

Hepatitis A Outbreak Prevention and Response: Call to Action

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Disclosures

- **Justin Albertson, Zack Moore, Gibbie Harris, Beth Meadows, and Susan Sullivan have no relevant financial disclosures or conflicts of interest related to the content of this activity.**
- **Completion criteria: the participant must attend 100% of the 8/23/18 webinar, sign and fax back (919-733-0490) the attendance roster and complete the participant evaluation to receive 1.5 CNE contact hours.**
- **There is no commercial support for this activity.**

Accreditation Statement

Continuing education credit will be provided through the Public Health Nursing and Professional Development (PHNPD) Unit.

Public Health Nursing and Professional Development, Department of Health and Human Services, is an approved provider of continuing nursing education by the North Carolina Nurses Association, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

Learner Objectives

Upon completion of this presentation, you should be able to

- List the 3 high risk groups impacted by the multi-state hepatitis A outbreaks**
- Outline a brief written plan to reach high risk groups in your jurisdiction**
- Identify necessary vaccine storage and handling steps for your off-site vaccination outreach**

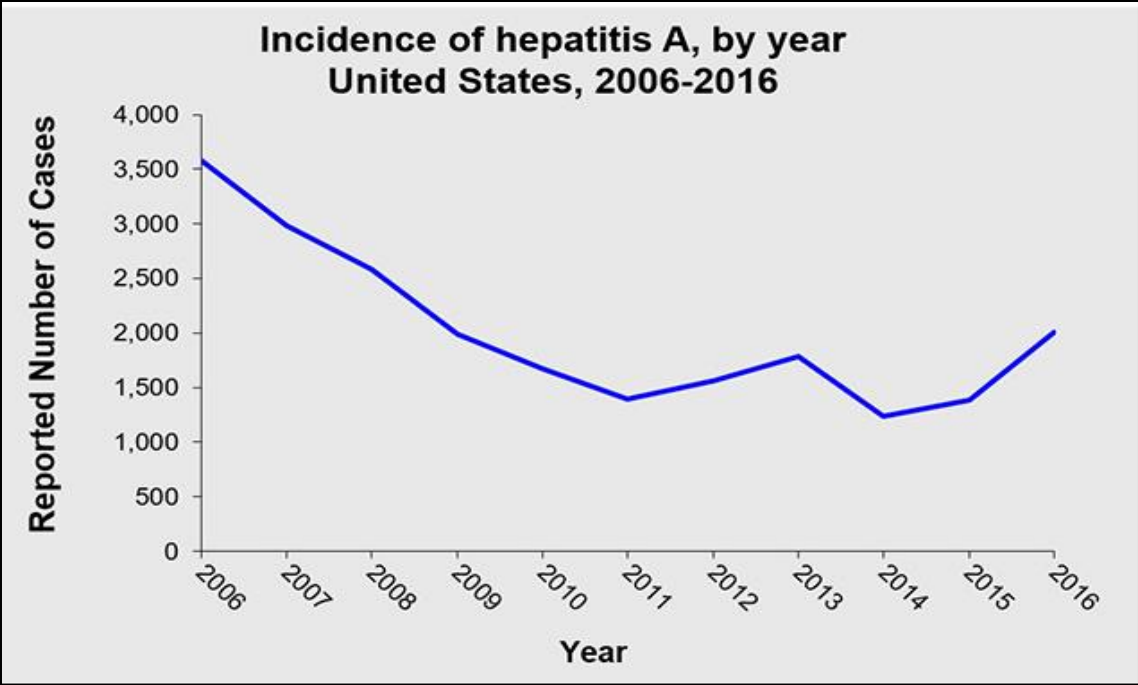
Webinar Activity Purpose

- **The purpose of this activity is to enable you, the learner, to assist your jurisdiction with assessment, planning, implementation and evaluation for hepatitis A outbreak prevention and response.**

Hepatitis A Features

- Transmitted through ingestion of object, food, or drink contaminated with stool from an infected person
- Symptoms include: fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, clay-colored stool, jaundice
- Incubation period (time between exposure and symptoms): 28 days (range 15-50 days)
- Infected persons are contagious from: 2 weeks before jaundice onset to 1 week after jaundice onset, OR from 1 week before to 2 weeks after other symptoms if no jaundice

Hepatitis A Incidence, U.S., 2006-2016



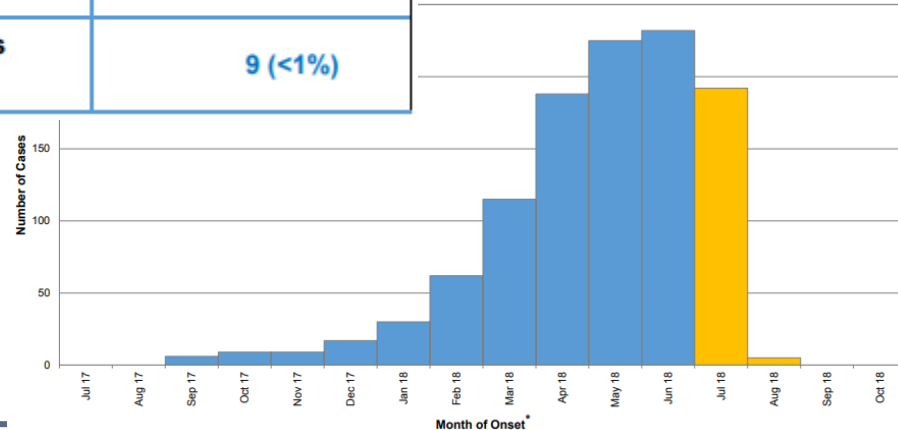
<https://www.cdc.gov/hepatitis/statistics/index.htm>

Hepatitis A Outbreaks in the United States

- From January 2017 to July 6, 2018, over 3,700 reports of hepatitis A infections nationwide
- Outbreaks in 10 states: AR, CA, IN, KY, MI, MO, OH, TN, UT, WV
- Occurring primarily among persons experiencing homelessness, persons who use drugs, and men who have sex with men (MSM)
- High hospitalization rate among cases is common (>50%)

