Why are Aboriginal People at risk for Hepatitis C?

• Residential School Syndrome

• Sexual Abuse

• Low Self Esteem

• Isolation

• IV drug use

• Time in prison

• Tattooing

• Poor access to health services

Chee Mamuk, Aboriginal Program, STD/AIDS Division, BC Centre for Disease Control, 2004
National Study

• Hep C infection is about 7 times higher in the Aboriginal population
  – (Incidence of acute Hepatitis C in the Canadian Aboriginal Population, 1999-2000)

Chee Mamuk, Aboriginal Program, STD/AIDS Division, BC Centre for Disease Control, 2004
Aboriginal Hepatitis Stats

- Warren D Hill, BC Hepatitis Services, BC Centre for Disease Control
- Community HCV prevalence rates from 1992-2000
- Grouped BC into 200 areas around cities
- Correlation between higher than average HCV rates and communities with higher than average number of Aboriginal people

*Chee Mamuk*, Aboriginal Program, STD/AIDS Division, BC Centre for Disease Control, 2004
VIDUS

- Out of 1437 injection drug users
- Current HCV prevalence is 87.5%
- 362 are Aboriginal, 339 are HCV positive (94%)
- 232 youth in VIDUS, 143 (62%) are HCV positive
- 56 (24%) are Aboriginal, 47 Aboriginal youth (84%) are HCV positive
Hep C Risk Factors among Aboriginal People (N=23)

Source: Forrester et al. 2002, Health Canada Enhanced Surveillance Project
The Liver

“Football size”
What Does a Healthy Liver Do?

- Makes nutrients
- Clears out harmful things (drugs, alcohol)
- Clotting
- Hormones
- Keeps your body healthy

Chee Mamuk, Aboriginal Program, STD/AIDS Division, BC Centre for Disease Control, 2004
What is Hepatitis C Virus?

• Virus that is spread blood to blood

• Hep C virus reproduces in the liver and damages it

• “hepat” (liver) + ‘itis’ (inflammation)

• No vaccine

Chee Mamuk, Aboriginal Program, STD/AIDS Division, BC Centre for Disease Control, 2004
Transmission

• Usually blood to blood

• Very low risk through breast milk, semen, or vaginal secretions

• Hep C virus + Opening into Bloodstream + Risk Behavior = Risk of Infection

Chee Mamuk, Aboriginal Program, STD/AIDS Division, BC Centre for Disease Control, 2004
Risk Activities

- Sharing needles, works, spoon, cotton, water
- Sharing crack pipes or snorting equipment
- Blood transfusions prior to 1990
- Sharing razors, toothbrushes, nail files and nail clippers
- Tattooing, piercing, ritual cuttings (shared)
- Mother to baby (very low risk)
- Unprotected Sex (very low risk)
Hepatitis C not spread by:

- Sneezing, coughing
- Shaking hands
- Sharing forks, cups
- Mosquitoes
- Spit, pee, poo, vomit
- Toilet seats
- Sweats

*Chee Mamuk*, Aboriginal Program, STD/AIDS Division, BC Centre for Disease Control, 2004
Symptoms

- Fatigue
- Jaundice
- Nausea
- Muscle and joint pain
- Swollen hands and feet
- Trouble sleeping
- Dark urine
- Light colored poo

Hepatitis C affects each person differently. Only about 25% will experience symptoms.

Chee Mamuk, Aboriginal Program, STD/AIDS Division, BC Centre for Disease Control, 2004
Effective Treatment is Available

Infection

Hepatitis C virus enters the bloodstream, attaches to liver cells and infects them

Cirrhosis?

Some people may develop liver cancer or require a liver transplant

Cirrhosis affects how blood flows through liver. The liver doesn't work as well

In 20 to 30% of people with long-term infection, fibrosis can lead to cirrhosis of the liver.

Fibrosis takes a long time to develop. A lot of scar tissue means that hepatitis C virus has been present for ten years or more

Fibrosis?

