Yakima Health District
BULLETIN

Volume 16, Issue 3 November 2017

Hepatitis A Outbreaks in Multiple States

Inside this issue:

Requested Actions

- Vaccinate high-risk adults against hepatitis A virus (HAV): homeless, illicit drug users, people who work with these groups, international travelers.
- Be vigilant for patients, particularly homeless individuals and/or illicit drug injectors, who may be presenting with HAV (e.g., nausea, anorexia, fever, malaise, or abdominal pain AND either jaundice or elevated serum aminotransferase levels).
- Check for anti-HAV IgM, as well as anti-HCV, HBsAg, and anti-HBc IgM among suspected cases of acute viral hepatitis.
- Provide post-exposure prophylaxis to close personal contacts of HAV cases if they have not been previously vaccinated and are not known to have naturally acquired immunity (see below for details).
- Report suspected and confirmed cases of HAV and other forms of viral hepatitis to YHD at (509) 249-6541.

Background

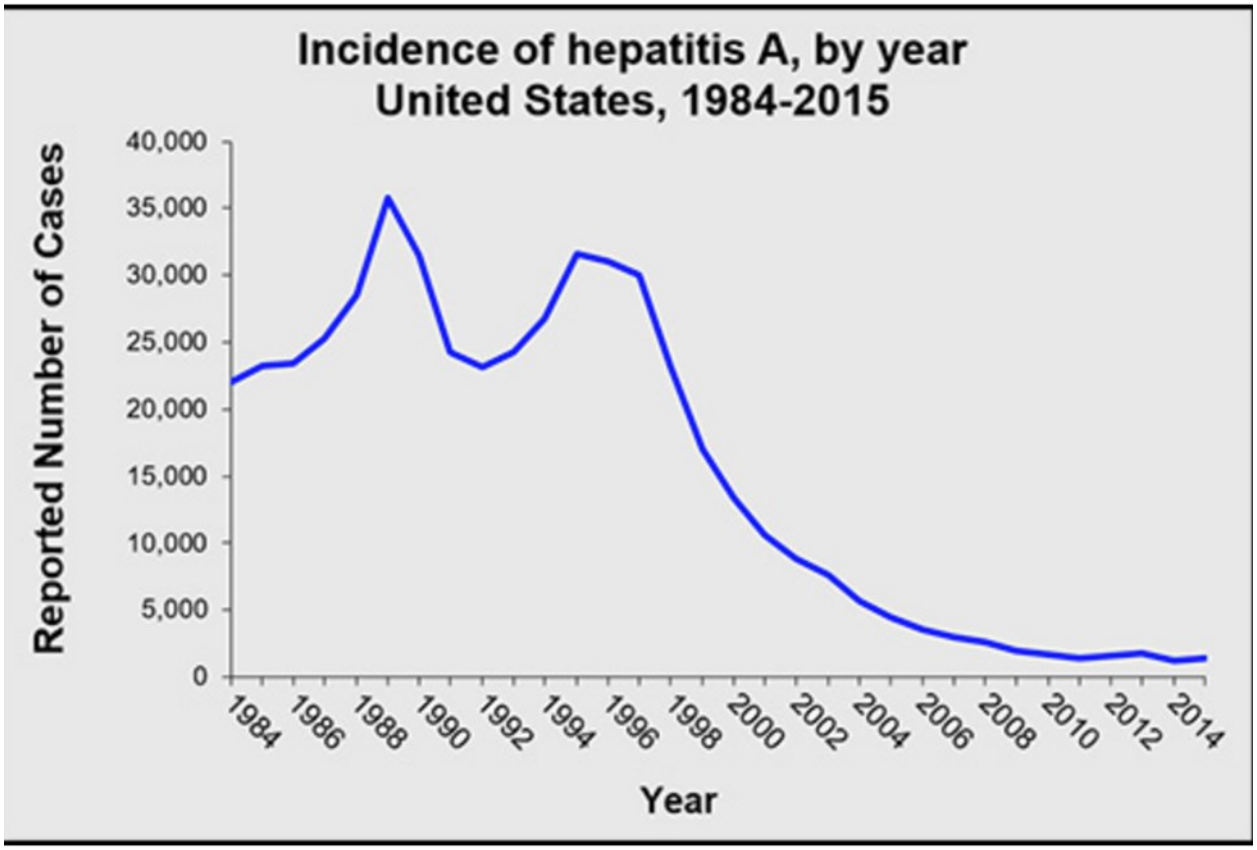
California is currently experiencing the largest person-to-person hepatitis A outbreak recorded in the United States since the hepatitis A vaccine became available in 1996. The current outbreak involves cases in multiple California counties and several other states, resulting in several dozen HAV-associated deaths.

