

# **Local Health Department Response to Multistate Hepatitis A Outbreak**

Bureau of Epidemiology & Infectious Diseases  
Shelby County Health Department  
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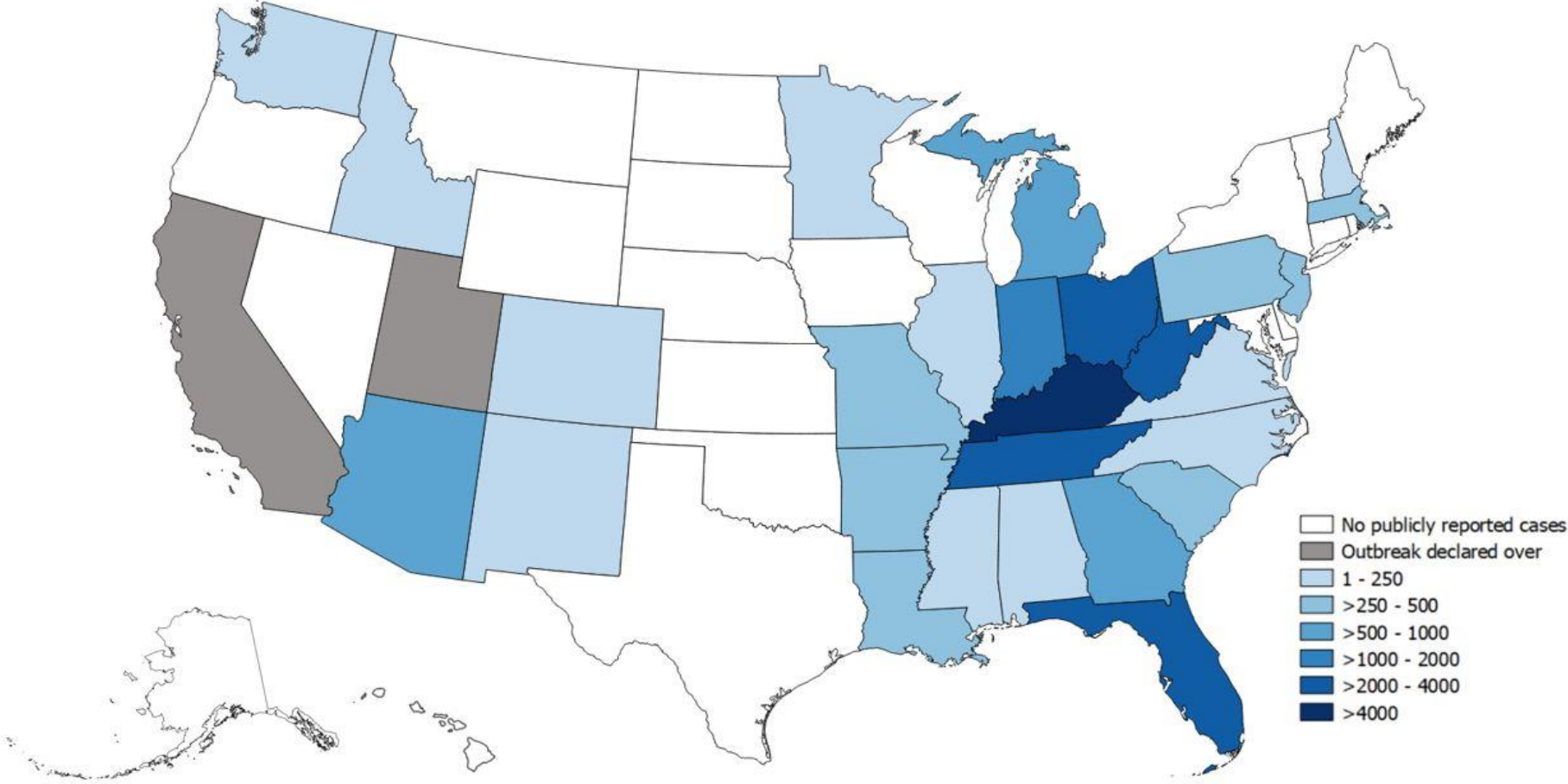
# Overview

- Discuss Hepatitis A
- Describe the Nationwide Outbreak 2016-present
- Review the Shelby County experience
- Discuss potential control opportunities
- Things to consider

# Hepatitis A

- Virus that causes inflammation of the liver
- Fecal-Oral route of transmission
- Gastroenteritis, fever, fatigue, abdominal pain, jaundice, dark urine
- Poor sanitary conditions promote transmission
- 30-50 day incubation period

# National Hepatitis A Outbreak



- No publicly reported cases
- Outbreak declared over
- 1 - 250
- >250 - 500
- >500 - 1000
- >1000 - 2000
- >2000 - 4000
- >4000



# From the Centers for Disease Control

**Since the outbreaks were first identified in 2016, 30 states have publicly reported:**

**Cases: 26,013**

**Hospitalizations: 15,643 (60%)**

**Deaths: 262**

**As of September 20, 2019**

🏠 Outbreaks

Hepatitis A Outbreaks

Widespread outbreaks of hepatitis A across the United States

Frequently Asked Questions: Hepatitis A outbreaks

Interim outbreak-specific guidance on hepatitis A vaccine administration

Information for the Public

Multistate outbreak of hepatitis A linked to frozen strawberries - 2016

Hawaii outbreak of hepatitis A - 2016

Multistate outbreak of hepatitis A virus infections - 2013

Outbreaks Related to Healthcare

Hepatitis C Outbreaks in People who Inject Drugs

Reporting HBV and HCV infections among repeat blood donors

## Widespread person-to-person outbreaks of hepatitis A across the United States

When hearing about hepatitis A, many people think about contaminated food and water. However, in the United States, hepatitis A is more commonly spread from person to person. Since March 2017, CDC's Division of Viral Hepatitis (DVH) has been assisting multiple state and local health departments with hepatitis A outbreaks, spread through person-to-person contact.

