

HEPATITIS C 101

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Be Legendary.™

Hepatitis = Inflammation of the liver



SYMPTOMS OF ACUTE INFECTION

- Fever
- Fatigue
- Loss of appetite
- Nausea
- Vomiting
- Abdominal pain
- Elevated liver enzymes
- Gray-colored stool
- Joint pain
- Jaundice

Symptoms of all types of viral hepatitis are similar



HEPATITIS C

- HCV may be a short-term illness but for 70%–85% it becomes a long-term, chronic infection.
- Transmitted by infectious blood or body fluids that contain blood
- Symptom onset in 20-30% of cases acutely infected within in 2-12 weeks of exposure



100 people infected with hepatitis C

75-85 will develop chronic hepatitis C

IF LEFT UNTREATED...







5-20 will develop cirrhosis over 20-30 years

1-5 will die from cirrhosis or liver cancer



U.S. Department of Health and Human Services Centers for Disease Control and Prevention

TEST OUTCOME	INTERPRETATION	FURTHER ACTIONS
HCV antibody nonreactive	No HCV antibody detected	Sample can be reported as nonreactive for HCV antibody. No further action required. If recent exposure in person tested is suspected, test for HCV RNA.*
HCV antibody reactive	Presumptive HCV infection	A repeatedly reactive result is consistent with current HCV infection, or past HCV infection that has resolved, or biologic false positivity for HCV antibody. Test for HCV RNA to identify current infection.
HCV antibody reactive, HCV RNA detected	Current HCV infection	Provide person tested with appropriate counseling and link person tested to care and treatment. [†]
HCV antibody reactive, HCV RNA not detected	No current HCV infection	No further action required in most cases. If distinction between true positivity and biologic false positivity for HCV antibody is desired, and if sample is repeatedly reactive in the initial test, test with another HCV antibody assay. In certain situations, [§] follow up with HCV RNA testing and appropriate counseling.

* If HCV RNA testing is not feasible and person tested is not immunocompromised, do follow-up testing for HCV antibody to demonstrate seroconversion. If the person tested is immunocompromised, consider testing for HCV RNA.

⁺ It is recommended before initiating antiviral therapy to retest for HCV RNA in a subsequent blood sample to confirm HCV RNA positivity.

[§] If the person tested is suspected of having HCV exposure within the past 6 months, or has clinical evidence of HCV disease, or if there is concern regarding the handling or storage of the test specimen.

Recommended Testing Sequence for Identifying Current Hepatitis C Virus (HCV) Infection



U.S. Department of Health and Human Services Centers for Disease Control and Prevention



* For persons who might have been exposed to HCV within the past 6 months, testing for HCV RNA or follow-up testing for HCV antibody is recommended. For persons who are immunocompromised, testing for HCV RNA can be considered.

[†] To differentiate past, resolved HCV infection from biologic false positivity for HCV antibody, testing with another HCV antibody assay can be considered. Repeat HCV RNA testing if the person tested is suspected to have had HCV exposure within the past 6 months or has clinical evidence of HCV disease, or if there is concern regarding the handling or storage of the test specimen.

Source: CDC. Testing for HCV infection: An update of guidance for clinicians and laboratorians. MMWR 2013;62(18).

The **Growing Problem** of Hepatitis C in the U.S.







is the average age people are dying

More persons die from hepatitis C than all of the 60 other reported infectious disease combined. According to available data, at least 20,000 deaths occur each year - which is believed to be an underestimate of the actual number.









Source: CDC, National Notifiable Diseases Surveillance System.

* During 2019, cases of chronic hepatitis C were either not reportable by law, statute, or regulation; not reported; or otherwise unavailable to CDC from Arizona, Arkansas, California, Delaware, District of Columbia, Hawaii, Indiana, Kentucky, Mississippi, Nevada, North Carolina, Rhode Island, and Texas.

†Only confirmed, newly reported, chronic hepatitis C cases are included. For the complete case definition, see https://ndc.services.cdc.gov/conditions/hepatitis-c-chronic/.

HCV TREATMENT

- Highly effective therapies were introduced in 2011
 - New drugs have become and continue to become available
- Over 90% of HCV infected persons can be cured with 8-12 weeks of oral therapy

WHO IS AT RISK FOR HEPATITIS C?

