



hepc.bull

BC's Hepatitis C News Bulletin "Promoting HCV Wellness"

NOVEMBER 2000

Issue No. 28

BC & YUKON REGIONAL CAPACITY- BUILDING WORKSHOP

By Gordon Mastine

The workshop, first of its kind, took place in Vancouver from 4 to 6 October. The first question that comes to mind is, "What does Health Canada mean by *Capacity Building*?" Some key words from the Health Canada proposal '*learning activities and meaningful relationship building*' help to define what the workshops were to be about. The request for input prior to the workshop asked us to remember that, '*workshop sessions must provide you with practical information and tools to increase your project management capacity and community development skills.*' The next logical question is, "Did we accomplish that?" In my opinion we did that and more, but the operative word was WORK. The venue, the arrangements and the workshop plan were excellent. Almost every need was anticipated, including a room apart in the conference area where anyone who wished could go to rest. The few needs that had not been anticipated were dealt with speedily and efficiently by the Health Canada staff. Every member of the team deserves recognition for a job well done, but Susan Dann, our facilitator, made it happen. With a less skilled and enthusiastic facilitator, the road could easily have been rough.

Susan kept us working, and managed to keep us smiling most of the time, even when we were tired and stressed by the demands of what we were doing. One of the highlights for me was to receive project update reports from all the participants, then to hear them tell us about who they are and what they do. I came away with faces and personalities to go with e-mail addresses, and a new awareness of the diversity of needs in the HepC community and of the individuals

(Continued on page 6)

A REVIEW OF THE MOST PROMISING NATURAL TREATMENTS FOR HCV

by Will Lawson

In October, we printed an article from the Journal of Gastroenterology and Hepatology on adjunctive therapies for HCV patients. In this issue, we present similar material in a review of literature by three naturopathic physicians: Drs. W. B. Milliman, D. W. Lamson, and M. S. Brignall. They caution that many of the preparations discussed operate to a greater or lesser extent in more than one category.

Not all of these trials were formal, and most involved small numbers of subjects. Unless otherwise noted, these studies were reported since 1997.

DIET AND LIFESTYLE

Fats: A high intake of fats, coupled with reduced protein and carbohydrate intake, appears to increase the risk of progression to cirrhosis (1995). It is unknown whether these effects are limited to specific fats, but phosphatidylcholine high in omega-3 fatty acid side chains appears to be beneficial in chronic liver disease.

Protein: Except in extreme cases where protein intake must be limited, an intake of 45-75 gm/70 kg adult is recommended.

Amino acids: Branched-chain amino acids may be beneficial in patients with more advanced liver disease, particularly in the prevention of hepatic encephalopathy (1990), and do mildly increase natural killer cell activity in patients with viral-load induced cirrhosis.

Iron: Iron depletion before interferon treatment is associated with reduced ALT levels and possibly with an increased treatment response. A trend towards greater amounts of hepatitis C viral RNA has also been noted with increasing levels of serum iron.

A vegetarian diet may reduce iron levels, while regular tea drinking with meals can significantly reduce iron absorption over one year.

Alcohol: The intake of alcohol by patients with HCV is severely destructive.

(Continued on page 6)

COMING EVENTS *Hepatitis C and Your Rights*

BC ADVOCACY WORKSHOP

Thanks to the generosity of the Legal Services Society of BC, HepCBC will be holding a Focus Group/Workshop on **Hepatitis C and Your Rights**.

Topics for discussion will include: disability issues (provincial and federal); treatment coverage; home care; supplements; allowances; human rights and the appeals process.

Our **guest panel** will consist of: Lori Mist, Regional Executive Officer, Joyce Wallace, BC Benefits Coordinator, and Michael Cormack, District Supervisor—Ministry of Social and Economic Development; Tom McGregor, Co-Director, Advocacy Access Program, BC Coalition of People with Disabilities; and Bill Burrill, President of Together Against Poverty.

The workshop will be held at the **Woodward Room, in the Begbie Building, Royal Jubilee Hospital, Victoria, BC, on Tuesday, November 7, 2000, from 1-4 pm.**

We are expecting support group coordinators and advocates from all parts of the province to attend this very important workshop. Should you wish to attend, please let us know as soon as you can.

For further information and registration details, please call David at (250) 361-4808, or email us at info@hepcbc.org

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PHONE: TEL: (250) 361-4808
FAX: (250) 414-5102
EMAIL: info@hepcbc.org
WEBSITE: www.hepcbc.org
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HepCBC
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Past articles are available at a low cost in hard copy and on CD Rom. For a list of articles and prices, write to HepCBC.



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THANKS!!

HepCBC would like to thank the following institutions and individuals for their generosity in the form of grants, personal donations, donations in kind, discounts, and donations of services, or equipment: David Klein, J.J. Camp, Bruce Lemer, Elsevier Science, Blackwell Science, Massachusetts Medical Association, Health Canada, The Legal Services Society of BC, Pacific Coast Net, BC Transit, Margison Bros Printers, Carousel Computers, Island Collateral, David Lang, Alan Franciscus and Arlene & Frank Darlington. Special thanks to Miss Danielle Creally for helping with the bulletin.

NEW VICTORIA WOMEN'S SUPPORT GROUPS

**let's get together
for tea. for more
information call
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CUPID'S CORNER



This column is a response to requests for a personal classified section in our news bulletin. Here is how it works:

To place an ad: Write it up! Max. 50 words. Deadline is the 15th of each month and the ad will run for two months. We'd like a \$10 donation, if you can afford it. Send cheques payable to HepCBC, and mail to HepCBC, Attn. Squeeky, 2741 Richmond Road Victoria BC V8R 4T3. Give us your name, tel. no., and address.

To respond to an ad: Place your written response in a separate, sealed envelope with nothing on it but the number from the top left corner of the ad to which you are responding. Put that envelope inside a second one, along with your cheque for a donation of \$2, if you can afford it. Mail to the address above.

Disclaimer: The hepc.bull and/or HepCBC cannot be held responsible for any interaction between parties brought about by this column.

Ad No. 18

Otherwise healthy attractive Hep C pos working male seeks attractive female, 30-40 yrs., similar circumstances, to take advantage of all the good things that are still there.

Ad No. 19

Cute, attractive & active 44 years young lady, Hep C pos, no symptoms, 5'0" 115 lbs, who loves life, animals, country music, long walks, long talks, with a great sense of humour and spontaneity is looking for a gentleman of similar age with a great sense of humour, similar interests, who is positive and loves to live life. Lower Mainland Vancouver Area.

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Washington Hepatitis C Summit

Oct 18, 2000

Thanks to a small grant from Health Canada, and the generosity of Dave Lang, I was able to travel down to Seattle, Washington, for a conference sponsored by the Washington Hepatitis C Coalition, the American Liver Foundation and the Hepatitis Education Project, which is where our friends Sara Amber from the Hepv-L and "Uncle" Dave Lang hang out. This year I was not detained at customs as an undesirable alien, and I was able to smuggle in all kinds of contraband and subversive literature—the *hepc.bull*, some FAQs, the Advocate's Guide and plenty of pamphlets.

The summit was held in the Bellevue Hyatt Hotel, which was very, very nice. I really have no idea how much milk thistle or interferon this translates into, but I'm sure it would have been enough for a lot of us for quite some time. There were many doctors and specialists, healthcare workers, nurses, government officials, union reps, and support group leaders in attendance. I can't say for certain, but I'd say that there were at least 200 people there. The food was excellent, and I'm sorry I didn't bring my tux.