### The hepatitis A vaccine is the best way to prevent HAV infection

- The following groups are at highest risk for acquiring HAV infection or developing serious complications from HAV infection in these outbreaks and should be offered the hepatitis A vaccine in order to prevent or control an outbreak:
  - People who use drugs (injection or non-injection)
  - People experiencing unstable housing or homelessness
  - [Men who have sex with men \(MSM\)](#)
  - People who are currently or were recently incarcerated
  - People with chronic liver disease, including cirrhosis, hepatitis B, or hepatitis C
- One dose of single-antigen hepatitis A vaccine has been shown to control outbreaks of hepatitis A and provides up to 95% seroprotection in healthy individuals for up to 11 years.<sup>1,2</sup>
- Pre-vaccination serologic testing is not required to administer hepatitis A vaccine. Vaccinations should not be postponed if vaccination history cannot be obtained or records are unavailable.

CDC has provided [outbreak-specific considerations for hepatitis A vaccine](#)

### At A Glance

Since the outbreaks were first identified in 2016, 30 states have publicly reported the following as of September 20, 2019

- Cases: 26,013
- Hospitalizations: 15,643 (60%)
- Deaths: 262

### On This Page

- CDC's Response
- Postexposure Prophylaxis
- HAV Specimen Requests
- Additional Vaccination Information
- Professional Resources
- Educational Resources
- Information for the Public

# Current Outbreak

- People who use drugs (injection or non-injection)
- People experiencing unstable housing or homelessness
- Men who have sex with men (MSM)
- People who are currently or were recently incarcerated
- People with chronic liver disease, including cirrhosis, hepatitis B, or hepatitis C

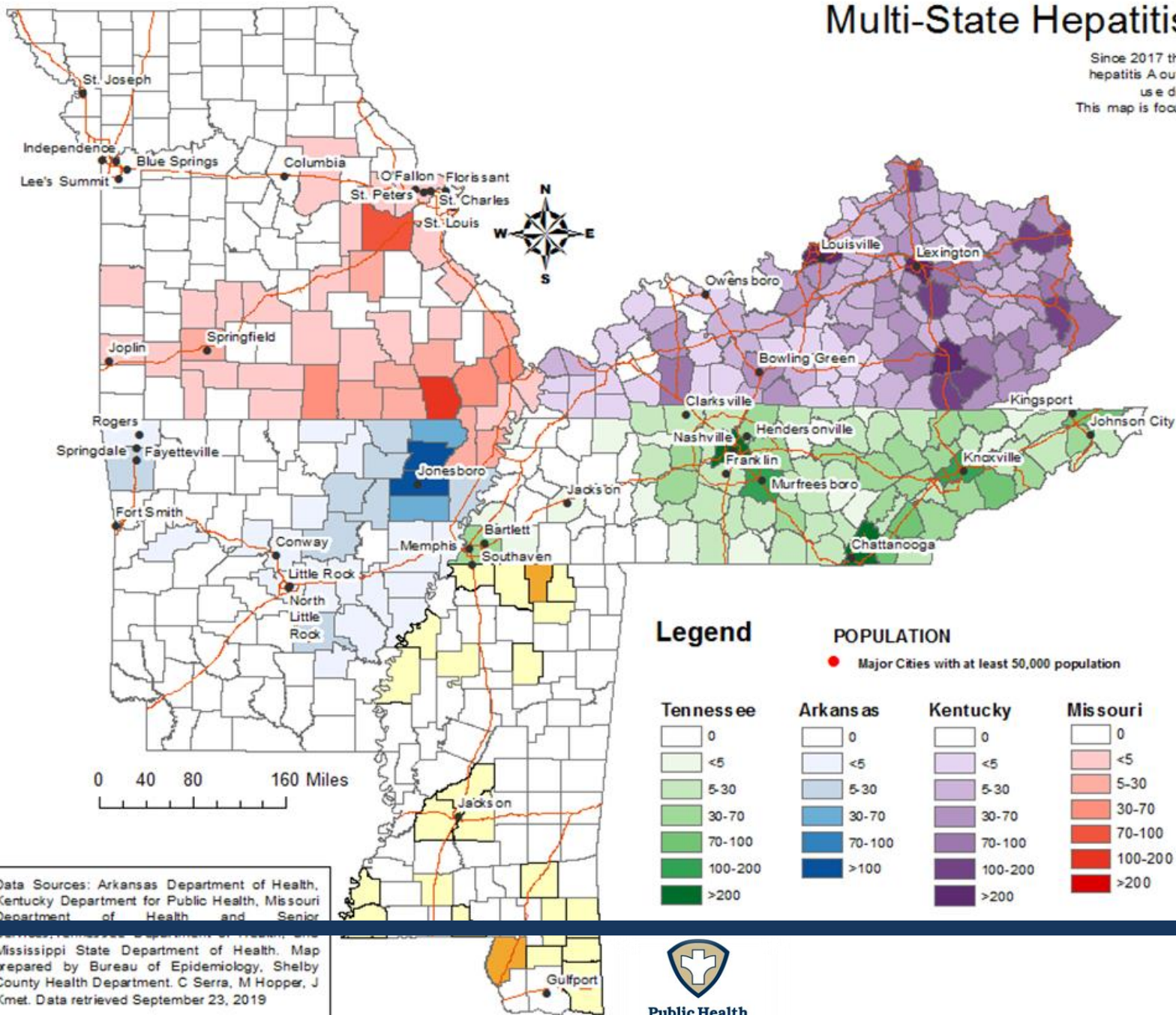
# State Comparisons

	Cases	Deaths	Hospitalization	Date updated
TN	2447	17	60%	9/13
AR	411	Not reported	Not reported	Sep
MO	444	2	56%	9/10
KY	4902	61	48%	9/7
MS	46	0	63%	9/9



