

HEPATITIS C

Based on the MoH Communicable Diseases Manual 2012¹

Associated Documents

Case Report Form:

K:\CFS\ProtectionTeam\FinalDocs\notifiableConditions\Hepatitis C\Forms\HepBCNOS_Nov_2013.pdf

Fact sheet: There is no link to a fact sheet but a booklet is available from C&PH and resources are available from the Hepatitis C centre (see Management of a case, Counselling).

The Illness

Hepatitis C is a viral illness that affects the liver. Infection is usually chronic and asymptomatic. Mild fatigue and arthralgia are the most common symptoms reported. Most patients have some degree of inflammation in the liver, with fluctuating elevations of serum transaminases detectable in the peripheral blood. Of those chronically infected, approximately 10-20% develop liver cirrhosis after 15 to 40 years and an estimated 5% develop hepatocellular carcinoma after 40 years of infection.

The risk of HCV transmission by household contact has not been well defined, but the efficacy of transmission in this setting appears to be low. HCV has not been well defined as a sexually transmissible disease, however a risk may increase for people with multiple partners. Mother-to-infant transmission at birth can be up to 10 percent.²

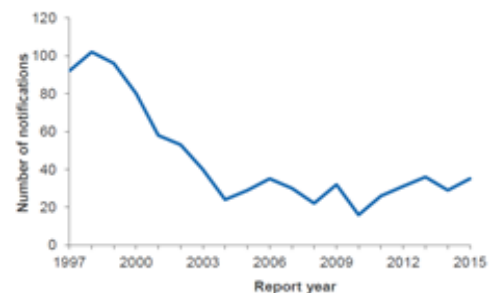
Infection with hepatitis C virus does not usually confer immunity and reinfection is possible.

Epidemiology in New Zealand^{1,3}

Most cases of hepatitis C (HCV) in New Zealand have a history of injecting drug use. Body piercing and tattooing are less common exposures. The National Needle Exchange Blood-borne Virus Seroprevalence Surveys (undertaken in 2004 and 2009) found that the prevalence of HCV infection among injecting drug users was high (70%) and was strongly associated with age and duration of injecting.

In New Zealand, only acute hepatitis C is a notifiable disease, so notification rates do not give an indication of the burden of chronic hepatitis C infection. In 2015, 35 cases of hepatitis C were notified compared with 29 cases in 2014. After a peak of 102 cases in 1998 notifications steadily declined until 2004. The number of notifications has ranged from 26 to 36 in the last five years (Figure 13).

New Zealand: Acute hepatitis C notifications by year, 1997–2015



The 2015 notification rate (0.8 per 100,000) was similar to the 2014 rate (0.6 per 100,000). Canterbury DHB had the highest number of cases (9 cases, 1.7 per 100,000). Males (0.7 per 100,000) had a similar notification rate to females (0.8 per 100,000). Ethnicity was recorded for all cases.

The highest notification rate was in the Māori ethnic group (1.9 per 100,000), followed by the European or Other ethnic group (0.7 per 100,000).

The most commonly reported risk factors were a history of injecting drug use and household contact with a confirmed case or carrier.

Case Definition

Clinical description

- Hepatitis C infection is often asymptomatic but may present as an illness with variable symptoms of lethargy, anorexia and jaundice.
- The current definition for acute hepatitis C^α includes cases where there has been

	<p>documented seroconversion within a 12-month period, even in the absence of clinical illness.</p> <ul style="list-style-type: none"> • Only acute cases of hepatitis C are notifiable. <p>^α Also sometimes referred to as 'incident' cases.</p> <p>Incubation period: 2 weeks to 6 months, commonly 6–9 weeks.</p> <p>Mode of transmission: Almost all transmissions in New Zealand occur through sharing contaminated needles and other equipment during recreational injecting drug use. Occupational sharps injuries, tattooing and body piercing have also been implicated. Sexual and vertical (mother to child) transmission is uncommon. Percutaneous exposure to contaminated blood and blood products carries a risk of HCV infection. Before routine screening of donors for HCV was introduced in July 1992, people who received a blood transfusion or blood products were also at risk.</p> <p>Communicability: From 1 week before onset of first symptoms. Infection usually persists indefinitely without treatment. Infectivity correlates with serum HCV RNA levels.</p> <p>Prevention: Safe handling of body fluids. Safe sex practices. Use of sterile equipment for injections, skin piercing, cutting etc. Management of cases and contacts to prevent spread. Occupational policies in the health sector to avoid transmission. Education especially of the at risk group.</p>
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Notification Procedure

