Guidance and Standing Orders for Influenza Vaccinations

Updated: 10/19/2022

This guidance is for all influenza vaccinations given by On-Site Medical Services or NH State Regional Public Health Networks. This guidance will be updated as new information and resources become available, including as new vaccines become available for use under a Food and Drug Administrations (FDA) Emergency Use Authorization (EUA), and after the U.S. Centers for Disease Control and Prevention (CDC) and theirAdvisory Committee on Immunization Practices (ACIP) provides medical recommendation for appropriate use of the vaccines.

If questions or issues arise during vaccine clinic operations, please refer to the contact sheet provided.

General Guidance:

Review CDC's Infection Control Guidance for Healthcare Professionals

All persons involved in handling, preparing or administering influenza vaccine must read and be familiar with these vaccine clinic protocols and standing orders, and the following influenza vaccine fact sheets from the FDA:

- Fluzone Quadrivalent FDA Information
- Influenza vaccine information specific for 2022-2023 season

Review CDC's:

- Influenza vaccine 2022-2023 season
- Information for the 2022-2023 Influenza Season
- Summary: Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices.

All persons involved in handling, preparing or administering influenza vaccines must have been provided and completed vaccination training material developed by On-Site Medical Services and approved by the NH Department of Health and Human Services.

Face Mask Use:

- All healthcare providers and staff supporting the influenza vaccination clinic must wear a surgical face mask over their nose and mouth at all times when within the vaccination clinic facility (including in break rooms and other indoor spaces where they might encounter co-workers), when entering a facility or person's home, and when outdoors and around other people.
    - Staff should be given routine mask breaks as needed (ideally outside if weather permits) where staff are separated from others and can safely remove (and store) their face mask.
    - Staff must sanitize hands before and after removing and putting on face masks.
    - Avoid touching your face or adjust face covering without first sanitizing your hands. After touching a person's face or adjusting face coverings, hands must again be sanitized.
- All vaccine recipients (VRs) and visitors to a influenza vaccination clinic who are 2 years of age and older must wear a face mask or cloth face covering over their nose and mouth when within the vaccination facility or outdoors and around other people, unless there is a valid medical or developmental reason a child or adult cannot wear a face mask (per CDC guidance), or if a young child is unable to be compliant with face mask use even after parents/guardians and staff work to gain compliance.
- **Masking for school-based clinics (SBCs):** In alignment with NH Dept. of Education policies, children are not mandated to follow masking protocols while on school premises. Due to this policy, children are not required to wear masks within school-sponsored vaccination clinics.

Personal Protective Equipment (PPE) During a Vaccine Recipient (VR) Care Encounter:

- During VR encounters, or when interacting with members of the public, vaccination clinic staff should wear appropriate PPE, including the following:
    - Surgical face mask (if appropriate)
    - Eye protection: face shield (preferred) or goggles (note: eye protection is optional for vaccinators operating in areas that have a low or moderate level of Community transmission of influenza, but should be worn in areas of "substantial" community transmission)
    - Gloves are required for healthcare workers delivering vaccine
- Staff going into a long-term care facility (LTCF) experiencing an outbreak or with concern for facility transmission must follow the facility's PPE guidance and infection control procedures.
- The above specified articles of PPE should be appropriately donned and doffed (put on and taken off) per CDC guidance on using PPE.
- Masks and face shields can be reused between VRs at fixed site (non-mobile) vaccination clinics as long as they are not contaminated; gloves should be changed in- between VRs.
    - Masks should be discarded, at a minimum, at the end of each shift, or if the mask becomes saturated or soiled.
    - Face shields and goggles can be reused and should be cleaned and disinfected at the end of each shift, or if they become soiled/contaminated; gloves should be used when cleaning and disinfecting (see cleaning and disinfection guidance below).
- For mobile clinics, or teams traveling between facilities or households, vaccinators and staff must doff all PPE between vaccination sites – disposable masks and eye protection should be discarded after use at each vaccination site; reusable eye protection (i.e. face shield or goggles) must be cleaned and disinfected at a minimum after use at each site before traveling to the next site where clean PPE should be put on.
- Healthcare workers should practice hand hygiene immediately before AND after each VR care encounter.

Hand Hygiene:

- Alcohol-based hand sanitizer should be made readily available at the walk-in facility entrances, exists, throughout the facility, and at points of vaccination. Drive-thru clinics should also have alcohol-based hand sanitizer readily available, especially at points of vaccination for use by staff. Mobile vaccination teams should carry portable containers of alcohol-based hand sanitizer.
- All staff, visitors, and VRs should be asked to practice hand hygiene upon entry to the facility and upon exiting (even for drive-thru clinics). All household members should be asked to practice hand hygiene before a mobile vaccination team enters a household.
- All healthcare personnel delivering vaccination must practice hand hygiene immediately before and after vaccinating each VR.
- All staff should frequently perform hygiene throughout the day, including before and after taking a break or eating, before and after restroom use, etc.

Screening for fever, symptoms, and risk factors for influenza:

- Each staff member must have their temperature taken and be screened for symptoms of influenza, recent diagnosis of active influenza infection, and risk factors for influenza prior to each shift/clinic (see screening questions below) – temperatures and responses to questions do not need to be documented or recorded
- Each VR and visitor entering a clinic (including drive thru clinics), or any household contact present for vaccination of a homebound individual must have their temperature taken and be screened for symptoms of influenza, recent diagnosis of influenza infection, and risk factors for influenza immediately prior, or upon entry, to the facility (see screening questions below); temperatures and responses to questions do not need to be documented or recorded.

- Anybody with new or unexplained symptoms of influenza (including fever of 100.4°F or higher) should be instructed to contact their healthcare provider for evaluation.
- All staff, VRs, visitors, and household contacts should have their temperature taken with a touchless thermometer prior to entry to the facility (or prior to a vaccination team entering a person's home) and be asked the following screening questions (people can be asked verbally, or provided the questions in writing and asked to identify any "yes" or affirmative answers to the screening questions):
    - Do you have any symptoms of influenza that are new for you, including:
        - Fever, chills, or feeling feverish;
        - Respiratory symptoms such as runny nose, nasal congestion, sore throat, cough, or shortness of breath;
        - General body symptoms such as muscle aches or severe fatigue;
        - Nausea, vomiting, or diarrhea.
    - Have you recently tested positive for, or been diagnosed with, active influenza in the prior 10 days?
    - Have you had close contact with someone who has tested positive for COVID-19 in the prior 10 days? (Note: healthcare workers caring for COVID-19 patients while wearing appropriate personal protective equipment should answer "no" because they are not considered to have exposure)

Cleaning and Disinfection:

- Review CDC's cleaning and disinfection guidance under their Infection Prevention and Control Recommendations for Healthcare Personnel (see "Environmental Infection Control" section), and general community Cleaning and Disinfecting guidance.
- Commonly touched surfaces should be routinely cleaned and disinfected.
- Shared tools and equipment, especially shared non-disposable medical equipment used during VR care, must be cleaned and disinfected according to manufacturer's instructions between each VR use.
- Use an EPA-approved disinfectant effective against the influenza (EPA List N disinfectant).
- Use disposable gloves to clean and disinfect.
- Follow manufacturer instructions on PPE use, and application and contact time needed for disinfectant.