# Multi-State Hepatitis A Cases

Since 2017 there has been a multi-state hepatitis A outbreak among people who use drugs and/or are homeless. This map is focused on cases surrounding Memphis, TN



Case Count  
9/23/19

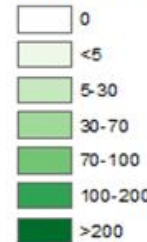
TN 2493  
AR 413  
KY 4907  
MO 453  
MS 49

## Legend

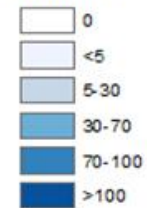
### POPULATION

● Major Cities with at least 50,000 population

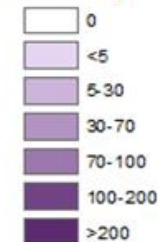
### Tennessee



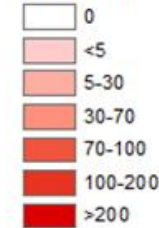
### Arkansas



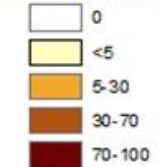
### Kentucky



### Missouri



### Mississippi



Data Sources: Arkansas Department of Health, Kentucky Department for Public Health, Missouri Department of Health and Senior Services, Tennessee Department of Health, and Mississippi State Department of Health. Map prepared by Bureau of Epidemiology, Shelby County Health Department. C Serra, M Hopper, J Kmet. Data retrieved September 23, 2019

# Shelby County, Tennessee

- Shelby County has the largest population of any TN County
  - 2017 5-Yr ACS Population Estimate: **937,847**

- Largest city in Shelby County is Memphis
  - 4 other cities: Bartlett, Germantown, Lakeland, Millington
  - 2 towns: Arlington, Collierville
  - 7 unincorporated communities: Barretville, Brunswick, Cordova, Eads, Ellendale, Fisherville, Rosemark

- Population is primarily Black/African American

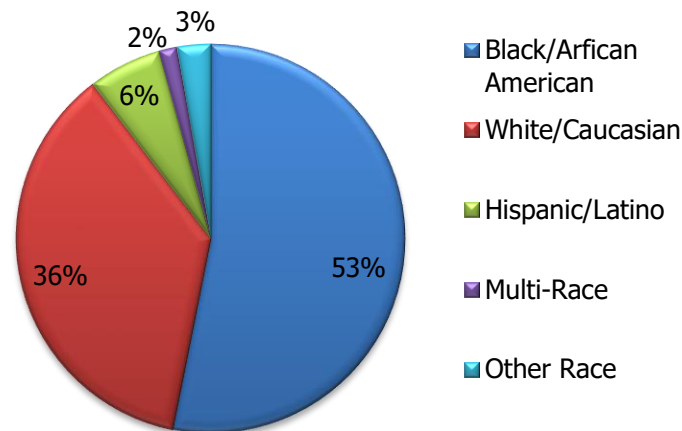
- Median Household Income: \$49,647

- Unemployment Rate: 7%

- Population living below federal poverty level: 18.8%

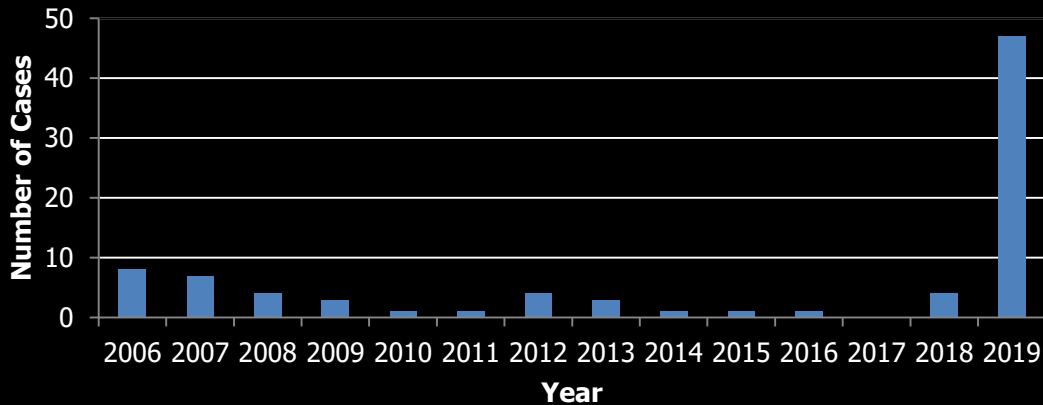
- Shelby County is very diverse and contains both rural and urban areas, as well as low SES and high SES areas that differ quite a bit from each other.

