



Hepatitis A

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Basic Features of Hepatitis Viruses

<u>Virus</u>	<u>Transmission</u>	<u>Incubation Period*</u>	<u>Chronic Infection</u>
A	fecal-oral	4 (2-7)	No
B	parenteral	8-12 (6-24)	Yes
C	parenteral	6-9 (2-24)	Yes
D	parenteral	? (2-10)	Yes
E	fecal-oral	5 (2-9)	No

* Weeks

Disease Characteristics

- Incubation period: 15-50 days (usually 4 weeks)
- Infectious period: 2 weeks before symptom onset until 2 weeks after symptom onset
- Signs and Symptoms:
 - Headache, malaise, fatigue, fever, nausea, vomiting, diarrhea, anorexia, abdominal pain, dark urine, clay-colored stools, and jaundice
 - Elevation of liver enzymes
- Children unlikely to have symptoms

Hepatitis A Virus Transmission

- Fecal-oral
- Close personal contact
(e.g., household contact, sexual contact, child day care centers)
- Contaminated food, water
(e.g., infected food handlers)
- Blood exposure (rare)
(e.g., injecting drug use, transfusion)

Complications

- Most adults experience sudden onset of symptoms
- Older adults are at high risk for severe disease
- Can cause a severe, sudden, and overwhelming infection of the liver
- Persons who have other liver diseases are at highest risk for severe complications
- No specific medications to treat hepatitis A, goal is to help alleviate symptoms
- Average hospitalization rate ~40-50%
- Average mortality rate ~1%

Outbreaks

National Outbreaks

- Began emerging in late 2016
- 29 states involved in the national outbreak
 - Only two states have declared their outbreak over – California & Utah
- Risk factors similar between states
- Unusual risk groups for HAV
- **Extremely** complicated to address

Risk Factors

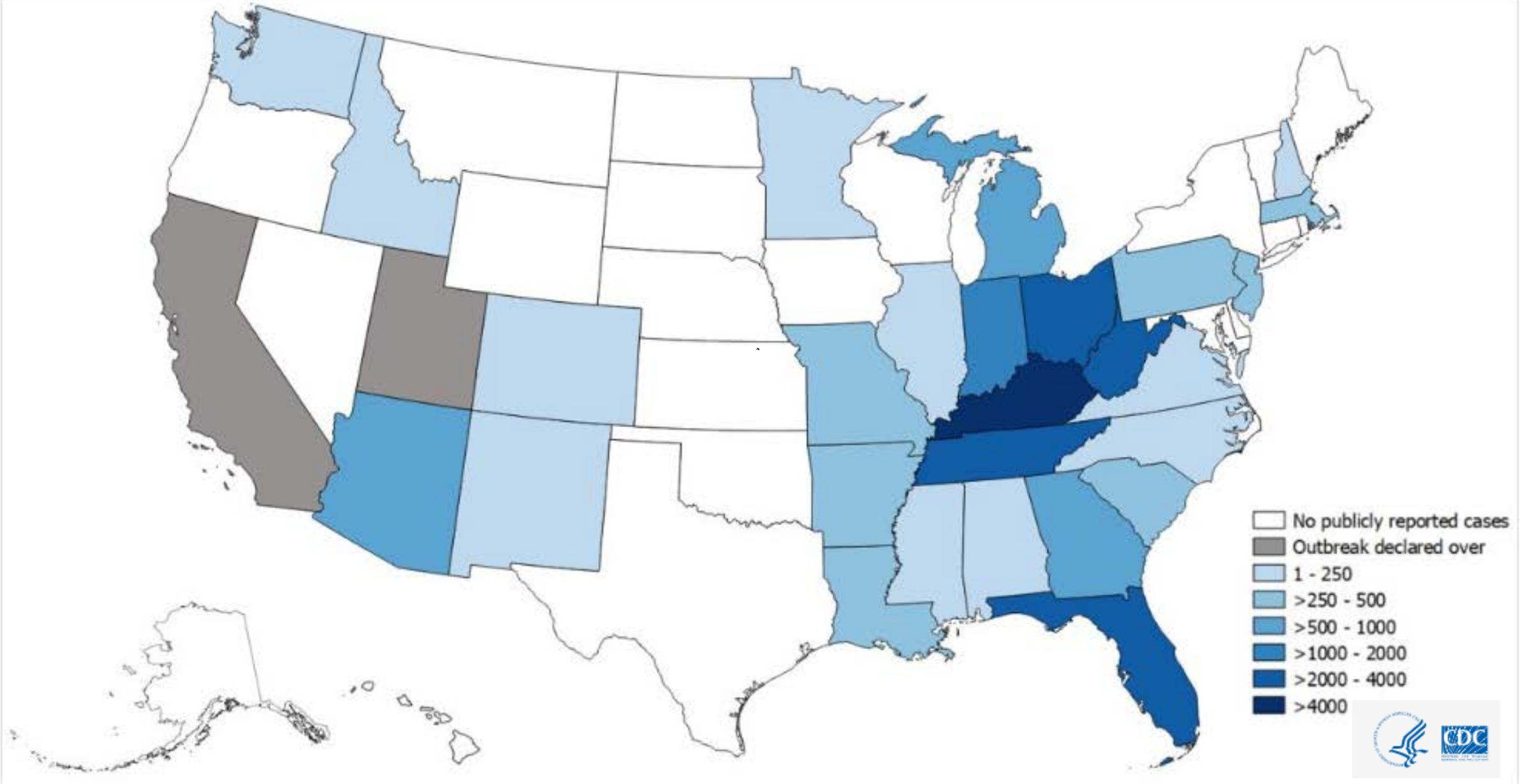
Recent outbreaks have been primarily impacting:

- Persons who use injection and non-injection drugs
- Persons experiencing homelessness
- Persons who are or were recently incarcerated

As of August 16, 2019, there have been:

- Over 24,200 cases
- Over 14,500 hospitalizations (60% overall, close to 80% in some states)
- 236 reported deaths

State-Reported Hepatitis A Outbreak Cases as of August 16, 2019



Co-Infection & IV Drug use

- Co-infection rates have been high in some states
 - West Virginia (2,540 cases) – 56% HCV and 10.3% HBV
 - Florida (2,586 cases) – 24% of cases co-infected with HBV or HCV
- Drug use is the most common risk factor
 - Kentucky (4,870 cases) – 80%
 - West Virginia (2,540 cases) – 69 %
 - Indiana (2,014 cases) – 53%

What about Minnesota?

Disease activity as of August 23, 2019:

- 26 outbreak associated cases
- 17 hospitalizations

- Risk factors mirror national outbreaks
 - 62% report drug use (54% report IV drug use)
 - 46% report unstable/transient housing
 - 19% were incarcerated during exposure and/or infectious period

Testing & Follow Up

Testing and Diagnosis

Test persons with hepatitis A symptoms:

- Headache
 - Fatigue
 - Fever
 - Nausea
 - Vomiting
 - Diarrhea
 - Anorexia
 - Abdominal pain
 - Dark urine
 - Clay-colored stools
 - Jaundice
-
- Elevation of liver enzymes

Role of Health Professionals

- Test persons with hepatitis A symptoms
- Case follow up and prevention
 - Report to MDH
 - Post-exposure prophylaxis recommendations
 - Vaccination
 - Testing

Post-Exposure Prophylaxis

Must be given within two weeks of last exposure to be effective

For healthy, immunocompetent persons:

- Age <12 months: IG (0.1 mL/kg)
- Age 1-39 years: 1 dose
- Age 40 and older: 1 dose (+IG if indicated)

For immunocompromised or chronic liver disease

- 1 dose and IG (0.1mL/kg)

IG should be given to those for whom vaccine is contraindicated.

