

Tabletop Exercise Scenario: Hepatitis A in a Hurricane Shelter



General Information

Exercise Objectives

- Discuss the execution of medical countermeasure materiel management, distribution/security transportation, resupply, inventory management, dispensing and procedures as outlined in SNS plan(s).
- Discuss local dispensing modalities per jurisdictional plans (including closed, open, traditional, drive thru, walk up, etc. for Points of Distribution [POD] locations), to include surge staffing support.
- Discuss the dissemination and collection of incident specific information using proper communication procedural chains.
- Discuss which stakeholders within the jurisdictions across public health, medical, law enforcement and other disciplines should be included in information exchange.
- Identify inter-jurisdictional public health stakeholders that should be included in the information exchange.
- Determine the levels of security clearance needed for information access across and between these stakeholders.

Exercise Structure

This exercise has the following 3 modules:

- Module 1: Power is On, Let's Open
- Module 2: Information and Investigation
- Module 3: Communication and Prophylaxis

Each module begins with an update that summarizes key events occurring within that time period. After the updates, participants review the situation and engage in jurisdictional group discussions of appropriate prevention/protection/mitigation/response/recovery issues. At the end of the jurisdictional group discussions, participants will engage in a moderated plenary discussion.

Exercise Guidelines

- This exercise will be held in an open, low-stress, no-fault environment. Varying viewpoints, even disagreements, are expected.
- Respond to the scenario using your knowledge of current plans and capabilities (i.e., you may use only existing assets) and insights derived from your training.
- Decisions are not precedent setting and may not reflect your organization's final position on a given issue. This exercise is an opportunity to discuss and present multiple options and possible solutions.

This exercise was developed as a part of the Georgia Hurricane Response Hub's Disaster Epidemiology workgroup. Funding for this activity has been provided to the National Network of Public Health Institutes (NNPHI) through a Cooperative Agreement with the Centers for Disease Control and Prevention (CDC – NU1ROT000004-01-00). NNPHI is collaborating with Rollins School of Public Health at Emory University and the CDC's National Center for Environmental Health on this project.

- Issue identification is not as valuable as suggestions and recommended actions that could improve prevention/protection/mitigation/response/recovery efforts. Problem-solving efforts should be the focus.

Exercise Assumptions and Artificialities

In any exercise, assumptions and artificialities may be necessary to complete play in the time allotted and/or account for logistical limitations. Exercise participants should accept that assumptions and artificialities are inherent in any exercise and should not allow these considerations to negatively impact their participation. During this exercise, the following apply:

- The exercise is conducted in a no-fault learning environment wherein capabilities, plans, systems, and processes will be evaluated.
- The exercise scenario is plausible, and events occur as they are presented.
- All players receive information at the same time.

Module 1: Power is On, Let's Open

October 8th

Hurricane Zelda made landfall just south of the coastal town of Safe City, GA resulting in multiple power outages affecting businesses and residential communities for the last 4 days. The power restoration began as soon as the storm passed, and re-entry was allowed. However, 250 residents are still without power and staying in a local Red Cross shelter. Many of the restaurants that lost power did not have alternate power sources and their food stocks most likely have spoiled and must be discarded. In addition to power outages, most areas have been under a boil water alert.

Power and water services have begun to come back, and restaurant owners have been cleaning and throwing out food. Some have started to open without a re-opening inspection from the local health environmental health office. Water sample results have begun to come back allowing restaurants without an emergency water plan to reopen. For the nearby community, the reopening of the restaurants is a big plus for the community due to power outages at their homes.

A popular licensed restaurant next to the Red Cross shelter, Pat's Pizzeria, is in the process of reopening and offers to provide dinner for all of the shelter residents and workers/volunteers – 300 total individuals of all ages. Shelter workers include Red Cross, Public Health, and Medical Reserve Corps volunteers. The Public Health employees and Medical Reserve Corps volunteers have signed up in the state's R-STaR system for tracking responders' health and safety. Environmental Health inspects the restaurant and gives it the green light to reopen and serve the large dinner.

That evening 15 employees from Pat's Pizzeria serve food prepared in-house at the Red Cross shelter via an assembly line. All 15 employees wear gloves to serve the food; hand sanitizers are provided at the beginning of the assembly line. All 250 residents and 25 of the employees/volunteers eat this meal.