Hepatitis A Outbreak- Kentucky

Update for Week 32:		Total Case Counts: 8/1/2017 – 8/11/2018:	
Number of new cases (n=66):	Confirmed [^] - 0 Probable - 38 Suspected - 28	Total number of cases (n=1425):	Confirmed [^] - 477 Probable - 612 Suspected - 336
Number of counties with new cases:	27	Total number of counties with cases:	83 (69% of KY counties)
Number of Hospitalizations:	40	Total Number of Hospitalizations:	809 (57%)
Number of deaths Reported [†] :	1	Total number of deaths reported [†] :	9 (<1%)

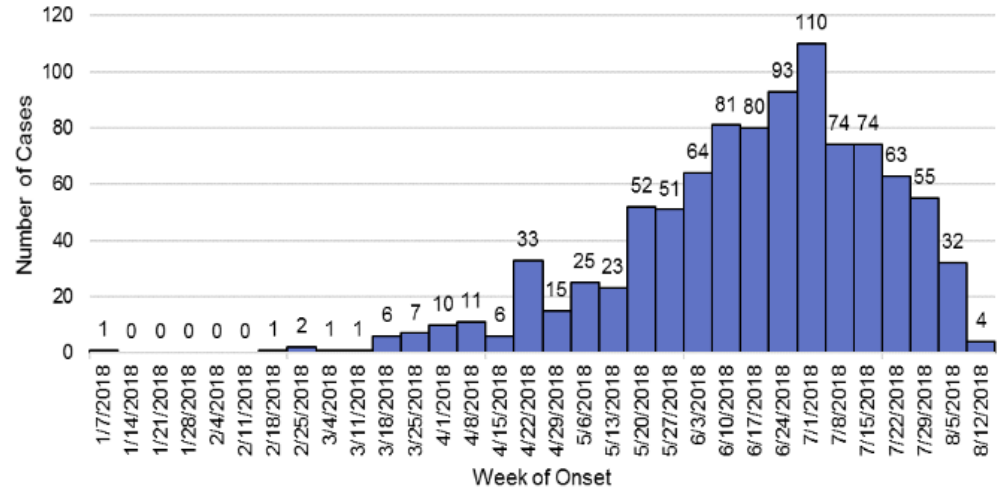


Hepatitis A Outbreak- West Virginia

West Virginia Hepatitis A Outbreak Cases* as of August 17, 2018**

Number of Cases	975
Demographics	
Age Range	12-82
Median Age	37
Male	584 (59.9%)
Hospitalizations	532 (54.6%)
Deaths	2
Risk Factors	
Co-infection with Hepatitis C <small>(Information available for 843 cases)</small>	519 (61.6%)
Co-infection with Hepatitis B <small>(Information available for 843 cases)</small>	95 (11.3%)
Reports Illicit Drug Use <small>(Information available for 811 cases)</small>	636 (78.4%)
Homeless	124 (12.7%)

Outbreak Cases of Hepatitis A
by Week of Symptom Onset,
West Virginia, 2018 (n=975)



Hepatitis A Outbreak in North Carolina

- **21 outbreak-associated cases statewide**
 - **17 (81%) hospitalized; 0 deaths**
 - **5 counties affected: Mecklenburg (17 cases), Cabarrus (1), Gaston (1), Iredell (1), Rowan (1)**
- **Cases occurring primarily among MSM in the Charlotte area**

Case Definition

- **Clinical Description**

An acute illness with a discrete onset of any sign or symptom consistent with acute viral hepatitis (e.g., fever, headache, malaise, anorexia, nausea, vomiting, diarrhea, and abdominal pain), and either a) jaundice, or b) elevated serum alanine aminotransferase (ALT) or aspartate aminotransferase (AST) levels.

- **Case Classification**

Confirmed:

A case that meets the clinical criteria and is IgM anti-HAV positive*, **OR**

A case that has hepatitis A virus RNA detected by NAAT (such as PCR or genotyping) **OR**

A case that meets the clinical criteria and occurs in a person who had contact (e.g., household or sexual) with a laboratory-confirmed hepatitis a case 15-50 days prior to onset of symptoms

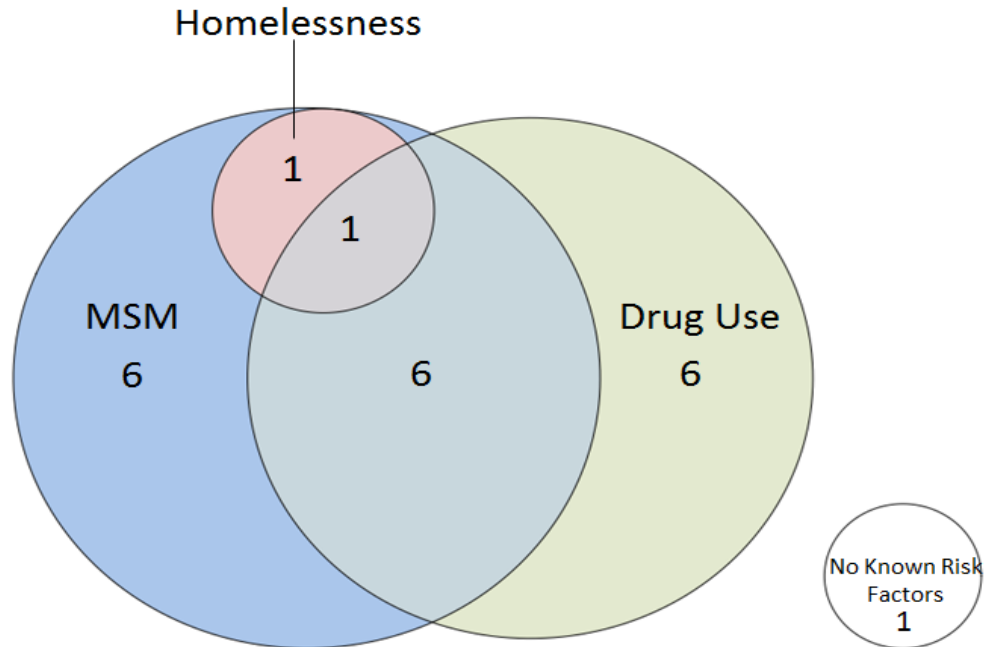
NC Outbreak Case Definition

Outbreak-associated case:

An acute case of hepatitis A meeting the confirmed case classification with onset on or after January 1, 2018 in a North Carolina resident who:

- a) Reports at least one of the following risk factors: homelessness, drug use (injection or non-injection), or MSM status; OR**
- b) Has a hepatitis A genotype that matches a genotype predominant in a recent or current US hepatitis A outbreak; OR**
- c) Is epidemiologically linked to a person meeting one of the above criteria.**

Confirmed Outbreak-associated Cases Of Hepatitis A in NC by Risk Factor, Jan. 1 2018 – August 20, 2018



Investigating Hepatitis A Cases

- **1-page supplemental questionnaire (in addition to part 2 form) captures housing status (available on CD manual)**
- **Please assess MSM status, use of injection or non-injection drugs, homelessness/transiency, and recent incarceration for each hepatitis A case**
- **Recent revisions to NC EDSS include space to enter data on all risk factors of concern**

Supplemental Questionnaire

North Carolina Division of Public Health Hepatitis A Supplemental Case Report Form

Interview Date: _____

Patient Information:

Last Name: _____ First Name: _____

Date of Birth: _____

NCEDSS ID: _____

****Please use this form in conjunction with the Part 2 form to complete the NC EDSS hepatitis A risk history package****

Has the patient ever had sexual contact with a male? (answer for male cases only)

Yes No Unknown Refused to answer

Risk History: From 50 days prior to onset of symptoms...

Question	Yes	No	Unk	If yes, name and location	If yes, start date	If yes, end date
Did the patient spend the night at a friend's or family member's home?						
Did the patient spend the night at a shelter?						
Did the patient spend the night on the street?						
Did the patient spend the night at a jail/prison/detention center?						
Did the patient spend the night at a rehab/detox/congregate living facility?						
Did the patient spend the night at another type of location?						
Did the patient work for, or volunteer at, a place that serves homeless people?						

NC EDSS Risk History Package

Behavioral Risk and Congregate Living		TO (Symptom Onset Date):
FROM (50 days prior to onset of symptoms):	<input type="text"/>	<input type="text"/>
During the period of interest did the patient stay in any congregate living facilities or other locations that were not their primary residence? ⓘ ⓘ	01. Correctional facility Add New	
During the period of interest, has the patient attended any social gatherings or crowded settings?	01. Correctional facility	
SUBSTANCE USE	02. Barracks	
During the timeframe specified above, has the patient used injection drugs not prescribed by a doctor?	03. Shelter	
During the timeframe specified above, has the patient used NON-injection street drugs?	04. Commune	
SEXUAL RISK	05. Boarding school	
During the timeframe displayed above, has the patient had sexual contact with a confirmed or suspected case of this disease?	06. Camp	
During the timeframe shown above, has the patient had sexual contact with a FEMALE?	07. Dormitory, sorority, fraternity	
During the timeframe shown above, has the patient had sexual contact with a MALE?	08. Rehab or detox center	
Specify number of male sexual partners during timeframe above	09. Friend or family member's home	
Has the patient EVER had sexual contact with a MALE?	10. On the street	
In what setting was the patient most likely exposed?	zz_No	
	zz_Other	
	Yes <input type="checkbox"/>	
	No <input type="checkbox"/>	
Other Exposure Information		
Does the patient know anyone else with similar symptoms?	<input type="text"/>	
During the period of interest did the patient have contact with sewage or human excreta?	<input type="text"/>	
Food Risk and Exposure		
During period of interest, did the patient eat any raw or undercooked seafood or shellfish (i.e., raw oysters, sushi, etc.)?	<input type="text"/>	
Describe the source of drinking water used in the patient's home. (Check all that apply)	<input type="checkbox"/> Bottled water supplied by a company <input type="checkbox"/> Bottled water purchased from a grocery store <input type="checkbox"/> Municipal supply (city water) <input type="checkbox"/> Well water	
Where does the patient or patient's family typically purchase groceries? Store Name:	<input type="text"/>	
Did the patient eat any food items during the period of interest that came from a produce stand, flea market, or farmers market?	<input type="text"/>	
Did the patient eat any food items during the period of interest that came from a store or vendor where they do not typically shop for groceries?	<input type="text"/>	
Occupational Exposure		
FROM (50 DAYS PRIOR TO SYMPTOM ONSET):	<input type="text"/>	UNTIL (SYMPTOM ONSET): <input type="text"/>
During the period of interest did the patient do any of the following:		ⓘ
Employed as food worker? (Note: Update in Risk Questions - Part 1 package)	<input type="text"/>	
Where employed?	<input type="text"/>	
Non-occupational food worker (e.g. potlucks, receptions) during contagious period?	No <input type="checkbox"/>	
Health Care worker or child care worker handling food or medication in the contagious period?	No <input type="checkbox"/>	
Did the patient work for, or volunteer at, a place that serves homeless people?	No <input type="checkbox"/>	
Comments	<input type="text"/>	

Investigating Hepatitis A Cases (cont)

- Genotyping is generally recommended for all cases unless non-outbreak source is identified (e.g. international travel)
- Specimen should be sent to SLPH and will be forwarded to CDC for genotyping
 - Original IgM+ sample is preferred, but recollection within 30 days of onset is acceptable. At least 1 mL is required
 - Use serum separator tube or EDTA plasma labeled with patient name, date of birth. Include DHHS # 3445 form requesting hepatitis A genotyping
 - Freeze and send and dry ice

Outbreak Prevention and Response: Call to Action

Actions for Local Health Departments

- 1. Identify partners in your communities who interact with high-risk populations**
- 2. Develop a plan to increase vaccination of high-risk populations**
- 3. Discuss plan with your regional immunization consultant or the state immunization office**
 - Assess need for state-supplied vaccine**
 - Identify and address barriers to conducting off-site vaccine clinics**
- 4. Track your progress**
- 5. Communicate with providers, partners, and media**

Planning for Prevention

CDC Guidance for Public Health Response

- **Provide hepatitis A vaccine to people who are homeless, people who use injection and non-injection drugs, MSM, and others with established risk factors who are not yet immunized**
- **Consider hepatitis A vaccination for anyone with ongoing, close contact with people who are homeless or people who use injection and non-injection drugs**

Hepatitis A vaccination coverage, 2016-U.S.

