ASSOCIATION OF FOOD & DRUG OFFICIALS
Making a Difference

Preventing Illnesses Due to Hepatitis A

Ernest Julian, Ph.D.
President
Hepatitis A Incidence – United States, 2018*

Data Sources: NNDSS, US Census Bureau
Agenda

Welcome & Introductions –
   Dr. Ernest Julian, AFDO President,
   Rhode Island Dept. of Health
Monique Foster – CDC
Dr. Laura Brown – CDC
Lisa Hainstock – Michigan Dept. of
   Agriculture and Rural Development
MaryBeth DeMarco – Virginia Dept.
   of Health
Closing Remarks – Dr. Ernest Julian
Q&A
End
Hepatitis A Outbreaks—2016–Present

Monique A. Foster, MD, MPH
Centers for Disease Control and Prevention

September 27, 2019
Hepatitis A Virus (HAV)

- Replicates in the liver
- Acute illness
- Clinical manifestations: fever, jaundice, diarrhea, fatigue
- Average incubation period: 28 days
  - Peak infectious period 10-14 days prior to symptoms, 7-10 days after symptom onset
Hepatitis A Virus Endemicity in the United States

- The United States is a low endemicity country
- The number of reported cases in the pre-vaccine era was ≥ 21,000 infections annually
- In the pre-vaccine era, cyclical increases occurred every 10–15 years

Reported Hepatitis A Infections by MMWR Week, NNDSS — United States, 2017–Present

SHADED AREA INDICATES 8-WEEK PERIOD OF POTENTIAL SURVEILLANCE REPORTING LAG
What you need to know about Arizona's hepatitis A outbreak

Hepatitis A outbreaks up 132% in Va. compared to 2018

Yes, Kentucky is fighting back against nation's worst hepatitis A outbreak. Here's how

Hepatitis A spreading fast in Florida

Hepatitis A outbreak spreading in NH has already claimed a life
Hepatitis A Virus Outbreaks, United States, 2016–2019

- **State-reported outbreak information from 30 states**
  (July 2016 – September 2019)
  - Total cases: **26,013**
  - Hospitalizations: **15,643 (60%)**
  - Deaths: **262**

- **Outbreaks resolving in some states, increasing in others**

Epidemiology of Hepatitis A Infections

- **Shifting epidemiology**
  - Past outbreaks associated with asymptomatic children
  - Recent outbreaks primarily affecting adults, causing severe disease
    - Coinfection with hepatitis B, hepatitis C
    - Estimated millions of dollars in healthcare costs

- **Many cases among persons who use drugs or experiencing homelessness**
  - Person-to-person contact
  - Crowding, poor hygiene

Vaccination is the Cornerstone for Outbreak Response

- **Vaccination is Recommended to the Following Groups to Prevent or Control these Outbreaks**
  - People who use drugs (injection or non-injection)
  - People experiencing homelessness
  - Men who have sex with men (MSM)
  - People who are, or were recently, incarcerated
  - People with chronic liver disease
    - Including cirrhosis, hepatitis B, or hepatitis C

Update: Widespread Outbreaks of Hepatitis A among People Who Use Drugs and People Experiencing Homelessness across the United States

https://emergency.cdc.gov/han/han00418.asp
Bias in Public Awareness

- >60% cases report risk factors
  - Drug use, transient living, MSM, international travel
  - High proportion of “no risk” are loss to follow up or report close contact

- Current outbreaks are spread through person-to-person contact

- Majority of public reports reference infected food handlers
Foodborne Transmission of Hepatitis A Virus

- HAV contamination can occur at any point
  - Prepared foods contaminated by infected food handlers
  - Contaminated produce
  - Shellfish grown in contaminated waters

- Transmission from HAV infected food handlers has declined

Food handler with suspected hepatitis A

Is the food handler positive for IgM anti-HAV?

Can IG be administered within 2 weeks of the last possible exposure?

Did the food handler have hand contact with high risk items (uncooked or handled after cooking)?