Food items provided from the restaurant: Pizza (3 kinds: cheese, pepperoni, sausage), salad, hot dogs with buns, chocolate chip cookies, bananas, canned soft drinks, and water bottles.

Near the end of his double shift that evening, Ben, a 27-year-old male, already feeling very lethargic but thinking it is due to a long day at work, runs to the closest restroom in the shelter, vomiting and having diarrhea. He informs his boss that he is sick. She asks him to finish helping serve dinner (20 minutes), then sends him home.

October 9th

The next morning, after a night of continued GI illness, Ben notices that he eyes appear yellow and his urine is dark brown. Due to his dehydration and jaundiced appearance, he goes to the nearest Urgent Care facility. At the Urgent Care, the physician asks travel and symptom history questions and lab samples (blood, stool) are given. The physician tells him to rest, drink plenty of fluids and await a call regarding results.

October 11th

Two days after the medical visit, Ben receives a call from the Urgent Care – his Hepatitis A lab test was positive. Again, he is told to rest and drink plenty of fluids and call the office if symptoms worsen. Ben asks for an excuse for work – he is e-mailed one without being asked his occupation.

That same day, a Hepatitis A IgM+ lab result is reported in the State Electronic Notifiable Disease Surveillance System (SENDSS). Due to Hepatitis A's "Report Immediately" high priority status, local Epidemiology immediately begins follow-up – calling the case for an interview.

In the phone interview, Ben tells the district epidemiologist his symptoms and symptom onset date/time. When asked about risk factors, he admits to occasional non-injection drug use (pills). No travel outside the area this year. The epidemiologist asks his occupation and he answers that he is a cook/server at Pat's Pizzeria but thankfully, they hadn't yet reopened to the public since the hurricane. When probed further, he states that he worked a double shift a few days ago to prepare and serve food to a few hundred Red Cross shelter residents. When asked his specific job duties, Ben responds that he made pizzas (all of the steps), opened salad mix bags and poured them into large containers, adding tomatoes, croutons and shredded cheese on top. He also handled the cookies – removing them from packaging and placing them on serving trays. He served pizza slices at the shelter that evening but wore gloves the entire time. The epidemiologist then asked how confident was he that he wore clean gloves and performed handwashing before and during meal prep. He finally admits to not wearing gloves during most of it because he couldn't find any additional ones in his size after the first pair was soiled, and he was in a rush to get the job done.

The district epidemiologist immediately alerts her supervisor to the situation.

Key Issues - UPDATE

- A worker from the approved food service facility was serving food with bare hands to the shelter residents, employees and volunteers while sick with what was later confirmed to be Hepatitis A.

- Over 300 people may have been exposed to Hepatitis A. Symptomatic individuals may be presenting at emergency rooms.
- Timely dissemination of crucial information to leadership, partner agencies and the food service facility and public is critical.

Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 1. Identify any critical issues, decisions, requirements, or questions that should be addressed at this time.

The following questions are provided as suggested subjects that you may wish to address as the discussion progresses. These questions are not meant to constitute a definitive list of concerns to be addressed, nor is there a requirement to address every question.

Functional Groups

Epidemiology

- How and when would you expect your department to learn about this notifiable disease?
- What questions would you ask the reporting provider?
- What interview questions would you ask the case-patient?
- Would any additional lab testing need to be conducted? If yes, please list.
- At what point would you notify local public health leadership, emergency preparedness and response (EP&R), clinical, environmental health, and the state Department of Public Health epidemiology section?
- What would be your next steps?

Emergency Preparedness

- Upon notification by Epidemiology, would the State Operations Center (SOC) be activated?
- Would local incident command be established? What agency would take the lead in the incident command? What agencies would participate in the incident command? Who would the incident command notify after initial notification, activation, and setup?
- What other actions would the incident command take early on, after setting up?
- Who would be included in notifications by EP&R?
- What would be your next steps?

Clinical

- How quickly would you expect to learn about this Hepatitis A case? Who would inform you?
- What preparatory actions, if any, would you make after learning about the possibility of a Hepatitis A exposure emergency that would require large-scale prophylaxis of shelter residents/employees/volunteers?
- How would you continue to communicate if the incident command had been established? Who would you contact?
- Would there be any coordination calls taking place related to this event? If so, what would the calls cover and who all would be involved? How often would these take place?