I arrived a bit late, and then had some problems trying to buy a roll of film and a battery for my hearing aid with Canadian money. Finally, I was able to join the conference.

Dr Robert L. Carithers, Director of Hepatology at the University of Washington presented "An Overview of Hepatitis C." It was fairly standard stuff, and anyone reading the bulletin would already be familiar with the material he presented. What was more interesting to me were the questions his presentation raised.

As part of his overview, Dr. Carithers touched on the epidemiological history of hepatitis C. He referred to a study which noted the high rates of infection in Northern Italy and Japan after the war, due to vaccination with non-disposable syringes. He seems to have forgotten that these practices were also current in Canada and the US during the late 40s and 50s. In fact if my memory serves me correctly, the syringes used in the early 60s by my elementary school nurse and my family physician were made of glass and were sterilized through boiling—a procedure frowned upon in the 1956 Merk Manual, where this practice was identified as possibly being responsible for the spread of "serum hepatitis." (Thanks to Sue White for bringing this to my attention.)

Dr. Carither's assessment of the situation was fairly standard. The blood supply is safe; the studies show that most who have hep C

got it through IVDU, and maybe even through sex. Dr. Carithers, and later Alan Brownstein, CEO of the ALF, and others tossed about figures for sexual transmission that were in the 20 percentile range. There was much chuckling in the room. Maybe they didn't realize how many Italians were there. Who knows? As they say, I'm not a doctor. But, while they repeated that they counsel monogamous couples that the risk of transmission is extremely low, and they acknowledged a transmission rate of 3% in the MSM population (men having sex with men), they still would not Alter the party line that unsafe sex was responsible for a very large percentage of transmission.

I did manage to question Dr. Carithers on the statistical methods of the study, and to his credit, he answered well. But the fact remains (in my opinion) that there is just as much reason to think that we all got Hep from the barber as there is to conclude that we all got it from a one night stand with Sir Inge, or from that orgy at Aunt Martha's last summer—unless it was in Brazil.¹

It was strange, though. Dr. Carithers answered honestly, and said that perhaps the epidemiological studies were flawed, and that, yes, calling Hep C a liver disease was perhaps more due to lazy infectious disease specialists than aggressive hepatologists. But why both he and Mr. Brownstein relied on statistics and studies from as early as 1977 sure raised more than a few eyebrows.

I was not alone in my feeling that Mr. Brownstein was out of his depth presenting on the epidemiology of Hep C, and that his lecture seemed hastily put together and dated. But his presentation, "How Hepatitis C Impacts [sic] Different Cultural & Socioeconomic Groups," was interesting and informative. I learned that different ethnic groups peak differently; so, while the white population might experience a crisis in the 35-40 group, Blacks and Hispanics tend to manifest Hep C from 5 to 10 years later.

Quite informative was the "Breakout Session" for health care providers, which focused on the clinical side of hepatitis C. Although it was supposed to cover current treatment options, you'd learn more from Peppermint Patti's FAQs. No mention was made of Alfacon, or of thymosin, or of Maxamine, or of triple therapy with Amantadine. Non-interferon based modalities were treated cursorily, if not summarily dismissed.

Part of this workshop focused on testing procedures. The differences between ELISA and RIBA tests were explained, as well as what exactly constituted a "false positive." The general conclusion was that doing one PCR test was cheaper than doing an ELISA and a RIBA—which is the way that chronicity is currently established (initial ELISA, followed by a RIBA 6 months later).

(Continued on page 5)

LIVING WITH LIVER DISEASE IN POWELL RIVER

Coast Garibaldi Health Unit in Powell River, the local The Hep C Support Group and the CLF are sponsoring a series of educational forums called "Living With Liver Disease." These sessions will be held the second Wednesday of each month beginning November 8th. Dr. Deborah Hocking, a local physician and member of the local Hep C Support and Education Project, along with Terry Howard, Patient Services Coordinator from the Liver Foundation will present a current overview of Hep C Information and Resources. Location: Public Health Unit, 4313 Alberta Avenue, Time: 7:00 p.m. to 9:00 p.m. Call Cheryl Morgan (604) 483-3804 for further details.

October 10, 2000

hepc.bull

Letter to the Editors:

After reading the October issue of the *hepc.bull*, I was completely in awe of the professional presentation of information, education, human interest and entertainment items. I felt I had to write and thank you for your dedicated efforts on behalf of all victims of this insidious disease, be they infected and/or affected.

It doesn't seem possible that the *bull* just gets better and better, when I know that you two, Joann and David, do most of the research, writing, editing and all the other jobs that are necessary to put out such an outstanding newsletter.

It is so nice to know that there are people like you in this world who are willing to do their utmost to help others, especially when there is no thought of personal gain or fame.

I can only say **THANK YOU** from the bottom of my heart. I appreciate all that you do.

Arlene Darlington

"PATIENTS WITH CHRONIC HEPATITIS C WITH CIRRHOSIS THAT IS CLINICALLY COMPENSATED ... SHOULD BE CONSIDERED FOR ANTIVIRAL THERAPIES."

(Recommendations of the core working party for the Asia-Pacific consensus on hepatitis B and C—JGH Aug 2000)

COMPARISON OF TRIAL RESULTS

by Joan King

PRODUCT	ALL GENOTYPES	GENOTYPE 1	NON-RESPONDERS	HIGH VIRAL LOAD
PEGASYS + RIBAVIRIN ¹	70% (end of trial)	(Majority genotype 1)		
PEGASYS+MAXIMINE ¹	69% (end of trial)			
IFN + MAXAMINE ²	61% (end of trial)	55% (end of trial)		54% (over 2 million copies)
TRIPLE (IFN+RIBA+AMANTADINE) ³			33% (small study)	
IFN + ZADAXIN ⁴	41.9 %			
IFN+RIBAVIRIN ^{5 + 3}	40% (naïve)	14% ³	14% of non-resp, 48.6% sustained in relapsers ⁶	
PEGASYS ALONE ⁷	39%			
PEG-INTRON ⁸	25%	11%		
IFN + THYMOSIN ⁹	14.2%			
INTERFERON ALONE ²	10-12%			
INFERGEN ALONE ¹⁰	9%		59.9% relapsers @ 24 wks ¹¹ , 31% non-responders @ 24 wks, (daily dosing) (Most 1b)	50% relapsers @ 24 wks ¹¹ 27% non-resp. @ 24 wks, (daily dosing)

These results (response rates) are the best I could find, using the companies' most successful dosage (often daily dosing and/or high induction dosing). There are discrepancies about the term "non-responders," and some studies include previous relapsers, who respond better than those patients who have never responded. None of these studies compared one drug with another on the same trial. Some studies are small, done on very few patients, and others are large. Some trials are financed by the company, and others, by independent groups. Some of the results are given before the trial has finished, so they are not sustained rates (I have tried to indicate this. *The rates are sustained rates if not otherwise indicated.*) Dear pharmaceutical companies out there: I will be glad to correct this data in our next issue, if you have complaints about the accuracy of this table. I am not trained in the medical field. This table is meant to serve as a guideline for further research for the patient and physician (including mine!!)

