



Massachusetts Department of Public Health

Public Health Council

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Massachusetts Department of Public Health

Hepatitis A Outbreak in Vulnerable Populations: Public Health Response



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Hepatitis A Virus Infection

- Acute liver disease
 - ranges from asymptomatic to severe disease
 - Individuals with pre-existing liver damage prone to more severe disease
- Symptom: fever, fatigue, jaundice, dark urine, light stool
- Transmission route: fecal-oral
 - Shedding: 2 weeks before and 1 week after illness onset
- Incubation period 15-50 days
- Infection results in lifelong immunity
- Prevention: vaccination, hand hygiene

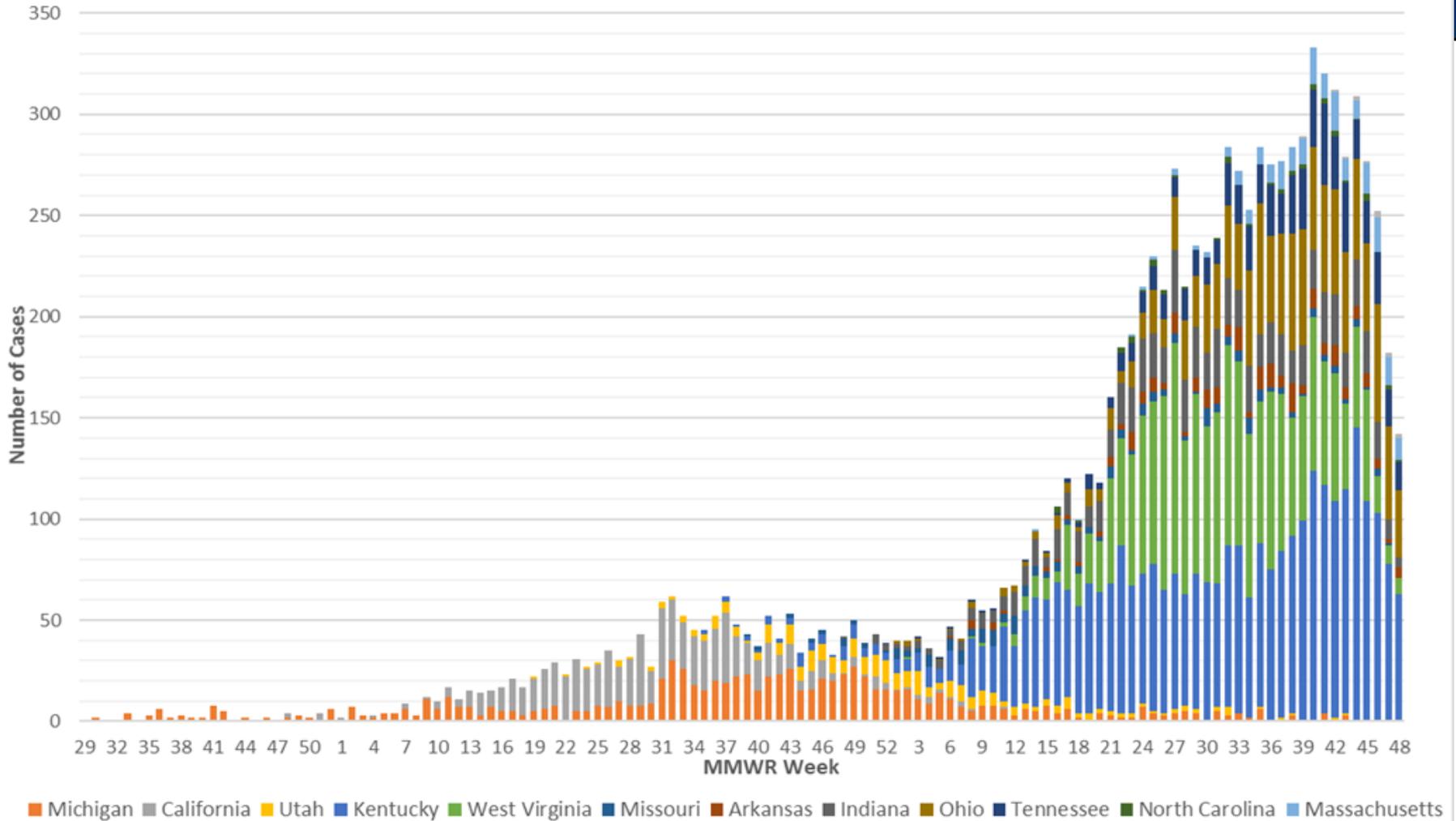
National Hepatitis A Outbreaks

- Occurring in specific vulnerable populations
 - Persons experiencing homelessness
 - Persons with substance use disorder
 - Not specific to injection drug use

State	Cases	Hospitalizations	Deaths
Arkansas	227	112 (49%)	1
California	704	461 (65%)	21
Florida	487	382 (78%)	2
Illinois	17	12 (71%)	0
Indiana	777	372 (48%)	2
Kentucky	3122	1576 (50%)	19
Louisiana	25	19 (76%)	0
Massachusetts	235	200 (85%)	4
Michigan	909	730 (80%)	28
Missouri	234	96 (41%)	0
North Carolina	51	39 (76%)	1
Ohio	1200	750 (63%)	2
Tennessee	590	371 (63%)	2
Utah	281	152 (56%)	2
West Virginia	2089	1053 (50%)	5

Cases of Hepatitis A Associated with Outbreaks, United States

Hepatitis A Cases by MMWR Week, July 27, 2016 - December 1, 2018 (N=10,037)

