hepatitis*wa*

Newsletter

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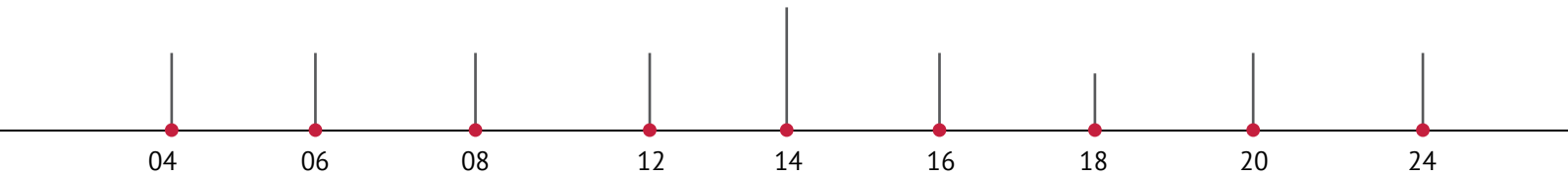

LETTER FROM THE EDITOR

Where has the year gone? This year has shown some remarkable and positive movements towards the development of new hepatitis C treatments and the push to get access for Australians through the Pharmaceutical Benefits Advisory Committee (PBAC). Hepatitis Australia has been working with hepatitis organisations around Australia – including HepatitisWA, on a campaign lobbying an "open letter" to the Minister of Health, amplifying a #TimeForAction and imploring Hon. Sussan Ley MP to embrace a new treatment era and to confirm a Pharmaceutical Benefits Scheme (PBS) listing date for 2015. It does not look like we will have this announcement before the end of the year – so as the year draws to a close, we patiently look forward to 2016 and are excited for the revolutionary treatment options that will change the landscape of hepatitis C in Australia. In this issue of the HepatitisWA Newsletter, we feature a number of articles on both hepatitis B and C, including a feature on Pamela Anderson and her recent announcement of being cured of hepatitis C. She speaks about the cost of treatment and makes the argument for wider availability to all people in America living with hepatitis C. Our personal perspective is from 29 year-old Rick Nash who shares his experiences of what it's like to be living with hepatitis C and five failed treatment attempts. Rick is an active advocator on Twitter, and can be reached @HepatitisMe. Other features include an article discussing the importance of screening for liver cancer if you have hepatitis B, and in our "Health & Lifesyle" section, we publish a healthy and delicious veggie fritter recipe, which I've had the pleasure of tasting! Lastly, HepatitisWA would like to take this opportunity to wish all our clients, fellow organisations and general readers a happy and safe holiday season, wishing you all the best for 2016!

Felicia Bradley

Editor

stay connected

www.hepatitiswa.com.au

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HepatitisWA (Inc).
HepatitisWA is a community based organisation which provides a range of services to the community in response to viral hepatitis, particularly hepatitis A, B and C.

Please contact us for more information, or make an appointment to stop by and talk with an appropriate member of our staff.

MESSAGE FROM hepatitis wa's MANAGEMENT

Management Report: The 4th International Symposium on Hepatitis Care in Substance Users (INHSU) 2015

The symposium was well run and there was reasonable diversity within the program of presentations. The focus was obviously on people who inject drugs (PWIDs) who are disproportionately affected by hepatitis, and whose burden of hepatitis C related disease continues to grow globally at alarming rates. There was good representation from international experts along with strong representation from local experts.

The meeting covered streams across HCV epidemiology, screening, assessment, HCV treatment and care, HCV access and implementation.

It was acknowledged that whilst deaths around the world related to HIV, malaria and tuberculosis are declining, the rate of deaths related to hepatitis B & C are increasing.

There was some discussion about language and that the appropriate term to use is 'people who inject drugs', which may be abbreviated in writing to PWIDs, but must not be abbreviated when referring to this group in presentations etc. This abbreviating occurred on a number of occasions by the presenters and it was highlighted by the community as being disrespectful.

It was acknowledged that rates of SVR (sustained viral response) are high in PWIDs initiating Sofosbuvir regimes, and peer support was also identified as an important component when working with PWIDs initiating treatment. There was a presentation looking at SVR relapse and this study identified that people who had relapsed had low education levels and were often young. This reinforced the need to ensure that people have good levels of education around adherence. Direct Observed Therapy (DOT) was also seen as possibly an important component for this group of people, along with initiatives such as sms and electronic diary messaging.

