



HCSP FACT SHEET

• HCV POPULATIONS •

Hepatitis C in Children

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Forward

This fact sheet will discuss the various aspects of hepatitis C (HCV) in children and adolescents including mother-to-child transmission, hepatitis C transmission and prevention, HCV disease progression, the tests to monitor chronic hepatitis C, and treatment of children with chronic hepatitis C.

Prevalence

Worldwide it is estimated that there are 5 million children infected with chronic hepatitis C. According to the National Examination Survey (NHANES) there are an estimated 31,000 6 to 11-year old children and 101,000 adolescents infected with chronic hepatitis C in the United States. The number is likely higher since the survey was conducted between 2003 and 2010 and NHANES doesn't count the homeless population. Additionally, since 2010 there has been an increase in injection drug use due to the opioid crisis that includes women of child-bearing age.

Mother-to-Child Transmission

The risk of mother-to-child transmission is approximately 5%. Some factors may increase the likelihood of transmission from a mother-to-child such as fetal scalp monitoring, birth by cesarean, high viral load (HCV RNA), and coinfection with HIV. At this time there have not been any studies of hepatitis C direct-acting drugs that could prevent the transmission of hepatitis C from mother-to-child. Hopefully, future studies with HCV direct-acting antiviral medications (without ribavirin) will be conducted to find out whether HCV treatment in pregnant women is safe and effective in preventing mother-to-child transmission of HCV.

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The information in this fact sheet is designed to help you understand and manage HCV and is not intended as medical advice. All persons with HCV should consult a medical practitioner for diagnosis and treatment of HCV.

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Hepatitis C in Children —CONTINUED FROM PAGE 1**Testing**

A baby born to a mother who is hepatitis C positive will receive the mother's HCV antibodies. The mother's HCV antibodies will remain in the infant's blood for a year or longer. For this reason, the recommendation is to test an infant at 18 months. A blood test called an HCV RNA (viral load) can be performed at two months to detect if the HCV virus is present in the baby blood. But parents should be cautioned on testing for RNA this early because 25% to 50% of infants will naturally clear—called spontaneously clear—the virus after six months. If an infant is RNA tested at 2 to 6 months, children should be retested or tested at 18 months. If viral load is negative, a HCV antibody test should be taken on or after 18 months of age.

Interestingly, another 6% to 12% of children will spontaneously clear the virus before reaching adulthood.

Transmission

The most common transmission of hepatitis C in children is from injection drug use—sharing needles and drug equipment (cookers, cotton, water, etc.). Sexual transmission is another possible risk factor but is unlikely unless children and teens are having unprotected sex with multiple sexual partners or having sex with trauma. Another possible route is getting a tattoo or piercing in unlicensed tattoo or piercing parlors that are not following safety practices. Tattoo and piercing parties are of particular concern because drugs and alcohol are usually involved and safety may not be a particular concern for the party goers.

Prevention

The best practices include: do not share anything that comes into contact with blood.

Children should be taught to not share any personal care items—toothbrushes, razors, nail clippers or any other item that may contain blood. If they have cuts or wounds they should cover them with band aids or dressings. Use gloves and bleach to clean up blood spills.

If you inject drugs – do not share needles, cookers (to mix drugs), cotton (to filter drugs), or water (to mix drugs). In fact, don't share any other equipment used to inject or snort drugs. Just use your own equipment or go to a needle exchange (if available) to get new equipment. Needle exchange people are there to help you stay safe.

Only get a tattoo or piercing at a professional tattoo or piercing parlor where they pay attention to safety and only get a tattoo from a professional artist. A skilled tattoo artist will provide a safe and beautiful tattoo that will last for years!

Sexual transmission among straight people in a long-term relationship is a very low risk, but it is still a potential risk—if you are worried about getting hepatitis C from sex practice safer sex and use a condom. There have been reports of sexual transmission of hepatitis C among men who have sex with men (MSM) and gay men who have multiple sexual partners. Gay men or MSM who have multiple sexual partners are advised to practice safer sex and use a condom. No matter

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what type of sex that people practice there are ways to stay safe. Talk to a harm reduction person about how to stay safe while having sex.

