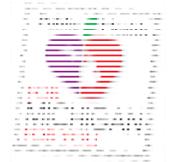




District Health Department #10



## **REPORT TO THE BOARDS OF HEALTH**

Jennifer Morse, M.D., Medical Director

Mid-Michigan District Health Department, Wednesday, November 23, 2016  
Central Michigan District Health Department, Wednesday, November 16, 2016  
District Health Department #10, Friday, November 18, 2016

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### **Hepatitis A**

Since August 2016, there have been four statewide alerts regarding hepatitis A, the most recent pertaining to a recall of frozen strawberries that originated from Egypt (for more information, refer to [MDARD](#) and the [FDA](#)). These strawberries were not shipped to retail stores and local health departments throughout the state have contacted the establishments that may have received them. Unrelated to this, it has been observed that since August of this year, the areas of Detroit, Macomb County and Oakland County have had at least a six-fold increase in the number of cases of hepatitis A as normally experienced during this time period when compared to the last several years.<sup>1</sup>

Hepatitis A is a virus that infects and inflames the liver. Unlike hepatitis C, the infection does not become chronic. Symptoms, if they occur, can include fever, fatigue, nausea, vomiting, abdominal pain, joint pain and jaundice (a yellowing of the skin or eyes). These symptoms can be severe and debilitating and usually resolve on their own in less than 2 months. Rarely, hepatitis A can lead to liver failure and death, which is more likely in older individuals and those with other liver problems. Children infected with hepatitis A often do not have symptoms and spread virus to others without knowing. Adults are contagious for two weeks before showing symptoms.

Hepatitis A rates were once much higher than they are now. The Hepatitis A vaccine was developed in 1995 and was initially only recommended as routine vaccination for children living in communities with high rates of infection. In 2005, the Advisory Committee on Immunization Practices (ACIP) added it to the routine recommended vaccinations for all children, as two-thirds of cases of hepatitis A were occurring in states not identified as high-risk areas.<sup>2</sup>

Hepatitis A is usually spread when a person eats or drinks something that has become contaminated with the virus from contact with objects, food, or drinks contaminated by feces or stool from an infected person. This most commonly comes from an ill food service worker that prepares food for others, from an ill household member or other close contact, or from contaminated food.<sup>3</sup> Food implicated in hepatitis A contamination often include fruits, such as raspberries and strawberries, and shellfish. Viruses such as hepatitis A are often resistant to the treatments used to reduce bacterial contamination on fruits and vegetables<sup>4</sup>. Other factors contributing to hepatitis A illness from foods include large-scale production and wide distribution of food, globalization of the food supply, eating away from home, and increasing number of at risk individuals<sup>4</sup>. One historic example occurred in February and March of 1997, when 213 cases of Hepatitis A occurred in 23 schools in Michigan, as well as 29 cases in Maine and scattered cases in other states, which were linked to frozen strawberries originating from Mexico<sup>5</sup>.

Traditional risk factors for hepatitis A are:

- Travel to or living in [countries where hepatitis A is common](#) (some experts advise people traveling outside the United States to consider hepatitis A vaccination regardless of their destination)<sup>6</sup>
- Being a family members or caregivers of a recent adoptee from countries where hepatitis A is common

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<sup>1</sup> Michigan Health Alert Network

<sup>2</sup> Buck, M. "Routine Hepatitis A Vaccination in the United States." *Pediatric Pharmacotherapy* 12.4 (2006)

<sup>3</sup> Centers for Disease Control and Prevention. "Viral Hepatitis-Hepatitis A Information." Inform