Have persons who ate food prepared by the HAV-infected food handler had repeated exposures?

Did the food handler have good hygiene?

**Probable low risk**
Individual evaluation required
Give IG to other kitchen and restaurant employees*

**Probable low risk**
Individual evaluation required
Give IG to other kitchen and restaurant employees*

No further action

No IG prophylaxis

No IG prophylaxis

No IG prophylaxis

Strongly consider IG for all exposed

---

Prevention of Foodborne Transmission of Hepatitis A Virus

- Encourage proper handwashing
- Eliminate bare hand contact with foods that are ready to eat
- Empower managers and employees to talk about symptoms and diagnoses
- Exclude or restrict workers who have symptoms of hepatitis A infection
- Be aware of state-specific exclusion policies

Outbreak Communication and Education Materials

- For public and professional audience
  - Website
  - Fact sheets
  - Posters, pocket cards
  - Spanish translations

- Tailored materials for
  - People who use drugs
  - People experiencing homelessness
  - Gay or bisexual men

www.cdc.gov/hepatitis/HepAOutbreak
Thank You!

ydg9@cdc.gov
Protect Against Hepatitis A in Food Establishments with These Resources

Laura G. Brown, Ph.D.
Water, Food, and Environmental Health Services Branch
Division of Environmental Health Science and Practice
DEHSP Goal: Support and improve environmental public health practice
Environmental Health Services Newsletter

• Weekly newsletter on resources for environmental health professionals
• 54,000 readers
• www.cdc.gov/nceh/ehs
Protect Against Hepatitis A in Food Establishments with These Resources

Individuals infected with hepatitis A who work in food establishments can spread it to customers and other employees. Although foodborne outbreaks of hepatitis A are uncommon, they can require intensive and costly public health efforts to control.

Learn about three important actions food establishments can take to prevent illness.
Exclude III Food Workers: Infected Food Handlers Can Spread Hepatitis A Even If They Don’t Have Symptoms

- Exclude or restrict workers who have been diagnosed with or have symptoms of hepatitis A.

- Review local or state food codes to find specific exclusion and restriction criteria.

- Managers need to know if their workers are sick so they can decide if they should handle food. Learn what the Food Code, HIPAA, and ADA have to say about employee and manager conversations on foodborne illness.
Ensure Proper Hand Hygiene to Help Prevent the Spread of Hepatitis A

• Avoid bare hand contact with ready-to-eat foods.

• NOTE: Alcohol based hand sanitizer is not a substitute for washing hands with soap and water.
Practice Proper Disinfection to Get Rid of Hepatitis A on Surfaces

• Use disinfectants that are effective against hepatitis A.

• Review cleaning and disinfection procedures to make sure viruses are not spread throughout the kitchen, restrooms, or dining areas.

• Discard food handled by workers infected with hepatitis A and disinfect surfaces that might have touched contaminated food.

• Have a plan to clean up vomit or to keep germs out of the kitchen. Make sure staff know proper cleanup procedures.
Best Practices for Food Regulators and Retail Food Industry

Michigan’s Hep A Regulatory Response

Lisa Hainstock, R.S.
Food Safety Specialist
Michigan Department of Agriculture and Rural Development
Outline

• Brief Description of Michigan Outbreak
• Outreach to Food Industry
• Industry Response examples
• Lessons Learned
2016-2019 HAV in Michigan

920 Cases
738 Hospitalized
30 Deaths

Confirmed Hepatitis A Case Onset by Week for the Michigan Outbreak for cases referred August 1, 2016 to September 25, 2019

*If illness onset was not identified from lab collection date was used instead.*
HAV Risk Factors Identified in Michigan

- Documented Substance Abuse: (434)
- Homeless/Transient Living: (112)
- Men Who Have Sex with Men (MSM): (78)
- Correctional Facility Inmates: (66)
- Chronic Liver Disease, History of Hepatitis B or C: (247)
Food worker transmission to the public became a bigger concern in 2017

