HEPATITIS C: An Overview
What Will We Look At?

The A, B and C of Hepatitis
Prevalence
Transmission & Prevention
Standard Precautions
Disclosure and Discrimination
Services
How is hep C relevant to your work?

What does … currently do around hep C?
The LIVER
Cleans body’s blood, absorbs nutrients

Makes proteins, carbohydrates and fats
Hepatitis

*Hepatitis* = Inflammation of the liver

- Hepatitis has many different causes

*Hepatitis C* = a virus which causes hepatitis

- Different from hepatitis A and hepatitis B
The ABC of Hepatitis
Hepatitis A is transmitted by:

...for example in contaminated food. It causes an acute illness that lasts a few weeks or so. There is a vaccine.
Hepatitis B is transmitted by:

...and can be transmitted through sexual contact and injecting drug use. The good news is, it rarely results in a chronic illness, and there is a vaccine available.
Hepatitis C is transmitted by:

...and is usually transmitted through injecting drug equipment. It leads to chronic illness in \( \frac{3}{4} \) people exposed. There is no vaccine and exposure doesn’t provide immunity.
### Viral hepatitis A, B, C

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transmission</strong></td>
<td>Faecal-oral</td>
<td>Blood-to-blood</td>
<td>Blood-to-blood</td>
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<tr>
<td></td>
<td></td>
<td>Body fluids</td>
<td></td>
</tr>
<tr>
<td><strong>Vaccine</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>Antibodies protect?</strong></td>
<td>Yes</td>
<td>Yes (for most adults)</td>
<td>No</td>
</tr>
<tr>
<td><strong>Acute symptoms?</strong></td>
<td>Common</td>
<td>Common</td>
<td>Rare</td>
</tr>
<tr>
<td><strong>Chronic infection common in adults?</strong></td>
<td>No</td>
<td>No (5%)</td>
<td>Yes (75%)</td>
</tr>
</tbody>
</table>
Hepatitis B vaccinations

Are a course of 3 injections over 3-6 months
Everyone should get vaccinated for hep B unless they are already immune, including workers.
People considered ‘at risk’ may be able to get them free, from places such as sexual health clinics and KRC.
Prevalence
Prevalence of hep C

An estimated 264,000 people had been exposed to hepatitis C in Australia at the end of 2005...ie approximately 1% of the population

How did they contract it?
82.3% exposed as a result of injecting drugs
10.9% migrants from countries with high hep C prevalence
6.8% recipients of contaminated blood/blood products or exposed via other transmission routes

There were around 9,700 new infections in 2005

Hepatitis C Virus Projections Working Group
- Estimates and Projections of the Hepatitis C Virus Epidemic in Australia 2006 -
MACASHH Hepatitis C Sub-Committee

Council of NSW
Priority Populations

- links with high risk behaviours practices or settings

Young people

Almost 9000 teenagers are injecting drug users in Australia


Prisoners

40% of males and 65% of women are estimated to have hepatitis C

Butler, T, Inmate Health Survey 2002

Aboriginal People

Do not access health services are readily as non-indigenous people
Youth

High hepatitis C incidence in new injecting drug users: a policy failure?’ Lisa Maher, National Centre in HIV Epidemiology and Clinical Research and School of Public Health and Community Medicine, University of NSW 2007

Key points:
• 215 hep C negative drug users in South West Sydney were recruited into this study. 204 were new injectors – injecting less than 6 years and under 30 years of age

• After one year of injecting almost half of the 204 new injectors had become hep C positive

• Of those in the sample who had been injecting for less than a year at the beginning of the study – 98% had acquired hep C in the 1st year of the study
Recommendations

• Retaining at-risk youth in school environments

• Expansion of peer education activities in terms of scope and content

• Need specialised and further investigation into significant minority of young injectors who report that family members inject

• Practical safe injecting information

• Acknowledge embedded social disadvantage and inequality

Risk for Hepatitis C - Transition and initiation to injecting drug use among youth in a range of injecting drug user networks
Carla Treloar et al
NCHSR
Transmission – the game
Transmission

Blood-to-blood
Sexual Transmission

• Hep C is not classified as a sexually transmissible disease

• Controversial subject, and some conflicting evidence

• Although risk is very low, certain sexual practices may increase risk of transmission

• Compared to IDU very low risk
## Transmission

<table>
<thead>
<tr>
<th>Risk Activities</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharing / reusing fits</td>
<td>extremely high</td>
</tr>
<tr>
<td>Sharing / reusing other injecting equipt</td>
<td>very high</td>
</tr>
<tr>
<td>Unsterile tattooing / body piercing</td>
<td>high</td>
</tr>
<tr>
<td>Vertical transmission (before or at birth)</td>
<td>mod / low</td>
</tr>
<tr>
<td>Sharing razors, toothbrushes</td>
<td>mod / low</td>
</tr>
<tr>
<td>Health care worker needle stick injury</td>
<td>mod / low</td>
</tr>
<tr>
<td>Sexual activity (no blood-blood contact)</td>
<td>very low</td>
</tr>
<tr>
<td>Blood transfusion/blood products &lt;Feb 90 (in Aust.)</td>
<td>very low</td>
</tr>
<tr>
<td>Blood transfusion/blood products &gt;Feb 90 (in Aust.)</td>
<td>extremely low</td>
</tr>
<tr>
<td>Breast feeding</td>
<td>extremely low</td>
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</table>
Needlestick injury (approx) in Health Care settings