Messaging and Communication:

- All healthcare workers and supporting staff and volunteers should be informed and educated about the infection control and influenza mitigation measures outlined in this and other supporting guidance documentation.
- VRs and visitors should be informed (e.g., through use of signage) that they should not enter the facility if they have any symptoms of influenza or COVID-19, have traveled to high risk areas in the prior 10 days, or been in close contact to someone with COVID-19 in the prior 10 days (unless the person is not required to quarantine after travel or an exposure to COVID-19 due to previous infection or being fully vaccinated – see above).
- VRs, visitors, and household contacts should be instructed to wear a face mask, practice hand hygiene, and socially distance upon entering the facility, or when a mobile vaccination team enters a person's home.

Environmental Safety:

- Clinic managers and safety officers should ensure walkways and drive-up areas are safe and free of ice and snow to prevent slips and falls.
- Vaccination areas in outdoor drive-thru clinics should have space where staff can shelter from weather in a safe, socially-distanced space, and also provide a warm space for breaks and snack/lunch if needed due to cold weather.
- In the case of unsafe inclement weather (e.g., snow storm or Nor'easter), clinics should have plans for canceling and rescheduling VRs and have a plan/process in place for notification of staff.

Vaccination Clinic Work-Flow:

- Vaccine recipients (VR) should be screened before registering for an appointment at any influenza vaccine clinic:
    - Screen the VR to ensure they are part of the priority vaccination population.
    - Screen the VR for any vaccine contraindications, precautions, or other specific health conditions that need additional follow-up or evaluation (see "PreRegistration Screening Questionnaire" for details and recommended actions), including:
        - Contraindications to vaccination
        - Precautions to vaccination
        - Any prior history of anaphylaxis
        - Receipt of another vaccine in the last 14 days
        - Severely immunocompromised condition
        - Current pregnancy
    - Provide the necessary documents listed below so the VR has a chance to review before their vaccine appointment.
- Documents that need to be provided to all VR's BEFORE vaccination include:
    - Influenza Vaccine Information Sheet:
        - Influenza vaccine, (for other language translations of the VIS statement, see the CDC website)
- Before entry into the influenza vaccination clinic, staff should take the temperature of all VRs and visitors using a touchless thermometer, and ask (or provide in writing) the screening questions above, to which the VR and visitors must provide an answer.
- Upon entry, staff should direct VRs to the registration area where the following should occur:
    - If VR has pre-registered and has a vaccination appointment, then registration staff will verify the person's information in the Vaccine Management System (VMS).
    - If VR has NOT pre-registered, then staff register VR on-site. If registering on-site, the person registering the VR should screen the person for the above contraindications, precautions, and other health conditions using the "Pre-Registration Screening Questionnaire".
    - Provide necessary documents outlined above, if not already provided
- If the VR has not been given or not reviewed the above information before the clinic, staff should direct the VR to a waiting area to review the provided information before vaccination. After reviewing the information, if the VR elects not to be vaccinated, registration staff should cancel the clinic appointment.
- Vaccinators should review information entered into the Pre-Vaccination Questionnaire, Recipient Details, and Medical Information sections of the VMS with the VR.
    - Vaccinators should use the "Vaccination Screening Checklist" to quickly screen/review for any contraindications, precautions or other health conditions.
- If no contraindications, administer the appropriate influenza vaccine per standing order protocols (see attached protocols) using safe vaccination and infection prevention technique.
    - Vaccinators should follow General Best Practice Guidelines for Vaccine Administration.
    - Sharps and syringes should be appropriately disposed of in a sharps container immediately after vaccination.
    - Sharps containers should be monitored and replaced when nearing capacity to prevent needle sticks when disposing of sharps.
- "Log Vaccination" and enter the necessary information in the "Vaccine Administration" section of the VMS
- Documents that need to be provided to all VR's AFTER vaccination include:

    - The “After Visit Summary (AVS) Recommendations for Vaccine Recipients” (note: this can also be provided with the information packet provided prior to vaccination if easier to implement into clinic flow).
- Vaccinators should instruct the VR to expect some side effects from the vaccine in the next few days (refer VR to the “After Visit Summary”), and to contact their primary care provider if they experience any concerning adverse reactions after leaving the vaccine clinic. If a VR doesn’t have a primary care provider, they should seek medical care at a local urgent care or emergency department if they have any concerning signs/symptoms after vaccination, or call 9-1-1 for serious life-threatening symptoms or reactions (e.g., chest pains, difficulty breathing, face or throat swelling, confusion, body rash or hives, etc.)
- After vaccination, the VR should be directed to wait in an observation area for at least 15 minutes after vaccination to ensure there are no immediate serious adverse vaccine reactions (e.g., anaphylaxis) – it is not mandatory that someone wait 15 minutes, but it is strongly recommended. People with a history of severe allergic reaction (e.g., anaphylaxis) due to any cause, OR persons with a history of an immediate allergic reaction of any severity (reaction within 4 hours) after receipt of another vaccine or other injectable medication therapy, that does not meet criteria as a contraindication should be instructed to wait for 30 minutes after vaccination.
    - Waiting areas should be large rooms (for walk-in clinics) with individual seating spaced 6 feet apart.
    - For drive-thru clinics, waiting areas should have enough space for cars to park spaced apart so that someone can walk up to a window to check on the person without coming within 6 feet of another vehicle (e.g., space waiting vehicles so that every-other space is empty).
    - Clinic staff should monitor the waiting area wearing appropriate PPE and periodically check on VRs.
    - For vaccination of homebound persons, mobile vaccination teams should identify an area within the home where the VR can be safely observed for the appropriate time frame while the vaccination staff maintains appropriate social distance from the VR and other household members (while continuing to wear appropriate PPE).
    - Any adverse vaccine reactions should be managed according to the “Medical Management of Vaccine Reactions” protocols.
    - In the event of a serious life-altering reaction occuring, provide BLS and call emergency services (9-1-1).
- Adverse events should be reported to the Vaccine Adverse Event Reporting System (VAERS) at 1-800-822-7967 or online at https://vaers.hhs.gov/reportevent.html.
- Scan and submit all consent forms and *End of Day Report* forms to designated OnSite Dropbox **within 1 business day**. If clinics/vaccine administrations occur over the weekend, forms need to be submitted by the end of business day the following Monday.

Additional Guidance for Vaccination Clinics in Long-Term Care Facilities:

- To efficiently provide influenza vaccination to long-term care facility (LTCF) or assisted living facility (ALF) residents, the required information and documents outlined above should be provided prior to a scheduled vaccination clinic, and at least verbal agreement should be obtained prior to the date of the clinic (written consent is not required). LTCFs/ALFs should assist in sharing of information and obtaining agreement for vaccination.
- This agreement to vaccination should be obtained:
    - Directly and verbally from residents with decision making capacity, or
    - From guardians or a person's healthcare power of attorney for residents without decision making capacity (e.g., with dementia or other cognitive impairment) – this can be obtained verbally via phone, or in writing via e-mail or fax.
- Prior to a scheduled clinic, LTCFs/ALFs should provide the vaccination clinic staff the list of residents who have agreed, or whose legal surrogates have agreed, to vaccination, and should indicate this on the provided vaccination list. Provide this list by secure fax or e-mail to the appropriate Regional Public Health Network contact.
- The LTCFs/ALFs should document in the resident's chart or medical record that the required information was provided to residents or healthcare powers of attorney, and that agreement was obtained prior to vaccination.