Footnotes:

¹<http://www.roche-hepc.com/> August 10, 2000

²http://www.maxim.com/9_14_00.html September 14, 2000

³ *American Journal of Gastroenterology*, May 2000, Volume 95, Number 5 Pages 1122-1124 Retreatment of Hepatitis C Patients Who Do Not Respond to Interferon: The search continues

⁴ Source: PRNewswire, Sept. 28, 2000 SciClone Strengthens Latin American Position for Zadaxin in Hepatitis C

⁵ *American Journal of Gastroenterology* May 2000 Volume 95, Number 5 Pages 1122-1124

⁶ www.prnewswire.com May 10, 1999

⁷ <http://www.roche.com/roche/news/mrel00/e000502a.htm> May 2, 2000

⁸ <http://www.prnewswire.com/cnoc/exec/menu?777050>

⁹ *Hepatology* 1998 Apr;27(4):1128-1135

¹⁰ <http://www.amgentrials.com/index.html#> October 2000

¹¹ *Patients NewsWire* September 12, 2000 HCV Infections Resistant to Interferon Alpha-2b May Respond to High-Dose Interferon Alfacon-1

CLINICAL TRIALS

PHASE II IFN + HEPTAZYME TRIALS

Ribozyme Pharmaceuticals, Inc. has bought back its rights to Heptazyme (LY466700), the "molecular scissors" we have talked about in previous issues of the *hepc.bull*, and is **planning to start Phase II clinical trials in early 2001**, combining it also with interferon, to study dosage and effectiveness in Hep C patients. In September, the drug was studied for safety, tolerability and pharmacokinetics.

Source: PRNewswire, Sept. 28, 2000, RPI to Initiate Phase II Clinical Trials on Anti-Hepatitis C Drug

IFN-BETA INDUCTION THERAPY

In a clinical trial, 30 patients were assigned to two groups: One group received IFN-beta intravenously, 3 MU twice a day. The other group received IFN-beta IV, 6 MU once a day. Both groups continued therapy during 2 weeks. Group A had an 86.7% viral clearance rate, compared to Group B's 13.3% rate, both taken at day 3. The researchers believe that "Twice-a-day IFN-beta injection therapy ... could be an **efficient induction therapy** for eradication of HCV." In other words, this could be given to clear the virus at the beginning of a more standard interferon treatment.

Source: *J Interferon Cytokine Res* 2000 Sep;20(9):831-6, Ikeda F, et al, Early clearance of circulating hepatitis C virus enhanced by induction therapy with twice-a-day intravenous injection of IFN-beta.

ALBUFERON

In order to begin Phase I trials for the new drug Albuferon, Human Genome Sciences has applied to the US FDA for approval. Albuferon, a new protein, was made by joining the gene for human interferon alpha to the gene for human albumin. The result is a new protein that combines the properties of interferon and albumin, which should give patients a **longer acting drug with fewer side effects** than current therapy.

The company is currently evaluating other fusion protein drugs to see if they are good candidates for further development.

Source: PRNewswire, Oct. 18, 2000, Human Genome Sciences Submits IND for Albuferon(TM) to Treat Hepatitis C

ANOTHER PEGYLATED INTERFERON

Viragen, Inc., announced that Viragen (Scotland), Ltd., has agreed to work with PolyMASC Pharmaceuticals, and use PolyMASC's new PEGylation process to deliver Viragen's Omniferon, a natural alpha interferon which is currently in Phase II clinical trials in Europe. Viragen believes that this pegylation technology is superior to others now in use, and **since Omniferon is a naturally occurring interferon, it should have less side-effects than some other interferons.** Pegylation keeps the drug in the body for a longer time, and allows for only one injection a week. Hoffman-LaRoche and Schering have pegylated interferons in clinical trials at this time.

Source: SOURCE PRNewswire, Sept. 19, 2000 Viragen and Valentis to Develop PEGylated Natural Alpha Interferon To Treat Hepatitis C

VERTEX PATENTS NEW TEST

Vertex has received a patent in the US for a new tool to accelerate the discovery of HCV protease inhibitors to treat the disease. The company has developed a way to measure HCV protease activity in a cell-based test. This test will make it possible to find compounds that could have a direct activity against the virus in a cellular environment. They say they could select a drug development candidate as early as 2001. **Their target is the NS3-4A serine protease, believed to be essential for replication of the virus.** They are partnering with Eli-Lilly.

Source: PRNewswire Oct. 2, 2000 Vertex Pharmaceuticals Receives U.S. Patent Covering Assay Technology to Accelerate Drug Discovery Targeting Hepatitis C Protease

PREDICTING TRANSPLANT REJECTION

When people receive liver transplants, they must take powerful drugs to make sure their bodies don't reject the foreign tissue. At the same time, these drugs can cause terrible side effects such as high blood pressure, vulnerability to infections, and even cancer. Researchers from the University of Pittsburgh have found that some people produce more of a cytokine called TNF-alpha, and less of the cytokine IL-10. These people seem to reject their new organs more frequently, even when they are well matched to their donor. These researchers have developed a simple genetic test, which they hope **can predict which patients can be weaned from their immunosuppressive drugs,** and are now using the test on all of their transplant recipients, and it looks like about 30% of patients could qualify.

Source: Biotechnology, September/October 2000, Erika Jonietz, A Genetic Rx for Rejection



Dr. Carithers and colleagues at the Washington HepC Coalition Summit

(WA HEP C SUMMIT—Continued from page 3)

I raised the issue of vaccines not taking, and this was the answer I got: No one should be vaccinated for Hep A or B while on treatment for Hep C. Vaccination should be undertaken before beginning treatment. Since the vaccines for Hep A and B span a period of 6 months to a year, all persons with Hep C should be vaccinated immediately. The doctors also mentioned that persons over 40 have a high incidence of vaccination failure with the Hep B vaccine. They said that this should not obtain for Hep A, and that in fact they had not heard of the Hep A vaccine not taking. (WE certainly have!) With respect to Hep B, they said that *all those who failed vaccination would remain at risk for this virus.*

Other highlights of the conference were a presentation on the costs of hepatitis C from an actuarial perspective, where it was concluded that it was ultimately cheaper to treat Hep C than not to treat. A very uncomfortable issue was raised during this session: Because unions are not using testing for those in high risk professions (police, firefighters), and have taken the position that anyone in their employ who tests positive for Hep C will be assumed to have contracted it on the job, there was talk of introducing Hep C screening at job interviews. I protested that this sounded like a discriminatory procedure, and called upon government officials present to make some comment with respect to human rights.

On a good note, the conference allowed me to put faces to names of many friends I had met on the Internet, and with whom I had chatted often. I also had the opportunity to talk with quite a few Schering reps (Eric Marchant, in particular), who had a sympathetic ear for HepCBC, but who were powerless to help us, since Canada was out of their jurisdiction. Eric said he'd see what he could do for us. Thanks Eric!

Jarad and Leslie Gibbenhuck were there, Jarad to give the concluding speech, and Leslie to show off her new cast. (When I told her to break a leg, I didn't expect her to take me seriously!) Jarad spoke about how this new treatment from South America he's been on has really helped; he talked, as well, about how much energy he had and how he had to rewrite his speech to convey his sense of joy in being able to participate in BMX races and attend school. He said he even has a girlfriend!!!! Way to go, Jarad!

All in all, it was worth the effort. But now it's time for a nap.

Squeeky

¹The references here are to Dr. M. Alter's hep C sexual transmission study which used as its cohort a group of Brazilian prostitutes.