Whilst there have been a number of studies looking at PWIDs on HCV treatments, these studies have predominately focused on PWIDs who are no longer injecting and/or on Opiate Substitute Therapy (OST). On a number of occasions it was mentioned that by only allowing those PWIDs who no longer inject to access HCV treatments, was really only targeting the "low hanging fruit". Unless more access to HCV treatments is given to PWIDs who are currently injecting there will be little impact on the incidence.

The new treatments currently trying to be listed on the Pharmaceutical Benefits Scheme (PBS) was also discussed on a number of occasions. In February the Pharmaceutical Benefits Advisory Committee (PBAC) recommended that the new treatments should be made available to all people living with chronic HCV, and not just limited to those who have severe liver disease. It was acknowledged that Australia has taken an unusual, but what appears to be clever tact with the drug companies regarding costing. Apparently discussions to date have included limiting the number of treatments available on the PBS to approximately 62,000 over

Photograph by Krux Data Matters 2015.

5 years, which would equate to approximately 25% of the population of people living with HCV. If more people are treated over this period then the drug companies would have to pick up the cost.

It would of course be in the best interest for the government if more people could be treated as that would be cheaper in the long run for the government.

There were a number of presentations which talked about the positive changes to PWIDs whilst on treatments. These changes mainly focused on the positive changes around drug use. The studies identified that for a number of people who underwent HCV treatments there was some changes which saw them no longer use drugs, and having a more positive outlook on their lives. Unfortunately these studies did not identify if there were positive changes for those who continued to inject in relationship to their sharing of injecting equipment.

Point of Care testing and a "One stop shop" to target minority communities was also mentioned on a number of occasions. It was acknowledged that taking the testing, treatments, monitoring and care to targeted minority communities i.e. PWID, CaLD people and Aboriginal peoples rather than expecting them to access mainstream services was probably more feasible and would have better outcomes.

Probably one of the highlights of the symposium was the dinner which saw a number of band members from Australian bands such as Midnight Oil, Mental as Anything and Australian Crawl come together to entertain the delegates. They acknowledged the importance of hepatitis C and wanted to show their personal support by providing their services free of charge (excluding accommodation and food).

So for me I found this a very worthwhile symposium to attend and I feel that it reinforced to me that this agency needs to continue to seek funding to secure a testing and treatments clinic for our PWIDs.

by Sally Rowell

WHAT IT'S LIKE TO HAVE HEPATITIS C

As a young man with hepatitis C, Rick Nash copes by sharing his experiences and progress with readers of his blog.

Rick Nash is squarely in the minority of hepatitis C patients. At 29, he's decades younger than most people who are diagnosed with this viral disease, and he was diagnosed at the tender age of 12.

"Hep C changed the course of my life," says Nash, who lives in San Diego and has engineered his entire life so that he can stay as healthy as possible while dealing with the difficult challenges imposed by the chronic disease. He doesn't drink alcohol, which can worsen hepatitis C symptoms and may interact with medications, according to the National Institute on Alcohol Abuse and Alcoholism. He exercises not only to stay healthy, but also so he can see and feel the effects it has on his body.

And he confesses that he's a bit of a neat freak. "I rearrange my space constantly, cleaning as I go and making the flow more efficient," he says.

Hepatitis C in the Family

Nash's journey with hepatitis C began the summer before he entered seventh grade. He'd been playing tennis and slurping sugary drinks when he excused himself to go to the bathroom, and much to his shock, his urine was the color of iced tea.

His parents took him on a round of doctors' visits, he underwent all manner of tests, and eventually, a liver biopsy confirmed that he had the hepatitis C virus.

Medical sleuthing ensued to find the source of his infection: his father, mother, and brother gave blood samples for testing. Sadly, they found that the source was his mother, who was also infected with HCV.

Like most people with the disease, she'd had no hepatitis symptoms and was shocked by her diagnosis. In its early stages, hepatitis C often produces no symptoms or only mild ones, and for many people it can go unnoticed until liver damage occurs, according to the American Liver Foundation.

Only 6 of every 100 infants born to HCV-infected mothers will become infected with the virus, according to the Centers for Disease Control and Prevention (CDC).

It must have been terrible for his mother to realize that she was the source of his illness, and Nash says that the two of them didn't really deal with the issue for a long time.

"Both my mother and I had bouts of depression for the first five or six years after our diagnoses," he says. "Until my first treatment, we avoided the topic as much as we could."

Later, it became easier for them to be more open about what they were going through. "I spent a long time reminding her that I don't blame her. She still has a hard time with it, and probably will until I'm cured," says Nash.

Looking for Hepatitis C Meds

Though Nash's mother was able to kick hepatitis C with a triple drug cocktail containing interferon, ribavirin, and Incivek (telaprevir), that treatment didn't work for him — in fact, he writes on his blog, it nearly killed him. All told, he has now failed five hepatitis C treatments.

