To provide guidelines for administering immunizations.

Immunizations are to be administered to all patients in accordance with the North Carolina Immunization Regulations and Instructions as published by the North Carolina Commission for Health Services. These immunizations will include, but are not limited to Tetanus and Diphtheria, Hepatitis B, Influenza, and Pneumococcal polysaccharide.

Nursing Staff is responsible for patient education and obtaining the patient's consent prior to administering all immunizations.

A. The nurse is responsible for counseling the patient about the purpose of the vaccine, the contraindications to the vaccine, risks of the vaccine and what is to be done in case of adverse reactions. Counseling is to be supplemented with the appropriate Vaccine Information Sheet (VIS) published by the Center for Disease Control (CDC) available at [http://www.cdc.gov/vaccines/pubs/vis/default.htm](http://www.cdc.gov/vaccines/pubs/vis/default.htm)

B. Prior to the administration of the vaccine the nurse must review the inmate’s medical history to determine if there are contraindications to the vaccines.

NOTE: PATIENT MUST INDICATE CONSENT BY SIGNING AND DATING THE IMMUNIZATION RECORD (DC-928) PRIOR TO VACCINE ADMINISTRATION.

C. Refer to procedures outlined in Health Care Procedures Manual policy AD IV-1 – Informed Consent.

A. Document the following on the Immunization Record (DC-928):

- Vaccine Lot #/Manufacturer/Expiration date
- Site and route
- VIS publication date

B. Document vaccine contraindication findings on the Nurse Progress Notes (DC-387) and Problem List.

The DOP Infection Control Coordinator should be contacted for immunization guidelines for residents entering the prison system who are 12 years of age or younger.
TETANUS AND DIPHTHERIA

I. PURPOSE

Tetanus (commonly called lockjaw) is a bacterial disease that affects the nervous system. It is contracted through a cut or wound that becomes contaminated with tetanus bacteria. Diphtheria spreads when germs pass from an infected person to the nose or throat of others. It causes a thick coating in the nose, throat or airway and can lead to respiratory distress, heart failure, paralysis, or death. Vaccination is the best way to protect against tetanus and diphtheria.

II. RECOMMENDATIONS

Tetanus/diphtheria (Td) is recommended for children over seven (7) years of age and adults. After the primary series has been completed, a booster dose is recommended every 10 years. (Make sure the patient has received a primary series of three doses.) Consult the Advisory Committee on Immunization Practices (ACIP) for recommendations. A booster dose may be given at a five (5) year interval if a person has a dirty wound.

III. DOSING SCHEDULE

A Tetanus booster dose is recommended every 10 years after the completion of the primary series of three doses. Primary Series should be completed prior to 12 years of age. The primary series is three doses given as follows:
- Dose #1: Initial dose
- Dose #2: Given 4 weeks after dose #1
- Dose #3: Given 6 - 12 months after dose #2
This vaccine may be given with all other vaccines but at a separate site.

IV. CONTRAINDICATIONS

Tetanus/Diphtheria vaccine is contraindicated for those who have had a previous anaphylactic or neurologic reaction to this vaccine or to any of its components. Persons who are experiencing moderate or severe acute illness should avoid the Tetanus/Diphtheria vaccine.
HEPATITIS A

I. Purpose

Hepatitis A is a serious liver disease caused by hepatitis A virus (HAV). HAV is found in the stool of persons with hepatitis A. It is usually spread by close personal contact and sometimes by eating food or drinking water containing HAV.

II. Recommendations

Adults who should be routinely vaccinated with hepatitis A vaccinations are:

- Men who have sex with men
- Persons who use street drugs
- Persons with chronic liver disease
- Persons who are treated with clotting factor concentrates

III. Dosing Schedule

**Hepatitis A Vaccine Only**: Two doses of the vaccine needed for lasting protection. These doses should be at least six (6) months apart. Hepatitis A vaccine may be given at the same time as other vaccines.

**Twinrix Vaccine (Hepatitis A+ Hepatitis B)**:

Twinrix is indicated for persons aged ≥18 years of age. Any person in this age group having an indication for Hepatitis A and B vaccinations can be administered Twinrix. Because Twinrix contains hepatitis B vaccine the dosing schedule is the same as a single dose of hepatitis B vaccine:

Three doses of the vaccine are needed on a 0, 1 month, 6-month schedule.

- Dose #1: Initial dose
- Dose #2: Given 1 month after dose #1
- Dose #3: Given 6 months after dose #1

Single-antigen hepatitis A vaccine may be used to complete the hepatitis A series begun with Twinrix and vice versa.

IV. Contraindications

The Hepatitis A vaccine is contraindicated for those persons who have previously had an anaphylactic reaction to this vaccine or any of its components. Persons who are experiencing moderate or severe acute illness should avoid the Hepatitis A Vaccine.