	<p>Only acute cases of hepatitis C are notifiable. If on investigation the case is a non-acute infection, make "Not a case" on EpiSurv.</p> <p>Case Classification</p> <ul style="list-style-type: none"> • Under investigation: A case that has been notified, but information is not yet available to classify it as probable or confirmed. • Probable: Not applicable. • Confirmed: - documented seroconversion to HCV when the most recent negative specimen was within the last 12 months, or a positive anti-HCV antibody test or nucleic acid (PCR) test and a clinical illness consistent with acute HCV within the previous 12 months where other causes of acute hepatitis can be excluded. • Not a case: A case that has been investigated and subsequently found not to meet the case definition.
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Laboratory Testing

	<p>Laboratory confirmation requires either:</p> <ul style="list-style-type: none"> • positive anti-HCV serology, or • detection of HCV nucleic acid by PCR.
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Management of Case

	<p>Investigation (Although newly diagnosed chronic HCV is not notifiable, refer to a primary health care provider for appropriate follow-up, including patient care and contact tracing).</p> <p>Christchurch</p> <ul style="list-style-type: none"> • If notification is from a prison: <ul style="list-style-type: none"> ◊ no follow-up is required unless specified by the referring practitioner. The records are filed. • If notification is from the Hepatitis C Community Clinic (situated with the Needle Exchange Programme at the Roger Wright centre): <ul style="list-style-type: none"> ◊ no follow-up is required unless specified by the referring practitioner. The records are filed.
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Christchurch, Timaru, Greymouth

- If the notification is **not** from either of the above:
 - ◊ obtain a history of:
 - injecting drug use
 - body piercing
 - tattooing, contact with a known case
 - blood or blood product transfusions
 - occupational sharps injuries
 - sexual contacts
 - overseas travel.
- Complete case report form: obtain laboratory results (Éclair or request they be faxed)
- Contact notifying doctor/doctor's nurse to gather as much information as possible particularly: a history of clinical illness and risk factors, the results of the viral load assay (indicates infectivity), whether or not the case has been informed and the case's understanding of the diagnosis and of any ongoing treatment.

Restriction

- No precautions other than standard precautions (<http://www.cdhb.govt.nz/cdhpolicies/vol10.htm> >Standard Precautions) are indicated for anti-HCV-positive cases in health care facilities.
- In almost all cases, there are no restrictions on work, attendance at early childhood services or school or other community activities. Follow local protocols for high-risk occupations (for example, dentistry, surgery) including workers in the sex industry.

Disclosure

Cases should be counselled to disclose their condition to other health care workers. Consider informing sexual partners. It may be appropriate for a doctor to inform other health professionals involved in the management of a case of the infectious status of that case when such information is relevant to clinical safety. Adherence to the Privacy Act 1993 and Codes and Medical Council Guidelines is essential.

Treatment

- GP to refer acute and chronic cases to a specialist for management. (Infectious disease specialists tend to deal with patients who have other infections including HIV and gastroenterologists manage patients with severe liver disease. The departments work closely with each other.)

Counselling

- There is no link to a fact sheet but a booklet is available from C&PH and resources are available from the Hepatitis C centre (see below).
- Advise the case and their caregivers of the nature of the infection and its mode of transmission.
 - Specific recommendations to prevent spread include:
 - ◊ not donating blood, organs, semen or tissue
 - ◊ not sharing drug-injecting equipment
 - ◊ not sharing razors or toothbrushes
 - ◊ using safe sex practices and informing sexual partners
 - ◊ covering cuts and sores with dressings
 - ◊ informing health care workers (including dentists) of infection
 - ◊ hepatotoxic agents including alcohol and recreational drugs should be avoided, and HAV and HBV vaccination should be considered for those non-immune.
- Advise follow-up of case by GP to identify those who become carriers so they can be managed appropriately.
- Post out standard letter to case as well as Hepatitis C information.