- Would you expect to review employee/volunteer Hepatitis A vaccination records at this point in the incident?
- What would be your next steps?

Environmental Health

- How quickly would you expect to learn about this Hepatitis A case? Who would inform you?
- What actions would you make after learning about the possibility of a Hepatitis A case in a food handler?
- How would you continue to communicate if the incident command had been established? Who would you contact?
- Would there be any coordination calls taking place related to this event? If so, what would the calls cover and who all would be involved? How often would these take place?
- What would be your next steps?

Module 2: Information and Investigation

October 11th

Upon notification by Epidemiology, an assigned Environmental Health (EH) Specialist inspects the kitchen of Pat's Pizzeria, reviews the employee sick log and interviews the employees and owner. It is noted in the investigation that gloves were not readily available, and an employee admitted to handling ready-to-eat foods without wearing gloves. EH informs the owner that all susceptible (non-vaccinated) employees working with the case need to receive a Hepatitis A vaccine within 14 days of exposure. The owner agrees to cover the cost of this vaccination. Education is also provided to staff regarding symptoms/diseases that require notification to supervisor and immediate removal from food service.

State public health leadership contacts the Red Cross regarding the exposure at the shelter, both with potentially contaminated food and the men's restroom. Upon discussing the need for prophylaxis for all shelter residents and employees/volunteers, Red Cross faxes the resident list to the health department. However, now 4 days following the exposure, 75 of the 250 residents have left the shelter to return home. Public Health decides a POD (Point of Distribution) needs to be set up to provide this mass post-exposure prophylaxis (PEP) in the timeliest manner.

Key Issues - UPDATE

- Environmental Health has inspected the facility and discussed the employee health policy with specific reference to Hepatitis A. All employees, shelter residents and volunteers should get vaccinated. Unified public messaging is needed.
- Point(s) of Distribution (POD) for vaccinations are approved. Rumor control may be a necessary function. Public Health needs coordinated messaging internally and strong communications ties to its partners during the event.

Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 2. Identify any critical issues, decisions, requirements, or questions that should be addressed at this time.

The following questions are provided as suggested subjects that you may wish to address as the discussion progresses. These questions are not meant to constitute a definitive list of concerns to be addressed, nor is there a requirement to address every question.

Functional Groups

Epidemiology

- How would Epidemiology contact residents no longer at the shelter to inform them of the exposure and need for vaccination? Would additional resources be needed by Epi for this large-scale follow-up?
- Who is considered a “contact” in this investigation?
- How does Epidemiology track contacts (contact information, vaccine/immunity status)?

Emergency Preparedness & Response

- What is EP&R’s role to set up a POD to vaccinate those potentially exposed to Hepatitis A?
- How long would it take to obtain supplies, staff and setup a vaccination POD?
- What other actions would EP&R be involved with to prevent the spread of this disease?
- Is there an additional funding source that EP&R may access to pay for needed supplies?
- Is EP&R staff involved with stool or food sample collections?

Clinical

- What is the process to request Hepatitis A vaccines and IG from the state?
- How does Clinical assess vaccination status of contacts with no immunization records with them at the shelter?

Environmental Health

- What level and kind of PPE is used by the Environmental Health Specialist (EHS) during the site investigations?
- What type of risk factors is the EHS focusing on when assisting with the investigation?
- How soon can the employee return to work and how is this information obtained and conveyed to the person in charge at the restaurant?
- Is the EHS involved with collecting any food samples? If so, what? If not, why not?
- What type of EHS training is provided for taking food samples and shipping them?
- Does EH assist EPI with interviewing shelter residents that have already returned home?

Module 3: Communication and Prophylaxis

October 12th

Educational material is provided to the American Red Cross staff from EPI regarding symptoms/disease, exposure and prophylaxis. Health Advisory Alerts have been sent out to

the media to try and reach those individuals that did not provide accurate contact information while in the shelter.

A POD has been set up near the original shelter location for those possibly exposed. All shelter residents, employees and volunteers are encouraged to get vaccinated as soon as possible at the POD, local health department or at their physician's office.