If the needle is infected with:

**HIV** 0.3%

**Hepatitis B** 30%

**Hepatitis C** 1.8 – 3%

What happens to you if you have a needlestick injury?
Standard Precautions
Standard Precautions

Principles:

Assume everyone is infectious

- Protect yourself - many people don’t know if they have HCV or other blood borne viruses
- Prevent discrimination – treat everyone the same

NHMRC, Infection Control in Health Setting 1996
Standard Precautions

Principles in the workplace:

Be blood aware

- Your skin is the first line of defence - cover cuts and abrasions with waterproof dressing
- Wash hands before and after first aid or cleaning
- Wear gloves and eye protection when appropriate
- Clean any blood spills with soapy water and disposable materials
- Dispose of blood stained articles appropriately
- Avoid combative situations

NHMRC, Infection Control in Health Setting 1996
Testing for hepatitis C

How do you know you have hep C?

• Cannot tell by looking at someone
• Symptoms are rare – may include jaundice, fatigue and pain
• People at risk of hep C need two tests to check for the virus

Test 1: Antibody Test
Test 2: PCR (polymerase chain reaction) test

Where do you go for a test?:
- GP
- Sexual health clinic
- Liver Clinic
- Community Health Centre
- AMS
- Justice Health

Hepatitis C Council of NSW
Hep C Treatment
What it Involves?
Hepatitis C Treatment

• Treatment is available for people with hep C (only once)

Treatment consists of:

- Pegylated INTERFERON injections weekly
- RIBAVIRIN tablets daily

• Success rate 50% genotype 1&4  80% 2&3

• Medications need to be taken at the same time everyday
## Side effects of treatment

<table>
<thead>
<tr>
<th>On the body</th>
<th>On the mind</th>
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<tbody>
<tr>
<td>• Fever / chills</td>
<td></td>
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<tr>
<td>• Headaches</td>
<td></td>
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<tr>
<td>• Nausea</td>
<td></td>
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<tr>
<td>• Fatigue / sleep disturbances</td>
<td></td>
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<tr>
<td>• Weight loss</td>
<td></td>
</tr>
<tr>
<td>• Injection site reactions</td>
<td></td>
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<tr>
<td>• Joint / muscle ache</td>
<td></td>
</tr>
<tr>
<td>• Anemia</td>
<td></td>
</tr>
<tr>
<td>• Eye problems</td>
<td></td>
</tr>
<tr>
<td>• Thyroid disfunction</td>
<td></td>
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<tr>
<td>• Hair Thinning</td>
<td></td>
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<tr>
<td>• Skin irritation / rash</td>
<td></td>
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<tr>
<td>• Brain Fog: memory loss &amp; poor concentration</td>
<td></td>
</tr>
<tr>
<td>• Irritability / mood swings / anxiety</td>
<td></td>
</tr>
<tr>
<td>• Depression</td>
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</tbody>
</table>

*N.B ‘Out of character’ behavior from prisoners on treatment maybe genuine. If concerned pls contact Justice Health Staff*
Self Management

Basic messages

- Alcohol in moderation (or none at all)
- Weight management
- Balanced diet – reduce fat intake
- Hepatitis A & B vaccination
- Regularly monitor liver function (LFTs)
- Not smoking
- Managing stress
- Avoid re–infection
- Moderate exercise
Other Self Management issues

- Disclosure / discrimination
- Support
- Preventing transmission
- Treatment
- Complementary therapies
Disclosure and Discrimination
Disclosure and hepatitis C

No one has to disclose their hep C status to you

You don’t have to tell anyone you have hepatitis C except:

• If you are giving blood to the Blood Bank
• On insurance applications, especially life insurance
• If you are a health care or dental worker involved in “exposure-prone procedures”
• If you are in the Australian Defence Force

Hepatitis C is a notifiable disease, so the Health Department is confidentially informed of any diagnosis
Hepatitis C related Discrimination

- Because of past or present or assumed drug use
- Because of fear of contagion
  - The Anti-Discrimination Act 1977 (NSW) makes it is against the law to harass or treat someone with hepatitis C unfairly
  - Covered under disability discrimination
Where can you incorporate hep C further into your work?

What can … as an organisation do further to address hep C in priority communities?
Hep C Helpline
Tel: 9332 1599 (Sydney callers)
Tel: 1800 803 990 (Other NSW Callers)

Website
www.hepatitisc.org.au

Hepatitis C Council of NSW
phone: 9332 1853   fax: 9332 1730
hccnsw@hepatitisc.org.au