Consider hepA vaccination even if the two-week exposure window has passed; especially if exposure risks continue.

Assessing Capacity to Offer HepA Vaccination

CDC Hepatitis A (HepA) Vaccine Recommendations

Children at age 1 year

- Routinely recommended for infants 12 – 23 months
- Vaccination can be considered for children 2 – 18 years old
- 2 dose series; no additional booster doses after series completion
- MN immunization child care requirement

Persons at increased risk for infection

- Travelers to endemic countries
- Close contacts of new arrival adoptees from endemic countries

- Persons who use drugs (injection and non-injection)
- Persons experiencing homelessness
- Men who have sex with men (MSM)

- Persons with occupational risk

- Persons who have direct contact with persons who have hepatitis A

Persons at increased risk for complications from hepatitis A

- Persons who have chronic liver disease
- Persons who have clotting-factor disorders

Persons who want immunity (>1 year)

- Can be given to any patient who wants protection from hepatitis A

Promote Hepatitis A (HepA) Vaccination to High-Risk Groups

- The best way to prevent hepatitis A infection is through vaccination
- High-risk groups impacted in national outbreaks should get vaccinated:
 - People who use injection and non-injection drugs
 - People experiencing homelessness or unstable housing
 - People who are currently or were recently incarcerated
 - Men who have sex with men (MSM)
- We are prioritizing one dose as it provides protection for up to 11 years and has been shown to control outbreaks
 - Hepatitis A vaccine is a two-dose series and a second dose will ensure longer-term protection

Can you provide on-site HepA vaccine?

- Vaccine uptake among high-risk groups is most successful when it is convenient and accessible
- You already see high-risk patients through the drug dependency treatment care you provide
- Consider recommending and providing HepA vaccine to your patients
- No vaccinators on-site? Consider partnership with your local public health agency or a UUAV (Un- and Underinsured Adult Vaccine program) clinic in your area

Can't provide vaccine? Recommend and Refer Patients!