- Coverage (≥ 2 doses) was
 - 9% for adults ≥ 19 years,
 - 13% for adults 19-49 years, and
 - 5% for adults ≥ 50 years
- Adults 19-49 years, coverage for blacks (10%) was lower than that for whites (14%)
- Among adults 19-49 years with chronic liver conditions, coverage was only 23%

Actions for Local Health Departments

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1) Identify your high-risk population

- **Where are they?**
- **Who works with them?**
- **How do you successfully reach them?**

1) Identify Your Partners (contd)

- LHD STD Clinics
- Indigent Care/Free Clinics
- Jails/Detention Centers
- Syringe Exchange Programs
- Methadone Clinics
- Substance Abuse Treatment Centers
- Homeless Shelters
- Behavioral Health Programs
- Hospital ED/Ambulatory Care
- FQHCs
- LGBTQ Community Orgs
- LGBTQ Pride Events
- Bars/Nightclubs

2) Develop a Plan to Increase Vaccination

- **Convene your Epi Team**
- **Get buy-in from your local leaders**
- **Gather your partners**
- **Identify your high-risk populations**
- **Select your vaccination strategies**

2) Develop a Plan (cont)

Follow Vaccine Storage and Handling (VSH) Principles

- a) Right equipment**
- b) Right monitoring**
- c) Right training**
- d) Right planning**
- e) Right response**
- f) Right resources**

3) Discuss Plan with Immunization Consultants

- **Assess need for state-supplied vaccine (available for high-risk populations through Immunization Branch)**
- **Review your standing orders and equipment needs**
- **Identify and address barriers to conducting off-site vaccination clinics**
- **Conduct training**

4) Track Your Progress

Decide how to track your metrics

- **Vaccination**

- Date, venue, number of doses offered, number of doses administered

- **Education**

- Date, venue, number of presentations given, number of persons reached

5) Communicate with Providers, Partners, and Media

- **Use your metrics**
- **Give them feedback on how you are progressing**
- **Share your success story**
- **Check our website for updates**

5) Educate Providers - Communication Strategy for Vaccination - example



- “I reviewed your record.”
- “It’s time for shots.”

- “We’re having a hepatitis outbreak.”
- “Your situation puts you at risk.”

- “I strongly recommend this vaccine.”
- “Let’s vaccinate today.”

<https://www.hpviq.org/>

Action Items for NC LHD Response Phase

- Investigate hepatitis A reports upon receipt
- Plan for post exposure prophylaxis administration with CD Branch, Immunization Branch
- Discuss submission logistics of serum for CDC genotyping with CD Branch
- Identify skilled resources for enhanced interviewing
- Communicate with providers, partners and media

Hepatitis Post Exposure Prophylaxis

- Immune Globulin dosage now 0.1 ml/kg
- Give hepatitis A vaccine when IG is not available
- One dose of single-antigen HAV vaccine is 95% effective in preventing infection



Hepatitis A Vaccine

Products, Reporting, Offsite Administration, etc.

Beth Meadows, RN, MSN
NC Immunization Branch

Hep A
Products
(Licensed in
the US)

Havrix

Vaqta

Twinrix

Havrix

HAVRIX^{®1}

Licensed dosages and schedules for HAVRIX^{®1}

Age	Dose (ELISA units) ²	Volume (mL)	No. of doses	Schedule (mos) ³
12 mos-18 yrs	720	0.5	2	0,6-12
≥19 years	1,440	1.0	2	0,6-12

¹Hepatitis A vaccine, inactivated, GlaxoSmithKline.

²Enzyme-linked immunosorbent assay units.

³0 months represents timing of the initial dose; subsequent numbers represent months after the initial dose.

Adult Havrix, pre-filled syringes- currently only single antigen adult Hep A product available via the NCIP. Product availability is subject to change at any time.

Vaqta

VAQTA^{®1}

Licensed dosages and schedules for VAQTA^{®1}

Age	Dose (U.) ²	Volume (mL)	No. of doses	Schedule (mos) ³
12 mos-18 yrs	25	0.5	2	0,6-18
≥19 years	50	1.0	2	0,6-18

¹Hepatitis A vaccine, inactivated, Merck & Co., Inc.

²Units.

³0 months represents timing of the initial dose; subsequent numbers represent months after the initial dose.

Twinrix



TWINRIX^{®1} (HepA/HepB) Vaccine Schedule (Not recommended for post exposure prophylaxis)

Licensed dosages and schedules for TWINRIX^{®1}

Age	Dose (ELISA units) ²	Volume (mL)	No. of doses	Schedule
≥ 18 yrs	720	1.0	3	0, 1, 6 mos
≥ 18 yrs	720	1.0	4	0, 7, 21-30 days + 12 mos ³

¹Combined hepatitis A and hepatitis B vaccine, inactivated, GlaxoSmithKline.

²Enzyme-linked immunosorbent assay units.

³This 4-dose schedule enables patients to receive 3 doses in 21 days; this schedule is used prior to planned exposure with short notice and requires a fourth dose at 12 months.



Product Considerations

- Post-exposure vs Pre-exposure
- Populations Served

Pre-exposure for High Risk

**Administer 2 doses of Havrix or Vaqta 6 months apart
OR 3 doses of Twinrix at 0, 1, and 6 months**

High Risk Individuals



MSM
Homeless
Injection/Non injection Drug
Use
Individuals with clotting-factor
disorders, such as hemophilia

**12mo-18 yr
older**

Pediatric Havrix- .5 ml
Or
Pediatric Vaqta .5 ml

19 yr or older

Adult Havrix- 1 ml
Or
Adult Vaqta 1 ml

18 yr or

Twinrix 1 ml

Single Antigen Hep A vs. Twinrix

Known exposure to Hep A in the past two weeks? Yes- Single Antigen

Documented completion of either the Hep A or Hep B series? Yes- Single Antigen

Ability to complete the Twinrix series? (e.g. short term inmate vs. long term inmate)?
Yes- Twinrix



Dose 2?

“While manufacturers have supply to meet current demand, CDC and vaccine manufacturers continue to monitor ongoing demand for and usage of adult Hepatitis A vaccine closely” (CDC, March 2018).



Latex Allergy?