- People who inject drugs, current or former use
- Those born from 1945-1965
- Recipients of clotting factor concentrates made before 1987
- Recipients of blood transfusions or solid organ transplants prior to 1992
- People with a known exposure
 - Needlestick injuries in a healthcare setting



WHO IS AT RISK FOR HEPATITIS C?

- Children born to mothers infected with HCV
- People who are incarcerated
- People who use intranasal drugs
- People who received body piercing or tattoos done with non-sterile instruments



WHO SHOULD GET TESTED FOR HEPATITIS C?

EVERY ADULT



At least once

EVERY PREGNANT WOMAN

EVERYONE WITH RISK FACTORS



Regularly

Every pregnancy

SOURCES: CDC Recommendations for Hepatitis C Screening, MMWR, April 2020 CDC Vital Signs, April 2020

- Among People Who Inject Drugs (PWID)
 - 60%-90% Have HCV after 5 Years
 - Median Time to HCV Transmission is 3 Years
 - Each Year 20-30% of PWID Acquire HCV



HOW IS HEPATITIS C SPREAD AMONG PEOPLE WHO INJECT DRUGS?

- **Needles & Syringes**. Sharing or reusing needles and syringes increases the chance of spreading the Hepatitis C virus. Syringes with detachable needles increase this risk even more because they can retain more blood after they are used than syringes with fixed-needles.
- **Preparation Equipment**. Any equipment, such as cookers, cottons, water, ties, and alcohol swabs, can easily become contaminated during the drug preparation process.
- **Fingers**. Fingers that come into contact with infected blood can spread Hepatitis C. Blood on fingers and hands can contaminate the injection site, cottons, cookers, ties, and swabs.
- **Surfaces.** Hepatitis C can spread when blood from an infected person contaminates a surface and then that surface is reused by another person to prepare injection equipment.

HCV PREVENTION

- Unlike hepatitis A and B, there is no vaccine for hepatitis C
- Don't share needles or injection equipment
 - Syringe Service Programs (SSP)
- Follow universal blood/body fluid precautions

SYRINGE SERVICE PROGRAMS

- There are five syringe service programs currently in ND
 - Any Positive Change (APC) Project; Grand Forks, ND
 - Harm Reduction Center; Fargo, ND
 - Mandan Good Neighbor Project; Mandan, ND
 - Minot Good Neighbor Project; Minot, ND
 - The ROPES Project; Valley City, ND

North Dakota



HEPATITIS C

Hepatitis C Case Count by Gender, North Dakota 2017-2021



Source: NDDHHS Sexually Transmitted and Bloodborne Diseases Unit

HEPATITIS C COUNT AND RATE, 2021



HEPATITIS C - AGE

Hepatitis C by Age, North Dakota 2021



Source: NDDHHS Sexually Transmitted and Bloodborne Diseases Unit

HEPATITIS C - RACE



Source: NDDoH Division of Sexually Transmitted and Bloodborne Diseases

CTR SITES

- The Sexually Transmitted and Bloodborne Diseases Unit offers HIV and hepatitis C testing to populations at risk with the counseling, testing and referral (CTR) program. CTR sites aim to inform clients of their HIV and hepatitis C status, provide counseling and support for harm reduction and help to secure needed referrals for treatment and care.
- CTR sites are providers who have patients at high risk of HIV and hepatitis C infection. CTR providers may include, but are not limited to local public health units, substance abuse and treatment centers, ND community action organizations, ND family planning sites, pregnancy clinics, correctional institutions, homeless shelters, institutions of higher education, community health centers, sexual health clinics, tribal health, etc.

CTR DATA 2021



Source: NDDHHS Sexually Transmitted and Bloodborne Diseases Unit

HCV SURVEILLANCE IN ND

- April 2022 implementation of interviewing newly reported HCV cases
- Field epidemiologists try to contact patients who are newly diagnosed with HCV
 - Interviewing for demographic information, risk factors, clinical history, contacts, and giving information about treatment options
- Goal is to get patients a confirmatory test and into treatment

CONT.

- April 20th, 2022 November 10th, 2022
 - 266 new morbidity cases have been reported
 - Of the 266 cases, 140 were interviewed
 - 77 female, 63 male
 - 4 have started treatment
 - 103 have reported injection drug use (74%)



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