the host genome. Transcription then occurs creating a messenger RNA fragment. The mRNA makes its way to the cytoplasm where ribosomes translate the mRNA fragment to create the spike proteins seen on the SARS COV2 virus. These spike proteins are then presented on the surface of the cell. After the spike proteins are presented on the surface of the cell, the person’s immune system is activated to produce antibodies against the SARS COV 2 spike protein. After the person develops immunity, if the person were to encounter the SARS COV 2 virus in the community, the body is able to quickly neutralize the virus since the person has already developed immunity.
15. All of the vaccines authorized by the FDA under emergency use have shown to be effective in helping to prevent severe disease, hospitalizations, and death. For more information on vaccine effectiveness research, please refer to the website listed here.
16. Now that we have discussed the different vaccine types, let’s discuss the many CDC training modules and other resources that you can use to bring you up to speed on these vaccines.
17. CDC offers a variety of training resources for healthcare providers to learn about COVID-19 vaccines. Please visit our Training and Education webpage linked here for all the training resources that we offer to health care providers.
18. Of note, one of these resources that’s particularly helpful is the COVID-19 vaccine training modules. Each vaccine product has its own training module where you can learn about its storage, handling, and administration requirements. At a minimum, CDC recommends all providers complete the training module for the vaccine(s) they will be administering.
19. This webinar is part of a series of webinars that CDC has developed where providers can learn more about COVID-19 vaccines. Each of these webinars is about 15 minutes long and providers can earn continuing education credits from each of these webinars.
20. Here are a few screenshots of the webinars that are currently available.
21. CDC has also provided core-competency and training recommendations based on an individual’s professional background, competencies and professional experiences.
22. Please refer to your state, local, or jurisdictional immunization program as they may also have training requirements for health care providers.
23. Let’s now turn to storage and handling requirements for vaccines.
24. To effectively store vaccines, you ideally must keep vaccines in units that are designed to store biologics. However, if necessary, household grade units are acceptable to refrigerate many types of vaccines. Never store vaccines in dormitory-style or bar-style units. Store vaccines and their diluents, if needed, in the original tray/carton with lids closed until ready for administration. If you plan to store the Pfizer BioNTech vaccine until its expiration date, you must store it in an ultra cold unit.
25. Additionally, to effectively store vaccines, you must keep the vaccine at the temperatures recommended by the manufacturer. To monitor the temperatures of stored COVID-19 vaccines, CDC requires using a Digital Data Logger or DDL that measures the minimum and maximum temperature of the unit. DDLs use a buffered temperature probe, which is an accurate way to measure actual vaccine temperatures, instead of inadvertently measuring air temperatures. If you are monitoring ultra-cold temperatures, like for the Pfizer-BioNTech COVID-19 vaccine, make sure your DDL and probe are appropriate for ultra-cold monitoring.
26. Never shake, drop or vibrate any of these vaccines. Please refer to CDC's resources, linked here, to learn more on how to store, handle and transport these vaccines.
27. For the most up-to-date specific guidance on how to store, handle, and transport COVID-19 vaccines, please refer to the CDC websites presented here.
28. Let’s now turn to special considerations that you must consider when preparing and administering COVID-19 vaccines.
29. As of this presentation, COVID-19 vaccination is available to all adolescents and adults 12 years of age and older.
30. There are certain contraindications to vaccination that you as a health care provider should be aware of. Anaphylaxis after receiving a COVID-19 vaccine or to any component of the COVID-19 vaccine would be a contraindication to receiving that particular COVID-19 vaccine product. Similarly, an immediate allergic reaction of any severity after receiving a COVID-19 vaccine or to any component of the COVID-19 vaccine would be a contraindication as well
31. For individuals who have contraindications to receiving a certain class of COVID-19 vaccines, consider administering the other vaccine type. For example, if an individual has a contraindication to receiving an mRNA based vaccine, consider administering an adenovirus vector vaccine, or vice versa.
32. An allergic reaction to any other vaccine or injectable therapy is considered a precaution to COVID-19 vaccination. Most people deemed to have a precaution to a COVID-19 vaccine can and should be vaccinated.
33. For a full up-to-date list of these contraindications and precautions, please refer to the Interim Clinical Considerations webpage, linked here.
34. Furthermore, it is important to keep in mind that you should defer vaccinating individuals with known current SARS-CoV-2 infection until the person has recovered from the acute illness (if they are symptomatic) and they have met [criteria](https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-in-home-patients.html) to discontinue isolation.
35. There are special considerations and recommendations for certain population subgroups that you should be aware of when it comes to COVID-19 vaccination. These populations can be vaccinated, unless of course they have a contraindication. But these populations should be provided with additional information before they receive the vaccine. For example, women less than 50 years of age should be aware of the rare but increased risk of developing blood clots with low platelets that can occur after vaccination with the Janssen Johnson & Johnson COVID-19 vaccine.