List of Medical Providers Approved to Administer Influenza Vaccine through NH State-Managed Vaccination Clinics

All persons administering vaccinations through the NH State-managed COVID-19 vaccination clinics should have training and/or experience in administering vaccinations. All persons should be trained in the necessary processes and procedures outlined in this document, and provided vaccination refresher training. Any trainees (e.g., pharmacy interns, nursing students, medical students, etc.), must operate under the direct supervision of a provider/preceptor in their respective profession who is onsite, trained, experienced, and licensed/certified to provide vaccination.

The following licensed medical providers or trainees are allowed to administer COVID-19 vaccines through NH State-managed COVID-19 vaccination clinics. Note that specific personnel are allowed to vaccinate minors under the age of 12, and must meet license requirements as stated in the below standing orders:

- **MD** – Doctor of Medicine
- **DO** – Osteopathic Medicine
- **PA** – Physician Assistant
- **DMD** – Doctor of Dental Medicine
- **DDS** – Doctor of Dental Surgery
- **RDH** – Registered Dental Hygienists
- **DPM** – Doctor of Podiatric Medicine
- **ND** – Naturopathic Doctor
- **APRN** – Advanced Practice Registered Nurse
- **RN** – Registered Nurse
- **LPN** – Licensed Practical Nurse
- **RMA** – Registered Medical Assistant
- **CMA** – Certified Medical Assistant
- **Paramedic**
- **Advanced-EMT**
- **EMT** – Emergency Medical Technician (including EMT-basic)*
- **68W and 4N** – Military Medics
- **Pharmacist†**
- **Pharmacy interns†** *
- **Pharmacy Technician‡**
- **Nursing, Medical, and PA Students***

- **Ages 12+:** See above list from COVID-19 Standing Orders
- **Ages 3-11yrs:** MD, DO, APRN, APRN Student*, PA, PA Student*, RN, RN Student*, LPN, Pharmacists and Pharmacy Technicians* (If they have an immunization endorsement through NH OPLC), Paramedic, Advanced-EMT, EMT*
- **Ages 6mo-3yrs:** MD, DO, APRN, APRN Student*, PA, PA Student*, RN, LPN

** Interns and students must operate under the direct supervision of a provider/preceptor in their respective profession who is onsite, trained, experienced, and licensed/certified to provide vaccination. These individuals must all receive training on clinic processes and protocols, and training in injection safety and technique. EMTs must also conduct any training required through the NH Bureau of EMS.*
† Pharmacists & pharmacy interns require an immunization endorsement offered through OPLC.
‡ Based on NH Emergency Order #79, pharmacy technicians are allowed to vaccinate persons three years of age and older while under the supervision of a NH licensed pharmacist (see Emergency Order #79 for further details and requirements).

Influenza Vaccine Health Questionnaire

SCREENING QUESTIONS	Yes	No	Don't Know
Have you received an influenza vaccine in the past?			
Are you feeling sick today?			
Have you ever had a severe reaction to the influenza vaccination? *Allergic reactions can include symptoms like rash, hives, swelling of face or mouth, wheezing and difficulty breathing, etc. – Please specify:*			
Do you have a known allergy to an ingredient in the influenza vaccine *See the provided age-appropriate FDA Fact Sheet for a list of vaccine ingredients.*			
Do you have an allergy to eggs or egg products?			
Have you ever had any allergic reaction within 4 hours of receiving a non-influenza vaccine or other injectable medication (including medications injected into a muscle, vein, or under the skin)?			
Have you ever had a severe allergic reaction (like anaphylaxis due to any other cause, including medications taken by mouth, food, or other substances?			
Did you develop Guillain-Barré syndrome (GBS)?			
Are you pregnant?			
Do you have a bleeding disorder or are you taking blood thinners?			

I attest that the above information is accurate to the best of my knowledge.

Print Name: _____**Date**: _____

Signature: _____

Vaccination Screening Checklist (For Vaccinators)

This screening checklist is to help vaccinators identify important information entered into a person's PreVaccination Questionnaire in the Vaccine Management System (VMS), which may impact the ability of a person to receive the vaccine or affect vaccine selection or management of a person after vaccination.

Review vaccine recipient (VR) information in the VMS and verify information with VR prior to vaccination:

- ☐ **Is the VR feeling sick today?**
  - Moderate or Severe Illness: Vaccination should be delayed for any person with moderate-to-severe acute illness until their illness has improved.
  - Symptoms of influenza: A person with any new or unexplained symptoms of influenza (even mild cold symptoms) should be declined vaccination, instructed to seek evaluation by a medical provider.
- ☐ **Does the VR have active COVID-19 infection or isolation?**
  - Persons in isolation for COVID-19 or in quarantine for known or suspected exposures should not be vaccinated if vaccination will pose an exposure risk to others in the vaccination setting.
  - For persons who are mildly ill or asymptomatic, deferral might be considered to avoid exposure risk to others in the vaccination setting.
- ☐ **Does the VR have a history of severe allergic reaction (e.g., anaphylaxis) after a previous dose of the influenza vaccine, or to any component of the vaccine?**
  - If "yes" to either, this is a vaccine **Contraindication**: Do NOT give that vaccine.
- ☐ Does the VR have an allergy to eggs or egg products?
  - Persons who have experienced only hives after exposure to eggs may receive any licensed, recommended influenza vaccine appropriate for their age and health status (i.e., any IIV4, RLV4, or LAIV4).
  - Persons reporting symptoms other than hives after exposure to egg (such as angioedema, respiratory distress, lightheadedness, or recurrent emesis; or who required epinephrine or another emergency medical intervention) should be deferred to an inpatient facility equipped to observe and respond to symptoms.
- ☐ Is the VR taking any antiviral medications?
  - IIV4 and RIV4 may be administered to persons receiving influenza antiviral medications.
  - Influenza antivirals might reduce effectiveness of LAIV4, if given before or after LAIV4. Persons who receive influenza antivirals during the following periods should be revaccinated with an age-appropriate IIV4 or RIV4 (intervals may be longer in conditions where medication clearance is delayed).
- ☐ **Does the VR have a bleeding disorder or is VR taking a blood thinner?**
  - If "yes", vaccine may be given, but use a fine-gauge needle (23 gauge or smalleR), followed by firm pressure on the site (without rubbing) for at least 2 minutes.
- ☐ **Is the VR currently pregnant?**
  - Persons who are pregnant or who might be pregnant during the influenza season should receive influenza vaccine.
  - Any age-appropriate IIV4 or RIV4 may be given in any trimester.
  - LAIV4 should not be used during pregnancy but can be used postpartum.