- 2016-mid 2017 - Infected food worker numbers small (n=6)

- By end of 2017, 22 cases and rising

- Food workers cases mirroring the general outbreak population – same risk factors

- If it’s hard to reach high risk population, how to reach food employees??
Preventing food-related HAV outbreaks through PARTNERSHIPS

LOCAL HEALTH DEPARTMENTS

FOOD INDUSTRY
Marketers claim people need hear something seven times before they act on it

• PR on ill worker incidents; PEP/vaccine
• Industry association publication articles
• Food Safety Task Force and conference presentations
• Grant to MRA to provide online ServSafe for free in high incidence HAV area
• Informational mailer sent to over 55,000 food and dairy establishments statewide
  • snail and email
• Inspector handouts and messaging
Outreach Tools and Products

• Information for food manager/operators
• Poster for food workers
• Disinfection guidance (with MDHHS)
• Infographics
• Multiple languages available in online versions
IMPORTANT HEPATITIS A INFORMATION
FOR FOOD MANAGERS/OPERATORS

In response to a recent outbreak of hepatitis A in Michigan, the Michigan Department of Agriculture and Rural Development (MDARD) and the Michigan Department of Health and Human Services are providing the following guidance to operators of licensed food facilities in Michigan.

The outbreak continues to spread, and your help is needed to prevent additional illnesses and possible outbreaks in your food establishment.

With your assistance, we can stop the spread of hepatitis A and help keep your employees and customers healthy.

What is hepatitis A?
Hepatitis A (HAV) is a highly contagious disease that attacks the liver. People infected with HAV are most contagious from two weeks before onset of symptoms to one week afterwards. Not everyone who is infected will have all the symptoms listed below. Symptoms usually start within 28 days of exposure to the virus with a range of 15-50 days. These symptoms can include:
- Jaundice (yellowing skin and whites of eyes)
- Fever
- Diarrhea
- Fatigue/tired
- Loss of appetite
- Nausea and vomiting
- Stomach pain
- Dark-colored urine
- Pale or clay colored stool

How is HAV spread?
- HAV is usually spread from person to person by putting something in the mouth that has been contaminated with the stool of a person with HAV, usually due to poor hygiene.
- Most infections in the U.S. are from contact with a household member or through close personal contact with a person who has HAV (e.g., sharing towels, cigarettes, toothbrushes or eating utensils; having sex with someone who is infected; or through IV drug use).
- HAV may also be spread by consuming food or drink that has been handled by an infected person.
Hep A Poster for Food Workers

IMPORTANT HEPATITIS A INFORMATION FOR FOOD EMPLOYEES

Please review with employees and post where employees can read for easy reference.

MICHIGAN IS EXPERIENCING A HEPATITIS A OUTBREAK.

Take steps to protect yourself from hepatitis A:
GET VACCINATED IF YOU LIVE IN THE OUTBREAK AREA!
Outbreak area information: michigan.gov/hepatitisAoutbreak

What is hepatitis A?
Hepatitis A is a very contagious disease that attacks the liver. An infected person can infect others up to two weeks before they feel sick, and sometimes up to a week after they feel better. Not everyone who is infected will have all the symptoms listed below. Symptoms usually start within 28 days of exposure to the virus, with a range of 15-50 days.

Symptoms:
- Jaundice (yellowing skin and whites of eyes)
- Fatigue
- Loss of appetite
- Nausea and vomiting
- Dark urine
- Pale stools
- Stomach pain in the upper right side of the abdomen

How is it hepatitis A spread?
- Usually by putting something in your mouth that has been contaminated with the feces (poop) of a person with hepatitis A.
- By sharing towels, toothbrushes or eating utensils, or having sex with someone who is infected.
- May be spread by food, drinks, drugs or cigarettes that have been handled by an infected person.
# Regulatory Follow-up Guidance

## Regulatory Guidance for HAV Food Worker Case Follow-Up

Use this worksheet to respond to a reported case of a Hepatitis A virus (HAV) infected worker in a food facility. This is not a routine evaluation, but an attempt to identify potential HAV contamination and transmission risk associated with an ill food worker.