For general information and support groups contact:

- Rodger Wright Centre in Christchurch (Ph 03 365 2293)
- Hepatitis C Resource Centre in Christchurch (Ph 03 366 3608)
- Needle Exchange Programme. The Needle Exchange website provides contact details of centres around New Zealand,

	<p>Christchurch and West Coast: www.needle.co.nz/fastpage/fpengine.php/templateid/14/menuid/1/tempidx/9/catid/1/fPpagesel/2</p> <p>Timaru and Ashburton: w.needle.co.nz/fastpage/fpengine.php/templateid/14/menuid/1/tempidx/9/catid/1/restemp/b%3A0%3B/fPpagesel/3</p> <p>Christchurch</p> <ul style="list-style-type: none">- The Sexual Health Centre (ph 364 0485), AIDS Foundation (Ph 379 1953) and Hepatitis C Community Clinic (ph 377 8689) provide free hepatitis testing. Consider referral to the Hepatitis C Community Clinic for support, information, and assistance with lifestyle issues which may enable the patient to be suitable for treatment. Hepatitis C Community Clinic, 27 Cashel Street, Christchurch, Phone (03) 377-8689.- The Hepatitis C Community Clinic offers further testing, information, monitoring, and refers into secondary care as appropriate. Patients can self refer to this free clinic run by a full time nurse, part time general practitioner, and social worker. <p>• Resources are available from:</p> <ul style="list-style-type: none">- C&PH: A booklet entitled Two Hep C Questions (What will happen to me? Should I go on treatment?)- Hepatitis C Resource Centre: (Ph. (03) 366 3608) for this and other resources.
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Management of Contacts

	<p>Identify contacts for investigation and counselling where appropriate.</p> <p>Definition</p> <p>A contact is someone who has either:</p> <ul style="list-style-type: none">o shared drug-injecting equipmento suffered a sharps injury with a contaminated needle or some other significant percutaneous exposure (e.g., receiving a tattoo or a blood product from a known case)o had long-term sexual exposure to a case during the suspected period of communicability, oro is a newborn child of a case. <p>Members of the same household are not considered to be contacts unless they have met one or more of the above conditions.</p> <p>Investigation</p> <ul style="list-style-type: none">o Ongoing primary health clinical care is the lead for appropriate specialist follow-up, including ongoing diagnostic testing and imaging.o C&PH does not actively pursue contacts but will respond to requests to assist with contact tracing. <p>Restriction and Prophylaxis</p> <p>Nil.</p> <p>Counselling</p> <ul style="list-style-type: none">o There is no link to a fact sheet but a booklet is available from C&PH and resources are available from the Hepatitis C centre (see Management of a case, Counselling above).o The exposed contact should be advised regarding the risk of transmission and the need for follow-up testing by a professional counsellor(s) as part of the primary health care multidisciplinary team approach to ongoing clinical care.o Consider referral via GP to the Hepatitis Foundation of NZ [http://www.Hepatitisfoundation.org.nz/index.php/hepb/ >For Health Professionals>Refer to the Foundation] because the Foundation provides some services for hepatitis C follow-up and information. (The Ministry of Health contracts the Hepatitis Foundation of NZ to provide a hepatitis B surveillance programme to eligible carriers. This programme provides regular hepatitis serology and liver function testing, enabling timely referral in cases of early evidence of liver disease and/or cancer.)
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Other Control Measures

Identification of source

- The medical officer of health is responsible for identifying and managing a cluster of cases.
- Investigate for a common exposure if indicated.
- If the case could be transfusion-related, contact the New Zealand Blood Service.

Needle stick injuries: refer to the Needle stick injuries paragraph in the NZ Immunisation Handbook.

Disinfection

Viral measures. Clean equipment and surfaces potentially contaminated with blood or body fluids.

Health education

- See 'Counselling' above.
- Discourage injecting drug use and advise drug users on single use injecting equipment.
- Needle and syringe exchange programmes exist in pharmacies and community groups throughout New Zealand. A list of outlets is available from the New Zealand Needle Exchange Programme website: www.needle.co.nz
- Refer people to the Hepatitis C Resource Centre (Ph 03) 366 3608).

Reporting

- Ensure complete case information is entered on EpiSurv
- If a cluster of cases occurs, contact the Communicable Diseases Team at the Ministry of Health, and outbreak liaison staff at ESR, and complete the Outbreak Report Form
- If an outbreak, write report for Outbreak Report File

References and further information

1. Ministry of Health, Hepatitis C. Communicable Disease Manual 2012, Wellington: Ministry of Health
<http://www.health.govt.nz/system/files/documents/publications/cd-manual-hepatitis-c-may2012.pdf>
2. New South Wales Health, Hepatitis C guidelines, Control Guideline for Public Health Units, Updated July 2012.
http://www.health.nsw.gov.au/Infectious/controlguideline/Pages/hep_c_protoco.aspx
3. Institute Of Environmental Science And Research Limited, Hepatitis C, Notifiable diseases in New Zealand: Annual Report 2015 p 32.
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