* An “immediate allergic reaction” is defined as any hypersensitivity related signs or symptoms consistent with urticaria (hives), angioedema, respiratory distress, or anaphylaxis that occurs within 4 hours following administration. Allergic reactions after vaccination should be differentiated from non-allergic reactions, such as vasovagal episodes and normal vaccine side effects. CDC has created a table (Appendix D) to assist providers in differentiating.

** Severely immunocompromised conditions include being on chemotherapy for cancer, being within one year out from receiving a hematopoietic stem cell or solid organ transplant, untreated HIV infection with a CD4 lymphocyte count of less than 200, primary immunodeficiency disorder, high levels of steroids (e.g., receipt of prednisone >20 mg/day for more than 14 days), etc.

Standing Order for Administering the Influenza Vaccine

PURPOSE: To reduce the burden of disease and associated morbidity and mortality from the influenza vaccine by vaccinating persons who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices.
POLICY: This standing order enables eligible healthcare professionals to assess and vaccinate persons who meet the criteria outlined below and are seeking influenza vaccination through the New Hampshire Department of Health & Human Services' State-managed influenza vaccine clinics and On-Site Medical Services without the need for clinician examination or direct order from the attending provider at the time of the interaction.

PROCEDURE:

1. Follow the "Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices (ACIP)—United States, 2022-23"
2. Identify the following individuals for vaccination (i.e., the vaccine recipient, or VR):

APPROVED AGES & DOSE VOLUMES
Approved ages and volumes for intramuscular influenza vaccines (IIVrs and RIV4)

Vaccine	Approved Ages	Dose Volume
Afluria Quadrivalent	6 through 35 months ≥ 3 years	0.25 mL 0.5 mL
Fluarix Quadrivalent	≥ 6 months	0.5 mL
FluLaval Quadrivalent	**≥ 6 months**	**0.5 mL**
Fluzone Quadrivalent	**6 through 35 months** **≥ 3 years**	**0.5 mL (see below)** **0.5 mL**
Flucelvax Quadrivalent	≥ 6 months	0.5 mL
Flublok Quadrivalent	≥ 18 months	0.5 mL
Fluzone High-Dose Quadrivalent	≥ 65 years	0.7 mL
Fluad Quadrivalent	≥ 65 years	0.5 mL

- The approved dose volume per the package insert for Fluzone Quadrivalent is ***either*** 0.25 mL or 0.5 mL for ages 6 through 35 months. However, 0.25mL prefilled syringes are not available.
- If a dose less than the necessary volume is administered:
    - If the error is discovered immediately (before the recipient has left the vaccination setting), administer the remaining additional volume needed.
    - If it is difficult to measure the remaining needed volume, or if the error is discovered after the recipient has left the vaccination setting, administer a repeat full dose.
    - Healthy non-pregnant persons aged 2 through 49 years may alternatively receive 0.2 mL of LAIV4, 0.1 mL per nostril, using the supplied intranasal sprayer

1. **Screen for any contraindications or precautions to vaccination (refer to the "Vaccination Screening Checklist" for vaccinators).**
    a. ***Contraindications***: Do NOT give influenza vaccination to any person who has a history of either: Anaphylaxis to previous influenza vaccination, egg, egg products.
        i. See CDC's information for ingredients
        ii. An **"immediate allergic reaction"** is defined as any hypersensitivity related signs or symptoms consistent with urticaria (hives), angioedema, respiratory distress, or anaphylaxis that occurs within 4 hours following administration. Allergic reactions after vaccination should be differentiated from non-allergic reactions, such as vasovagal episodes and normal vaccine side effects. CDC has created a table (Appendix D) to assist providers in differentiating.
    b. ***Precautions***: Take additional precautions if a person has a history of either: 1) an immediate allergic reaction to other non-influenza vaccines or injection medication therapies (including intramuscular, intravenous, or subcutaneous injections), or 2) a non-severe, immediate allergic reaction after a previous dose of influenza vaccine
        i. Vaccine may be given, but persons with a vaccine "precaution" are recommended to discuss their allergy histories with their primary care provider so their provider can help perform a risk assessment and discuss the potential risks/benefits of the influenza vaccines with the VR. If the VR chooses not to discuss their allergy history with their primary care provider before vaccination, the VR can still be administered the vaccine. Inform the VR about the potential increased risk of an allergic reaction to the influenza vaccine. VR must be monitored for at least 30 minutes after vaccination.
        ii. If the VR has a known or diagnosed anaphylactic allergy to egg, the CDC recommends referral to an inpatient facility for administration.
    c. If there is any question about whether a VR has an influenza vaccine contraindication vs. precaution, consult with the vaccine clinic medical lead to help determine if vaccination is appropriate. If there are concerns about whether a VR is appropriate to be vaccinated with available influenza vaccines, then the VR should be declined vaccination, and instructed to seek assessment and vaccination in a more appropriate medically monitored setting.
2. **Screen for other health conditions listed below (refer to the "Vaccination Screening Checklist" for vaccinators).**
    a. **Severe allergic reaction (e.g., anaphylaxis) due to any cause that does not qualify as a vaccine contraindication or precaution (including to other oral medications, food, environmental exposures, etc.)**: Vaccine may be given. It is recommended that the VR discuss their allergy history with their primary care provider before vaccination, but even if the VR did not discuss with their primary care provider, the vaccine can be given. VR must be monitored for at least 30 minutes after vaccination.
    b. **Moderate or Severe Immunosuppression**: Vaccine may be given and should be safe for VR to receive, but the vaccine may be less effective due to their immune system. Counsel the person to continue to take steps to protect themselves from influenza after vaccination. If questions or concerns, recommend the VR discuss with their health care provider.
    c. **Pregnancy/Breastfeeding**: Vaccine may be given, but ensure the VR received and reviewed the *"Information about the influenza Vaccine for Persons with Certain Health Conditions."*
    d. **Bleeding disorder or taking blood thinner**: Vaccine may be given, but use a fine-gauge needle (23 gauge or smaller), followed by firm pressure on the site (without rubbing) for at least 2 minutes.
3. **Provide required documents listed in the "Interim Guidance for NH State-Managed Influenza Vaccination Clinics" (or ensure vaccine recipient has already received the documents)**: Provide all vaccine recipients (or, in the case of minors or people who lack decision making capacity, their parent or

legal representative) with a copy of the most current required information (or verify the person,parent/guardian, or legal representative received and had the opportunity to review the information), including, but not limited to:

   a. Influenza vaccine: Fact Sheet for Recipients and Caregivers (for other language translations of the Fact Sheet, see the FDA website)

4. **Obtain consent for vaccination from a legal guardian for vaccine recipients under the age of 18 years, and for vaccine recipients 18 years of age or older who lack decision making capacity and cannot legally consent to vaccination themselves:** Follow instructions outlined in the "*Policy for Vaccinating Minors*". Any new vaccine dose administration requires a new consent form (if the parent/guardian is not in attendance).
5. **Prepare to administer vaccine**: Choose the needle gauge, needle length, and injection site as outlined below. Follow manufacturer's instructions for storing and handling vaccine.