Develop a Health Advisory Alert

- Health advisories are issued at the discretion of the public health district.
- District Public Information Officer (PIO) works with state Department of Public Health Communications to develop messages and to ensure dates are accurate.
- It is recommended to use date(s) that the food handler was symptomatic and worked instead of using the case's entire infectious period.
- Include the last date that prophylaxis can be administered to exposed patrons (last date of exposure plus 14 days).

Key Issues - UPDATE

- Educational materials are being provided.
- Unified public messaging is in progress.
- A POD has been setup near the shelter to dispense prophylaxis.

Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 3. Identify any critical issues, decisions, requirements, or questions that should be addressed at this time.

The following questions are provided as suggested subjects that you may wish to address as the discussion progresses. These questions are not meant to constitute a definitive list of concerns to be addressed, nor is there a requirement to address every question.

Functional Groups

All

- Who will be responsible for disseminating information to the general public regarding the monitoring of any related symptoms?
- How would that process look?
- Who will be first to receive prophylaxis?
- How will the decision be made to prioritize what quantities local jurisdictions will receive?
- Discuss maintaining distribution procedures for MCM (medical countermeasures) assets.
- Discuss the effect that a notification stating the incident was intentional and caused by an identified terrorist group will have on incident response efforts.
- Discuss how information about POD (open and closed) locations will be disseminated.
- Discuss how active duty individuals receive medications.

Epidemiology & Lab

- What is Epidemiology's role in the POD?

- What steps would be taken if a contact arrives to the POD with symptoms compatible with Hepatitis A?
- What documentation is Epidemiology responsible for in this response and where is that documentation stored once completed?

Emergency Preparedness & Response

- Has an incident command post been setup at the POD locations?
- What kind of staff is at the PODs?
- What kind of responder safety measures are in place?
- What kind of security is in place at the site?
- How can more supplies be obtained when a larger than possibly affected population shows up at a POD?

Clinical

- What is Clinical's role in a POD?
- How does Clinical determine who should receive PEP at the POD?
- For those receiving PEP, how does Clinical determine who should receive vaccine and who should receive IG?

Environmental Health

- Does Environmental Health have any tasks to perform at this time, or any role at a POD?
- What kind of messaging should be reinforced with the restaurant managers and owners during the environmental assessment?
- Should the Environmental Health Specialist (EHS) investigating the site be vaccinated for Hepatitis A? Should all EHS be vaccinated against other diseases? Is there a recommended list of vaccinations for EHS?

Appendix A: Public Health Investigation of Acute Hepatitis A Infections

Investigation for all hepatitis A laboratory reports should be started by District Public Health staff within 2 business days of being reported.

Note: Be sure to record all activities related to the investigation in the Progress Notes of the SendSS record in a timely manner.

Note: *All patients reported with a positive IgM anti-HAV and/or a Total anti-HAV test result should be investigated. For patients reported with only a Total anti-HAV result, acute infection cannot be ruled out until further investigation is completed.*

Step 1: Contact medical provider to obtain laboratory and clinical information:

- Verify reported lab results and any additional HAV lab results
 - For Total anti-HAV test results, determine if an IgM anti-HAV was ordered
 - For positive Total anti-HAV test results, additional testing will be needed if the patient was symptomatic
 - Determine liver enzyme (e.g., ALT & AST) and bilirubin results, if done
- Determine the reason for testing
- Determine any signs or symptoms of viral hepatitis: jaundice, nausea, vomiting, diarrhea, fever, headache, loss of appetite, abdominal pain, fatigue, dark urine, clay-colored stools, any other symptoms
- If patient was symptomatic, determine earliest date of onset. If patient is jaundiced, determine date of jaundice onset
- Confirm patient's demographics and contact information
- Determine any vaccination history
- Determine if patient has any co-infections (e.g., HIV, HCV, HBV, etc.)
 - Document HBV and HCV test results (negative and positive)
- If patient was hospitalized, record both the admission and discharge dates
- Determine any known risk factors known by provider, including recent travel, drug use history, whether patient is a food handler, etc.
- Document all clinical information in SendSS
 - Record information in both the main page and the case report form
- Notify State Hepatitis Program via SendSS message of any identified acute HAV cases

Step 2: For acute hepatitis A cases, interview patients immediately to:

- Complete risk assessment for the 2-6 weeks prior to the onset of symptoms
 - Determine risk factors for exposure
 - Recent travel outside of the USA or Canada – record dates of travel, countries visited, and who patient travelled with
 - Illicit drug abuse – route (e.g., IVU), drug of choice (e.g., meth), record names of any drug sharing partners
 - Sexual Preference
 - Number of sex partners – record names and contact information
- Determine any contact with a confirmed or suspect hepatitis A case
 - Record name, DOB, contact information, relationship to the patient and exposure date(s)

Calculate the patient's infectious period

(Date of symptom onset minus 14 days) *through* (date of symptom onset plus 7 days)

- Determine household and sexual contacts
 - Record name(s), DOB, relationship to patient, contact information, hepatitis A vaccine history, whether the contact is immunocompromised or has chronic liver disease, contact's weight (for IG) and exposure date(s)
 - Refer contact(s) for PEP if <14 days of exposure; PEP is available through public health
 - Enter information on all contacts in SendSS Hepatitis A CRF "Exposed Contacts" section
- Determine patient's occupation (e.g., food handler, school, public safety, etc.) and whether outreach will be necessary for occupational contacts
 - Food handlers with a confirmed acute HAV infection should be excluded from work for 14 days after onset of symptoms or 7 days after onset of jaundice

Appendix B: Hepatitis A Protocol for Food Handlers



Hepatitis A – Food Handler Investigation

Risk Assessment Investigation Steps for Exposed Coworkers and Patrons

Food handlers are not at increased risk for hepatitis A virus (HAV) because of their occupation. Most food handlers with HAV infection do not transmit HAV to exposed consumers, co-workers or restaurant patrons.¹ Thorough investigation is needed to determine risk to patrons and other staff at the food establishment. The guidance below outlines risk assessment questions to determine the need for post-exposure prophylaxis (PEP), which must be administered within 14 days of exposure.

Step 1: Interview confirmed hepatitis A case thoroughly. Verify/obtain the following information:

- **Symptoms:**
 - Confirm date of symptom onset
 - Confirm date of jaundice onset, if applicable
 - Identify date that diarrhea began, if applicable
 - Determine case's infectious period:
(Date of symptom onset minus 14 days) *through* (Date of symptom onset plus 7 days)
Example: Date of Onset: 1/15/19 → (1/15/19 - 14 days = 1/1/19 *through* (1/15/19 + 7 = 1/22/19)
- **Employer:**
 - Name of the facility/restaurant
 - Address of the facility
 - Supervisor/Manager's name
 - Verify if case notified Manger/Supervisor about illness
- **Work Schedule:**
 - Work Schedule – Days and Shifts
 - Date(s) worked while symptomatic
 - Date(s) worked with diarrhea, if applicable
 - Diarrhea event at work
 - Last date worked
- **Job Duties:**
 - Specific job duties
 - Types of food handled or prepared
 - Determine if case had bare-hand contact with food or drinks
 - Determine if case had contact with high-risk foods:
 - Lettuce, tomatoes, etc., on sandwiches that receive no further heating
 - Salads, vegetables and fruit at salad bars
 - Cold cuts (e.g., deli meat)
 - Cake icing
 - Ice scooped by hand or with a contaminated scoop
 - Garnishes for drinks (e.g., lemon wedges, lime wedges, olives, parsley...)
 - Determine whether any abnormal/atypical event(s) happened at work (e.g., different job duties)
- **Personal Hygiene:**
 - Verify if gloves worn while preparing/handling food
 - Access to handwashing facilities at work
 - Handwashing practices
 - Ask case to describe handwashing practices
 - Does case wash hands with soap after bowel movements?



Hepatitis A – Food Handler Investigation

Risk Assessment Investigation Steps for Exposed Coworkers and Patrons

- Does case wash hands with soap before preparing food?
 - Ask employee how/if they were trained on when to wash their hands.
 - Ask employee about any health reporting requirement training that was provided by the restaurant/facility management.
- Coworkers:
 - Did case prepare food for any coworkers?
 - Contact outside of work (e.g., roommates, close friends, share drugs...)