Table 2. Foods high in ammonia and sodium

FOODS HIGH IN AMMONIA	FOODS HIGH IN SODIUM
Aged cheeses	Salt
Salami	Garlic salt, onion salt, season salt
Bacon	Soy sauce
Ham	Monosodium glutamate (MSG)
Ground beef	Canned soups
Gelatin	Canned vegetables and meats
	Cured meats (bacon, sausage, ham, lunchmeats)
	Processed cheeses
	Frozen meals
	Salty snacks (chips, pretzels, popcorn)
	Pickled foods (sauerkraut, pickles, olives)

(NATURAL TREATMENTS—Continued from page 1)

Tobacco: Smoking is associated with an increased risk of hepatocellular carcinoma.

HA/BV: HCV patients should vaccinate against HAV and HBV (1995).

Weight: Significant association between [increased] body mass index and [increased] fibrosis has been noted.

Sweets: A recent editorial suggests tight glycemic control could be important in the management of patients with HCV and diabetes. A limited intake of sweets is recommended to all HCV patients.

Other: Also recommended is adequate rest, at least 2 litres/day of water, plenty of raw or lightly steamed fruits and vegetables—at least one serving/meal—and 4 oz. daily of breakfast muesli (see Issue No. 27, Oct. '00).

ANTI-FIBROTIC AGENTS

These are substances which are thought to delay the destruction of liver cells—the single greatest threat to HCV patients.

Colchicine can significantly reduce fibrosis during hepatocytotic regeneration in animal models (1975). Several prospective trials have shown it to be of mild but significant benefit to cirrhotic patients, lengthening survival in one trial and possibly stabilizing changes in liver tissue in another. Colchicine has been beneficial to some HBV patients, but has not undergone clinical trial in HCV patients.

Side effects may include diarrhea, and reduction in the number of white cells and platelets. Normal dosage is 1 mg/day 5 days/week.

UDCA (ursodeoxycholic acid) has been shown to protect cells in several liver disorders (1992). In one long-term study of HCV infection unresponsive to or unsuitable for interferon treatment, UDCA significantly lowered certain serum enzyme levels, including GGT, irrespective of HCV genotype. Another study showed a 25-percent decrease in serum enzyme levels, but no improvement in liver tissue (1993). Its role in HCV treatment is considered ancillary.

UDCA has been found to reduce anti-nuclear and anti-smooth muscle antibodies in autoimmune-associated hepatitis C. It is sometimes used with taurine to improve bile acid. Typical dosage might be 600 mg/day for one year.

Silybum marianum (milk thistle) is a 2000-year-old treatment for liver disease. One study showed that 420 mg/day reduced ALT levels in chronic liver patients as much as did UDCA (1992). But not all of the subjects had HCV, and reduction of GGT was not as great. This may mean that UDCA is more effective in improving bile flow.

In two trials, reported in 1993, significant reductions in AST/ALT/GGT levels over one week/two months when phosphatidylcholine was added to silybin to improve its absorption. (Not all subjects were HCV patients.) In a 3-year study of alcoholic cirrhotics who took 450 mg/day, no benefit was seen, but all 13 HCV treatment subjects survived while 4 of 16 in the control group did not. Another study found that

silymarin is most beneficial in early stage cirrhosis (1989).

Adverse effects are rare, and further clinical trials with HCV are warranted.

Sho-saiko-to (TJ-9) is a common treatment for chronic hepatitis in some parts of the world. It has been shown to inhibit fibrosis in animals. One study of TJ-9 (7.5 gm/day) in cirrhotics showed significant increases in survival over five years among HCV-positive subjects who were not HBV positive (1995). Another trial (5.4 gm/day) showed significant reduction in ALT/AST levels (1989).

Side-effects were minimal, except for some cases of interstitial pneumonia (1996).

ANTIOXIDANT AGENTS

Oxidative damage appears to be importantly related to the grade of liver fibrosis and liver cell DNA damage in HCV patients. Vitamin C and carotenoids also bear further study.

Vitamin E (d-alpha-tocopherol): Biopsies on 6 HCV interferon nonresponders who took 1200 IU/day for 8 weeks showed reduced inflammatory activity and insignificant reduction in ALT levels, but unchanged viral load, inflammation, or fibrosis. Among 23 nonresponders who took 800 IU/day, half showed significant reductions in ALT/AST levels.

In a third trial, interferon-alone users were compared to interferon/NAC/sodium selenite users, and interferon/NAC/sodium selenite/vitamin E users. The third group had a greater response to treatment and a significantly greater reduction in viral loads.

Selenium: Supplementation with 200 mcg/day from a yeast source was associated with a 50-percent reduction in all-site cancer mortality over a mean of 4.5 years in one study (1996). Another trial found an inverse relationship between plasma selenium levels and cancer in HCV patients.

NAC (N-acetyl-L-cysteine) counters deficiencies in glutathione, a major antioxidant, which are common in HCV patients (1993). Initial nonresponders who supplemented a second course of interferon therapy with 1800 mg/day NAC saw their levels of glutathione rise significantly, while their ALT levels fell within six months from an averaged 124 to 37.

Other trials indicate that NAC may benefit only patients taking interferon and whose glutathione levels are low.

Lipoic acid: Three case studies show that 600 mg/day lipoic acid combined with 900 mg/day silymarin and 400 mcg/day selenium was associated with at least a 60-percent ALT reduction in each patient. This effect has been noted elsewhere. Lipoic acid promises to be useful in HCV treatment.

IMMUNOSTIMULATORY/ANTIVIRAL AGENTS

Thymic extracts: Several studies using different forms of this extract have been made over the years, but with disappointing or in-

(Continued on page 9)

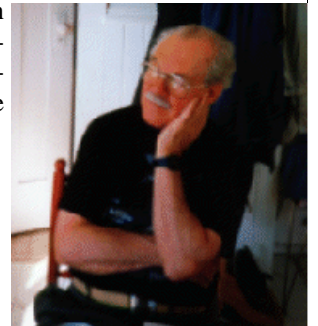
(HEALTH CANADA—Continued from page 1)

who have created organizations to meet those needs. For most of us this was a first-time opportunity to meet one another. I was impressed by the dedication of all the folks who were there. There was a synergy arising from the intensity of emotion and desire to do more and do it better. New relationships between sometimes diverse members of the group emerged as a natural part of working together in small groups around common concerns. Some of the concerns addressed were, "Finding Common Ground," "Combating the Stigma of HepC," "Living With HepC," and "Prevention Education and Harm Reduction."

The Health Canada sponsored presentations provided the background against which other activities at the workshop progressed. An explanation of the Population Health Approach gave the broad picture of the context within which we need to develop our projects. Excellent sessions on grant proposal applications, project management, financial management, and project evaluation gave us a good understanding of how all these activities work together and need to be considered together for maximum efficiency. It was encouraging to hear that Health Canada is addressing the issue of physician education concerning hepatitis C. The staff team worked smoothly together to make the best possible use of the time. They were present, available and attentive to the concerns being expressed by sick, tired overworked and often frustrated people who are struggling daily to serve their communities.

My conclusion, "It was a very profitable three days!" We didn't do it all, but we made a good start. Hamid (pronounced ha'meed) Taghavi, our very helpful and enthusiastic Health Canada Program Consultant, says he will try to visit as many of the projects as possible. I believe that the most important thing we can do to advance the work is cooperate. To do that effectively, I believe we need to have a regional mentality and look toward building a unity that will empower all of us, including the twenty-eight groups in our region who were not represented at the workshop. We need to arrive at the place where we can speak to government and industry with one voice.