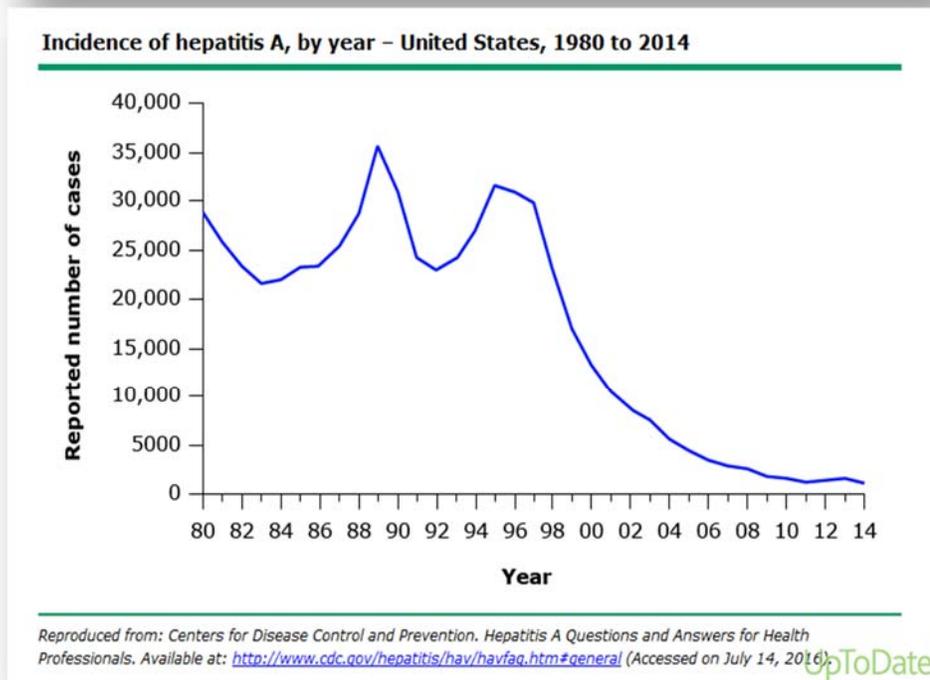
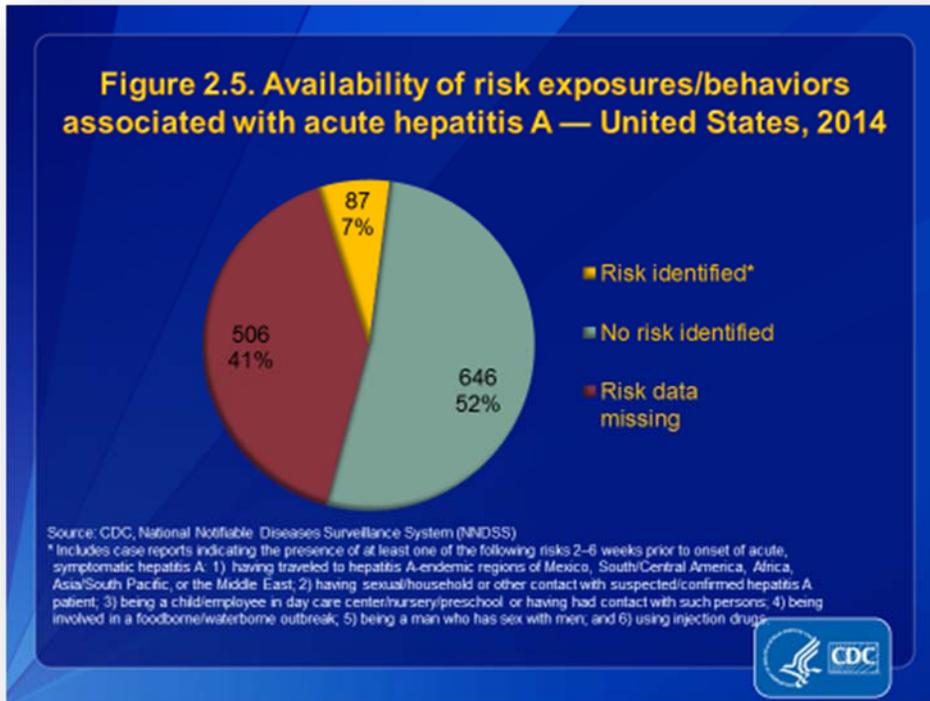
<sup>4</sup> Radin, Dragoslava. "New trends in food-and waterborne viral outbreaks." *Archives of Biological Sciences* 66.1 (2014): 1-9