Step 2: Restrict case from returning to work until no longer infectious

- Instruct case not to return to work until approved by Regulatory Authority (e.g., Board of Health)
- The case will be excluded if they have vomited and/or had diarrhea within the past **14** days or had jaundice within the past **7** days. Report illness to the Regulatory Authority/Health Authority.
 - Employee Illness Quick Decision Guides: [Non-HSP](#) and [HSP](#)
- Medical clearance forms can be accessed [here](#).
- Resource: [DPH Environmental Health Rules and Regulations Food Service Rules](#)

Step 3: Notify District Environmental Health Director immediately about HAV-infected food handler

Environmental Health will inspect the facility and assist with investigation.

- Collaborate with Environmental Health to obtain the following from the facility Manager/Supervisor:
 - Verify date(s) that case worked during infectious period
 - Verify last date case worked
 - Verify case's exact duties
 - Glove usage protocol
 - Supervisor/Manager's knowledge of case's hygiene
 - Number of employees that work at the facility
 - Names, DOBs and contact information for exposed employees
 - Verify if Person-in-Charge (PIC) is knowledgeable about their employee health policy and training staff about employee health reporting requirements. (Exposed co-workers will need to be monitored for illness for 50 days of last exposure)
- DPH Environmental Health Program Contact: Galen Baxter, Food Service Program Director / Phone: 404-657-6534 / Galen.Baxter@dph.ga.gov

Note: Retail grocery stores and convenience stores are licensed and regulated by the United States Department of Agriculture (USDA). The Georgia Department of Agriculture (GDA) must be notified if we document a confirmed hepatitis A infection in a food handler employed by these types of facilities. GDA will inspect the facility and assist with the investigation.

(GDA District Office contacts: <http://www.agr.georgia.gov/district-offices.aspx>)

Step 4: Notify DPH Viral Hepatitis Epidemiology Program about HAV-infected food handler

- Notify Viral Hepatitis Epidemiology Program staff about the case. If the main contact is unavailable, call the Epidemiology Program's Receptionist at (404) 657-2588 to be routed to an alternate staff member.



Hepatitis A – Food Handler Investigation

Risk Assessment Investigation Steps for Exposed Coworkers and Patrons

Step 5: Notify District Immunization Coordinator of HAV-infected food handler

- Notify District Immunization Coordinator of case so that vaccine inventory can be accessed
 - Coordination of PEP will occur *after* Steps #6 and #7 are completed

Hepatitis A vaccine should be administered to other employees at the same establishment. IG may consider in addition to vaccine for persons who are immunocompromised or have chronic liver disease.

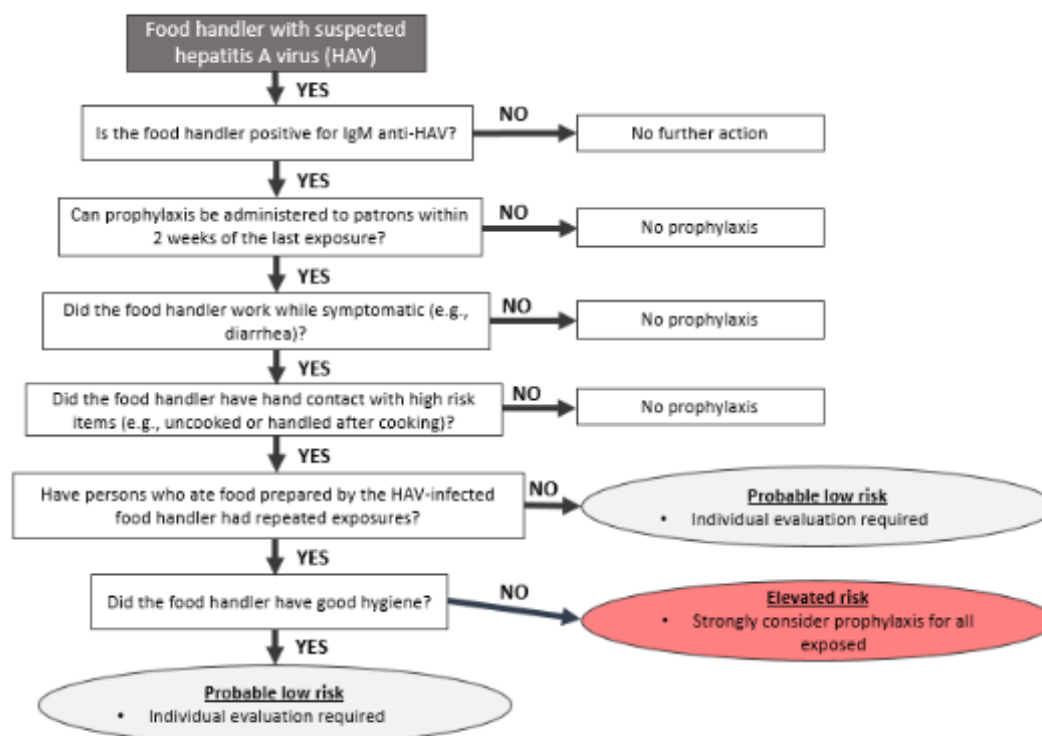
Step 6: Confirm Hepatitis A vaccination statuses for exposed employees using GRITS