Stigma and Discrimination

Hepatitis C is a highly stigmatized disease and people with hepatitis C face discrimination. Children have a difficult time just being children so it is not surprising that adding a potentially infectious disease into the mix can be overwhelming for a child.

The decision to inform the school or child care facility of a child's status is a personal one. No one should be forced to tell that their child has hepatitis C. Children can be educated about blood exposure and ways to prevent transmission of hepatitis C and other blood-borne diseases.

Disease Progression

In general, most children have a slow disease progression. The vast minority of children with chronic hepatitis C have a more aggressive disease progression. As a child ages, the disease progression process can speed up. There are some factors that increase the likelihood of a faster hepatitis C disease progression such as coinfection with HIV, or hepatitis B, having cancer, or anemia. Additionally, obesity with fatty liver disease and heart disease can contribute to HCV disease progression.

Homelessness and incarceration can also increase HCV disease progression in children.

To keep a child healthy and to prevent liver disease progression in children, the same advice that prevents

disease prevention in adults should be followed for children. See a specialist about nutrition and an exercise program geared towards children. Alcohol can damage the liver. Alcohol combined with hepatitis C can be deadly. Stay away from recreational drugs.

Children are already dealing with many emotional issues. The emotional complexities of living with a disease that has many physical and emotional problems can be overwhelming for children. A lot of children find it difficult to talk to adults. Seek professional care even if your child seems to be 'ok.'

Disease Monitoring

Children should be monitored for their general health and liver health on a regular basis. It is recommended that children have at least an annual visit with their pediatric medical provider and a consultation with a liver doctor that specializes in children with liver diseases.

Children should receive regular vaccinations including the hepatitis A and B if not already immune. Children should be protected with other childhood vaccines as advised by their medical provider.

Treatment

There are medications approved by the Food and Drug Administration (FDA) to treat children aged 12 and over. The cure rates are up to 100% for all HCV genotypes. For more information, please refer to our Hep C Medications blog: <http://hepatitiscmedications.hcvadvocate.org>

Conclusion

The hepatitis C epidemic is continuing and increasing in the general population. We now have

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“Twin Epidemics” of hepatitis C—the decade-long surge in injection drug use across the United States and the older “Baby Boomers.” The newest epidemic means that we will have even more children with infected with hepatitis C. We have all the tools we need to identify, manage and treat children to eliminate hepatitis C especially in children we just need to put them into practice.

Sources:

- Hepatitis C Virus Infection in Children and Adolescents, Hepatology Communications, VOL. 1, NO. 2, 2017—J.E. Squires et. al.
- Hepatitis C Virus Infection Among Reproductive-Aged Women and Children in the United States, 2006 to 2014—K N Ly et. al.
- MMWR - Hepatitis C Virus Infection Among Women Giving Birth — Tennessee and United States, 2009–2014 - Weekly / May 12, 2017, / 66(18);470–473 – S. Patrick at. al.
- AASLD Guidance: HCV in Children <http://www.hcvguidelines.org/unique-populations/children>

Related publications:

A Guide to Understanding Hepatitis C

http://hcvadvocate.org/hepatitis/factsheets_pdf/HCV_Guide.pdf

How To Tell Children They Have Hepatitis C

http://hcvadvocate.org/hepatitis/factsheets_pdf/TellChild_HCV.pdf

Overview: Diagnostic Tests

http://hcvadvocate.org/hepatitis/factsheets_pdf/diagnostic.pdf

For more information

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www.ada.gov • Centers for Disease Control and Prevention
www.cdc.gov | <ul style="list-style-type: none"> • Mayo Clinic
www.mayoclinic.com • MedlinePlus
www.nlm.nih.gov/medlineplus |
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**GET TESTED
GET TREATED
GET CURED**

HCV Populations