*Gordon Mastine
Vice President
HepCBC.*



NOT JUST NEEDLES

Australian researchers reported that in spite of the number of infections from HIV among IVDUs going down, the same is not the case with HCV, and they mentioned that HCV has probably been around longer than HIV, and that it is more easily transmitted than is HIV. The authors examined used injecting equipment for HCV among IV drug users known to be infected with HCV, and **found HCV on 70% of syringes, 67% of swabs, 40% of filters, 25% of spoons, and 33% of water samples.** These findings show that HCV can be transmitted through the sharing of equipment other than needles and syringes, so the message about not sharing needles may not be sufficient. They suggest that IVDUs be encouraged to use non-injectable drugs, wash their hands more, and not share any equipment used while injecting.

Source: BMJ 2000;321:899, Oct 7 2000, Crofts, N, et al. Minimising harm from hepatitis C virus needs better strategies

THREAT FROM THE OCEAN

Hep C sufferers have an enemy in the ocean. *V. vulnificus* is a bacteria commonly found in the Gulf of Mexico and other warm waters, where it can infect oysters and other shellfish, and does not occur because of pollution, so the normal precaution of avoiding contaminated waters may not be enough. Eating raw or undercooked shellfish, yes, even from the ocean, can be a serious danger, and can even cause death, especially in people with liver disease. Think twice what you eat the next time you go to a sushi bar. And not only that, but *V. vulnificus* can infect open wounds when a person goes swimming in infected waters.

Source: Superintendent of Documents, U.S. Government Printing Office (GPO), Washington, DC 20402-9371; telephone: (202) 512-1800

SAME WARNING FOR MANIC-DEPRESSIVES

SAME has been used in Europe for many disorders, such as depression, osteoarthritis, and liver disorders. Its mood-enhancing effects have been demonstrated in clinical trials. There are no known confirmed drug interactions with SAME, but it can cause mild gastrointestinal problems. Otherwise it seems to be generally well tolerated, but agitation and manic reactions have been reported to appear soon after taking SAME, so **patients with a history of mania or bipolar disorders should avoid it.**

A company conducting independent analyses of supplements recently found serious differences between the amount claimed on the label and the actual amount of SAME contained in several brand products, and almost half of the products tested did not contain the correct amounts. Also, SAME may cost more than most prescription antidepressants.

Efficacy, safety, long-term tolerability and relapse rates should be evaluated through large controlled trials and by formal evaluation.

Source: West J Med, 2000;173:229-230, Linda Shul and Nancy P Lee, SAME targets consumers via the Web

INFERGEN + RIBAVIRIN SAFE

Recent clinical trial results at week 12 of 48 have shown that Amgen's **Infergen is safe to use together with ribavirin**, even using a high initial dose of the company's interferon. Up to now, physicians have been cautious about prescribing other interferons for use with ribavirin, since the safety of the new combos had not been investigated. The trial is being done with 40 Hep C patients, all receiving Infergen, and half of those receiving ribavirin as well.

Source: PHILADELPHIA, Aug. 30 /PRNewswire/ Treatment with Daily Interferon Alfacon-1 and Ribavirin Safe for HCV-Infected Patients

NEW PCR TEST RECOMMENDED

The US FDA Advisory Panel has recommended that Roche's test for qualitative viral load be approved. This measures the presence of the virus, but doesn't tell the amount. The test is version 2.0 of Amplicor and COBAS Amplicor HCV Test, version 2. The panel gave a recommendation that a label be included to warn that some genotypes would be missed by these tests, and that some people might appear to be infected when in fact they aren't. At this time, there is no FDA approved test to measure HCV, although Roche's tests, both qualitative and quantitative, are being used regularly.

Besides Roche's PCR tests, which can measure as few as 100 virus particles in a milliliter, a test called Branched-Chain DNA Assay is used, but though it is easier and cheaper, it only measures over 200,000 particles per milliliter.

Source: HCV Advocate, September 2000, Alan Francis, FDA Advisory Panel Recommends Approval of Hoffmann-LaRoche's Viral Load Test

US MAY APPROVE NEEDLE-STICK BILL

US lawmakers have introduced a bill to protect healthcare workers from needle stick injuries, which would make it necessary for hospitals and other employers to use better-designed medical devices. Healthcare workers in the US receive nearly 400,000 needle-stick injuries each year. Nurses associations and hospital worker unions originally asked members of Congress to introduce the bill, and the American Hospital Association is supporting it. The bill could prevent the spread of hepatitis, AIDS, and other blood-borne diseases.

Source: Reuters Health Sep 15, 2000, Todd Zwillich, Lawmakers introduce needle stick safety bill

THE FUTURE OF HEP C IN CANADA

Canadian investigators have assessed the burden that hepatitis C may cause in the near future in this country. An estimate was done by simulation, using a previously published natural history model where no treatment was given. They based their estimate on the fact that 240,000 people in Canada are presently infected. The simulation demonstrated that the cases of cirrhosis would probably increase by 92% from 1998 to 2008, that liver failures and liver cancer caused by Hep C would increase by 126% and 102% respectively in the next 10 years, and that deaths related to hepatitis C would also increase by 126% in the same period of time. The findings demonstrate the importance of treatment and prevention.

Source: Canadian Journal of Gastroenterology, July/August 2000; Volume 14, Issue 7: 575-580S Zou, M, et al, Prediction of hepatitis C burden in Canada

ZADAXIN NOW IN MEXICO

SciClone announced that its Hep C drug Zadaxin is now patented in Mexico, and that Peru has expanded its approval of the drug to include the treatment of hepatitis C.

Zadaxin is approved for sale in 20 countries, principally for the treatment of hepatitis B and hepatitis C and as a vaccine adjuvant for patients with weakened immune systems.

A phase III Zadaxin trial should start in the US by the end this year. In previous trials, Zadaxin used in combination with interferon produced a positive response in 41.9 % of the patients treated compared with only 16.6 % among patients treated with interferon alone.

Contact lcopello@spil.org for more information on availability.

Source: PRNewswire, Sept. 28, 2000 SciClone Strengthens Latin American Position for Zadaxin in Hepatitis C.

FAST HEP A/B VACCINE

The Twinrix vaccine combines vaccines for Hep A and B. Researchers believe that giving this vaccine over a 3 week period may be more effective than the normal 6 month period. [Note: This may be of benefit to those with Hep C who have not responded to previous vaccinations.] The fast schedule could provide faster protection for travelers.

In a recent study where 497 volunteers participated, the fast schedule provided a stronger response than the individual vaccines, and required less injections, since they are combined. The "fast" schedule is not yet approved.

Source: Reuters Health, April 13, 2000 Combined hepatitis A/B vaccine offers fast protection

Journal Scan:

By Dr. C.D. Mazoff, PhD

BIOPSY ALTERNATIVE?