For a long time, he says, "I let waiting for a treatment plan get in the way of living."

Over time, he's had a lot of restrictions to endure. In high school, he was barred from sports and even gym classes because of his hepatitis C.

Now, between doctor's appointments and emergencies, he doesn't do well in a nine-to-five world. And, he says, "having hep C has also made dating really interesting." It's tricky for him to approach the subject and find people who are compassionate enough to not let it get in the way of their interest in him.

At this point, his liver is decompensated, meaning that it's extensively scarred and unable to function properly. He now "hangs out" on the liver transplant list, as he ruefully notes.

One piece of helpful information: Nash has finally learned why he's been so resistant to treatments that can cure hepatitis C in as many as 90 percent of patients. It turns out that he has three genetic mutations that prevent these drugs from working properly.

Now that he knows which drugs are unlikely to work for him, he's been tirelessly researching studies about new drugs that might turn the tide and provide a cure. In his sights right now is a protocol known as C-Salvage, which is a single-pill cocktail combining two drugs: grazoprevir and elbasvir. In studies, it appears to have a success rate as high as 95 percent in a group of people for whom other hepatitis C treatments were ineffective. The drug is made by Merck, which submitted it for FDA approval in May 2015.

Nash looks forward to the treatment with hope. "Sixth time's the charm," he says with a smile.

Paying It Forward for Hepatitis C

Nash became a patient advocate for people with hepatitis C in early 2014. "I'd been on various forums for a while, and saw lots of people with serious questions about the treatment process — and few of them were my age," says Nash. "I wanted to help others, because I know how hard it is, and how alone you can feel." He frequently gets emails, messages, and letters from people who thank him for his help. "There's comfort in reading about common experiences," he says.

Going online can also be a great source of information, says Nash, especially when you're newly diagnosed with hepatitis C. Twitter is an excellent way to follow recent news because it's where most hepatitis C sites broadcast their posts. Reach out to Nash via Twitter **@hepatitisme**. Nash also has more hard-won advice for anyone living with hepatitis C:

> "Focus on maintaining your relationships, because that bond could save your life," he says. "If you drink, stop. If you smoke, stop. Get as healthy as you can, because there will be times when you'll wish you had. Don't focus everything on your treatment — it can be a goal, but remember that living your life and doing what makes you you is just as important."

GOING VIRAL

A ROUND-UP OF ARTICLES ON VIRAL HEPATITIS

INJECTED DRUG USE RISE LINKED TO HEP C, HIV INFECTIONS IN INDIGENOUS AUSTRALIANS NEW RESEARCH SAYS

New research has linked a rise in Indigenous Australians injecting drugs and concerning rate of hepatitis C and HIV.

Australian Health and Medical Research Institute (SAHMRI) associate professor James Ward has found a higher prevalence of injected drug use in Aboriginal populations, compared to non-Aboriginal populations.

Professor Ward estimated between 5 and 10 per cent of Aboriginal people have injected drugs, compared to 2 per cent of non-Aboriginal people.

He said the rate of hepatitis C was three times that of non-Aboriginal Australians, where it has "plateaued".

The research also showed the number of Aboriginal people accessing needle syringe programs has jumped from 5 to 14 per cent over the past two decades.

"That is good news on one side, that a large number of Aboriginal people are accessing needles through syringe programs," Professor Ward said.

"But something is going wrong after people collect the equipment.

"They are sharing with bigger groups... they are sharing with extended family.

"People may have an ubiquitous view that you are going to get hepatitis C if you are injecting anyway.

"We have heard that anecdotally around the traps."

Indigenous Australians reported injecting illicit drugs with extended family members at five times the rate of non-Indigenous people.

Professor Ward said the most commonly-injected drug was methamphetamine.

He said the community needed innovative, prevention-focused programs to target young Aboriginal and Torres Strait Islander people.

"We need further investments and continued efforts around primary prevention," Professor Ward said.

"While there is a contraction of drug and alcohol services in Australia in terms of funding and resourcing, we have got an expansion of injecting in Aboriginal and Torres Strait Islander communities.

"I think we really need to bite the bullet and go for a fairly big investment, so that people are not turned away when they do want to seek treatment for drug and alcohol services, as is often the case now."

Professor Ward presented his findings at a drug and alcohol conference in Perth, earlier in November.

BY ELIZA LASCHON

Nov 10, 2015 ABC News.
tinyurl.com/rise-in-indigenous-injecting

"DALLAS BUYERS' CLUB" FOR HEP C TREATMENTS UNDER INVESTIGATION

A "Dallas Buyers Club" of doctors and patients importing potentially life-saving hepatitis C medication from countries like China is being investigated by the Therapeutic Goods Administration.