The safety of Hepatitis A and Twinrix vaccines for pregnant women has not been determined.
HEPATITIS B

I. PURPOSE

Hepatitis B is caused by a virus that affects the liver. It can lead to liver disease, liver cancer and death in many of those afflicted. The virus is found in the blood and body fluids of infected people and may be spread in these fluids. The Hepatitis B Virus (HBV) can live outside of the body for several days.

II. RECOMMENDATIONS

It by North Carolina Immunization Regulations require that residents born July 1, 1994 or after be vaccinated with the Hepatitis B vaccine series prior to entering school.

Adults at risk for HBV infection should be vaccinated. This includes:
- Sex partners of people infected with HBV
- Men who have sex with men
- People who inject street drugs
- People with more than one sex partner
- People with chronic liver or kidney disease
- People with jobs that expose them to human blood
- Kidney dialysis patients
- People with HIV infection
- Inmates of long term correctional facilities
- Clients and staff of institutions for the developmentally disabled

III. DOSING SCHEDULE

Because the hepatitis B component of Twinrix is equivalent to a standard dose of hepatitis B vaccine, the schedule is the same whether Twinrix or single antigen hepatitis B vaccine is used.

**Hepatitis B Vaccine**

Three doses of the vaccine are needed on a 0, 1 month, 6-month schedule.
- Dose #1: Initial dose
- Dose #2: Given 1 month after dose #1
- Dose #3: Given 6 months after dose #1

Note: There must be 4 weeks between doses #1 and dose #2, and 8 weeks between doses #2 and dose #3. Overall there must be at least 4 months between doses #1 and #3.

**If the series is delayed between doses, do not start the series over. Continue from the last dose.**

**Twinrix Vaccine (Hepatitis A + Hepatitis B):**

Twinrix is indicated for persons aged ≥18 years of age. Any person in this age group having an indication for Hepatitis A and B vaccinations can be administered Twinrix. Because Twinrix contains hepatitis B vaccine the dosing schedule is the same as a single dose of hepatitis B vaccine (see above).

This vaccine may be given with all other vaccines but at a separate site.

IV. CONTRAINDICATIONS
The Hepatitis B vaccine is contraindicated for those persons who have previously had an anaphylactic reaction to this vaccine or any of its components. Persons who are experiencing moderate or severe acute illness should avoid the Hepatitis B Vaccine.

**INFLUENZA**

I. **PURPOSE**

Influenza (flu) is a highly contagious viral infection of the respiratory system. Flu is one of the most severe illnesses of the winter season. There is a vaccine to protect against influenza; it is usually given in the fall (September through December) so that protection is conferred for the entire flu "season" (December through March). Because the influenza virus changes from year to year, influenza immunizations are administered to annually on a voluntary basis.

II. **RECOMMENDATIONS**

The influenza vaccine is recommended for the following groups of people:

- People 50 years of age or older
- Healthcare workers and others in contact with people in high-risk groups
- People with chronic disorders
- People who are immunocompromised
- Women who will be in the second or third trimester of pregnancy during the flu season
- Residents of long-term care facilities
- Anyone who wishes to reduce their chance of becoming ill from influenza

III. **DOsing SCHEDULE**

The influenza vaccine is given every year. It may be given anytime during the influenza season. It may be given with all other vaccines but at a separate site.

IV. **CONTRAINDICATIONS**

Influenza vaccine is contraindicated for anyone who has previously had an anaphylactic reaction to the vaccine, to any of its components, or to eggs. Persons with moderate to severe acute illness should avoid the Influenza vaccine.
I. PURPOSE

Pneumococcal disease is an infection caused by a type of bacteria called Streptococcus pneumoniae. A single dose of pneumococcal vaccine protects against the 23 different types of Streptococcus pneumoniae bacteria that are responsible for causing greater than 90% of all pneumococcal disease cases.

II. RECOMMENDATIONS

The pneumococcal vaccine is recommended for the following:
- People who are 65 years of age or older
- Immunocompromised persons
- People with chronic diseases
- Persons in high-risk environments

III. DOSING SCHEDULE

The pneumococcal vaccine is routinely given as a one-time dose and is effective indefinitely. It is safe to administer if previous vaccination history is unknown. A one-time revaccination is recommended 5 years later for:
- People at highest risk of fatal pneumococcal infection or rapid antibody loss (e.g. renal disease, HIV)
- People 65 years of age or older if the 1st dose was given prior to age 65

The vaccine may be given with all other vaccines but at a separate site.

IV. CONTRAINDICATIONS

The pneumococcal vaccine is contraindicated for any person who has previously had an anaphylactic reaction to this vaccine or to any of its components. It should also be avoided in persons experiencing moderate or severe acute illness.

The information in this policy was adapted from Advisory Committee on Immunization Practices (ACIP) immunization recommendations. For specific ACIP recommendations refer to the full statements which are published in the Morbidity and Mortality Report (MMWR). Immunization practices and recommendations change periodically and this policy should not supercede sound medical judgement.

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