Children and Adolescents (5-18 years of age): Use a 1-inch needle (22-25 gauge) and administer in the deltoid muscle of the arm. Alternatively, the anterolateral thigh muscle can also be used with needle gauge and length according to the table below.

Age	Needle Gauge	Needle Length	Preferred Injection Site
Children, 5-10	22-25	⅝*-1"	Deltoid muscle of arm (preferred)
	22-25	1-1 ¼"	Anterolateral thigh (alternate)
Children 11-18	22-25	⅝* - 1"	Deltoid muscle of arm (preferred)
	22-25	1- 1 ½"	Anterolateral thigh (alternate)

** A 5/8" needle may be used in children/adolescents weighing less than 130 lbs for IM injection in the deltoid muscle only if the skin is stretched tight, the subcutaneous tissue is not bunched, and the injection is made at a 90-degree angle to the skin.*

Adults (19 years of age and older): Use needle size, gauge, and injection location as outlined in the table below based on a person's sex and weight. The deltoid muscle of the arm/shoulder is the preferred injection site, but if necessary due to a medical condition, the anterolateral thigh muscle can also be used for injection (use a 1.5 inch needle length for males and females of any weight when injecting the anterolateral thigh).

Sex and Weight	Needle Gauge	Needle Length	Preferred Injection Site
Female or male <130 lbs	22-25	⅝*-1"	Deltoid muscle of arm (preferred)
Female or male 130-152 lbs	22-25	1"	Deltoid muscle of arm (preferred)
Female 153-200 lbs	22-25	1- 1 ½"	Deltoid muscle of arm (preferred)
Male 153-200+ lbs	22-25	1- 1 ½"	Deltoid muscle of arm (preferred)
Female 200+ lbs	22-25	1 ½"	Deltoid muscle of arm (preferred)
Male 260+	22-25	1 ½"	Deltoid muscle of arm (preferred)

** A 5/8" needle may be used in patients weighing less than 130 lbs (<60 kg) for IM injection in the deltoid muscle only if the skin is stretched tight, the subcutaneous tissue is not bunched, and the injection is made at a 90-degree angle to the skin.*

6. **Administer the vaccine.**
7. **Document vaccination**: Document each person's vaccine administration immediately in the Vaccine Management System (VMS) and enter required information.
8. **Give vaccine recipient the required post-vaccination documents**
9. **Be prepared to manage medical emergencies**: Be prepared to manage medical emergencies related to the administration of vaccine by following the emergency medical protocols ("Medical Management of Vaccine Reactions"). To prevent syncope, vaccinate patients while they are seated. Observe vaccine recipient for at least 15 minutes after vaccination; persons with a history of a severe allergic reaction (e.g., anaphylaxis) due to any cause, a history of a non-severe immediate (onset less than 4 hours) allergic reaction after a previous dose of a influenza vaccine, or a history of any immediate allergic reaction of any severity to other non-influenza vaccines or injectable medication therapies that do not qualify as a vaccine contraindication should be observed for 30 minutes after vaccination.
10. Report adverse events to VAERS: Report adverse events following administration of vaccine to the Vaccine Adverse Event Reporting System (VAERS) at 1-800-822-7967 or online at https://vaers.hhs.gov/reportevent.html.

On-Site Medical Services Policy for Vaccinating Minors

For All Vaccine Recipients Under the Age of 18

It is the policy of On-Site Medical Services that each vaccine recipient under the age of 18 years must have a signed consent form associated with each vaccination dose. The parent or guardian of each child must sign a physical copy of the consent form as well as give a verbal consent prior to any vaccine being administered. The consent form can be found below. If the legal parent or guardian is not present at the time of vaccine administration, please see the section below on *Clinics When a Parent or Guardian is NOT in Attendance. *Consent forms are valid for **5 days** from the date of parent/guardian signature. **Please note, if consent forms have parent/guardian signatures dated more than 5 days from date of vaccination, verification in NHIIS is required prior to administration to ensure no prior Influenza dose has been given in the timeframe prior to scheduled vaccine administration. If unable to verify in NHIIS, verbal consent can be obtained by parent/guardian within 5 days of the scheduled vaccination clinic date. Verification must be documented in writing on the consent forms, including date of verification and means of verification (i.e. through NHIIS or verbal consent).***

Guidance for Conducting School-Based Clinics When a Parent or Guardian is NOT in Attendance

For vaccine recipients under the age of 18 years and *without a legal parent or guardian present* there will need to be extra documentation. For each vaccine given to a minor without a parent or guardian present, a consent form must be signed by the legal parent or guardian prior to any vaccine administration..

1. On-Site Medical Services Pediatric Consent **or** RPHN Influenza Vaccination Record and Consent

** Consent must be completed correctly. If the consent form is not completed in its entirety (i.e. missing an answer to a question, signed/dated by a parent/guardian, etc.), vaccination will need to be declined.*

For international students or recipients whose parent or guardian is not local, they will need a copy of proof of guardianship that has been individually signed by the parent authorizing medical rights to a named individual. If possible, having a signed consent form from the parent along with the proof of guardianship would be preferred.

The medical screening questionnaire (on pediatric consent form) should be used to screen children for any serious adverse reactions or side effects that might have occurred after a prior dose. The vaccinator should also verify and inquire of the VR whether they had any serious adverse side effects after a prior dose of the vaccine. **If a parent/guardian reports on the consent form that their child did experience serious/severe side effects or allergic reactions after an earlier vaccine dose, then the vaccinator should seek additional information from the parent/guardian to clarify (if needed), or decline vaccination if it is not medically appropriate.**

For VRs who are 5 years of age or older who are seeking a 3rd additional dose because they are moderate-severely immunocompromised, in addition to the consent form, the form "Third Dose Vaccine Administration for People who are Immunocompromised" also needs to be filled out, signed, and returned with the consent form prior to dose #3 administration.

Guidance for Minors in New Hampshire Division for Children, Youth, and Families Custody

For vaccine recipients under the age of 18 years and in the custody of Children, Youth and Families of NH (DCYF), there is additional information and documentation needed.

1. Letter from medical provider recommending the influenza vaccine for the VR
2. Medical Authorization Form for the VR
3. On-Site Medical Services consent form **or** RPHN Influenza Vaccination Record and Consent signed by DCYF case coordinator for that minor.

   Consents must be completed correctly. If **any of the consent forms are not completed in their entirety (i.e. missing an answer to a question, signed/dated by a parent/guardian, etc.), vaccination will need to be declined.*

The medical screening questionnaire (on pediatric consent form) should be used to screen children for any serious adverse reactions or side effects that might have occurred after a prior dose. The vaccinator should also verify and inquire of the VR whether they had any serious adverse side effects after a prior dose of the vaccine. **If a parent/guardian/foster parent reports on the consent form that the VR did experience serious/severe side effects or allergic reactions after an earlier vaccine dose, then the vaccinator should seek additional information from the parent/guardian/foster to clarify (if needed). If further information is not available, the vaccinator is to seek advice from the clinic supervision, or decline vaccination if it is not medically appropriate.**

If all of the above requirements are present, then the VR may be vaccinated with the appropriate influenza vaccine and documented accordingly.