15 to 25% of people infected will clear the virus from their bodies without treatment

75 to 85% of people will remain infected. They may be at risk for complications

Infected liver cells become inflamed

Inflammation causes liver cells to die

Dead liver cells cause scarring of the liver; this is called fibrosis

Inflammation
Infection

• Hep C enters blood and infects liver cells
• New virus made in liver cells
• 25% of people will clear the virus
• About 75% of people remain infected

Chee Mamuk, Aboriginal Program, STD/AIDS Division, BC Centre for Disease Control, 2004
Inflammation

• Infected liver cells become inflamed
• Inflammation causes liver cells to die
• Dead liver cells cause scarring of the liver

Chee Mamuk, Aboriginal Program, STD/AIDS Division, BC Centre for Disease Control, 2004
Fibrosis?

- Fibrosis=Scarring of the liver
- Long time to develop
- A lot of scar tissue means virus present < 10 years
- Drinking alcohol makes the liver worse

Chee Mamuk, Aboriginal Program, STD/AIDS Division, BC Centre for Disease Control, 2004
Cirrhosis? = 80% of liver scarred

- 20-30% of people with long term infection may lead to cirrhosis
- Affects how blood flows through liver
- Liver doesn’t work well
- Some people may develop liver cancer
- Some may need a transplant
- Treatment can cure some people

Chee Mamuk, Aboriginal Program, STD/AIDS Division, BC Centre for Disease Control, 2004
Testing

• Testing is important to confirm you have hepatitis and to monitor your progress during and after treatment

• Go to Doctor or Clinic for a test

• They will draw blood

• Testing is confidential

CHEE MAMUK, Aboriginal Program, STD/AIDS Control, BC Centre for Disease Control, 2004
Living with Hepatitis C

- Avoid alcohol
- Rest, eat healthy
- Exercise
- Sense of humor
- See doctor regularly
- Bandage cuts
- Hepatitis A and B Vaccine
- Talk to pharmacist/doctor about drug interactions
- Only use tylenol if doctor says ok

Chee Mamuk, Aboriginal Program, STD/AIDS Division, BC Centre for Disease Control, 2004
Co infection

- Infected with more than one virus
- Ex HIV + Hepatitis C
- HIV may make Hepatitis C worse
- Treatment for HIV may damage liver
- May have Hepatitis A, B, and C
- Having Hepatitis A and C is bad (get vaccinated for A and B)

Chee Mamuk, Aboriginal Program, STD/AIDS Division, BC Centre for Disease Control, 2004
Treatment of Hepatitis C

- Pegylated interferon and ribavirin
- Two forms are available: Pegeutron and Pegasys.
- Ribavirin capsules twice daily and pegylated interferon injection once a week.

Chee Mamuk, Aboriginal Program, STD/AIDS Division, BC Centre for Disease Control, 2004
Treatment

• Pegylated interferon and ribavirin
  – 45% cure with genotype 1
  – 75% cure with genotype 2, 3
• Cure is measured by:
• SVR = sustained virological response = no HCV virus in the blood 6 months after all therapy is stopped.
When Start, How Long?

- Start therapy when ALT level more than 1.5X normal on 3 consecutive occasions over 3 months.
- **Genotype 1** response rate better with 48 weeks of therapy.
- **Genotype 2, 3** can stop treatment after 24 weeks.
Side Effects

- **Interferon**: flu like, irritable, fatigue, depression, insomnia, decreased appetite, lower white blood cell count
- **Ribavirin**: anemia, shortness of breath, rashes, itching (cannot be used in pregnancy because it could damage the infant)
- Treatment makes you feel bad, make sure you are ready for it.

_Chee Mamuk_, Aboriginal Program, STD/AIDS Division, BC Centre for Disease Control, 2004
Standard Precautions

• Preventing contact with blood or body fluids of others
• Dispose of used needles properly
• Wear latex gloves when cleaning up blood
• Use household bleach (or other cleaning agent like lysol) and water to clean up blood spills
• Teach others, especially children

Chee Mamuk, Aboriginal Program, STD/AIDS Division, BC Centre for Disease Control, 2004
Chee Mamuk, Aboriginal Program, STD/AIDS Division, BC Centre for Disease Control, 2004
Resources

- Chee Mamuk, BCCDC
- Red Road HIV/AIDS Network
- Healing Our Spirit
- BC Women’s, Aboriginal Health Program
- Canadian Liver Foundation
- BC Centre for Disease Control Hepatitis Services
- Help Line 1800 707 6430