36. For more information on precautions, contraindications, and special considerations we just discussed, please refer to the COVID-19 pre-vaccination checklist linked here. CDC has developed this screening tool for patients to complete before vaccination. Additionally, this checklist also has multiple supporting pages that assist providers with decision making based on a patient’s responses. This checklist is also available in multiple languages to help screen your patients. It is important to keep in mind that this pre-vaccination checklist is only for COVID-19 vaccines and not for other routinely recommended vaccines.
37. COVID-19 vaccines may need to be prepared differently from routine vaccines. For example, many of these vaccines cannot be shaken. For the most up-to-date information on preparing these vaccines, please refer to the link provided here for product specific information.
38. Additionally, when administering COVID-19 vaccines, you must provide patients with certain specific information. Before vaccination, patients must be given the most current version of the EUA Fact Sheet for Recipients and Caregivers for the vaccine product administered. This can be done electronically or in print.
39. And after vaccination, providers are required to provide patients with a COVID-19 vaccination record card.
40. Providers should also encourage recipients to participate in v-safe, CDC's smartphone-based after-vaccination health checker that uses text messaging and web surveys to provide personalized health check-ins. Patients can report any side effects that they experience through v-safe. Depending on a patient’s answers, someone from CDC may call the patient to check and get more information. V-safe can also remind patients to get their second vaccine dose if they need one. More information on v-safe can be found at the website provided here.
41. Let us now discuss some common side effects that your patients may experience after receiving any COVID-19 vaccine.
42. For the first 24 hours or so after vaccination, patients may complain of local side effects at the injection site such as pain, erythema, or edema.
43. Additionally, patients may experience systemic symptoms such as fatigue, myalgias, fever, chills, headache and nausea.
44. For a vaccine requiring two doses, side effects may occur after the first dose, second dose, or after both doses.
45. Finally, let us discuss vaccination reporting requirements that you are responsible for when administering COVID-19 vaccines.
46. To order COVID-19 vaccines, you must be enrolled in your jurisdiction’s designated system for provider ordering.
47. Your jurisdiction may order vaccines through the Vaccine Tracking System (or VTrcKS), through the IIS, or through the Vaccine Administration Management System or VAMS. Your jurisdiction can provide you with further details on this process.
48. Once you administer vaccines, you need to document vaccine administration. You are required to document vaccine administration in your medical record system within 24 hours, and to your immunization information system or other designated entity in your jurisdiction within 72 hours of administration.
49. There are multiple vaccine administration data elements that you are expected to provide for each vaccination
50. A full list of which is provided at this website.
51. Additionally, all providers must report COVID-19 vaccine inventory daily to vaccines.gov. In some jurisdictions, providers may report vaccine inventory to the jurisdiction’s IIS for the jurisdiction to upload into Vaccines.gov. If you have questions about the process for your jurisdiction, please contact your jurisdiction’s immunization program.
52. For more information on reporting vaccine inventory, please visit the CDC website linked here.
53. Finally, health care providers must report certain vaccine adverse events and all vaccine administration errors to the Vaccine Adverse Event Reporting System (VAERS) at vaers.hhs.gov.
54. For COVID-19 vaccines, providers are required to report any serious adverse event, case of multisystem inflammatory syndrome, hospitalization or death that occurs after vaccination. Even if it’s not clear that a COVID-19 vaccine caused a clinically significant adverse event, health care providers are encouraged to report the adverse event to VAERS.
55. Now let’s review. What do you think? True or False? You must report COVID-19 vaccine administration to your electronic health record within 24 hours of administration.
56. **TRUE.** You must report vaccine administration to your electronic health record within 24 hours and to your jurisdiction’s immunization information system, or IIS, within 72 hours.
57. We have covered many topics in this webinar and we hope this information has helped explain the major requirements of becoming a COVID-19 vaccination provider.
58. Even if you are unable to participate in the CDC COVID-19 Vaccination Program, you play an important role in helping to educate and encourage your patients and others to get vaccinated.
59. A provider's recommendation has been shown to be an important factor in vaccine acceptance, and CDC has many resources to assist you with educating your patients, staff, families, and communities.
60. Check your patients’ vaccination status at every appointment
61. and, if they are unvaccinated, provide guidance on where they can get vaccinated. For example, you can use Vaccines.gov to locate vaccination sites or consider partnering with a COVID-19 vaccination provider to whom you can refer patients.
62. You play a critical role in ending the COVID-19 pandemic. Thank you for being a frontline health care provider!
63. Information and guidance about COVID-19 vaccines are constantly evolving, so please review the resources listed here as well as other CDC materials.
64. This concludes this webinar. If you have questions about the content included in this presentation, please e-mail [nipinfo@cdc.gov](mailto:nipinfo@cdc.gov) with the title of this presentation in the subject line. Thank you so much for your attention.