**2017 5-Yr ACS Population Estimates by Race/Ethnicity**



# Shelby County, TN

## Hepatitis A Infection, Shelby County, 2006- 2019



**2019**

**47 cases, 1 death**

**83% hospitalization rate**

### 2019 Risk Factors:

Recreational Drug Use: 63%

Homeless: 36%

Recent Incarceration: 17%

No risk factors: 30%

### Co-infections:

38% Hepatitis C

7% Hepatitis B

2% HIV

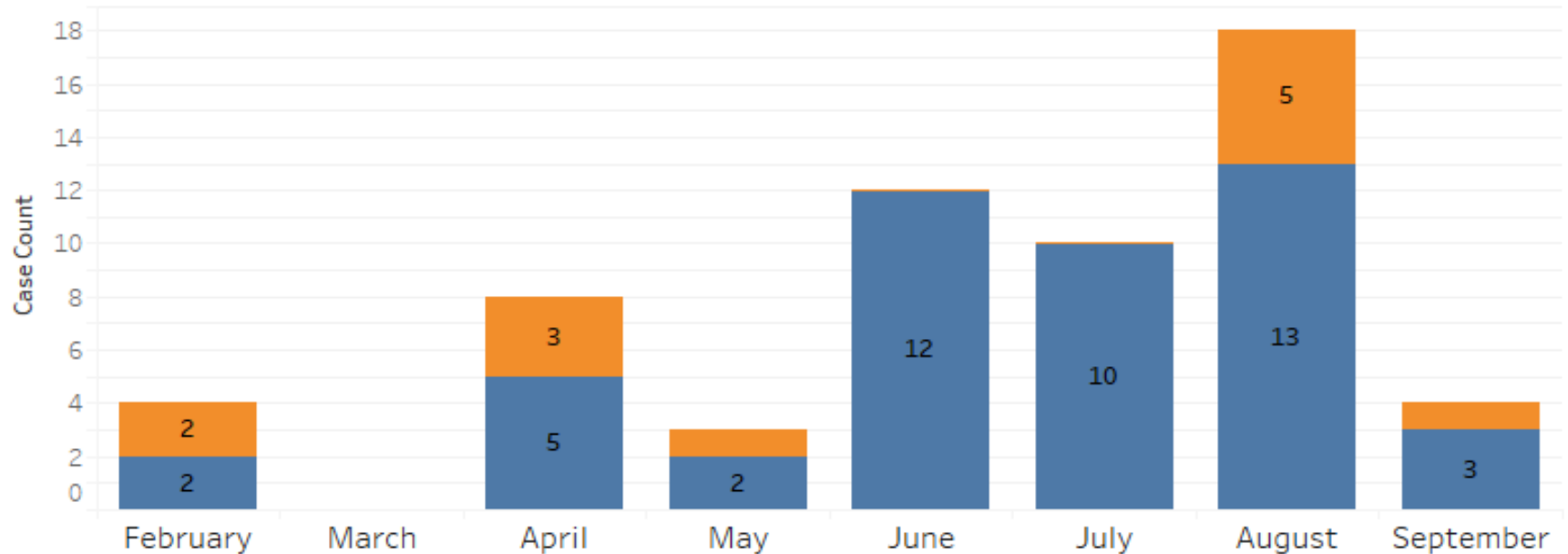
# 2019 Experience

47 cases

83% hospitalization rate

12 non-resident cases

Hepatitis A Cases by Month in Shelby County  
Residents and Non-Residents  
2019 YTD



# Case Statistics

- Age Range: 21 – 85 (38 median age)
- Sex: 55% Male 45% Female
- Race: 94% white 2% black 4%other
- Employment status:
  - only 12 cases report full time employment
  - 1 retired
  - other are unemployed or work part time
  - 3 healthcare workers
  - No food handlers

# Responding to Cases

- Verify Symptoms and Laboratory Results
- Interview Patients regarding exposures and history
- Identify contacts
- Post-Exposure Prophylaxis
  - Vaccine
  - Immune Globulin





## NJ food handler worked with hepatitis A infection; 27 confirmed sick, 1 dead

By News Desk on August 27, 2019

A food handler infected with hepatitis A who worked at New Jersey's Mendham Golf and Tennis Club is likely responsible for 27 illnesses including one death.



# Food Poisoning Bulletin

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You are here: Home / Outbreaks / Two Businesses in Arkansas Had Food Handlers Work While Infected with Hepatitis A

## Two Businesses in Arkansas Had Food Handlers Work While Infected with Hepatitis A

April 25, 2018 by News Desk

Two businesses in Arkansas have had food handlers work while they were infectious with hepatitis A. The Arkansas Department of Health has issued two press releases about these cases.



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## Health officials confirm case of hepatitis A in food handler at McDonald's in Chickamauga, Georgia