Hepatitis A	Havrix	YES – Syringe NO – Vial
	Vaqta	YES – Syringe YES – Vial

Twinrix	YES – Syringe NO – Vial
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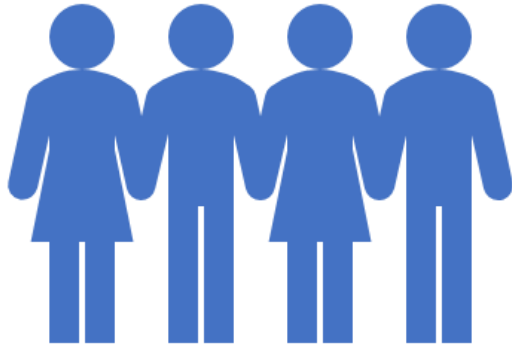
Eligibility

Twinrix- HepA/HepB Combination (Twinrix®)	≥ 18 years	UNINSURED ADULT USE	<u>LHD/FQHC/RHC Only:</u> Any uninsured adult who meets one or more of the ACIP recommended coverage groups can receive a three-dose series of the combination Hep A/Hep B vaccine at the LHD, FQHC, or RHC. State-supplied Hep A/Hep B vaccine cannot be used for the accelerated schedule, four dose series or for persons with a documented history of a completed hepatitis A or B series.
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Hep A- Any high risk individual regardless of insurance status* LHDs can now order through the NCIR.

*Insurance status is still required to be assessed and documented


Community Health Assessment?



- Populations at risk
- Potential Community Partners (e.g. homeless clinics, safe syringe programs, LTGB advocacy groups)



Reporting Doses- NCIR



UAT Region (T4) 10.2.0
.....

General
system user manual

Maintenance
manage users
manage sites
manage clinicians
manage physicians
manage schools
mass vax definition

Inventory
manage inventory
manage orders
manage transfers
manage returns
flumist replacement
request transaction sum
request vaccine usage
request wasted/expired
inventory report
vaccine accountability
inventory count

Clients
manage client
mass vax grid entry

Immunizations

- Enter at time of administration or by close of business day
- Can use Mass Vax Function in the NCIR

NCIR- Mass Vax Function



Use only for mass vaccination efforts



Can enter up to five patients at one time



Must set up a definition in order to use (use a standardized way to name your definitions (e.g. Name of Vaccine / State or Private / Lot Number))

NCIR- Mass Vax- Training Tool

<https://immunize.nc.gov/providers/ncireducation.htm>

The screenshot shows the NCDHHS website interface. At the top left is the NCDHHS logo. To its right are the logos for 'Women's and Children's Health Home' and 'NCPH North Carolina Public Health'. Below these are navigation tabs: 'My FAMILY & Me', 'HEALTHCARE PROVIDERS', 'SCHOOLS & CHILD CARE FACILITIES', 'RESEARCHERS & MEDIA', and 'Home'. The 'HEALTHCARE PROVIDERS' tab is active. On the left is a green sidebar menu with items: 'Immunization Home', 'Healthcare Providers', 'Provider Education', 'NCIP Requirements', 'NCIR', 'NCIR Education', 'Data Exchange', 'Resources', 'About Us', 'Contacts', 'Related Sites', 'CDC's Vaccine Website', and 'Vaccines.gov'. The main content area shows the breadcrumb path: 'DHHS > DPH > WCH > Immunization > Providers > Provider Education > Training Opportunities > NCIR Education'. Below this is the 'North Carolina Immunization Branch' logo and the heading 'NCIR Education'. The text reads: 'The following trainings are related to NCIR users and their specific roles in the registry. User roles include reports-only, typical user, inventory control, and administrators. The user roles are defined as follows:'. A list of user roles follows:

- Reports-only:** The reports only user is able to search for clients and print client specific immunization records. This user may not edit or update information in the registry.
- Typical User:** This user role is the most common in the NCIR. The typical user finds, adds, and edits client records, manages immunization information, and edits immunization consent for clients. The

A large blue arrow points from the left towards a list of training materials and reports. The list includes:

- [NCIP Borrowing and Replacing Policy and the NCIR](#) (PPT, 1.36 MB)

Trainings for Administrators

- [Adding and Editing Users](#) (PPT, 283 KB)
- [Adding and Editing Clinicians and Physicians](#) (PDF, 1.08 KB)
- [Reporting and Returning Expired Vaccine](#) (PPT, 474 KB)
 - Supplemental document: [Documenting half-doses of expired flu](#) (PDF, 15KB)
- [Reporting Wasted Vaccine](#) (PPT, 1.14 MB)
- [Inventory Reconciliation](#) (PPT, 2.10 MB)
- [Accountability Report](#) (PPT, 681 KB)
- [Using the NCIR as a Clinical Tool](#) (PPT, 864 KB)
- [Mass Vaccination](#) (PPT, 231 KB)
- [Strategies for Improving Immunization Rates](#) (PDF, 456 KB)

Reports in NCIR for Administrators

- [...](#)

Doses Administered Form

- Complete in addition to NCIR documentation
- Only note individuals vaccinated as part of this Hep A response (exclude routine Hep A vaccines from form)
- Submit via email or fax to the NCIP by COB each Friday

2018 Hepatitis A Response
Vaccine Reporting Form
North Carolina Immunization Branch

Agency: _____
Date: _____
Reported by: _____
Phone: _____
Email: _____

High Risk Population Vaccination

Please only report vaccine administered in response to the Hepatitis A event. *All doses of vaccine must also be documented in the NCIR.*

<u>Product</u>	<u>Doses Administered</u>
Adult Hepatitis A vaccine (ages 19 and older)	

<u>Product</u>	<u>Doses Administered</u>
Pediatric Hepatitis A vaccine (ages 12 months-18 years)	

Please submit to the Immunization Branch by close of business each Friday.

Caroline Helton- Fax: (919) 870-4824 or Email: caroline.helton@dhhs.nc.gov

Additional Screening and Documentation Forms

“Don't reinvent the wheel, just realign it” ~Anthony J. D'Angelo

Mass Clinic Form (NCIR homepage under “Resources on the web”)

North Carolina Immunization Registry Mass Clinic Form

Name of Organization: _____ Chart Number: _____

YOU MUST COMPLETE ALL FIELDS BELOW.