<sup>5</sup> Hutin, Yvan JF, et al. "A multistate, foodborne outbreak of hepatitis A." *New England Journal of Medicine* 340.8 (1999): 595-602

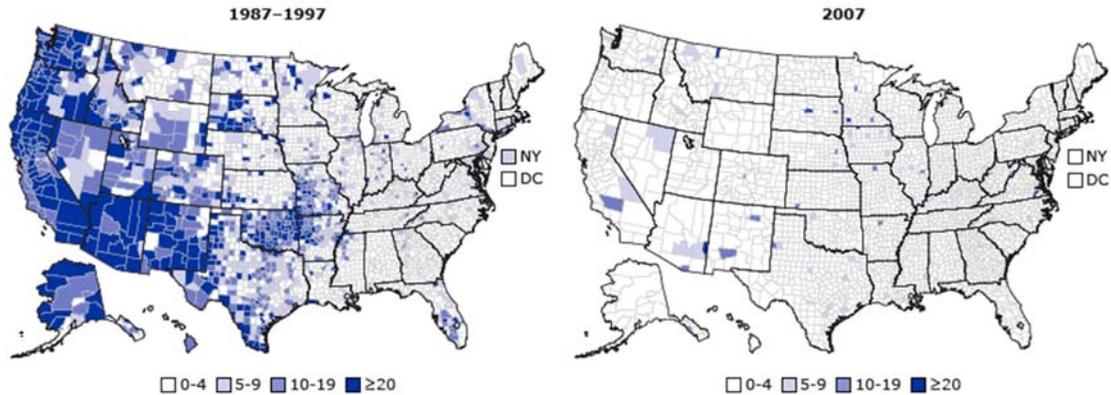
<sup>6</sup> Centers for Disease Control and Prevention. *CDC Health Information for International Travel 2016*. New York: Oxford University Press; 2016.

- Living with someone who has hepatitis A
- Being a man who have sexual contact with other men
- Using illegal drugs, whether injected or not
- Having clotting-factor disorders, such as hemophilia
- Having sexual contact with someone who has hepatitis A

Hepatitis A vaccination is recommended for all children at age 1 year and any individual with any risk factor listed above. As many as 52% of individuals that contract hepatitis A have no identifiable risk factor (see “figure 2.5” below.) Therefore, any adult who has not been vaccinated previously and wants to be protected against hepatitis A can also be vaccinated. The vaccine is given as a series of two shots, 6 months apart. Any unvaccinated person in close contact with an individual diagnosed with hepatitis A or otherwise exposed to hepatitis A should be evaluated for post-exposure prophylaxis, which is treatment after exposure in an attempt to prevent infection.



**Incidence\* of reported acute hepatitis A cases, by county – National Notifiable Diseases Surveillance System, United States, 1987 to 1997<sup>†</sup> (pre-vaccine) and 2007**



\* Rate per 100,000 population.  
<sup>†</sup> Annual average incidence.

Reproduced from: Murphy TV, Denniston MM, Hill HA, et al. Progress Toward Eliminating Hepatitis A Disease in the United States. *MMWR Suppl* 2016; 65:29.



Hepatitis A Incidence												
Area	2011		2011		2012		2013		2014		2015	2016**
	#	Rate*	#	#								
United States	1,670	0.5	1,398	0.4	1,562	0.5	1,781	0.6	1,239	0.4	-	-
Michigan	73	0.7	57	0.6	100	1.0	83	0.8	45	0.5	-	79
CMDHD	1	-	3	-	1	-	0	-	1	-	3	1
MMDHD	1	-	1	-	0	-	0	-	0	-	0	0
DHD10	0	-	0	-	0	-	2	-	0	-	0	2

\* Rate per 100,000 population  
 \*\* as of 11/2/16

**Recommendations:**

1. Continue routine hepatitis A vaccination of all children at one year of age.
2. Due to increased travel and globalization of food, all individuals should strongly consider getting hepatitis A vaccination.
3. Enjoy produce safely (<http://www.fightbac.org/food-safety-education/safe-produce/>).