The single most important predictor of serious illness and death in patients with viral hepatitis is the stage of fibrosis. However, because liver biopsies are expensive, invasive and present a "small but finite risk of death or other serious complications," researchers are trying to come up with an alternative. Recently studies have been conducted with a variety of biochemical markers, including hyaluronic acid, which can measure the presence or absence of cirrhosis. George's conclusions are that "biochemical indices of fibrogenesis [scarring] are not yet reliable enough to replace liver biopsy, which should remain the cornerstone of treatment decisions in those with chronic hepatitis C." What the measurement of biochemical markers can do, however, is **provide a way of measuring fibrogenesis once a baseline biopsy has been taken.**

Source: *Journal of Gastroenterology and Hepatology* (2000) 15 (819-821), Dr. Jacob George, *Biochemical Markers of hepatic fibrogenesis: Single measurements are not reliable enough to replace liver biopsy.*

ADDITIONAL LIVER CANCER TREATMENTS

This overview of current treatment methods concludes that "the most effective modalities for treating HCC...are resection and transplantation." However, depending on the patient's individual circumstances a combination of other therapies should be used. These include: **chemotherapy** as an adjuvant to surgery; **chemoembolization** (a treatment that clogs small blood vessels and blocks the flow of blood, such as to a tumour); and **cryoablation** (removal of a tumour by freezing). Resection (removal) of a large tumour usually doesn't work because large tumours are usually accompanied by a poorly functioning liver, other tumours outside the liver, or vascular complications. Chemotherapy alone fails because often hematoma cells are resistant to the drugs. Dr. Dutta concludes that the best treatment is prevention and screening of the population at risk.

Source: *Journal of Gastroenterology and Hepatology* (2000) 15(822-824) Dr. Usha Dutta, *Treatment of hepatocellular carcinoma.*

HEP C AFTER TRANSPLANT

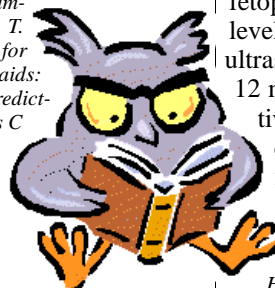
Hepatitis C is the leading cause of end-stage liver disease and liver failure requiring transplantation. Moreover, it is now known that recurrent HCV greatly diminishes graft survival compared to other liver disorders. Szabo et al. call for **early treatment with combination therapy and serial biopsies** to monitor progression of re-infection. They even go so far as to recommend combo therapy very early after transplantation even when no recurrence of HCV has been detected. However, they do caution that the toxic effects of IFN and ribavirin limit this approach. They conclude that what is needed are much more effective, less costly and less toxic treatments than those currently based on interferon. Although the "pegylated interferons represent an advance, they still fall far short of the ideal."

Source: *The American Journal of Gastroenterology*, September 2000, volume 95 number 9, pp. 2164-2170, G. Szabo et al, *The management of recurrent hepatitis C after liver transplantation: A concise review*

AST/ALT RATIO

A while back some studies were published demonstrating that an AST/ALT ratio (AAR) greater than 1 (ie AST 80 / ALT 60) was indicative of cirrhosis. This study attempts to turn the previous ones on their heads, but presents rather weak evidence. The authors themselves admit to some severe limitations in their study: for example they conjecture that alcohol consumption was not sufficiently monitored in the previous cohorts and that the higher AST levels in cirrhotics in the study might have been caused by the subjects' drinking—but they have no real reason to make this claim. They then make the assumption that since their study group consisted of persons who had been on, or were eligible for, interferon treatment, that these persons could not be active drinkers. They took the patients at their word, and **present no biochemical evidence for the presence or absence of alcohol.** I don't know about this one folks.

Source: *The American Journal of Gastroenterology*, September 2000, volume 95 number 9, pp2328-2332 Thomas T. Imperiale, Said et al, *Need for validation of clinical decision aids: Use of the AST/ALT ratio in predicting cirrhosis in chronic hepatitis C*



BIOPSIES FOR HEMOPHILIACS

In this study 13 adult hemophiliacs underwent biopsies, and no bleeding complications were encountered. The authors conclude that with the use of proper precautions, **"one may safely biopsy adult hemophiliacs** with chronic hepatitis C without clinical evidence of cirrhosis, regardless of the severity of hemophilia. All patients were given **factor replacement**, the biopsies were **ultrasound guided by a hepatologist**, **Midazolam** was given, **15 gauge needles** were used, and only one pass was needed. The patients did remain **in the hospital for one week** and had factor replacements and as needed (some every 8 hours, some continuous infusions).

Source: *The American Journal of Gastroenterology*, September 2000, volume 95 number 9, pp 2374-2376. Venkataramani, A, et al, *Liver biopsies in adult hemophiliacs with hepatitis C.*

HEP B VACCINE WOES?

In an unpublished study, these Turkish doctors vaccinated 127 HCV+ patients with the Energix against hepatitis B, given in 3 doses. **Only 77.2% of vaccines "took" in chronic active patients, and only 62.2% "took" in patients with cirrhosis.** There was no significant difference in age, race, gender, genotype, viral load, WBC, or IgG level, and there was no adverse effect from the vaccine, other than soreness at the area of injection. The response rate in **healthy populations ranges between 90 to 98%.** The authors suggest that higher doses (40 µg) be used in HCV+ patients. Get re-tested!

Source: *Hepatology*, August 2000, Vol. 32, No. 2, p. 444-445, Nicola De Maria, M.D, et al, *Antibody Response to Hepatitis B Virus Vaccination in Individuals With Hepatitis C Virus Infection.*

SUSTAINED RESPONDER? GET CHECK UPS ANYWAY!

Japanese researchers report that a 55-year-old man who had a sustained response to IFN beginning with a high induction dose of 9 MU for 2 weeks and continuing for 22 weeks more, at 9 MU three times a week in 1992, and who continued to have normal ALTs, ultrasound exams, and alpha-fetoprotein levels, suddenly had his AFP levels increase to 70 ng/ml in 1999, when ultrasound and a CAT scan showed a lesion 12 mm in diameter. The patient tested negative for hepatitis B. The authors concluded that **IFN does not necessarily inhibit progression to liver cancer.**

Source: *Eur J Gastroenterol Hepatol* 2000;12:1029-1032, Joene Hendry, *Long-term liver screening needed for patients with chronic HCV infection*

(NATURAL TREATMENTS-Continued from page 6) conclusive results.

The synthetic thymus polypeptide thymosin alpha-1, thought to be similar to thymosin fraction 5, was studied in conjunction with interferon in treatment-naive patients. Twice weekly intramuscular injections of 1 mg during interferon treatment were associated with significantly greater reductions in ALT and HCV RNA than interferon alone, except in the case of HCV-1b genotype.

Only one form, thymodulin, is known to be orally active (1987). The effectiveness of any form may vary with genotype.

Thymic extracts have a long history of use in viral infection, however, and merit further study.

Glycyrrhiza glabra (licorice root) is the major component of SNMC, an IV treatment for HCV used in Japan. It has reduced the incidence of HC cancer by 50 percent over 15 years and also normalized ALT levels in many patients. *Glycyrrhiza* is antiviral, but there was no reduction of HCV RNA in these patients.

Glycyrrhizin and glycyrrhetic acid are absorbable orally. Extended use of licorice root is associated with increased blood pressure in some cases.

ANTI-TUMOR NECROSIS FACTOR AGENTS

TNF- α (tumor necrosis factor- α) is suspected of being the central mediator of the inflammatory process in HCV. Serum levels of TNF- α have been correlated with elevated ALT levels and increased severity of fibrosis. Decreased TNF- α concentration has been noted in patients with sustained response to interferon therapy.

TNF-reducing herbs: These include tea (*Camellia sinensis*), ginger (*Zingiber officinale*), feverfew (*Tanacetum parthenium*), *Ginkgo biloba*, and quercetin, a flavonoid found in many herbs. These herbs are not usually employed to treat HCV, but their potential merits study.