Information collected on this form will be used to document authorization for receipt of vaccine(s).

Patient's Name (Last, First, Middle Initial)		Mother's Maiden Name (Last, First, Middle Initial)	
Date of Birth (mm/dd/yyyy)	Gender <input type="checkbox"/> Male <input type="checkbox"/> Female	Ethnicity (Check One) <input type="checkbox"/> Hispanic <input type="checkbox"/> Non-Hispanic	
Race (Check all that apply) <input type="checkbox"/> Asian <input type="checkbox"/> American Indian or Alaskan Native <input type="checkbox"/> White <input type="checkbox"/> Unknown <input type="checkbox"/> Black or African American <input type="checkbox"/> Native Hawaiian or Other Pacific Islander <input type="checkbox"/> Other Race			
Name of Parent or Guardian Responsible for Patient (Last, First, Middle Initial)		Relationship to Patient	
Address		P.O. Box	
City	County	State	Zip Code
Email Address (if applicable)	Home Telephone Number ()	Work Telephone Number ()	Extension

PLEASE ANSWER ALL OF THE FOLLOWING:

- Is the person to be vaccinated sick today? YES NO
- Does the person to be vaccinated have an allergy to a component of the vaccine? YES NO
- Has the person to be vaccinated ever had a serious reaction to influenza in the past? YES NO
- Has the person to be vaccinated ever had Guillain-Barré syndrome? YES NO
- Are you currently pregnant? YES NO

I am authorized by the parent, guardian, or person standing in loco parentis of the above-named child to obtain needed immunizations for the child.

If parental designee have received the "Vaccine Information Statements" (VIS) about the disease(s) and vaccine(s). I have had a chance to review the VIS(s) and to ask questions that were answered to my satisfaction. I understand the benefits and risks of the vaccine(s) and request the vaccine(s) indicated below to be given to me or the person named above for whom I am authorized to make this request.

SIGNATURE – Person to receive vaccine or person authorized to sign on the patient's behalf Date Signed _____

FOR OFFICE USE ONLY:

Eligibility: American Indian/Alaskan Native Medicaid Not Insured Underinsured NC Health Choice Insured

Vaccine	Trade Name	Lot #	VIS Pub. Date	Date VIS Presented	Body Route	Body Site*	mL.
Influenza					IM	RV LV RD LD	
PPSV					IM SC	RV LV RD LD	
Other							

* RV = Right Vastus Lateralis LV = Left Vastus Lateralis RD = Right Deltoid LD = Left Deltoid BN = Bilateral Nares RN = Right Naris LN = Left Naris

SIGNATURE AND TITLE – Person Administering Vaccine

Date Vaccine Administered

Screening for Risk Factors and Contraindications

Patient name _____ Today's date _____ / _____ / _____
 Identification number _____

Should You Be Vaccinated Against Hepatitis A?

A SCREENING QUESTIONNAIRE FOR ADULTS

Hepatitis A is a serious liver disease caused by the hepatitis A virus (HAV). Hepatitis A virus is found in the feces (poop) of people with hepatitis A. Hepatitis A can be spread by having close personal contact with an infected person, such as by living with or having sex with an infected person. It can also be spread by eating food or by drinking water that has been contaminated with hepatitis A virus – either when in the U.S. or when traveling in other countries. Symptoms of hepatitis A can include yellowing of the skin and eyes, nausea, fever, fatigue, belly pain, and dark urine. You can be sick for several weeks. Sometimes hepatitis A is fatal.

The Centers for Disease Control and Prevention (CDC) recommends hepatitis A vaccination for all children in the United States when they are one year of age, certain children age 6 through 11 months who are traveling outside the U.S., all people who are in risk groups, or for people who want to avoid hepatitis A infection. Please review the list below to see if you should be vaccinated.

Some people should have their blood tested to find out if they have already been infected with hepatitis A. Talk to your healthcare provider about whether this applies to you.

You should be vaccinated if any of the following apply to you:

- I want to be vaccinated against hepatitis A to avoid an infection in the future.
- I travel or work in areas outside the United States where hepatitis A is common. (This includes everywhere except Australia, New Zealand, Northern and Western Europe, Japan, and Canada.)
- I have (or will have) contact with an adopted child within the first 60 days of the child's arrival from a country where hepatitis A is common. (See previous bullet for locations.)
- I have chronic liver disease.
- I have a blood clotting-factor disorder (for example, hemophilia).
- I am a man who has sex with men.
- I use street drugs (injectable or noninjectable).
- I might have been exposed to the hepatitis A virus in the past two weeks.

Screening Checklist for Contraindications to Vaccines for Adults

PATIENT NAME _____
 DATE OF BIRTH _____ / _____ / _____

For patients: The following questions will help us determine which vaccines you may be given today. If you answer "yes" to any question, it does not necessarily mean you should not be vaccinated. It just means additional questions must be asked. If a question is not clear, please ask your healthcare provider to explain it.

	yes	no	don't know
1. Are you sick today?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Do you have allergies to medications, food, a vaccine component, or latex?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Have you ever had a serious reaction after receiving a vaccination?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Do you have a long-term health problem with heart disease, lung disease, asthma, kidney disease, metabolic disease (e.g., diabetes), anemia, or other blood disorder?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Do you have cancer, leukemia, HIV/AIDS, or any other immune system problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. In the past 3 months, have you taken medications that affect your immune system, such as prednisone, other steroids, or anticancer drugs; drugs for the treatment of rheumatoid arthritis, Crohn's disease, or psoriasis; or have you had radiation treatments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Have you had a seizure or a brain or other nervous system problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. During the past year, have you received a transfusion of blood or blood products, or been given immune (gamma) globulin or an antiviral drug?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. For women: Are you pregnant or is there a chance you could become pregnant during the next month?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have you received any vaccinations in the past 4 weeks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FORM COMPLETED BY _____ DATE _____

FORM REVIEWED BY _____ DATE _____

Did you bring your immunization record card with you? yes no

It is important for you to have a personal record of your vaccinations. If you don't have a personal record, ask your healthcare provider to give you one. Keep this record in a safe place and bring it with you every time you seek medical care. Make sure your healthcare provider records all your vaccinations on it.