County	Cases	Hospitalizations	Deaths
San Diego	544	372	20
Santa Cruz	76	33	1
Los Angeles	10	8	0
Other	14	7	0
Total California	**644**	**420 (65%)**	**21 (3%)**
Michigan	**495**	**416 (84%)**	**19 (4%)**
Utah	**60**	**32 (53%)**	**0 (0%)**

According to the Centers for Disease Control and Prevention (CDC) and these reporting jurisdictions, the majority of people infected in this outbreak are homeless, use illicit drugs (injected or non-injected), or both. While specific data on risk factors has not been published for all jurisdictions, Utah reports 70% of its cases are homeless, 20% are drug users, and 13% are other contacts of known cases. In Utah, 21% of cases are incarcerated and 30% are co-infected with hepatitis C. Higher than expected hospitalization and death rates are presumed to reflect an intersection between HAV and underlying liver disease due to hepatitis C, hepatitis B and/or excess alcohol use.

Cases have been linked using laboratory evidence as well as epidemiologic evidence. The outbreak is caused by related strains of the same hepatitis A virus genotype (IB), which is not commonly seen in the United States, but is common in the Mediterranean region, South Africa, and Turkey. The investigation is ongoing. Control efforts have been aimed at vaccination, sanitation and education among homeless and drug-using groups in the affected areas. Preparedness efforts elsewhere are focused on vaccination of the homeless and early recognition of cases.

This outbreak follows 20 years of nearly continuous declines in hepatitis A incidence in the United States since routine vaccination of children was introduced in the late 1990s.



Source: https://www.cdc.gov/hepatitis/hav/havfaq.htm#general

Post-Exposure Prophylaxis

Post exposure prophylaxis (PEP) is recommended for unvaccinated people who have been exposed to hepatitis A virus (HAV) in the last 2 weeks; those with evidence of previous vaccination do not require PEP. PEP consists of:

Hepatitis A vaccine for people aged 1-40 years

HAV-specific immunoglobulin (IG) for people outside of this age range. If immunoglobulin is not available, hepatitis A vaccine can be substituted.

Pre-Exposure Prophylaxis

Hepatitis A vaccine is available in multiple formulations, the majority of which have an administration schedule of two doses separated by six months. For more details on products and administration schedules, please visit: https://www.cdc.gov/hepatitis/hav/havfaq.htm#B3.

Vaccination is extremely effective. More than 95% of adults are protected after one of the two recommended doses, and nearly 100% of adults are protected after two doses. Hepatitis A vaccination has been part of routine childhood immunization for over 10 years. All children should be vaccinated against hepatitis A beginning at age 12 months.

Previously unvaccinated food-handlers are another worthwhile target group for adult immunization against HAV. Although food handlers are not inherently deemed at higher risk for acquisition of HAV, this measure helps to avoid costly and logistically difficult public notifications for post-exposure prophylaxis of patrons if a food handler were to be diagnosed with HAV.