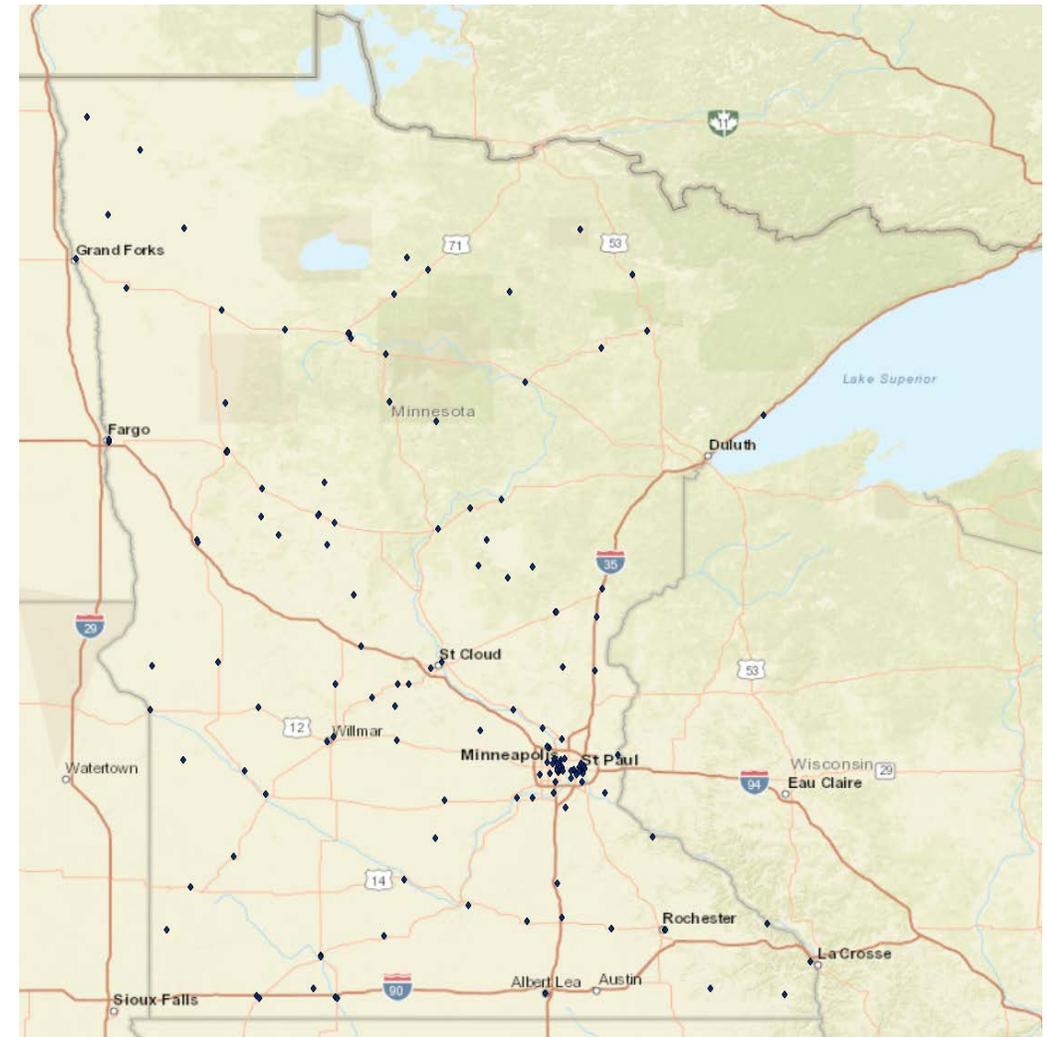
- If you cannot provide vaccine onsite, you still have a referral role to play
- Consider partnering with another health care provider that can provide vaccine onsite for you
- Recommend hepatitis A vaccine to people at high risk and give patients information about hepatitis A vaccine
- Refer your patients to a primary care health care provider or a UUAV clinic

HepA Vaccine Insurance Coverage

- Under the Affordable Care Act, ACIP recommended vaccines are fully covered as a preventative care essential benefit (cost of vaccine)
 - Most health insurance plans cover HepA vaccine provided in-network
 - Patients concerned about cost can contact their health plan
- Uninsured adults and adults whose insurance does not cover HepA vaccine may receive it at low cost at certain clinics
 - More information and a link to a map of clinics can be found on Vaccination Clinics Serving Uninsured and Underinsured Adults (www.health.state.mn.us/uuavsearch)

Uninsured and Underinsured Adult Vaccine (UUAV)

- Provides low-cost, routinely recommended vaccines to eligible adults
 - Uninsured
 - Underinsured (insurance doesn't cover specific vaccines)
- About 170 clinics enrolled
 - Local public health clinics, federally qualified health centers, rural health clinics, other safety net clinics
- Website
 - www.health.state.mn.us/people/immunize/hcp/uuav/index.html



Map of clinics enrolled in program, as of October 2018 22

HepA Vaccine through the UUAV Program

- No-cost vaccine may be available for high-risk individuals who do not have health insurance.
- Please contact us at health.uuadultvax@state.mn.us for more information.

MDH Hepatitis A Outbreak Resources

The screenshot shows the MDH Department of Health website. The header includes the MDH logo, navigation links for HOME, TOPICS, and ABOUT US, and a search bar. The main content area is titled "Hepatitis A Outbreak Prevention and Response". It features a sidebar with a menu where "Outbreak Prevention and Response" is highlighted with a red box. The main text explains that Minnesota is currently experiencing an outbreak of hepatitis A and that the best way to prevent infection is through vaccination. It also mentions that partners can use or adapt these resources and tools for hepatitis A outbreak prevention and response in Minnesota. There is a "Subscribe to VPD Information" section with a description and a link to "Expand All" and "Contract All". Below this are four expandable sections: "Hepatitis A outbreaks background", "Minnesota hepatitis A outbreak cases", "Vaccination guidance and resources", and "Outreach tools". On the right side, there is a "Share This" button, a "Spotlight" section with links to "Hep A Outbreak Prevention and Response", "CDC: Widespread outbreaks of hepatitis A across the United States", and "Viral Hepatitis A CDC information on hep A", and a "Contact us:" section with contact information for the MDH Infectious Disease Epidemiology, Prevention and Control Division.