Blood Borne Pathogen Exposure

Blood-borne pathogens (BBPs) include Human Immunodeficiency Virus (HIV), hepatitis C virus (HCV), and hepatitis B virus (HBV). A healthcare worker can be exposed to these viral pathogens when exposed to an infected person's blood or other potentially infectious body fluids* through a percutaneous exposure (i.e., needle stick), or when blood or body fluids are exposed to a break in the skin or mucous membranes (i.e., eyes, nose, and mouth). In the setting of a COVID-19 vaccination clinic or influenza clinic, the primary route of exposure to BPPs is from a contaminated needle stick; the risk of mucous membrane exposure should be minimal given brief patient contact, limited care targeting vaccine delivery, and the provider and clinic staff wearing eye protection (full face shield preferred over goggles). Clinic staff should follow the Interim Guidance for NH State-Managed COVID-19 and Influenza Vaccination Clinics and follow the Advisory Committee on Immunization Practices (ACIP) General Best Practice Guidelines for Vaccine Administration to minimize the risk for a needle stick and BBP exposure.

In the event of a potential exposure to a source patient's (i.e., the person who is the source of exposure) blood or other potentially infectious body fluid, the healthcare provider or clinic staff should take the following steps:

1. Immediately and thoroughly wash with soap and water any needle stick, other sharp wounds, or broken skin that has been exposed to another person's blood or body fluids.
2. Copiously flush and irrigate any exposed mucous membranes with clean water or sterile saline.
3. Once the wound is cleaned or mucous membranes are flushed, immediately report any exposure to the onsite clinical lead/supervisor.
4. Evaluation and testing should be offered to both source patient and staff member via a local urgent care utilizing personal health insurance.
5. Clinical lead/supervisor shall discuss the situation with the source patient and ask if the source patient can get blood borne pathogen testing to help inform care/management of the staff member who was stuck with a needle.
    a. The source patient should be advised to seek blood borne pathogen testing at a local urgent care using their personal insurance if they choose to.
6. Clinical lead/supervisor shall discuss the situation with the staff member with injury and advise them to seek blood borne pathogen testing at a local urgent care using their personal insurance if they choose to.
    a. Staff member should also seek follow up testing via urgent care or PCP utilizing personal insurance outlined by their provider.
7. Fill out the "Incident Report Form" below. This is critical to complete to ensure appropriate coordination between public health, On-Site Medical Services, the staff member, and the source patient. Be sure to document:
    a. Staff name, date of birth, and contact information (including phone number and email address)
    b. Date, time, and clinic location of incident and exposure
    c. Description of the exposure, including:
        i. Nature of the exposure (i.e., percutaneous needle stick, non-intact skin, mucosal, human bite, etc.)
        ii. Type of body fluid involved
        iii. Body location of exposure and contact time with the body fluid

iv. For percutaneous needle stick injuries, include a description of the injury including, type of needle used (solid vs. hollow bore needle), depth of wound, use in source patient
v. Actions taken after the exposure

d. Source patient's name, date of birth, and contact information (including phone number, mailing address, and email)
e. Source patient's pertinent medical history (including known HIV, HBV, or HCV infection status)

8. Supervisor should notify On-Site Medical Services by phone, and submit the Incident Report Form by secure email. All staff and source patient information must be kept confidential.
9. Staff should follow-up with their agency occupational medicine group or primary care provider.

**Body fluids considered potentially infectious include: blood, semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid, amniotic fluid, or any body fluid contaminated with visible blood. HBV and HCV can be detected in saliva, so these viruses could potentially be transmitted through bite wounds, although uncommon. Fluids generally NOT considered infectious (unless they contain blood) include feces, nasal secretions, sputum, sweat, urine, and vomit.*

NH Influenza Vaccination Clinic: Blood Borne Pathogen Exposure Report

Date of Incident: _____ **Time of Incident**:_____

Clinic Name/Location: _____

STAFF INFORMATION:

Name:_____ Date of Birth: _____

Phone Number: _____

E-mail Address: _____

Employer/Staff Type (circle all that apply):

National Guard PHN Hospital Fire/EMS Volunteer Other:_____

Clinic Supervisor Name and Contact Information: _____

Phone Number: _____ Email: _____

DESCRIPTION OF EXPOSURE/INCIDENT:

Type of Exposure (circle all that apply):

Needle Stick Non-intact skin Mucous membrane Bite Other: _____

Type of Body Fluid: **Blood Other:_____**

Body location of exposure:_____

Estimated Contact Time: _____

Describe the injury (for a needle stick: describe the type of needle, depth of wound, etc.):

Actions Taken:_____

Location of Medical Evaluation: _____

Name & Contact information of healthcare provider following staff after needle stick:

_____

SOURCE PATIENT INFORMATION (person who is the source of the exposure):

Name: _____ Date of Birth: _____

Phone Number: _____

Mailing Address: _____

E-mail address: _____

Source Patient Has a Known History of Infection with (circle all that apply):

HIV Hepatitis C Virus Hepatitis B Virus None Unknown

Call On-Call Provider to report.
Upload this form to On-Site Medical Services Secure Dropbox

INFLUENZA VACCINATION CLINIC INCIDENT REPORT FORM

Note: for blood borne pathogen incident (needle stick, etc.), use the incident form in the current Influenza Standing Order document

Today's Date: _____

Date of Incident: _____ Time of Incident: _____

STAFF REPORTING:

Staff Name: _____ Phone Number: _____

E-mail Address: _____

Clinic Name/Location: _____

TYPE OF INCIDENT:

_____ Vaccine administration error ____ Vaccine reaction ____ Seizure
_____ Other (brief description_____)

Reported through VAERS? If so, report number: _____

Name of Vaccine:_____ Site: _____ Lot Number: _____

Patient Name: _____DOB: _____

Patient Phone Number: _____

E-mail Address: _____

DESCRIPTION OF EXPOSURE/INCIDENT:

Actions Taken:

Outcome:

Health Care Provider Contacted: Yes ____ No_____ If so, date/time:

Name and phone number of provider: _____

Call On-Call Provider to report.
Upload this form to On-Site Medical Services Secure Dropbox

Medical Management of Vaccine Reactions in Adults

All vaccines have the potential to cause an adverse reaction. In order to minimize adverse reactions, patients should be carefully screened for precautions and contraindications before vaccine is administered (see www.immunize.org/catg.d/p3072.pdf, guidance in provided clinic protocols, and vaccine standing orders). Even with careful screening, reactions may occur. These reactions can vary from minor (e.g., soreness, itching) to severe and life threatening (e.g., anaphylaxis). Vaccine providers should be familiar with identifying allergic reactions, including anaphylaxis, and must be competent in managing these vaccine events at the site of vaccine administration. Providers should also have a plan in place to immediately contact emergency medical services (EMS) in the event of a severe vaccine reaction. Maintenance of the airway, oxygen administration, and administration of intravenous medications might be necessary. The table below describes procedures to follow if various reactions occur.