Additional Facts

- Organism: picornavirus (HAV is classified as enterovirus 72)
- Mode of transmission: fecal-oral
- Incubation period: typically 20-30 days (range 15-50 days)
- Duration of contagiousness: from two weeks prior to onset until one week after icterus develops
- Duration of convalescence: 2-6 months total

Adapted From

https://www.cdc.gov/hepatitis/outbreaks/2017March-HepatitisA.htm
https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/Hepatitis-A-Outbreak.aspx
http://www.sandiegocounty.gov/content/sdc/hhsa/programs/phs/community_epidemiology/dc/Hepatitis_A.html
http://www.michigan.gov/mdhhs/0,5885,7-339-71550_2955_2976_82305_82310-447907--,00.html
http://health.utah.gov/epi/diseases/hepatitisA/HAVoutbreak_2017

Additional Reading

Hepatitis A General
https://www.cdc.gov/hepatitis/hav/havfaq.htm

Post-exposure Prophylaxis
https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5641a3.htm

Tri-County Neural Tube Defect Investigation Concludes

Requested Actions
Recommend prenatal vitamin use among women of reproductive age, regardless of pregnancy status.
Report birth defects to the Washington State Department of Health (360-236-3533).

The Washington State Department of Health (DOH) has completed its investigation into reports of increased anencephaly in Yakima, Benton, and Franklin Counties.

Summary

- The investigation showed that during the period 2010-2015, the anencephaly rate for the three-county area was roughly four times the national rate (8 vs 2 per 10,000 births, respectively). Reported cases were lower in the two years since (2 in 2016, 4 in 2017). See table.

- Examination of the following potential causative factors yielded no culprit: age, race-ethnicity, area of residence, source of drinking water, nitrate levels in home water supply, occupation, medications, supplemental vitamin intake, proximity to agriculture, and domestic pesticide use.

- DOH's analysis further suggested that at least some of the observed increase could be related to efforts of the stronger system for detection and reporting of birth defects in Washington State. Variability in tracking of low frequency events could be contributory, as well. It is also conceivable that a confluence of multiple factors was at play.

- Although not found causal, low intake of prenatal vitamins prior to pregnancy was noted among both affected and unaffected women in the investigation. This finding mirrors observations from DOH's statewide survey of post-partum women regarding pre-pregnancy and pre-natal health, with women in the three-county area having lower intake of prenatal vitamins than their statewide counterparts.

- Efforts aimed toward future prevention include continued
  ⇒ surveillance,
  ⇒ outreach & education promoting use of prenatal vitamins on a daily basis regardless of pregnancy status,
  ⇒ increasing access to prenatal vitamins through expanded DSHS coverage, and
  ⇒ fortification of corn masa flour.

The full report can be viewed or downloaded at https://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/BirthDefects/AnencephalyInvestigation

Anencephaly in Yakima-Benton-Franklin Counties, 2010-2015
(data for 2016 and 2017 incomplete)

Anencephaly				
2010	6	8,565	7.0	2.6, 15.2
2011	4	8,528	4.7	1.3, 12.0
2012	9	8,352	10.8	4.9, 20.5
2013	9	8,084	11.1	5.1, 21.1
2014	8	8,432	9.5	4.1, 18.7
2015	5	8,332	6.0	2.0, 14.0
2016	2	N/A	.	.
2017	2	N/A	.	.
Total To-Date[2]	45	.	.	.
2010 to 2015	41	50,293	8.2	5.9, 11.1

DOH. Neural Tube Defect Investigation in Benton, Franklin and Yakima Counties, 2010-2016.September 2017

Note: *2017 Total was 4 not 2. The report was completed before the 2017 data was final.*

Governor Inslee Declares Antibiotic Awareness Week, November 13-17, 2017*

To emphasize the threat of antibiotic resistance and the need to use antibiotics wisely, Governor Jay Inslee has issued a proclamation declaring Nov 13-17, 2017 Antibiotic Awareness Week. This is part of a national and international effort to improve use of antibiotics in order to optimize patient outcomes, improve population health, save money, and preserve the effectiveness of these lifesaving medications. Toward this end, see the links below for a suite of tools and resources to improve use of antibiotics. Please consider sharing these resources with healthcare providers and facilities in your professional network.