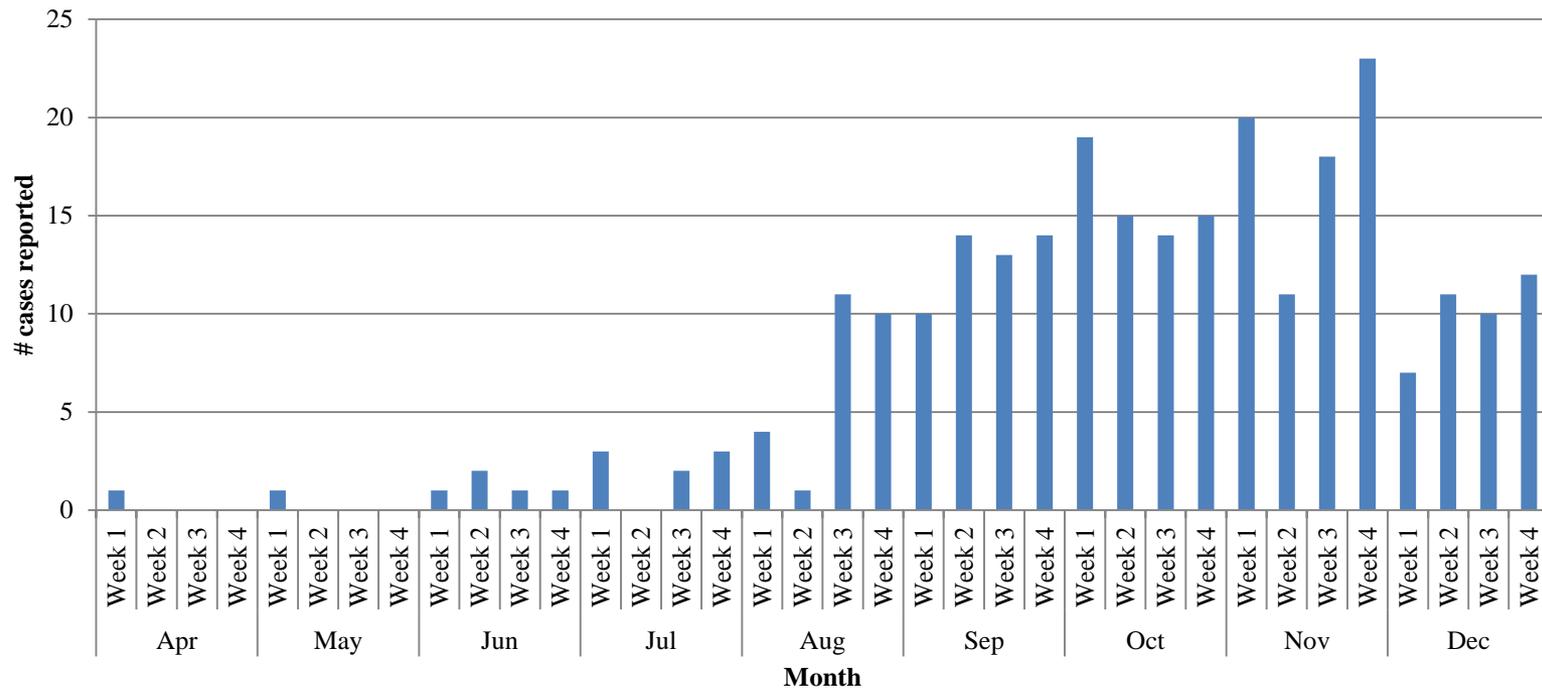


Massachusetts Hepatitis A Outbreak

- April 2018 – January 4, 2019
 - 267 outbreak cases (annual avg=50)
 - 84% hospitalized, 4 deaths
- 60% male, average age: 34
- 77% white, non-Hispanic
- 52% experiencing homelessness/unstable housing
- 87% any illicit drug use (73% injection drug use)
- Co-infection: 66% hepatitis C, 4% HIV
- Unusual genotype IIIA
 - National outbreak primarily IB, interstate links

Massachusetts Outbreak Curve

Outbreak-associated hepatitis A cases, by event date, Massachusetts, 2018



Cases occurring after Week 4 in December excluded. Data for more recent weeks may be incomplete due to diagnosis and reporting delays. Data source: MDPH Bureau of Infectious Disease and Laboratory Sciences. Data as of 1/4/2019 and subject to change.

Prevention

- Vaccination of at-risk populations
 - One dose of single-antigen vaccine confers more than a decade of protection; also useful for post-exposure prophylaxis
- Prompt identification of cases with contact tracing
 - Vaccinate close contacts within 14 days to prevent illness
- Increase hand hygiene
- Environmental sanitation

Response: Stakeholder Engagement

- Multiple general advisories to providers
 - Issued jointly with the Boston Public Health Commission
- Targeted advisories:
 - Emergency Departments
 - BSAS Acute Treatment Services (detox) programs
 - County Jails and Houses of Correction
- Conference calls with:
 - Local Boards of Health
 - EDs, ATS programs, Jails/HOCs

Response: Vaccination

- State-supplied adult vaccine:
 - Usually supplied only for uninsured
 - DPH eased usual requirements for hepatitis A vaccine:
 - At non-traditional sites (e.g. shelters, mobile programs)
 - At sites where billing insurance is not routine
 - To facilitate rapid vaccination of vulnerable populations in traditional settings
- Privately purchased vaccine also available
 - Prior national vaccine shortage resolved

Response: Educational Materials

- DPH website
 - www.mass.gov/hepatitis-a
- One-page educational posters for download
- Supportive materials for vaccination clinics
- Weekly epidemiologic summaries
- Ongoing technical assistance

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Next Meeting:
February 13, 2019