REACTION	SIGNS and SYMPTOMS	MANAGEMENT
Localized	Soreness, redness, itching, or swelling at the injection site	Apply a cold compress to the injection site. Consider giving an analgesic (pain reliever) or antipruritic (anti-itch) medication.
	Slight bleeding	Apply Pressure and an adhesive compress over the injection site.
	Continuous bleeding	Place a thick layer of gauze pads over site and maintain direct and firm pressure; raise the bleeding injection site (e.g., arm) above the level of the patient's heart.
Psychological fright and syncope (fainting)	Fright before injection is given	Have the patient sit or lie down for vaccination
	Patient feels "faint" or has paleness, sweating, nausea, lightheadedness, dizziness, weakness, or visual disturbances.	Have the patient lie flat. Loosen any tight clothing and maintain an open airway. Apply cool, damp cloth to the patient's face and neck. Keep them under close observation until full recovery.
	Fall, without loss of consciousness	Examine the patient to determine if injury is present before attempting to move the patient. Place the patient flat on their back with feet elevated.

	Loss of consciousness	Check the patient to determine if injury is present before attempting to move the patient. Place the patient flat on back with feet elevated. Call 911 if the patient does not recover immediately.
Anaphylaxis	**Skin and mucosal symptoms** such as generalized hives, itching, or flushing; swelling of lips, face, throat, or eyes. **Respiratory symptoms** such as change in voice, sensation of throat closing, stridor, shortness of breath, wheeze, or cough. **Gastrointestinal symptoms** such as nausea, vomiting, diarrhea, cramping abdominal pain. **Cardiovascular symptoms** such as collapse, dizziness, tachycardia, hypotension.	See "Emergency Medical Protocol for Management of Anaphylactic Reactions in Adults" on the next page for detailed steps to follow in treating anaphylaxis.

Adapted from www.immunize.org and online.lexi.com by the New Hampshire Division of Public Health Services (DPHS) Updated 12/20/2020

Emergency Medical Protocol for Management of Anaphylactic Reactions in Adults

1. If itching and swelling are confined to the injection site where the vaccination was given, observe the patient closely for the development of generalized symptoms.
2. If symptoms are generalized, activate the emergency medical system (i.e., call 911). This should be done by a second person, while the primary healthcare professional assesses the airway, breathing, circulation, and level of consciousness of the patient. Vital signs should be monitored continuously.
3. **Drug dosing information: The first-line and most important therapy in anaphylaxis is epinephrine. There are NO absolute contraindications to epinephrine in the setting of anaphylaxis.**
    a. **First-line treatment**: Use **epinephrine** 1.0 mg/mL aqueous solution (1:1,000 dilution). Administer 0.01 mg/kg per dose intramuscularly (adult dose ranges from 0.2 mg to 0.5 mg; maximum single dose is 0.5 mg). Prefilled autoinjector use is preferred. Repeat every 5-15 minutes in the absence of clinical improvement. Administration should preferably occur in the mid-outer thigh; administer through clothing if necessary. Follow manufacturer instructions for autoinjector use – hold the device/needle in the thigh for at least 3 seconds. Never reinsert needle. Do not administer repeated injections at the same site. B.
    b. **Optional treatment: H_1 antihistamines** – for hives or itching use **diphenhydramine**. Administer 25 mg orally every 4–6 hours or 50 mg every 6-8 hours (maximum single dose is 50 mg). H1 antihistamines do NOT relieve upper or lower airway obstruction, hypotension, or shock.
4. Monitor the patient closely until EMS arrives. Perform cardiopulmonary resuscitation (CPR), if necessary, and maintain airway. Keep the patient in supine position (flat on back) unless he or she is having breathing difficulty. If breathing is difficult, the patient's head may be elevated, provided blood pressure is adequate to prevent loss of consciousness. If blood pressure is low, elevate legs. Monitor blood pressure and pulse at least every 5 minutes.
5. If EMS has not arrived and symptoms are still present, repeat the dose of epinephrine every 5–15 minutes for up to 3 doses, depending on the patient's response.

6. 6. Record the patient's reaction (e.g., hives, anaphylaxis) to the vaccine, all vital signs, medications administered to the patient, including the time, dosage, response, and the name of the medical personnel who administered the medication, and other relevant clinical information.
7. Report adverse events to VAERS: Report adverse events following administration of vaccine to the Vaccine Adverse Event Reporting System (VAERS) at 1-800-822-7967 or online at https://vaers.hhs.gov/reportevent.html.
8. Notify the patient's primary care provider. If unable to contact, notify the patient that they will need to follow up with their primary care provider as soon as possible.

Emergency Medical Protocol for Management of Cardiac Arrest in Adults

1. If the patient is found to be in cardiac arrest, a medical emergency is under way.
2. Activate the emergency medical system (i.e., call 911). This should be done by a second person, while the primary healthcare professional assesses the airway, breathing, circulation, and level of consciousness of the patient. Vital signs should be monitored continuously.
3. Feel for carotid pulse. Keep pulse check to 10 seconds or less
4. If no pulse or if unsure if a pulse is felt, being CPR.
5. Place eel of hand on lower half of sternum
6. Place other hand on top and interlock fingers
7. Keep arms straight and press down, compressing the chest 2 inches
    a. If alone, the compressions to breaths ratio are 30:2
    b. If two healthcare providers are present, the compressions to breaths ratio are 15:2
8. Let the chest completely recoil between compressions
9. Have an assistant gather the nearest AED.
10. As compressions are being done, attach the AED.
    a. Once AED is on and active, follow directions of AED.
11. Continue with compressions until EMS arrives.

Medical Management of Vaccine Reactions in Children & Teens

All vaccines have the potential to cause an adverse reaction. In order to minimize adverse reactions, patients should be carefully screened for precautions and contraindications before vaccine is administered (see www.immunize.org/catg.d/p3072.pdf, guidance in provided clinic protocols, and vaccine standing orders). Even with careful screening, reactions may occur. These reactions can vary from minor (e.g., soreness, itching) to severe and life threatening (e.g., anaphylaxis). Vaccine providers should be familiar with identifying allergic reactions, including anaphylaxis, and must be competent in managing these vaccine events at the site of vaccine administration. Providers should also have a plan in place to immediately contact emergency medical services (EMS) in the event of a severe vaccine reaction. Maintenance of the airway, oxygen administration, and administration of intravenous medications might be necessary. The table below describes procedures to follow if various reactions occur.

REACTION	SIGNS and SYMPTOMS	MANAGEMENT
Localized	Soreness, redness, itching, or swelling at the injection site	Apply a cold compress to the injection site. Consider giving an analgesic (pain reliever) or antipruritic (anti-itch) medication.
	Slight bleeding	Apply Pressure and an adhesive compress over the injection site.
	Continuous bleeding	Place a thick layer of gauze pads over site and maintain direct and firm pressure; raise the bleeding injection site (e.g., arm) above the level of the patient's heart.