DEPARTMENT OF HEALTH

HOME TOPICS ABOUT US

Search

Hepatitis A

- Hepatitis A Home
- About Hepatitis A
- For Health Professionals
- Hepatitis A Statistics
- Outbreak Prevention and Response**

Hepatitis

- Hepatitis Home
- About Hepatitis Disease
- Hepatitis A
- Hepatitis B
- Hepatitis C
- Hepatitis Vaccine
- Traveling or Adopting Abroad
- Hepatitis Statistics
- For Health Professionals
- Laws and Regulations

Related Topics

Hepatitis A Outbreak Prevention and Response

Minnesota is currently experiencing an outbreak of hepatitis A. The best way to prevent hepatitis A infection is through vaccination.

Partners can use or adapt these resources and tools for hepatitis A outbreak prevention and response in Minnesota.

[Subscribe to VPD Information](#)

This subscription provides updates on all vaccine preventable diseases (VPDs) in Minnesota. By subscribing, you will receive updates about the hepatitis A outbreak in addition to other VPD information.

[Expand All](#) [Contract All](#)

- [Hepatitis A outbreaks background](#)
- [Minnesota hepatitis A outbreak cases](#)
- [Vaccination guidance and resources](#)
- [Outreach tools](#)

Share This

Spotlight

- [Hep A Outbreak Prevention and Response](#)
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Contact us:

If you have questions or comments about this page, use our [IDEPIC Comment Form](#) or call 651-201-5414 for the MDH [Infectious Disease Epidemiology, Prevention and Control Division](#).

MDH HepA Patient Education Resources

What to know about hepatitis A



What is hepatitis A?

- Hepatitis A is a serious liver disease caused by the hepatitis A virus.
- It can make you very sick and lead to hospitalization and sometimes death.

Who is at high risk?

- People who use injection and non-injection drugs
- People experiencing homelessness or with unstable housing
- People who are or were recently incarcerated
- Men who have sex with men
- People with direct contact with someone who has hepatitis A
- Travelers

How is hepatitis A spread?

-  Eating or drinking
-  Sharing syringes and drug use equipment
-  Unwashed hands
-  Sex with people who have hepatitis A

How can hepatitis A be prevented?

-  Get vaccinated.* It's the best way to prevent hepatitis A.
-  Wash hands with soap and water.

* If you don't have insurance, you can get vaccine for free or low cost: www.health.state.mn.us/uuavsearch.

What are the symptoms?

-  Yellowing of skin or eyes (jaundice)
-  Fever
-  Nausea, vomiting, diarrhea

Other symptoms include: stomach pain, dark pee, pale poop, tiredness, and lack of appetite.
If you have these symptoms, please contact your health care provider.

MDH DEPARTMENT OF HEALTH
651-201-5414 or 1-877-676-5414
www.health.state.mn.us/hepatitis
August 2019
Adapted with permission from the Tennessee Department of Health

Protect yourself from hepatitis A

The best way to prevent hepatitis A is to get vaccinated.

Anyone can request hepatitis A vaccine.

Hepatitis A vaccine is especially important for:

- People who use injection and non-injection drugs.
- People experiencing homelessness or who have unstable housing.
- People who are or were recently incarcerated.
- Men who have sex with men.
- People with chronic liver disease.
- People traveling to areas where hepatitis A is common.

Talk to your health care provider to get vaccinated.

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August 2019

Are you vaccinated?

If not, it is quick and easy.

Thank you!

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