March 28th, 2019 | by Staff Report | in Breaking News | Copyright 2019 |

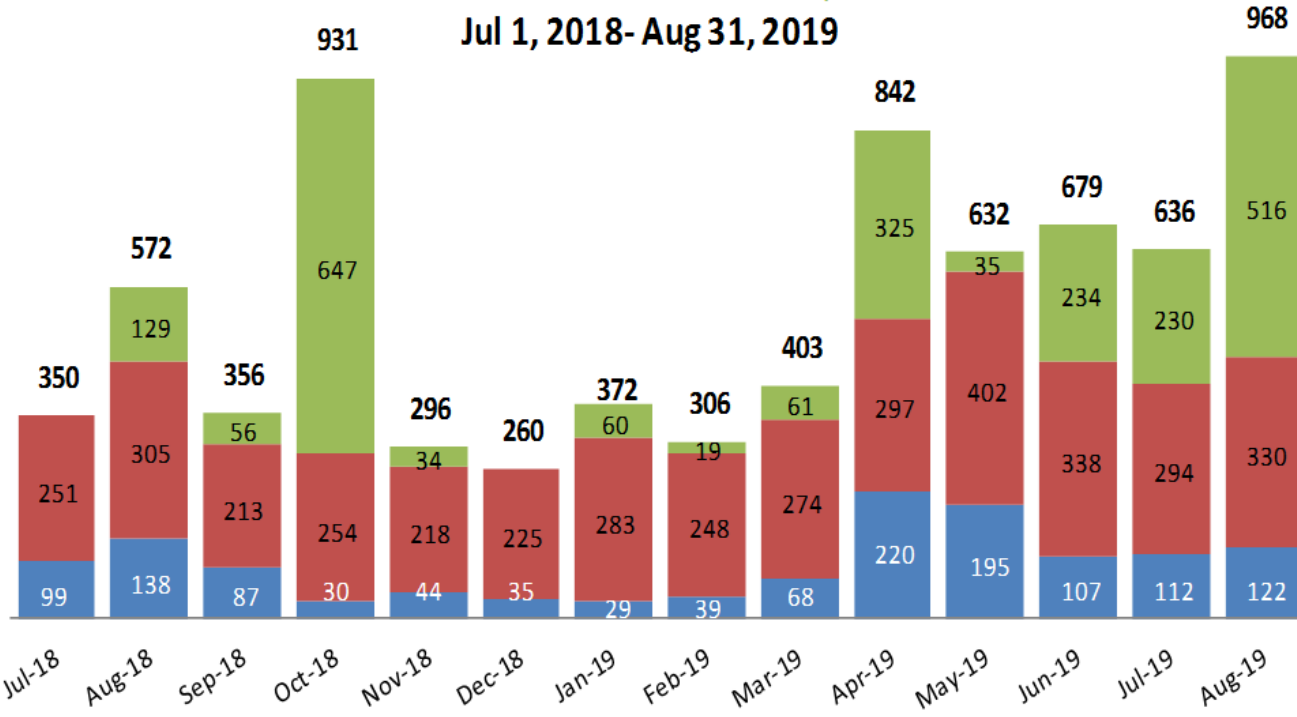


Health officials have confirmed a case of hepatitis A in a food handler at the McDonald's at 106 LaFayette

# Vaccination Efforts

**Hepatitis A Vaccinations in Shelby County**  
**SCHD clinics Private Providers Offsite/Jail Outreach**

Jul 1, 2018- Aug 31, 2019



**7,603 Total  
 Vaccinations  
 July 2018-Aug 2019**

**1,325 in SCHD Clinics  
 17% of the Total**

**3,932 by private  
 Providers = 52%**

**2,346 Jail Vaccine  
 31%**



# Strike Team



# Other Outreach Activities

- LPN administering vaccine at Corrections
- Local MOAs
- Memphis Area Prevention Coalition for Street Team for Overdose Prevention events
- TNHANs/ Press Releases
- Vaccine in emergency departments
- Handwashing Stations at public events
- Environmental Health inspections

# Vaccination is the Best Prevention

- Hepatitis A vaccine became a routine childhood immunization in 2006.
- People born before 2006 probably have not been vaccinated.
- In Tennessee so far there have been 1,647 cases, among which there have been 988 hospitalizations and 9 deaths.
- Memphis/Shelby region has a total of 11 confirmed cases of Hepatitis A in 2019, with hospitalization rate of 80%.
- In the national outbreak, people who use recreational substances, are homeless, or are men who have sex with men are at increased risk for Hepatitis A.
- Tennessee Department of Health recommends that all clients receiving testing and treatment for sexually transmitted infections (STIs) should be offered Hepatitis A vaccine.

# Patient Consent Form



## Hepatitis A

### *What is Hepatitis A?*

Hepatitis A is a highly contagious liver infection caused by the Hepatitis A virus. It can range in severity from a mild illness lasting a few weeks to a severe illness lasting several months.

### *Who is at risk?*

Although anyone can get Hepatitis A, some people are at greater risk, such as those who:

- People experiencing homelessness
- Are men who have sexual encounters with other men
- Use recreational drugs, whether injected or not
- Recently incarcerated

### *Can Hepatitis A be prevented?*

Yes. The best way to prevent Hepatitis A is by getting vaccinated. The Hepatitis A vaccine is safe and effective and given as 2 shots, 6 months apart. Both shots are needed for long-term protection. Are you interested in receiving the Hepatitis A vaccine?

Yes, I am interested in receiving the Hepatitis A vaccine.

No, I am not interested in receiving the Hepatitis A vaccine.

*If you are not interested in the Hepatitis A vaccine, please check the reason why (choose only one):*

- Completed the full series of Hepatitis A vaccine
- Completed one dose of Hepatitis A vaccine
- Afraid of the vaccine
- Had Hepatitis A in the past
- Will get the vaccine series from the regular doctor
- Not worried about Hepatitis
- Does not like shots/needles
- Personal or religious objection to vaccination
- Other: \_\_\_\_\_ (please specify)

*Attach patient label here:*

# Hepatitis A Clinical Staff Form



## Hepatitis A

(Clinic Staff Use)

Does the patient currently have moderate to severe acute illness with or without fever?  
 Yes |  No |  Unknown