- Query GRITS to determine if the contact was previously vaccinated for hepatitis A
 - Exposed contacts that are immunocompetent and have previously received two doses of HepA vaccine do not need additional prophylaxis (Additional PEP guidance can be found in DPH's document, *Hepatitis A Post-Exposure Prophylaxis (PEP) Decision Guide* (April 2019))

Step 7: Determine risk to patrons

- Assess risk using the algorithm below
- State Hepatitis Epidemiology staff can assist with risk assessment, if needed

Hepatitis A Post-Exposure Prophylaxis Algorithm for Food Handler Exposures - Patrons



Adapted from: https://www.cdc.gov/hepatitis/pdfs/fiore_ha_transmitted_by_food.pdf



Hepatitis A – Food Handler Investigation

Risk Assessment Investigation Steps for Exposed Coworkers and Patrons

Post-exposure prophylaxis (PEP) administration to patrons typically is not indicated but may be considered if 1) during the time when the food handler was likely to be infectious, the food handler both directly handled uncooked foods or foods after cooking and had diarrhea or poor hygienic practices, and 2) patrons can be identified and treated within 2 weeks of exposure, though the risk for individual patrons remains low.¹

PEP in this scenario should generally consist of vaccination for all age groups, though IG may be considered for exposed persons (patrons during the time the food handler was symptomatic and worked) who are immunocompromised or have chronic liver disease.¹

Additional PEP guidance can be found in DPH Viral Hepatitis Epidemiology Program's document: *Hepatitis A Post-Exposure Prophylaxis (PEP) Decision Guide* (April 2019).

Step 8: Coordinate Post-Exposure Prophylaxis (PEP) with District Immunization Coordinator

- Coordinate PEP of exposed food handlers, restaurant employees and patrons (if warranted)
 - Contact State Hepatitis Epidemiology Program staff for Immune Globulin (IG), if needed

Step 9: Develop Health Advisory Alert (if elevated risk to patrons is determined)

- Health advisories are issued at the discretion of the Public Health District
- Collaborate with District Public Information Officer (PIO) and DPH Communications to develop message and to ensure dates are accurate:
 - Recommended to use date(s) food handler was symptomatic and worked instead of using the case's entire infectious period
 - Include the last date that prophylaxis can be administered to exposed patrons
 - Last date of exposure plus 14 days
- DPH Communications Contact: Nancy Nydam, Director of Communications /
Phone: 404-657-2462 / Nancy.Nydam@dph.ga.gov

Step 10: Create Event in Outbreak Management System (OMS) in SendSS

- Document exposed contacts
 - Excel file can be uploaded instead of manually entering names
- Document the number of exposed contacts that received PEP (vaccine and IG)

¹ Update: Recommendations of the Advisory Committee on Immunization Practices for use of Hepatitis A vaccine for post-exposure prophylaxis and for international travel. MMWR. Morbidity and mortality weekly report; v. 67, no. 43, p. <https://stacks.cdc.gov/view/cdc/59777>

Revised 4.23.2019

Appendix C: Postexposure Prophylaxis Recommendations for Exposed Contacts

Recommendations for Postexposure Prophylaxis (PEP) for Exposed Contacts

NOTE: All Immune Globulin (IG) requests must be made through the Georgia DPH Hepatitis Program. Please have the age, weight, and exposure dates for each contact available before requesting IG.

- ✓ PEP should be given to contacts as soon as possible and within 14 days of exposure.
- ✓ Hepatitis A vaccine should be administered to all persons aged ≥ 12 months for PEP, unless otherwise contraindicated.
- ✓ In addition to HepA vaccine, IG may be administered to person >40 years, depending on the provider's risk assessment.
- ✓ Exposed contact(s) should monitor themselves for signs/symptoms of illness for 50 days after the last exposure, even if they received PEP. If symptoms develop the person should notify the health department and be tested for hepatitis A.

