Risk to Hospitals During a Community Hepatitis A Outbreak: Flipping the Perspective

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Background

Nationwide hepatitis A (HAV) outbreak

Louisville, KY

southern Indiana (Nov 2017)

Indianapolis (Nov 2018)
Background

Indiana Hepatitis A

• Outbreak Cases 2,014
• Outbreak Deaths 4
• Hospitalizations 1,109

Background

- Hepatitis A vaccine (HAVx) has been recommended for all children in the United States since 2006
  

- CDC does not recommend for HCWs because “routine infection-control precautions will prevent transmission to hospital staff”
  
  [https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5507a1.htm](https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5507a1.htm) accessed 16Aug2019
Background

- Based on CDC guidance, Eskenazi Health opted not to vaccinate HCWs via Occupational Health (OccHealth), despite requests from staff.

- Eskenazi Health did remind employees and IU affiliates on an individual basis that their respective medical insurance plans included HAVx with no cost sharing in-network.
Background

• Feb 27, 2019 notified that a nurse diagnosed with HAV
• Last working day Feb 25, 2019
• First symptoms Feb 22, 2019
Methods/Investigation

• EMR tracer report to determine if any of the nurse’s patients had HAV
  • 15–50 days prior to symptoms (incubation period)
  • 0-14 days prior to symptoms (infectious period)
• EMR and CHIRP review of potentially exposed patients to determine HAV immunity +/- HAVx
• Communication with potentially exposed patients
  • Risk thought to be low but “abundance of caution”
    • Nurses administer medications
    • Uncertainty about efficacy of alcohol hand gel for HAV
  • Scripted phone calls to patients and receiving facilities
Hello, can I speak with ___________?

___________, this is NAME. I’m a nurse at Eskenazi Health. I’m calling because there is a possibility you may have been exposed to a case of hepatitis A during your stay at the Sidney & Lois Eskenazi Hospital in February 2019.

Due to this potential exposure, we strongly recommend, as a precautionary measure, that you receive the hepatitis A vaccine. You can receive this vaccine at your local health department or at any Eskenazi Health pharmacy free of charge. The vaccine should be given as soon as possible. You can find a pharmacy location that is convenient for you at www.EskenaziHealth.edu.

There will be no charge for the vaccine if you choose to receive it at an Eskenazi Health facility. If you receive your vaccine at Eskenazi Health, please contact xxxxx at 317.880.xxxx in order to have your bill written-off.

Although it is highly unlikely that you will develop hepatitis A, as a precaution, can you tell me if you are experiencing any of the following signs or symptoms:

Fatigue  Flu-like symptoms  Nausea, vomiting or abdominal pain  Yellow eyes

IF PATIENT ANSWERS YES: Please see your primary care provider and ask to be tested for hepatitis A.

IF NO PRIMARY CARE PROVIDER: Please seek care at your local emergency room. Ask to be tested for hepatitis A.

IF PATIENT ANSWERS NO: Please reach out to your primary care provider immediately if you develop any of these symptoms. Please also proactively share this information with him or her at the next possible opportunity.

Your health is very important to us. If after we hang up you have any questions, please call the Eskenazi Health Office of Patient Experience at 317.880.xxxx.
Methods/Investigation

• Communication with public health partners
  • Notification of both Eskenazi Health local HD and nurse’s home county HD

• Investigation for other potential exposures

• Communication with employees regarding HAVx
  • “Nudges” in Eskenazi Health Daily three times – March 7, March 12 and March 15—with concurrent posts on Eskenazi Health internal webpage
  • Reaches almost 6000 unique email addresses
2. Vaccine Available to Employees for Hepatitis A Outbreak in Community

The United States is experiencing an unprecedented, multistate hepatitis A outbreak, including in our Indianapolis community. In Indiana alone, more than 1,000 people have fallen ill, and more than 500 have been hospitalized. Four people have died.

During community outbreaks, the Centers for Disease Control and Prevention strongly recommends the hepatitis A vaccine for anyone who is not immune. If you have never been vaccinated and have never had hepatitis A, you are not immune and should receive the hepatitis A vaccine.

Both Eskenazi Health and Indiana University fully cover the cost of hepatitis A vaccine in their health insurance programs:

- If you have health insurance via Eskenazi Health, you may request the hepatitis A vaccine at any Eskenazi Health pharmacy. You do not need an appointment, prescription or physician’s note.

- If you have health insurance via Indiana University, you may request hepatitis A vaccine at any CVS pharmacy. You do not need a prescription or physician’s note.

You should not need to pay for the hepatitis A vaccine if you receive it from these pharmacies, but it is always a good idea to confirm your cost at the time of service. If you do not have health insurance, you can receive the hepatitis A vaccine from your local county health department.

It is optimal and recommended to receive a second dose of the hepatitis A vaccine six months after the first. However, even one dose is over 90 percent effective at preventing hepatitis A. If you have any questions about the hepatitis A vaccine, please contact Dr. Amy Beth Kressel, medical director of infection prevention and antimicrobial stewardship, at abkresse@iu.edu or [pager].
Methods/Investigation--coordination

• Internal communication and coordination
  • Internal emails (non-synchronous)
  • Individual phone calls
  • Group meetings with conference line (synchronous, all stakeholders)

• Did not activate incident command
Results-- EMR tracer

- The nurse had not provided care for a patient with diagnosed HAV during the incubation period
  - Not hospital-acquired infection
- The nurse had provided care for 14 patients during the infectious period
  - None had evidence of HAV immunity or HAVx in EMR or CHIRP
  - 1/14 tested for HAV—negative
Results—patient chart review and communication

• 2 patients still hospitalized
  • Treating physician contacted via secure EMR message
    • 2 received HAVx

• 9 patients discharged to home
  • 8 contacted by phone (2 with interpreter)
    • 3 received HAVx
    • 1 pending HAVx—EMR last accessed 20Aug2019—CHIRP query failed and no HAVx in EMR
    • 1 symptomatic (not HAV), did not receive HAVx
  • 1 unsuccessful phone contact (message left)

• 3 patients discharged to jail or SNF
  • 2 RNs contacted by phone; 1 phone message left (jail)
    • 1 received HAVx
Results—public health and other potential exposures

• 14/14 patients did not develop HAV per EMR review

• No pitch-ins or community food at work
Results– employee HAVx

- HAVx dispensed at the EH Pharmacy increased after communication nudges about availability
  - Dec 2018-Feb 2019 = 4 HAVx dispensed
  - Mar-May 2019 = 82 HAVx dispensed
  - We did not determine how much dispensing was to employees
  - We were not able to determine any change in IUSM employees receiving HAVx at CVS Pharmacy
  - Employees sent emails asking for more information after the Eskenazi Health Daily
Conclusions

• The traditional view of hospital infection risk needs to be flipped: HCWs can bring community-acquired infection into the hospital

• We did not find any hospital transmission of HAV from patients to our nurse or from the nurse to patients
  • Limited to our own EMR review

• Patient post-exposure HAVx was low
  • Limited to our own EMR review, so may have been higher

• Nudges can quickly increase HAVx uptake
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Thank you!

Questions?