Is the patient HIV positive?  
 Yes |  No |  Unknown

Has the patient received the full Hepatitis A series?  
 Yes |  No |  Unknown

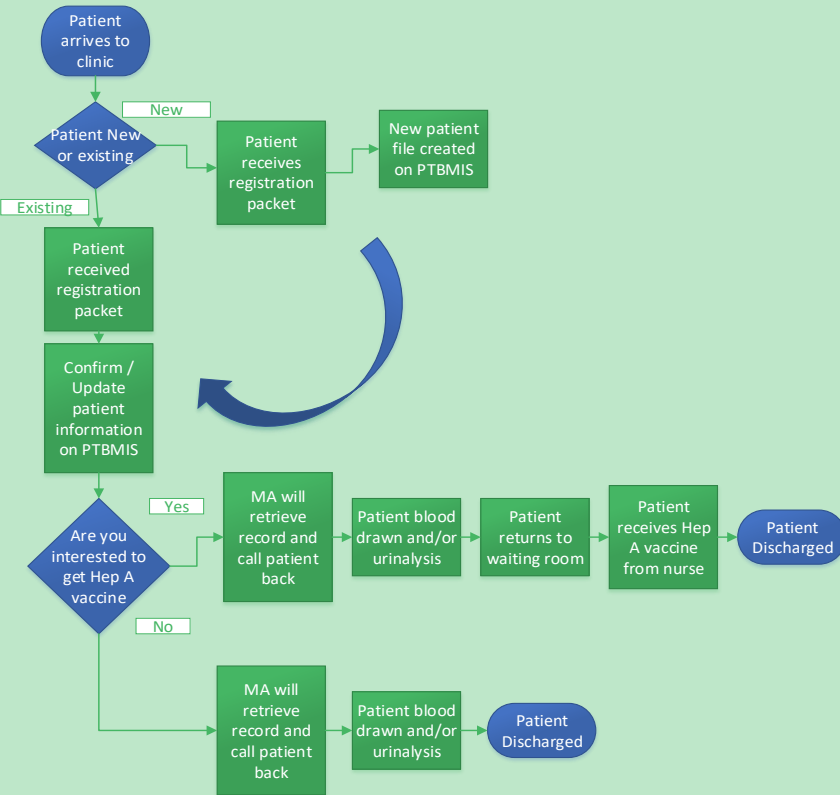
Has the patient received partial (most recent dose) Hepatitis A series?  
 Yes |  No |  Unknown

Has the patient ever had a serious reaction after receiving any vaccination?  
 Yes |  No |  Unknown

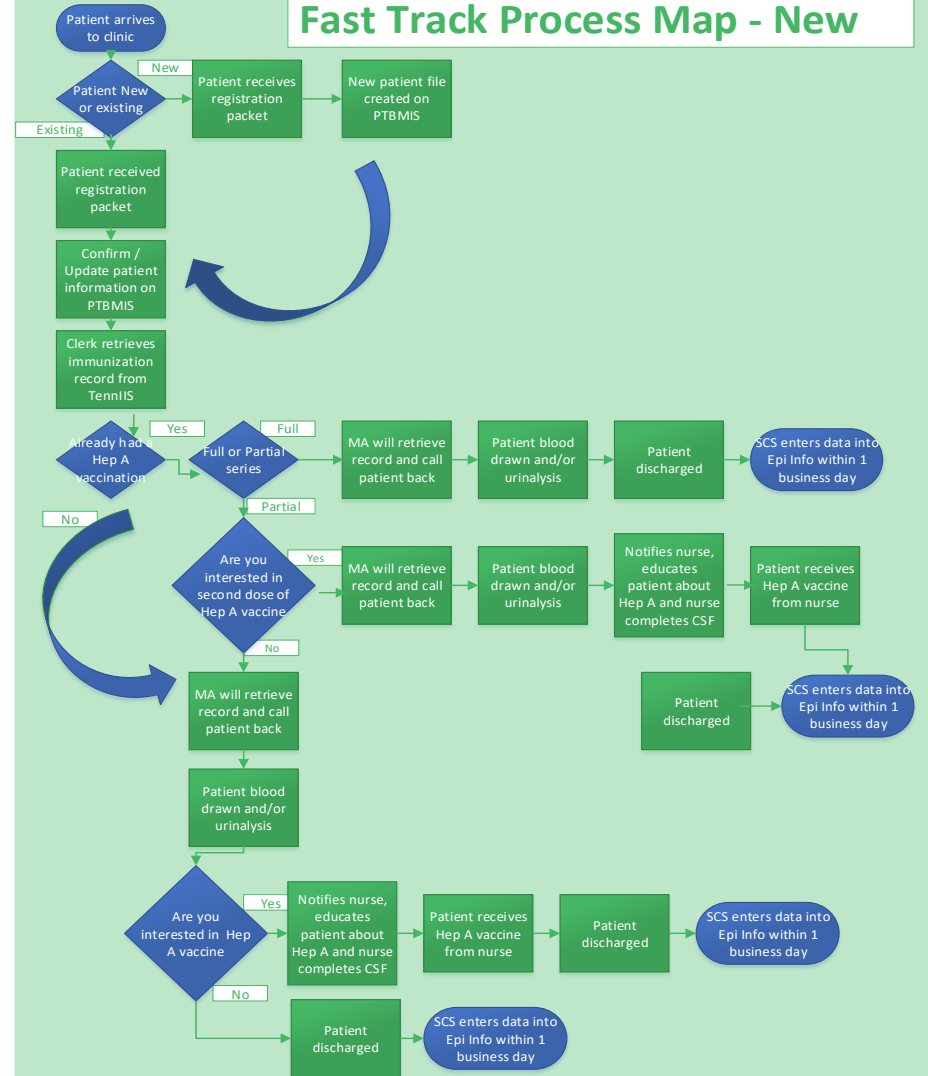
Attach patient label here:

# Process Map – Fast Track (Old and New)

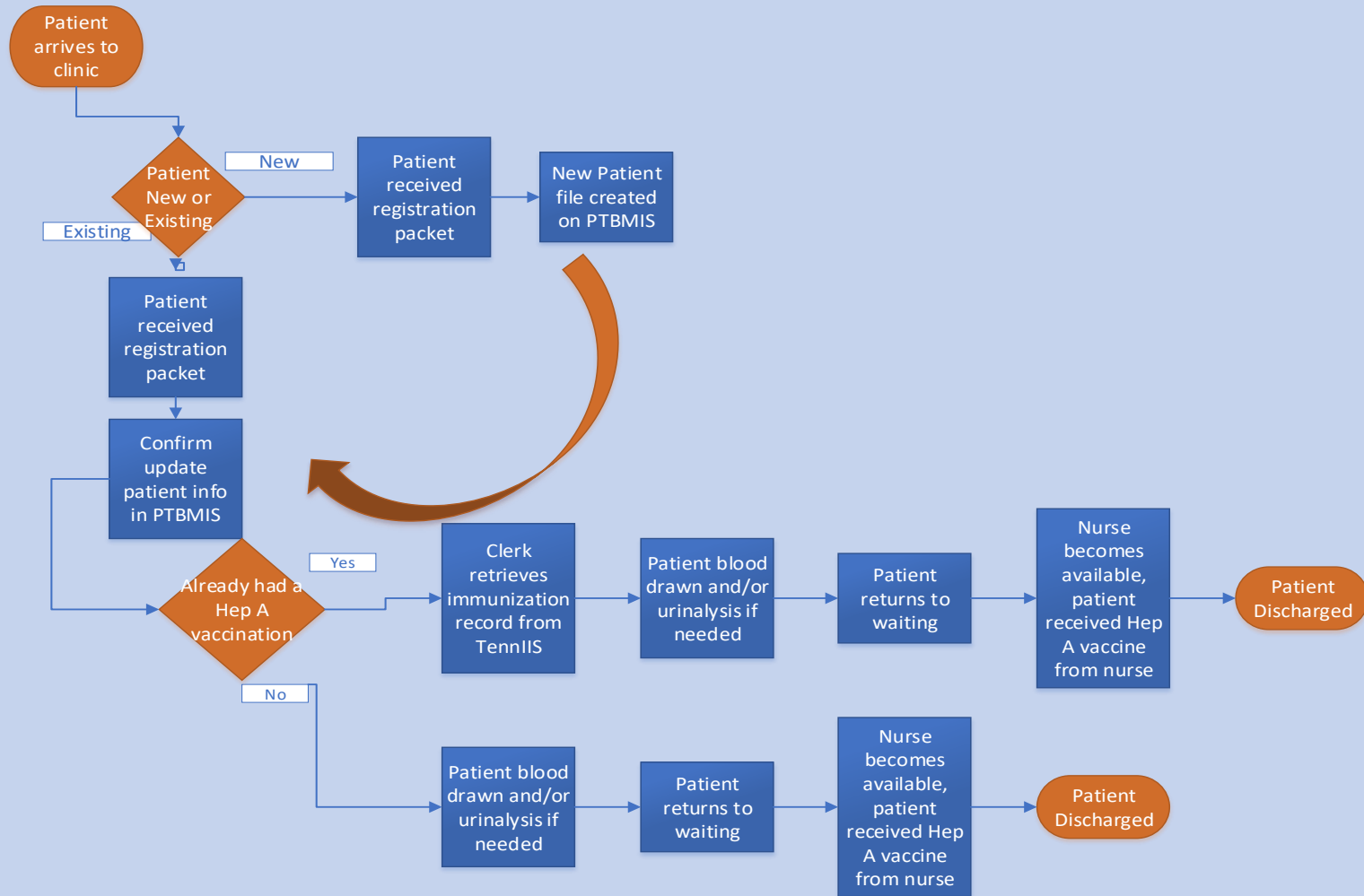
## Fast Track Process Map- Old



## Fast Track Process Map - New

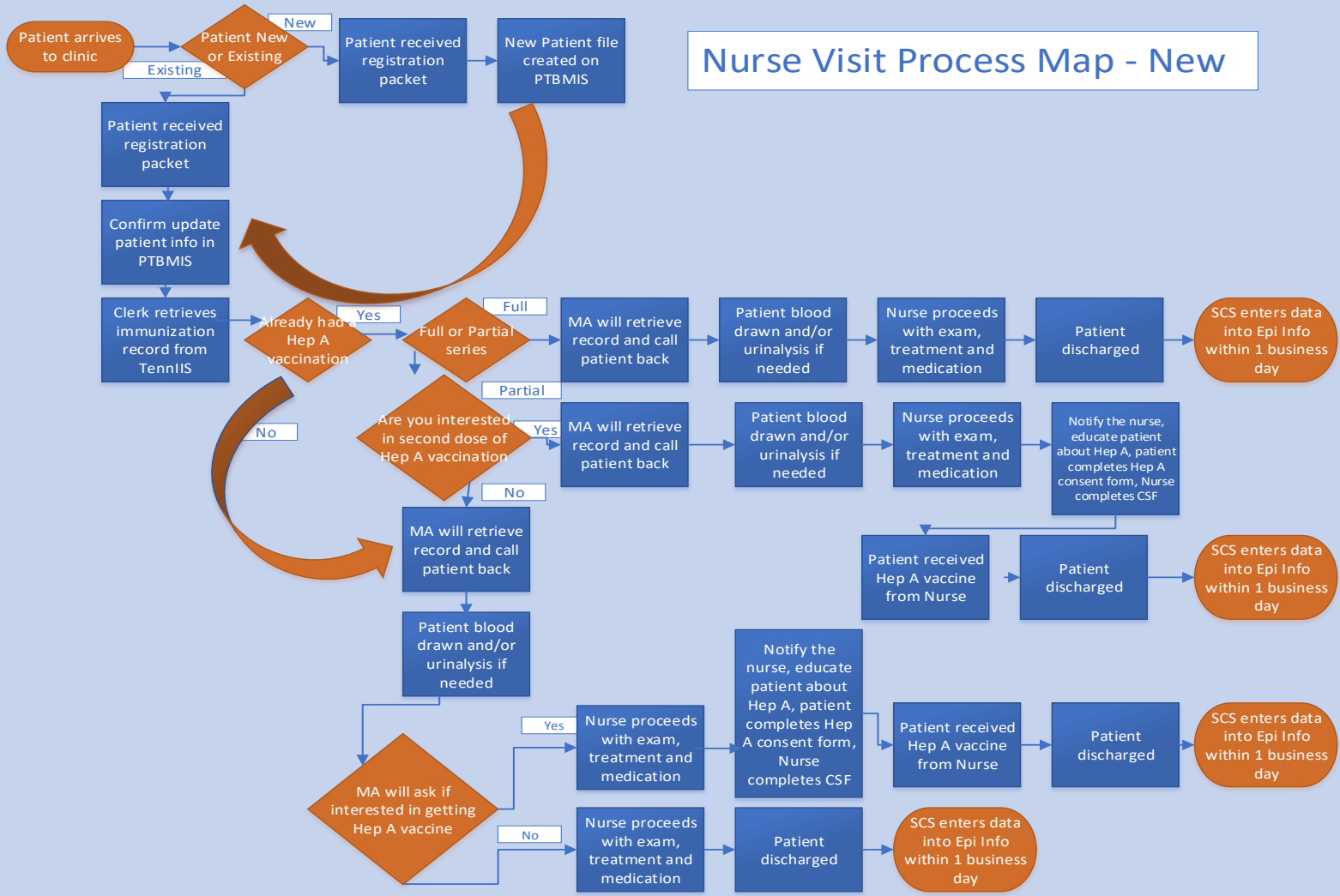


# Process Map – Nurse Visit Old



# Process Map – Nurse Visit New

Nurse Visit Process Map - New





# When to ASK the patient about receiving their Hepatitis A Vaccination

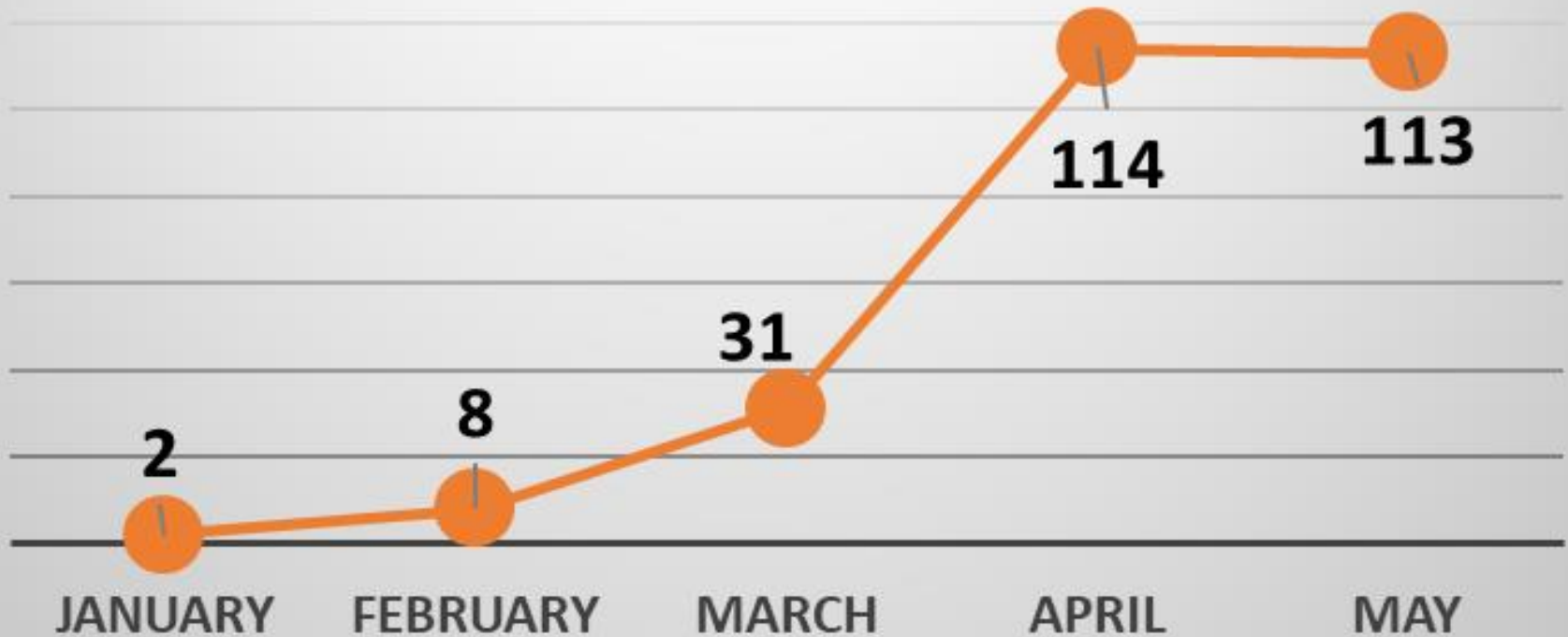
## ASK when...



- ✓ Scheduling the appointment
- ✓ Interviews with the patient
- ✓ After drawing labs
- ✓ During the clinic visit with the Nurse

# Hepatitis A vaccine administered by Month

Hepatitis A vaccine administered



● # Hep A Vaccines Administered

# Things to Consider

- Outbreak is probably on its way to Texas
- Hospital Emergency Department surveillance may be the best opportunity to detect cases
- Vaccination in Jails and STD program clinics may be the most effective targeted vaccination venues
- Learn from Kentucky
- Recreational Substance Use is fueling spread

# Questions?



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