Psychological fright and syncope (fainting)	Fright before injection is given Patient feels "faint" or has paleness, sweating, nausea, lightheadedness, dizziness, weakness, or visual disturbances. Fall, without loss of consciousness Loss of consciousness	Have the patient sit or lie down for vaccination Have the patient lie flat. Loosen any tight clothing and maintain an open airway. Apply cool, damp cloth to the patient's face and neck. Keep them under close observation until full recovery. Examine the patient to determine if injury is present before attempting to move the patient. Place the patient flat on back with feet elevated. Check the patient to determine if injury is present before attempting to move the patient. Place the patient flat on back with feet elevated. Call 911 if the patient does not recover immediately.
Anaphylaxis	**Skin and mucosal symptoms** such as generalized hives, itching, or flushing; swelling of lips, face, throat, or eyes. **Respiratory symptoms** such as change in voice, sensation of throat closing, stridor, shortness of breath, wheeze, or cough. **Gastrointestinal symptoms** such as nausea, vomiting, diarrhea, cramping abdominal pain. **Cardiovascular symptoms** such as collapse, dizziness, tachycardia, hypotension.	See "Emergency Medical Protocol for Management of Anaphylactic Reactions in Adults" on the next page for detailed steps to follow in treating anaphylaxis.
Cardiac Arrest	**Symptoms leading up to cardiac arrest**: syncope, dizziness, rapid heart rate, palpitations, shortness of breath. **Cardiac arrest**: collapse, pulselessness.	See "Emergency Medical Protocol for Management of Cardiac Arrest in Adults" on the next page for detailed steps to follow in treating cardiac arrest.

Adapted from www.immunize.org and online.lexi.com by the New Hampshire Division of Public Health Services (DPHS) Updated 12/20/2020

Emergency Medical Protocol for Management of Anaphylactic Reactions

1. If itching and swelling are confined to the injection site where the vaccination was given, observe the patient closely for the development of generalized symptoms.
2. If symptoms are generalized, activate the emergency medical system (i.e., call 911). This should be done by a second person, while the primary healthcare professional assesses the airway, breathing, circulation, and level of consciousness of the patient. Vital signs should be monitored continuously.
3. **Drug dosing information: The first-line and most important therapy in anaphylaxis is epinephrine. There are NO absolute contraindications to epinephrine in the setting of anaphylaxis.**

a. **First-line treatment**: Use **epinephrine** 1.0 mg/mL aqueous solution (1:1,000 dilution). Administer 0.01 mg/kg per dose intramuscularly (adult dose ranges from 0.2 mg to 0.5 mg; maximum single dose is 0.5 mg). Prefilled autoinjector use is preferred. Repeat every 5-15 minutes in the absence of clinical improvement. Administration should preferably occur in the mid-outer thigh; administer through clothing if necessary. Follow manufacturer instructions for autoinjector use – hold the device/needle in the thigh for at least 3 seconds. Never reinsert needle. Do not administer repeated injections at the same site. B.

b. **Optional treatment: H_1 antihistamines** – for hives or itching use **diphenhydramine**. Administer 25 mg orally every 4–6 hours or 50 mg every 6-8 hours (maximum single dose is 50 mg). H1 antihistamines do NOT relieve upper or lower airway obstruction, hypotension, or shock.

4. Monitor the patient closely until EMS arrives. Perform cardiopulmonary resuscitation (CPR), if necessary, and maintain airway. Keep the patient in supine position (flat on back) unless he or she is having breathing difficulty. If breathing is difficult, the patient's head may be elevated, provided blood pressure is adequate to prevent loss of consciousness. If blood pressure is low, elevate legs. Monitor blood pressure and pulse at least every 5 minutes.
5. If EMS has not arrived and symptoms are still present, repeat the dose of epinephrine every 5–15 minutes for up to 3 doses, depending on the patient's response.
6. Record the patient's reaction (e.g., hives, anaphylaxis) to the vaccine, all vital signs, medications administered to the patient, including the time, dosage, response, and the name of the medical personnel who administered the medication, and other relevant clinical information.
7. Report adverse events to VAERS: Report adverse events following administration of vaccine to the Vaccine Adverse Event Reporting System (VAERS) at 1-800-822-7967 or online at https://vaers.hhs.gov/reportevent.html.
8. Notify the patient's primary care provider. If unable to contact, notify the patient that they will need to follow up with their primary care provider as soon as possible.

For your convenience, approximate dosages based on weight and age are provided in the following charts. Please confirm that you are administering the correct dose for your patient.

First-Line Treatment: Epinephrine					**Epinephrine Dose**	
					1.0 mg/mL aqueous solution (1:1000 dilution); intramuscular. Minimum dose is 0.05 mg	Epinephrine autoinjector (0.1 mg 0.15 mg or 0.3 mg)
Recommended dose is 0.01 mg/kg body weight up to 0.5 mg maximum dose. May be repeated every 5–15 minutes for a total of 3 doses.		**Age group**	**Range of weight (lbs)**	**Range of weight (kg)***		
	Infants and children	1–6 months	9–19 lbs	4–8.5 kg	0.05 mg (or mL)	Off label
		7–36 months	20–32 lbs	9–14.5 kg	0.1 mg (or mL)	0.1 mg†
		37–59 months	33–39 lbs	15–17.5 kg	0.15 mg (or mL)	0.15 mg/dose
		5–7 years	40–56 lbs	18–25.5 kg	0.2–0.25 mg (or mL)	0.15 mg/dose
		8–10 years	57–76 lbs	26–34.5 kg	0.25–0.3 mg (or mL)	0.15 mg or 0.3 mg/dose
	Teens	11–12 years	77–99 lbs	35–45 kg	0.35–0.4 mg (or mL)	0.3 mg/dose
		13 years & older	100+ lbs	46+ kg	0.5 mg (or mL) – max. dose	0.3 mg/dose

Note: If body weight is known, then dosing by weight is preferred. If weight is not known or not readily available, dosing by age is appropriate.
* *Rounded weight at the 50th percentile for each age range*
† 0.1 mg autoinjector is licensed for use in 7.5 kg to 14 kg infants and children

Emergency Medical Protocol for Management of Cardiac Arrest In Children

1. If the patient is found to be in cardiac arrest, a medical emergency is under way.
2. Activate the emergency medical system (i.e., call 911). This should be done by a second person, while the primary healthcare professional assesses the airway, breathing, circulation, and level of consciousness of the patient. Vital signs should be monitored continuously.
3. Feel for carotid pulse. Keep pulse check to 10 seconds or less
4. If no pulse or if unsure if a pulse is felt, being CPR.
5. Place eel of hand on lower half of sternum
6. Place other hand on top and interlock fingers
7. Keep arms straight and press down, compressing the chest 2 inches
    a. If alone, the compressions to breaths ratio are 30:2
    b. If two healthcare providers are present, the compressions to breaths ratio are 15:2
8. Let the chest completely recoil between compressions
9. Have an assistant gather the nearest AED.
10. As compressions are being done, attach the AED.
    a. Once AED is on and active, follow directions of AED.
11. Continue with compressions until EMS arrives.

Updated: 10/19/2022

These standing orders shall remain in effect for all patients being vaccinated under the direction of On-Site Medical Services, effective 10/03/2022 and until rescinded.

Medical Director:
Cecilia Keady, DNP, APRN

Cecilia Keady
Digitally signed by Cecilia Keady
Date: 2022.11.26 17:55:53 -05'00'