Hepatitis C

Hepatitis C is caused by a virus that is spread through contact with infected blood. Prevention through the use of sterile needles and injecting equipment is key, and people with hepatitis C should ensure that others are not exposed to their blood.

What is hepatitis C?

- Hepatitis C is an infectious disease caused by the hepatitis C virus. There are several different genotypes (or strains) of the hepatitis C virus
- Infection causes hepatitis (inflammation of the liver)
- About one quarter of people who are infected will clear the virus within a few months
- The other three quarters develop an ongoing (chronic) infection and many will carry the virus for life. Some of these people eventually develop cirrhosis or cancer of the liver many years after infection.

What are the symptoms?

About 10 to 20% of people who are infected with the hepatitis C virus develop symptoms from two weeks to six months (usually six to nine weeks) after infection. These symptoms include tiredness, loss of appetite, stomach discomfort, nausea, vomiting, jaundice (yellowing of the eyes and skin) and dark urine.

How is it spread?

- A person with hepatitis C is infectious unless they clear the infection
- Reinfection with different genotypes of the virus can occur
- Hepatitis C is spread through contact with an infected person's blood, by:
  - using contaminated needles or sharing injecting equipment when injecting drugs, tattooing or skin piercing
  - transfusions (may have occurred in Australia before 1990)
  - needle-stick injuries
  - medical procedures involving contaminated instruments
  - sharing personal items that could have blood on them (eg razors, toothbrushes, nail scissors)
- Hepatitis C is rarely spread through sexual contact, but is more likely when there is contact with blood
- Hepatitis C may sometimes spread to the baby of a woman with hepatitis C during pregnancy or birth. The risk is higher if the mother has recently been infected or also has HIV infection
- Hepatitis C is not spread by casual contact such as hugging, sharing food or cutlery or using toilets. It does not seem to be passed on through breast milk, unless it is contaminated with blood.

Who is at risk?

- Injecting drug users
- Babies born to women with hepatitis C
- Haemodialysis patients
- Healthcare workers
- People born in countries with high rates of hepatitis C infection (such as in parts of Africa and the Middle East)
- People who have home tattoos or body piercing with non-sterile equipment
- Prison inmates.

How is it prevented?

To avoid infection:

- Do not share injecting equipment
- Do not share personal items that could have blood on them
- If having a tattoo or your body pierced, make sure only sterile equipment is used
- Practice safe sex.

There is no vaccine to prevent hepatitis C virus infection. Immunoglobulin is not effective. Since 1990, Australian blood banks have screened donated blood for hepatitis C.

If you have hepatitis C

- Do not donate blood. (Organs from a person with hepatitis C infection can sometimes be donated to another person who is already infected with hepatitis C)
- Do not share injecting equipment with others
- Be very careful to make sure that other people are not exposed to your blood
- Clean up any blood spills with a paper towel and clean thoroughly with detergent and water until no obvious stains are left. Large spills on carpet may need to be shampooed or steam cleaned
- Cover any wounds with a waterproof bandage
- Use condoms where there may be exposure to blood during sex.

How is it diagnosed?

Blood tests include:

- Antibodies to hepatitis C virus (shows that the person has been exposed to the virus at some time, but does not show if the virus is still present in the blood – babies born to women who have had hepatitis C can have their mother's antibodies for the first year or so

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of life, but this does not mean the baby is infected)
- A nucleic acid test, such as PCR (shows that the virus is in the blood)
- A viral load test (shows how much virus is in the blood)
- A genotype test (shows what strain of virus is in the blood – which can help in planning treatment)
- Liver function tests, which may show current liver damage.

How is it treated?

- There has been a significant improvement in the treatment of hepatitis C in recent years
- The drugs interferon and ribavirin can successfully treat hepatitis C in some people
- The success of treatment depends on the genotype and the amount of virus in the blood
- Treatment can clear the virus in up to 80% of people with genotypes 2 and 3 and up to 50% of people with genotype 1
- These drugs are usually taken for six to 12 months and can sometimes have serious side-effects.

A liver biopsy (where a small piece of liver is taken and examined under the microscope) shows the type and extent of any liver damage and may help in planning treatment.

To reduce the risk of further liver damage, people with hepatitis C should:
- Have hepatitis A and hepatitis B vaccinations
- Minimise alcohol intake
- Check with a doctor before taking prescription or over-the-counter drugs.

What is the public health response?

Hepatitis C is notifiable by both doctors and laboratories. Public Health Unit staff investigates cases of newly acquired infections to identify risk factors. Monitoring risk factors helps develop improved prevention programs.

For more information please contact your doctor, local public health unit or community health centre.

- the NSW Hep C Helpline on (02) 9332 1599 or 1800 803 990
- ADIS (Alcohol & Drug Information Service) (02) 9361 8000 or 1800 422 599
- NUAA (NSW Users & AIDS Association) (02) 8354 7300 or 1800 644 413

NSW HEALTH

Communicable Diseases Report, New South Wales, July and August 2007

Communicable Diseases Branch, NSW Department of Health

For updated information, including data and facts on specific diseases, visit www.health.nsw.gov.au and click on **Infectious Diseases.**

Tables 1 and 2 and Figure 1 show reports of communicable diseases received through to the end of July and August 2007 in NSW.

Influenza

NSW Health's influenza surveillance program monitors the rate of people presenting to selected emergency departments (EDs) with influenza-like illness, and the rate of specimens received by six major laboratories that test positive for influenza.

In July reports from EDs initially peaked in the middle of the month at very high levels (6.6/1000 presentations) before a short-lived decline. Influenza outbreaks were reported from 12 residential care facilities, three military facilities and one boarding school, across six of the eight area health services.

In August reports from EDs increased again, and peaked in the middle of the month at even higher levels (9/1000 presentations) before declining. Laboratories reported testing large volumes of specimens for influenza throughout August. Influenza outbreaks were reported from 16 residential care facilities, across six of the eight area health services. Greater Western Area Health Service reported that a 2-year-old boy died after a brief febrile illness. Tests of respiratory samples taken after death were

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