Saint Paul, Minnesota • 651-647-9009 • www.immunize.org • www.vaccineinformation.org

Technical content reviewed by the Centers for Disease Control and Prevention
 www.immunize.org/otag-dj9-2190.pdf • Item #P2190 (5/18)



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Technical content reviewed by the Centers for Disease Control and Prevention
 www.immunize.org/otag-dj9-4065.pdf • Item #P4065 (4/18)

Off Site Efforts

- Follow storage and handling requirements- Non-viable vaccine will not prevent disease!
- Transport and store vaccines in an approved unit (e.g. mobile vaccine unit, hard-sided cooler) using a digital data logger (Do not ship the vaccine to the site)
- Check and record vaccine temperatures hourly and at the end of the session or day
- Keep the transport unit closed as much as possible (taking out no more than one multi-dose vial or ten manufacturer pre-filled vaccine syringes at one time)
- Properly store vaccines and water bottles upon returning to facility (Do not leave vaccines in the transport unit overnight)
- Handle preventative maintenance of the cold chain equipment per manufacturer guidelines

Call the NCIP immediately for out
of range temperatures-
919-707-5574

Other Important Reminders...

Check standing orders to ensure they are clinically accurate and signed by a physician within the past 12 months

Have emergency protocols available and ready to be implemented (check expiration date for Epinephrine)

Same clinic standards apply when outside the clinic walls (providing VIS, administration documentation, screening for eligibility status and contraindications, additional agency requirements (e.g. written consent?), disposal of syringes, etc.).

Suggested items...

Immunization Action Coalition
<http://www.immunize.org/catg.d/p3046.pdf>

Supplies You May Need at an Immunization Clinic

Vaccines you may need²

Select the ones you need for the age of the patient you expect at your clinic.

Refrigerated (MMR may also be frozen)

- Diphtheria, tetanus, and pertussis (DTaP)
- DTaP-HepB-IPV (Pediaris)
- DTaP-IPV/Hib (Pentacel)
- DTaP-IPV (Kinrix, Quadracel)
- Haemophilus influenzae* type b (Hib)
- Hib-MenCY (MenHibrix)
- Hepatitis A (HepA)
- Hepatitis B (HepB)
- HepA-HepB (Twinrix)
- HepB-Hib (Comvax)
- Human papillomavirus (HPV)
- Influenza, injectable (IIV) (in season)
- Influenza, live attenuated intranasal (LAIV) (in season)
- Measles, mumps, rubella (MMR)
- Meningococcal ACWY
- Meningococcal B
- Pneumococcal conjugate (PCV13)
- Pneumococcal polysaccharide (PPSV23)
- Polio, inactivated (IPV)
- Rotavirus (RV)
- Tetanus-diphtheria, adult (Td)
- Tetanus, diphtheria, and pertussis (Tdap)
- Diluent[†] for ActHIB, Hibrix, MMR, MenHibrix, Menvivo, Pentacel, and Rotarix

Frozen (Never pack frozen vaccine with dry ice)

- Measles, mumps, rubella, varicella (MMRV)
 - Varicella
 - Zoster
 - Diluent[†] for MMRV, Varivax, and Zostavax
- For instructions on how to pack and transport vaccines, go to www.cdc.gov/vaccines/imz/ncvs/storage/toolkit/storage-handling-toolkit.pdf, pages 69–72.

Immunization Clinic Documentation

- Vaccine standing orders and protocols¹
- Vaccination administration record sheets¹ (i.e., medical records, if needed)
- Billing forms, if needed
- Screening Checklist for Contraindications to Vaccines for Children and Teens¹
- Screening Checklist for Contraindications to HPV, MCV4, and Tdap for Teens¹

- Screening Checklist for Contraindications to Vaccines for Adults¹
- Summary of Recommendations for Child/Teen Immunization¹
- Summary of Recommendations for Adult Immunization¹
- Immunization record cards for patients (pediatric and adult)¹
- Release of information forms
- Vaccine Adverse Events Reporting (VAERS) forms
- Schedules, including dates and times, of future immunization clinics

Emergency Supplies²

- Medical Management of Vaccine Reactions in Children and Teens¹
- Medical Management of Vaccine Reactions in Adults¹

First-line medication

- Epinephrine, aqueous 1:1000 dilution, in ampules, vials of solution, or pre-filled syringes, including epinephrine auto-injectors (e.g., EpiPen and Auvi-Q). If autoinjectors are stocked, at least 3 should be available (both pediatric and adult formulation, as needed).

Second-line medications: H₁ antihistamines (either or both of these)

- Diphenhydramine (e.g., Benadryl) oral (12.5 mg/5 mL liquid, 25 or 50 mg capsules/tablets) or injectable (50 mg/mL solution)
- Hydroxyzine (e.g., Atarax, Vistaril) oral (10 mg/5 mL or 25 mg/5 mL liquid, 10 mg or 25 mg tablets, or 25 mg capsules)

Other supplies for emergencies:

- Syringes (1 and 3 cc) and needles (22 and 25g, 1", 1½", and 2") for epinephrine or diphenhydramine
- Alcohol wipes
- Tourniquet
- Pediatric and adult airways (small, medium, and large)
- Pediatric and adult size pocket masks with one-way valve
- Oxygen (if available)
- Stethoscope
- Sphygmomanometer (child, adult, and extra-large cuffs)
- Tongue depressors

- Light source (e.g., flashlight for examination of mouth and throat)
- Wristwatch with a second hand or other timing device
- Telephone access to call 911

Vaccine and Miscellaneous Supplies²

- Appropriate storage units and monitoring equipment (thermometers) to maintain vaccine cold chain (see www.ezic.org/assets/docs/IMM-983.pdf)
- 1 or 2 needle disposal "sharps" containers
- 1 box of 3 cc syringes
- 22 and 25g needles
 - ½"; 1"; 1½"; 2"
- 1 box of medical gloves (appropriate size range for staff)
- Alcohol wipes
- Spot bandaids
- Rectangular bandaids
- 1" gauze pads or cotton balls
- Thermometers along with probe covers
- Certified calibrated thermometer for vaccine cooler, if needed
- Paper towels
- Bleach solution in spray bottle

Vaccine Information Statements (VISs)²

- Most current version associated with each vaccine used in the clinic (available in English and over 30 languages at www.immunize.org/vis)

Office Supplies

- Calendar
- Stapler/staples
- Pens
- Tape
- File folders
- Paper clips
- Scissors
- Post-its
- Pad of paper

¹ Always check the expiration dates of all vaccines, medications, and medical supplies before using! In addition, be sure to check that you have the most current versions of the VISs. To learn more about VISs, visit www.immunize.org/vis.