Liv-52 is an ayurvedic herbal combination designed to treat liver disorders, and also merits study for treating HCV. (Note the caution about taking unregulated herbs, in the October *hepc.bull.*)

Endogenous TNF- α modifiers: Corticosteroids, DHEA, and melatonin are among certain hormones which modulate TNF secretion. Corticosteroids have been shown to increase the risk of cirrhosis. The use of DHEA or melatonin as TNF-reducing agents in HCV is presently of theoretical benefit.

MISCELLANEOUS AGENTS

Vitamin B12 helps to remove fats from the liver. A treatment of 100 mcg 4x/day was reported to be of benefit in the treatment of acute hepatitis (1969). It is necessary, along with folic acid, for DNA replication.

Source: *Alternative Medicine Review* 5 (4) 2000, 357-366, W. B. Milliman et al.

Victoria Chapter Hepatitis C Society
of Canada will be having a
Fundraising Dance
on November 4th, 8:00 -1:00
to increase Hepatitis C Awareness.

FEATURING:
"Ruckus"

At the Esquimalt Legion
622 Admirals Road

Tickets \$10 each or 2 for \$15
Includes a meal, door prizes
and a good time

INFORMATION AND TICKETS

CONTACT:
HepCVic 388-4311
David 382-6244
Bob 384-2013



"Dancing With the Dragon" Productions

HCV Benefit Dance

Event Date:

Jan 27, 2001 8:00PM

Location:

VFW Post 3063
2812 NW Market Street
Seattle WA 98107

Event Details:

"Dancing With the Dragon" is formed and produced by Frontline Hepatitis Awareness and is a benefit to target trusts for education, advocacy and outreach within the HCV, HBV and HIV Co-infection areas. We are making anonymous, free HCV testing available on site at the event. Food will be available, as well as refreshments and a silent auction of quality items.

The line-up includes: The Duffy Bishop Band with Chris Carlson, 'Jr., Cadillac', who have been rocking the PNW for 30 years, and Dave Conant and the D-Rangers, who were recently inducted into the WA Blues Society Hall of Fame. The music will begin at around 8:30. You may come early for food or enjoy the home cooking at the event. The admission donation for this benefit is \$25 per person, plus the cost of food, and is a good deal for these three great bands and will benefit others across the US, as Frontline is not only local in WA State, but a National non profit organisation.

COMPENSATION

BRITISH COLUMBIA

1986-1990
Bruce Lemer/Grant Kovacs Norell
Vancouver, BC
Phone: (604) 609-6699 Fax: (604)
609-6688



Before August 1, 1986 or 1990-1991
David A Klein/ Klein Lyons
Legal Assistants: Lisa Porteous and
& Candace Wall
Vancouver, BC (604) 874-7171, 1-(800) 468-4466,
Fax (604) 874-7180

also:

William Dermody/Dempster, Dermody, Riley and
Buntain
Hamilton, Ontario L8N 3Z1
(905) 572-6688

The toll free number to get you in touch with the
Hepatitis C Counsel is 1-(800) 229-LEAD (5323).

ONTARIO AND OTHER PROVINCES

Pre 1986/post 1990
Mr. David Harvey/ Goodman & Carr
Toronto, Ontario
Phone: (416) 595-2300, Fax: (416) 595-0527

TRACEBACK PROCEDURES:

INQUIRIES-CONTACT:

The Canadian Blood Services
Vancouver, BC
1-(888) 332-5663 (local 207)

This information is for anyone who has received
blood transfusions in Canada, if they wish to find
out if their donors were Hep C positive.

RCMP Task Force TIPS Hotline
(Toll free) 1-(888) 530-1111 or 1 (905) 953-7388
Mon-Fri 7 AM-10 PM EST

CLASS ACTION/COMPENSATION

If you would like more information about class
action/compensation, or help with a lookback, con-
tact:

Leslie Gibbenhuck Tel. (250) 490-9054

E-mail: bchepc@telus.net

She needs your name, address, birth date, transfu-
sion dates, and traceback number.

National Compensation Hotline: 1-(888) 726- 2656

ADMINISTRATOR

To receive a compensation claims form package,
please call the Administrator at 1(888) 726-2656 or
1 (877) 434-0944.

www.hepc8690.com info@hepc8690.com

**Should you have any questions about the status
of your claim (86-90), please contact the adminis-
trator. They should answer all of your questions.
If, however, they do not, then please contact Bruce
Lemer who has promised me that he would answer
your questions at no charge.—C.D. Mazoff

Armstrong HepCure Office and library, by appointment. Contact Marjorie, 546-2953, ambrorse@sunwave.net, www.junction.net/hepcure

Castlegar/Grand Forks/Trail Contact: Robin, 365-6137

Chilliwack BC HepTalk Meetings: 2nd and 4th Wednesdays of each month, 7-9 PM, Chilliwack United Church, 45835 Spadina. NEXT MEETINGS: Nov. 8th and 22nd. Contact: HepTalk@fraservalleydir.every1.net, or 856-6880.

Comox Valley Liver Disease Support Group Meetings: Third Tuesday of each month, 6-8 PM, St. George's United Church on Fitzgerald. NEXT MEETING: Nov. 21st. Contact: Jayne, 336-2485 or Dan, 338-0913, Rhagen@mars.ark.com

Cowichan Valley Hepatitis C Support Contact: Debbie, 715-1307, or Leah, 748-3432.

Cranbrook HeCSC : Meetings: 1st and 3rd Tuesday of each month, 2-4 PM, #39 13th Ave South, Lower Level. NEXT MEETINGS: Nov. 7th and 21st. Contact: 426-5277, hepc@cyberling.bc.ca

Creston Educational presentation and appointments: Contact Katerina 426-5277

Downtown Eastside Hep C Support Group Meetings: Each Monday, 6 to 8 PM, Carnegie Center, 401 Main St., Vancouver. Contact: Carolyn, momma@vcn.bc.ca

Golden Client Support Services & Healthcare Professional and Service Providers Educational presentation and appointments: Golden Health Unit. Contact Katerina 426-5277

HepCBC Hepatitis C Education and Prevention INFO Line. Need free medical articles or other info? Contact: David, (250) 361-4808, info@hepcbc.org, www.hepcbc.org

Invermere Educational presentation and appointments: Invermere Hospital. Contact Katerina 426-5277

Kelowna HeCSC Meetings: First Saturday of each month, 2-4 PM, Rose Avenue Education Room, Kelowna General Hospital. NEXT MEETING: Nov. 4th. Contact: Doreen, 769-6809 or eriseley@bcinternet.com

Kimberley Support Group Meetings: First Monday of each month, 1-3 PM. For appointments & info, contact Katerina 426-5277

Kootenay Boundary Meetings: Second and fourth Tuesday of each month, 7 PM, 1159 Pine Ave, Trail. NEXT MEETING: Nov. 14th and 28th. Contact: Brian, 368-1141, k-9@direct.ca. Meeting for September 2nd Tuesday of the month only

Mid Island Hepatitis C Society Meetings: Second Thursday of each month, 7PM, Central Vancouver Island Health Centre, 1665 Grant Street, Nanaimo. NEXT MEETING: Nov. 9th. Speaker: Dietician. Contact: Sue 245-7635, Floyd 741-1595, or mi-hepc@home.com

Parksville/Qualicum MIHepCS support and contact: Ria 248-6072

Mission Hepatitis C and Liver Disease Support Group Contact: Patrick, 820-5576.