Ambulatory Clinics

Antimicrobial Stewardship Toolkit for Ambulatory Settings. The toolkit includes

- JumpStart Stewardship implementation guide for establishing a stewardship program in an ambulatory clinic
- Antimicrobial Stewardship in Ambulatory Settings online educational module for prescribers, including physicians, nurse practitioners, and physician's assistants, featuring clinical cases of commonly encountered in ambulatory settings
- Washington State Clinical Practice Guidelines for Acute Otitis Media, Acute Uncomplicated Bronchitis, Acute Uncomplicated Sinusitis in Adults, Acute Uncomplicated Sinusitis in Children, and Pharyngitis
- Provider and leadership commitment to stewardship posters for waiting and exam rooms (these posters can be personalized for each clinic)

QIN-QIO for Washington State, Qualis Health, AMS in Outpatient Settings initiative.

Nursing Homes

JumpStart Stewardship implementation guide for establishing a stewardship program in a nursing home

EQuIP for Long Term Care webinar series focusing on stewardship in 2017 and infection prevention in 2018. The registration link for this series is https://attendee.gotowebinar.com/register/5879017588924100354

Small Group Collaborative of nursing homes working together to implement a quality improvement project to improve assessment, communication, diagnosis and treatment of urinary tract infections in residents. Contact Marisa D'Angeli at marisa.dangeli@DOH.wa.gov for more information.

Qualis, Nursing Home Quality Care Collaborative to support stewardship in nursing homes.

Hospitals

Financial support for critical access and other small hospitals to participate in the University of Washington Tele-Antimicrobial Stewardship Program (UW-TASP). TASP offers weekly video conferences with UW physicians, pharmacists, and clinical microbiologists and outlying hospitals, featuring clinical didactics, antimicrobial stewardship (AS) policies and procedures, and case consultations drawn from the community. Hospitals interested in TASP should contact Natalia Paz at nmp@uw.edu.

JumpStart Stewardship implementation guide for establishing a stewardship program in a small, rural hospital

Washington State Hospital Association; Antimicrobial Stewardship Collaborative.

Animal Healthcare Providers

Brochure on antibiotic stewardship for veterinarians.

One Health Antibiotic Stewardship Summit in April 2018. This summit will bring together experts and stakeholders for education and collaboration to reduce antibiotic- associated harms across human, animal and environmental health. For more information, contact Kelly Kauber at Kelly.kauber@DOH.wa.gov.

**Courtesy of and adapted from the Washington State Department of Health Office of Communicable Disease Epidemiology*

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http://www.yakimapublichealth.org

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	Total Cases				
Notifiable Condition *(includes confirmed and probable cases)*	**Jan-Aug**	**Jan-Aug**	**Jan-Aug**	**By Year**	**By Year**
	2017	**2016**	**2015**	**2016**	**2015**
Campylobacteriosis	92	99	57	143	153
Chlamydia	1091	1071	994	1594	1597
Cryptosporidiosis	5	2	7	3	7
Genital Herpes - Initial	54	44	40	68	111
Giardiasis	12	19	9	27	25
Gonorrhea	263	296	248	444	376
Hepatitis A acute	1	0	0	0	0
Hepatitis B acute	0	2	0	2	0
Hepatitis B chronic	8	7	7	7	18
Hepatitis C acute	3	4	2	4	1
Hepatitis C chronic	173	157	198	237	223
HIV/AIDS Cumulative Living	221	199	195	204	197
HIV/AIDS Deaths	0	1	0	3	3
HIV/AIDS New	17	6	7	13	5
Meningococcal Disease	0	0	1	0	0
Pertussis	68	4	15	4	11
Salmonellosis	30	19	30	29	49
Shigellosis	11	1	12	19	2
STEC (enterohemorrhagic E. coli)	19	14	10	24	20
Syphilis - Primary and Secondary	9	4	8	11	7
Tuberculosis	7	10	2	7	12

Notifiable Conditions Summary Jan-Aug 2017