### Detection and Notification:
Establish regulatory jurisdiction for the affected firm/establishment and notify appropriate local, state, or federal agency; multi-jurisdictional partners; and neighboring jurisdictions (if applicable). Plan to conduct a focused on-site assessment within 24 hours (1 business day).
- **Locals** (food service): Please notify MDARD and MDHHS within 12 hours of case identification. MDARD and MDHHS are available for consultation and support.
- **State** (retail or manufacturing): Notify LHD where the affected firm is located.

### Pre-assessment:
Obtain the case-employee’s supplemental HAV questionnaire (if available) from the Local or State health department so relevant information can be shared with the on-site investigator.

### Information Sharing Elements:
- Case-employee information: Name, symptoms, onset date, infectious period, last day of work
- Has the employee or health department notified management at the firm of the illness?
- Has the firm notified their regulatory authority as required?
- Has the facility been notified by anyone else? (family, medical providers, etc.)
- Food facility location details – name, address

### On-site Investigation:
Field investigators will complete the following components while visiting the firm:
- **Meet with the manager**
  - Provide introduction and purpose for visit. Explain that immediate response and cooperation are necessary to prevent additional illnesses in employees and customers
- **Explain Assessment Priorities**
  - Review records: employee roster (including permanent and temporary workers), employee work schedules, production records, etc.
  - Assessment of potential HAV contamination (of food and environment) and transmission
Industry Responses — ill workers, etc.

- Working with officials to set up PEP clinics for employees
- Retailers with pharmacies offering PEP to their own employees
- Willingness to advertise/host MDHHS mobile vaccination clinics at venues popular with high risk populations
What have we learned?

• Even if foodborne not a primary transmission mode, still a risk area to address and plan for
• Do everything you can to deliver the message, don’t expect them to find it
• Engage with industry – critical for prevention and preparedness for when cases arise
• Help partner agencies where we can
• **Hepatitis A Outbreak Resources** click on Information for Food Workers
Hepatitis A Pandora Radio Campaign: A Success Story of Interagency Collaboration

MaryBeth DeMarco, BS
OutbreakNet Enhanced Epidemiologist
Virginia Department of Health
Background: Nationwide Status

State-Reported Hepatitis A Outbreak Cases as of September 20, 2019

Source: https://www.cdc.gov/hepatitis/outbreaks/2017March-HepatitisA.htm
Background: Virginia’s Response

• Virginia Statewide Hepatitis A Virus (HAV) Vaccination Campaign launched in January 2019
  • Campaign goals:
    • Increase statewide hepatitis A vaccination rate
    • Integrate hepatitis A vaccination into health department clinics
    • Partner with community organizations to provide vaccine
    • Provide community education
• Virginia officially declares statewide HAV outbreak in April 2019
Project Timeline:

Jan 2019
- Statewide HAV Vaccination Campaign began

Feb 2019
- Heard Michigan’s HAV message on Pandora Radio
- Reached out to Pandora Radio and Michigan for more info

March 2019
- Met with Internal VDH/VDACS partners to discuss project potential

April 2019
- VDH declares a statewide outbreak of HAV
- Pandora script and media development
- Signed IO

May 2019
- Script finalized
- Media finalized
- PO finalized

June 2019
CAMPAIGN LAUNCH
Campaign Details:

- **Goals**: Reinforce Statewide Hepatitis A Vaccination Campaign, spread awareness, and provide education
- **10 counties targeted:**
  - Buchanan, Chesterfield, Fairfax City, Lee, Orange, Rockingham, Scott, Alexandria City, Chesapeake City, Richmond
- **Targeted Demographic**: Age 18-44 years old
- **Impressions**: 1,099,383
  - Audio Everywhere: 695,357
  - Mobile Display Ads: 404,026
Our Media Images!