Nelson Hepatitis C Support Group Meetings: 2nd Floor 333 Victoria St., Multi-Purpose Room NEXT MEETING: Contact: Alex at ANKORS 1-800-421-2437 or 505-5506, or Ken 355-2732, keen@netidea.com

New Westminster Support Group Meetings: Second Monday of each month, 7:00-8:30 PM, First Nations' Urban Community Society, Suite 301-668 Carnarvon Street, New Westminster. NEXT MEETING: Nov. 13th. Contact: Dianne Morrissett, 525-3790.

Parksville/Qualicum 102a-156 Morison Avenue, PO Box 157, Parksville, BC V9P 2G4. Open daily from 9AM to 4 PM, M-F. Contact: 248-5551, sag@island.net

Penticton Hep C Family Support Group Meetings: Second Wednesday of each month, 7-9 PM, Penticton Health Unit, Board rooms. NEXT MEETING: Nov. 8th. Contact: Leslie, 490-9054, bchepe@telus.net

Powell River Hep C Support Group "Living With Liver Disease" sessions, second Wednesday of each month, 7-9 PM, Public Health Unit, 4313 Alberta Ave. First session: Nov. 8th. Speakers: Dr. Deborah Hocking and Terry Howard Contact: Cheryl Morgan 483-3804.

Prince George Hep C Support Group Meetings: Second Tuesday of each month, 7-9 PM, Health Unit Auditorium. Next Meeting: Nov. 14th. Contact: Gina, 963-9756, gwickaby@telus.net or Ilse, ikuep-per@pgrhosp.hnet.bc.ca

Princeton Meetings: Second Saturday of each month, 2 PM, Health Unit, 47 Harold St. NEXT MEETING: Nov. 11th. Contact: Brad, 295-6510, [cizen@nethop.net](mailto:citizen@nethop.net)

Salmon Arm Support Group Meetings: Second Thursday of each month 7-0 PM, Salmon Arm Health Unit. Contact Marjorie 546-2953, mharis@junction.net. www.junction.net/hepcure

Slocan Valley Support Group Meetings: Contact: Ken, 355-2732, keen@netidea.com

Smithers Positive Living Drop in on Thursdays, 3-7 PM, Heritage Bldg, 1st Ave, upstairs. Contact: Doreen, 847-2132 or aws@mail.bulkley.net

Sunshine Coast — Sechelt: First Wednesday of each month. NEXT MEETING: Nov. 1st—**Gibsons:** Last Thursday of each month. NEXT MEETING: Nov. 30th. Both meetings—Health Units, 7 PM. Contact: Kathy, 886-3211, kathy_rietze@uniserve.com

Vancouver CLF Meetings: Second Thursday of each month, 7:30 PM, Nurses Residence, VGH (12th & Heather). Next Meeting: Nov. 9th. Contact: CLF, 681-4588, or Herb, 241-7766, herbmoeller@cs.com

Vancouver Morning Support Group Meetings: Last Wednesday of each month, 10:30-12:30, BC CDC Building, 655 West 12th (Park in Cambie St. City Square Mall). NEXT MEETING: Nov. 29th. Contact: Darlene, 608-3544, djnicol@attglobal.net, or info@hepcvsg.org

Vernon HeCSC HEPLIFE Meetings: Second and fourth Wednesday of each month, 10 AM-1 PM, The People Place, 3402-27th Ave. NEXT MEETINGS: Nov. 8th and 22nd. Contact: Sharon, 542-3092, sgrant@netcom.ca

Victoria HeCSC Contact: 388-4311, hepcvic@idmail.com

Victoria HepCBC Support Groups We have small support groups for men and for women. For men, contact Guy at 382-9888, kidstum@home.com; for women, contact Joan at 595-3882, or jking@hepcbc.org

Yukon Meetings: Third Wednesday of each month, Whitehorse. Next meeting: Nov. 15th. Contact Positivelives@hotmail.com or Heather, fromme@marshlake.net for place and time.

ALBERTA:

Central Alberta CLF Hepatitis C Support Group Meetings: Last Thursday of each month, 6-8 PM, Provincial Building, Room 109, 4920 51 St., Red Deer. Enter at southeast entrance. NEXT MEETING: Nov. 30th. Contact: Shane, 309-5483, shane-hepc@hotmail.com

Edmonton, AB Hepatitis C Informal Support Group Meetings: Third Thursday of each month, 6-8 PM, 10230-111 Avenue, Conference Room "A" (basement) NEXT MEETING: Nov. 16th. Contact: Cathy Gommerud, yzcat@telusplanet.net or Jackie Neufeld, 939-3379

ATLANTIC PROVINCES:

Cape Breton Hepatitis C Society Meetings: Second Tuesday of each month. NEXT MEETING: Nov. 14th. Contact: 564-4258 (Collect calls accepted from institutions) Call toll free in Nova Scotia 1 (877) 727-6622

Fredericton, NB HeCSC Meetings: 7 PM Odell Park Lodge. NEXT MEETING: Contact: Sandi, 452-1982 sandik@learnstream.com

Greater Moncton, N.B. HeCSC Meetings: NEXT MEETING: Wed. Nov. 8th. Contact Debi, 1 (888) 461-4372 or 858-8519, monchepe@nbn.net

Halifax Atlantic Hep C Coalition Meetings: Third Tuesday of each month, 7-9 PM, Dickson Centre, VG Hospital, Rm 5110. NEXT MEETING: Nov. 21st Contact: 420-1767 or 1-800-521-0572 or ahcc@ns.sympatico.ca

Kentville Atlantic Hep C Coalition Meetings: Second Tuesday of each month, 6:30-8 PM, Kingstec Campus, Rm 214. NEXT MEETING: Nov. 14th. Contact: 1-800-521-0572 or ahcc@ns.sympatico.ca

ONTARIO:

Durham Hepatitis C Support Group Meetings: Second Thursday of each month, 7-9 PM, St. Mark's United Church, 201 Centre St. South, Whitby, ON. NEXT MEETING: Nov. 9th. Topic: Legal Issues for People with Hepatitis C. Guest Speakers: Deborah A. Hastings and Janet McKelvie. Contact: Smilin' Sandi, smking@home.com <http://members.home.net/smking/>, Durham Region Health Department (905) 723-8521 or 1-800-841-2729 Ext. 2170 (Ken Ng)

Hep C Niagara Falls Support Group Meetings: Last Thursday of each month, 7-9 PM, Niagara Regional Municipal Environmental Bldg., 2201 St. David's Road, Thurold, ON. NEXT MEETING: Nov. 30th. Contact: Rhonda, 295-4260 or hepcnf@becon.org

Hepatitis C Society of Ottawa-Carleton Meetings: Centertown Comm. Health Centre, 420 Cooper St. (Ottawa) between Bank and Kent St. One on one peer counselling Mon. afternoons. NEXT MEETING: Contact 233-9703 or ronlee@attcanada.ca

Kitchener Area Chapter Meetings: Third Wednesday of each month, 7:30 PM, Cape Breton Club, 124 Sydney St. S., Kitchener. NEXT MEETING: Nov. 15th. Contact: Carolyn, 893-9136 lollipop@golden.net

Windsor Support Group Meetings: Last Thursday of each month., 7-9 PM, 1100 University Ave. W. NEXT MEETING: Nov. 30th. Contact truds99@hotmail.com

QUEBEC:

Hepatitis C Foundation of Quebec Meetings: Dawson Community Centre, 666 Woodland Ave., Verdun. NEXT MEETING: Contact Eileen: 769-9040 or fhcq@qc.aibn.com