Illinois/Chicago Area Hepatitis A Update

It has been just over a year since the Illinois Department of Public Health (IDPH) declared a statewide person-to-person outbreak of hepatitis A virus (HAV), which has impacted over half the states in the US. With Chicago beginning vaccination efforts as early as 2017, when outbreaks in other states first began to intensify, and with the exceptional support of local partners in the CHART initiative, it appears we have been able to significantly impact the spread of the disease locally. Illinois as a whole has only had a total of 184 reported outbreak-related cases of hepatitis A cases in that time. Of those cases 76 have been reported in Cook County, with 54 of those cases occurring in Chicago. With hepatitis A outbreak cases ranging from 669 to 5,001 in the states surrounding Illinois, maintaining a low rate of local infection continues to be a priority.

With the current outbreak primarily occurring among specific unvaccinated populations, it is important that we remain vigilant in preventing the further spread of the disease. Of those cases in Illinois with identified risk factors the populations of individuals most at risk for infections are, people who use drugs (77.1%), men who have sex with men (46.9%), individuals with hepatitis B or C comorbidity (36.1%), recent incarceration (19.3%), and homelessness (10.8%) (Figure 1). As such, continued vaccinations of high-risk populations remains the most effective method to prevent the further spread of the virus.

National Perspective: Indiana

Outbreaks of hepatitis A are still a major concern nationwide, with increased rates of hospitalization and death, especially among elderly populations and with those individuals experiencing comorbidities. Nationally, thirty-two states have currently declared HAV outbreaks, with 31,485 confirmed cases and 320 deaths reported since the outbreaks began in 2016.

Indiana, just a short drive from Chicago, is one of several states that has been significantly impacted by a person-to-person outbreak of hepatitis A. Prior to their outbreak, which began in November 2017, Indiana State Department of Health (ISDH) only saw an average of 20 cases of hepatitis A annually. However, since the outbreak began the state of Indiana has reported 2,367 confirmed outbreak related cases, with 1,317 (56%) hospitalizations, and 4 deaths (Figure 2).

In response to the outbreak, ISDH began an extensive education and vaccination campaign, with health officials working diligently to provide prevention strategies and education about the hepatitis A outbreak to the public. Primarily they focused their efforts on homeless shelters, food establishments, correctional facilities, and other organizations that served at-risk populations. Working with local partners, ISDH has been able to provide vaccinations to nearly 230,000 at-risk individuals, significantly impacting the further spread of the disease.

Indiana continues to pursue efforts to prevent the further spread of HAV persisting with its educational and vaccination campaign. In addition, IDSH has deployed a hepatitis A vaccination Strike Team, which administers vaccinations to high-risk populations around the state.

References:
1.) IDPH. (2020, February 5). Indiana Hepatitis A Outbreak.

Figure 1. Percent of risk factor type among Illinois State hepatitis A outbreak cases who have an identified risk factor

Figure 2. IN Hepatitis A Cases by County

HAV Quick Facts

Hepatitis A is a highly contagious liver infection caused by the hepatitis A virus. Hepatitis A:

- Is preventable by vaccination
- Does not cause chronic liver disease and is rarely fatal
- Can cause debilitating symptoms and severe and sudden hepatitis
- Is treatable by a medical professional
- Requires a medical diagnosis
- Lab tests or imaging is always required
- Spreads through person-to-person contact and consuming contaminated food or drinks
- Is short-term: resolving within days to weeks
- Is critical: needs emergency care
Meet the Hepatitis A Champion of the Quarter

Founded in 1974, with a focus on eliminating the disparities in healthcare experienced by lesbian, gay, bisexual, transgender, and queer (LGBTQ) people, Howard Brown Health (HBH) has a long history of dedicated public service. In the late 70’s, after increased rates of hepatitis B (HBV) infection were identified among its patients, HBH participated a research program that eventually led to the development of a HBV vaccine. In the following years, Howard Brown Health continued its dedication to research with continued work in the areas of hepatitis B, and coordinating medical investigation and treatment efforts as the HIV/AIDS epidemic began. HBH’s efforts in these areas, as well as various social initiatives, has had a significant impact on both the incidence of disease in the area, and the community as a whole. In addition, Howard Brown Health, now also a Federally Qualified Health Center (FQHC), continues to work diligently to expand its available programs and services among all populations, but offers additional services with a focus on at-risk, homeless, LGBTQ, and under-and uninsured patients.

Howard Brown has continued its tradition of providing exemplary services to the community during the recent hepatitis A outbreak. In partnership with CDPH, Howard Brown Health has increased efforts to provide hepatitis A vaccination to at-risk populations from a monthly average of 147 doses a month, prior to the outbreak, to 264 doses each month. This is a 80% sustained increase in hepatitis A vaccinations, resulting in over 13,000 doses of public and private hepatitis A vaccine administered by HBH to those individuals most at-risk for infections (Figure 3).

The plans at HBH are to continue efforts to address the current HAV outbreak, with the expectation of further increasing hepatitis A vaccinations rates among at-risk populations.

Howard Brown’s significant contributions in protecting these individuals sets the example for our community. Thank you Howard Brown Health for all of your hard work and dedication!

![HAV Vaccines at Howard Brown Health (1/1/2017 - 11/1/2019)](image)

Figure 3. Monthly HAV vaccinations at HBH 01/2017-11/1/19

Shifting Epidemiology of Hepatitis A

Prior to the recommendation for the routine vaccination of all children with hepatitis A vaccine in 2006, there were two principle contributors to past outbreaks of hepatitis A disease: children in daycare settings, some of which were asymptomatic, and food borne outbreaks caused by infected food handlers. The increase in vaccination coverage among children has resulted in a shift in the epidemiology of the disease.

Current outbreaks of HAV are now primarily occurring among unvaccinated adult populations, with an increase in disease severity from that which was previously observed. Increased rates of hospitalization and death have been seen in this population, especially among the elderly and individuals suffering from comorbidities. Also, the method of disease transmission among this population is primarily person-to-person, rather than from contaminated food and water. At particular risk for infection are individuals experiencing homelessness, men who have sex with men, people who use drugs, recently incarcerated individuals, and people with chronic liver disease.

With the change in epidemiology, ACIP now recommends the vaccination of those individuals who are at increased risk of HAV or severe HAV infection. This includes the recommendation that “all persons aged ≥1 year experiencing homelessness should be routinely immunized against HAV infection”.