Immune Globulin (IG) only

- Infants aged <12 months
- Persons for whom vaccine is contraindicated:
 - Persons who have had a life-threatening allergic reaction after a dose of HepA vaccine
 - Persons who have a severe allergy to any component of this vaccine
- IG should be administered as soon as possible and within 14 days of exposure.

Hepatitis A (HepA) Vaccine only

- Immunocompetent (healthy) persons aged >12 months who have not previously completed the 2-dose HepA vaccine series
- HepA vaccine should be administered as soon as possible and within 14 days of exposure.

Immune Globulin (IG) and HepA Vaccine

- Persons aged >12 months who are immunocompromised and who have not previously completed the 2-dose HepA vaccine series (e.g., congenital or acquired immunodeficiency, HIV infection, chronic renal failure/undergoing dialysis, solid organ, bone marrow or stem cell transplant recipients and persons with diseases requiring treatment with immunosuppressive drugs/biologics (e.g., tumor necrosis alpha inhibitors), long-term systemic corticosteroids and radiation therapy)
- Persons aged >12 months who have chronic liver disease and who have not previously completed the 2-dose HepA vaccine series (e.g., hepatitis B infection, hepatitis C infection, cirrhosis (any etiology) fatty liver disease, alcoholic liver disease, autoimmune hepatitis, Alanine aminotransferase (ALT) or aspartate amino transferase (AST) level more than twice the upper limit or persistently elevated for 6 months)
- Special considerations:
 - Persons with increased risk factors for HAV infection (e.g., close contacts of person with HAV infection or occupational risks)
 - Persons with an increased risk for complications should be considered to receive IG and HepA vaccine (e.g., immunocompromised persons, persons with chronic liver disease)
- IG and HepA vaccine should be administered simultaneously in a different anatomic site (e.g., separate site) as soon as possible after exposure and within 14 days of exposure

Special Circumstances:

- Child-care center staff, attendees, and attendees' household members
 - PEP should be administered to unvaccinated staff and attendees if one or more cases of hepatitis A is identified or if a case of hepatitis A is identified in two or more households of center attendees
 - PEP should be administered to classroom contacts only in centers that provide care to older children that no longer wear diapers
 - If an outbreak is identified, PEP should be considered for household members that have diaper-wearing children that attend that center
- Common source exposure, such as an infected food handler
 - If a food handler is diagnosed with hepatitis A, PEP should be administered to other food handlers at the same establishment.
 - PEP is not typically indicated for patrons, but can be considered if the food handler had both direct contact with uncooked foods or foods after cooking and had diarrhea or poor hygiene practices or if patrons can be identified and treated within 2 weeks of exposure.

NOTE: IG would not routinely be recommended for:

- School settings, unless transmission within the school is documented.
- Hospital personnel caring for patients with hepatitis A disease, unless an outbreak among patients or between patients and staff is documented

Recommendations for Postexposure Prophylaxis, by Age Group and Risk Category

Indication/Age	Risk category/Health status	Hepatitis A vaccine	Immune globulin
<12 mos	Healthy	No	0.1 mL/kg
12 mos–40 yrs	Healthy	1 dose	None
>40 yrs	Healthy	1 dose	0.1 mL/kg
≥12 mos	Immunocompromised or chronic liver disease	1 dose	0.1 mL/kg
≥12 mos	Vaccine contraindicated**	No	0.1 mL/kg

Resources:

- Update: Recommendations of the Advisory Committee on Immunization Practices for Use of Hepatitis A Vaccine for Postexposure Prophylaxis and for Preexposure Prophylaxis for International Travel. MMWR Morb Mortal Wkly Rep 2018;67:1216–1220. DOI: <http://dx.doi.org/10.15585/mmwr.mm6743a5>
- Updated Dosing Instructions for Immune Globulin (Human) GamaSTAN S/D for Hepatitis A Virus Prophylaxis. MMWR Morb Mortal Wkly Rep 2017;66:959–960. DOI: <http://dx.doi.org/10.15585/mmwr.mm6636a5>