STOP THE SPREAD OF HEPATITIS A!
get more information at www.VDH.Virginia.gov/HAV

STOP the spread of hepatitis A.
WASH YOUR HANDS.
get more information at www.VDH.Virginia.gov/HAV

Talk to your doctor about the hepatitis A vaccine
get more information at www.VDH.Virginia.gov/HAV
Script of Audio Everywhere Message:

“Virginia is experiencing a hepatitis A virus outbreak. Hepatitis A causes nausea, diarrhea, and yellowing of the skin and eyes. You can get it from close contact with someone who has hepatitis A or by eating or drinking items contaminated with hepatitis A. Protect yourself by washing your hands with soap and water after using the bathroom and before preparing and eating food and get your hepatitis A shot. Go to VDH.Virginia.gov/HAV to help stop the spread of hepatitis A!”

Link to audio: https://pandora.app.box.com/s/d6702drhle9iavhjt1g978wrcboxwiog
Measurable Results:

- Compared to the month prior to the campaign, there was a **198.6% increase** in unique views to the public facing VDH HAV landing page during the Pandora Radio campaign.
- Compared to the same time period in 2018, there was a **37.6% increase** in adult HAV vaccine doses administered in the same area.
- Clickthrough rate (CTR) of **0.33**
  - Males 18-20 and 40-44 had the highest CTR at 0.49
  - Females 35-39 highly engaged at CTR of 0.38
Challenges and Successes:

**Challenges:**
- Funding - cost of advertising is expensive
- Inter-agency purchase and finance process
- Communications/Advertising experience

**Successes:**
- Inter-agency collaboration
- Increase in unique page views
- New method of media advertising
- Established a working relationship with local Pandora Radio Representative
Thank you! Any Questions?

Contact Information:
MaryBeth DeMarco
marybeth.demarco@vdh.virginia.gov
Making a Difference

Preventing Illnesses Due to Hepatitis A

Ernest Julian, Ph.D.
President
Hepatitis A Prevention in RI

• Childhood Vaccinations Work!
  • 502 cases in MA bordering RI
  • Over 200 cases in NH bordering MA
    • Similar population to RI
  • 4 cases in RI
    • Excellent childhood vaccinations in RI

• Sent notice to all food establishments in RI in October how to prevent Hepatitis A and Norovirus

• Over 1,000 Vaccinations of high risk individuals
  • Soup kitchens, food pantries
    • Homeless, drug users, MSM
Hepatitis A Prevention Summary

• Exclude jaundiced employees until tested
• Promote Excellent handwashing
• No hand contact of ready-to-eat foods
• Vaccinations of high risk individuals
  • Homeless, drug users, prisons, MSM
• Criteria for when to treat employees and the public when there is a Hepatitis A + food employee
  • Within 2 weeks of exposure?
  • Poor hygiene and hand washing?
  • Bare hand contact of ready-to-eat foods?
  • If all 3 and repeated exposure, strongly consider IG
• RI Email and links on Hepatitis A and Norovirus to the food industry:
https://mailchi.mp/3d0a0edd75ff/ridoh-center-for-food-protection-help-prevent-illnesses-at-your-facility
Upcoming Retail Webinars

OCTOBER 25
“Food Service Risk-Factor Violation Trends”
2:00PM ET

NOVEMBER 8
“Norovirus: Just-In Time Refresher for Retail Food Industry and Regulators”
2:00PM ET
AFDO-Managed Retail Program Standards Grant Program

- The CY 2020 Retail Program Standards Grant Program is open to accept new applications.
- Approx. $2 million in funding is available for this granting year.
- For more information, or to apply for a grant, please visit: http://afdo.org/retailstandards/

Due October 15, 2019 7:59 PM ET
The National Association of County and City Health Officials (NACCHO) invites all retail food regulatory programs to submit applications to participate in a mentorship program to learn, share experiences, and acquire tools and resources related to the FDA’s Voluntary National Retail Food Regulatory Program Standards (Retail Program Standards).


Applications due by
Oct. 15, 2019
8:00 PM ET