[†] Diluent should never be frozen.

[‡] These materials are available at www.immunize.org/handouts.

[§] These materials may be purchased at www.immunize.org/shop.

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ADDITIONAL HEPATITIS A VACCINATION RESOURCES

- CDC You Call the Shots Storage and Handling Training
<https://www2a.cdc.gov/nip/isd/ycts/mod1/courses/sh/ce.asp>
- Adult Hepatitis A Vaccine Package Inserts
 - <https://www.fda.gov/downloads/biologicsbloodvaccines/vaccines/approvedproducts/ucm224555.pdf>
 - <https://www.fda.gov/downloads/biologicsbloodvaccines/vaccines/approvedproducts/ucm110049.pdf>
- 2018 Recommended Immunization Schedule for Adults Aged 19 Years or Older, United States
<https://www.cdc.gov/vaccines/schedules/downloads/adult/adult-combined-schedule.pdf>
- Vaccine Manufacturer/Distributor Contact List (pg. 63)
CDC Vaccine Storage & Handling Toolkit
<https://www.cdc.gov/vaccines/hcp/admin/storage/toolkit/index.html>
- Hepatitis A Vaccine Information Statement
<https://www.cdc.gov/vaccines/hcp/vis/vis-statements/hep-a.pdf>



Regional Immunization Nurse Consultants North Carolina Division of Public Health North Carolina Immunization Program

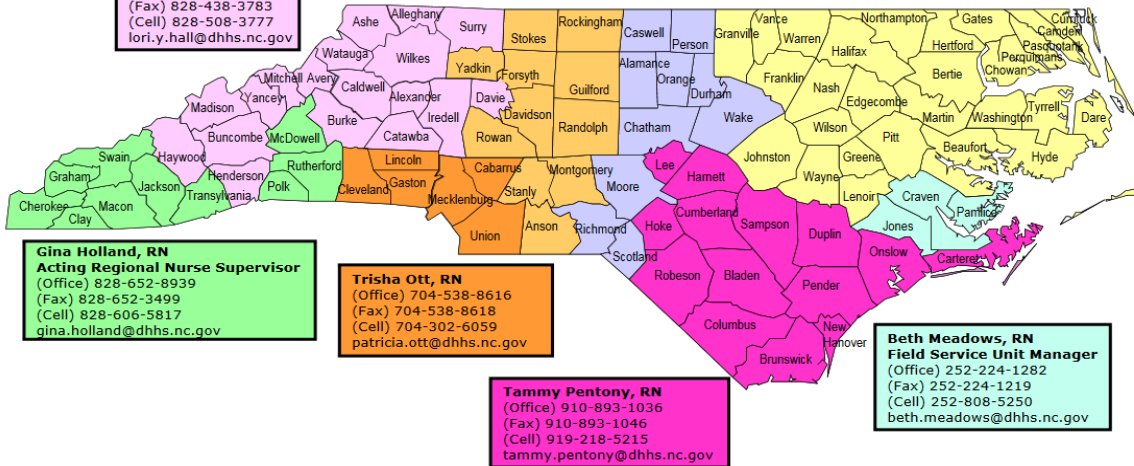


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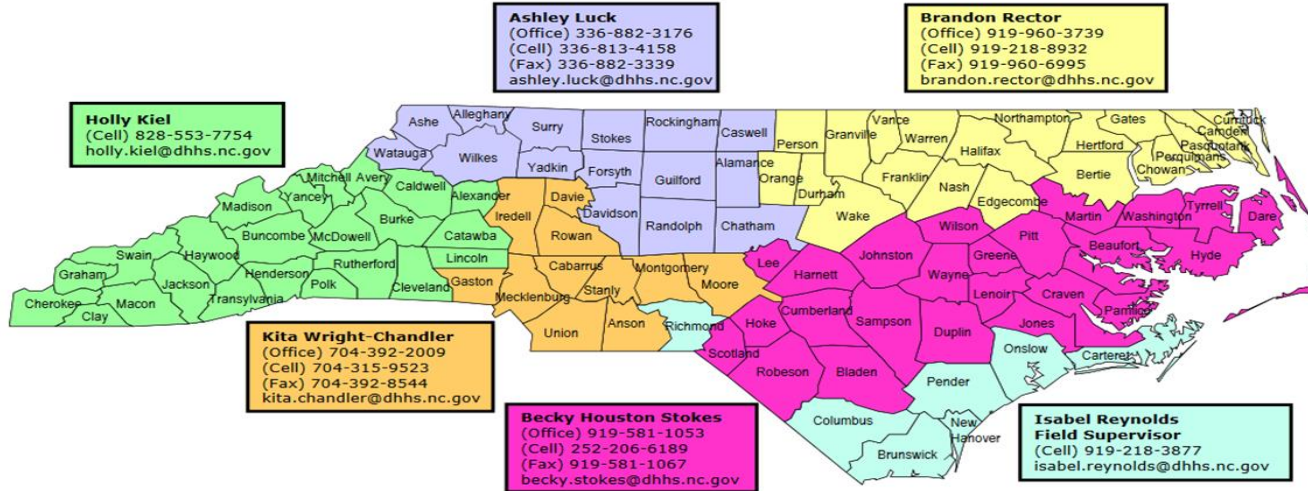
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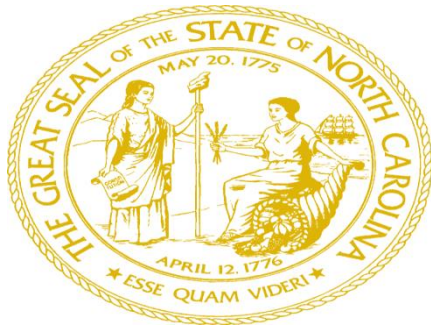
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Questions?

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