Australians living with hepatitis C have been waiting for about six months for the Pharmaceutical Benefits Scheme to negotiate with US companies on a subsidised Australian price on new drugs for the virus. The drugs are far more effective and fast-acting than existing interferon therapies for hepatitis C, which carry debilitating side effects. Four new drugs were recommended to be listed on the Scheme by its advisory council earlier this year.

It is unknown how much the drugs sell for privately in Australia, but the US prices for some of the drugs are reportedly more than $A100,000*.

The FixHepC Buyers Club, established in September, helps patients with a doctor's prescription import and test the drugs for their personal use for cheaper rates from China and India. Visits to the group's website soared from 5000 to more than 217,000 in its first week after a Fairfax Media report.

Labor Senator Jan McLucas asked Department of Health representatives about the practice at a senate estimates hearing on Wednesday night: "What is the TGA's position on doctors establishing a so-called Dallas Buyers' Club to bypass the Pharmaceutical Benefits' Scheme and import drugs such as Harvoni and Sovaldi from China?"

Adjunct Professor John Skerritt, a deputy secretary of the Department, said that the TGA was investigating the lawfulness of the importation and the advertising of such drugs.

"There are still a range of investigations in progress. We are aware of groups doing this and there are analogies to a Dallas Buyers Club but this does not make this whole package necessarily illegal," he said.

Fairfax Media has reported that most of Australia's 233,000 hepatitis C positive are deferring interferon treatment, often on advice from their doctors, to wait for the more effective drugs to be listed on the Pharmaceutical Benefits Scheme, at the risk that the virus would become life-threatening. A study published in the Journal of Gastroenterology and Hepatology has found that some patients, who were unable to receive interferon treatment, had experienced liver failure in that time.

Dr Skerritt said there were cases where finished medicines were being imported into Australia. Under the "personal import scheme" people could legally import medicines for up to three months for personal use, with a prescription from an Australian registered medical practitioner.

There were other cases where only the "active pharmaceutical ingredient" or the "starting material" of the drugs were being imported. If people were importing compounded forms of these ingredients with a prescription, the states and territories, not the federal authority, had regulatory powers to act.

Dr Skerritt said they were also investigating whether buyers' clubs had breached laws that prevented advertising prescribed medicines directly to Australians. Using the analogy of botox treatments, he said "You can advertise a service saying 'I'm doing wrinkle reduction surgery' but you can't advertise the substance (to be used.)"

Twenty-seven health advocacy groups including Hepatitis Australia wrote an open letter to Health Minister Sussan Ley last month urging her to intervene to speed up the negotiations, so that the drugs can be listed before the end of the year.

The Department's Andriana Platona said negotiations were particularly difficult because they involved three different companies and drugs that covered the entire hepatitis C spectrum: "What we are trying to achieve during these negotiations (is) treatment for most people… as many as we can at the lowest possible price."

BY JANE LEE

October 21, The Sydney Morning Herald. tinyurl.com/hep-c-buyers-club

*People should seek medical advice from their GP before considering taking this avenue.

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Hepatitis Workforce Development

HepatitisWA's Workforce Development Officer can provide **educational workshops** for any interested **workforce groups**.

Topics covered may include:

- The differences between hepatitis A, B, and C
- Statistics around current trends
- The impact on viral hepatitis on the liver
- Living well with viral hepatitis
- Up-to-date information on the latest treatments
- Modes of transmission
- Prevention and harm reduction
- Conducting risk assessments
- OHS/workplace issues (management of blood and sharps etc)
- Vaccination regime
- Workplace policy formation
- Confidentiality and disclosure
- Testing information
- Psycho-social impact of living with viral hepatitis
- Discrimination

THERE IS NO CHARGE FOR WORKSHOPS.

FOR MORE INFO CONTACT
MATTHEW on (08) 9227 9802
wdo@hepatitiswa.com.au

hepatitiswa

facilitates a peer
support service for
people living with hepatitis.

The peer support group assists people to achieve better health and well being through discussions and activities. The monthly meetings are confidential, free and provide opportunities to share experiences and thoughts with peers in a friendly and non-judgemental way. Healthy and tasty snacks will be provided.

For more information, please contact Amineh on 9328 8538 or support@hepatitiswa.com.au

Actress Pamela Anderson cures hepatitis C with antiviral medication: Why patients need equal access

In 2002, after reportedly sharing a tattoo needle with ex-husband Tommy Lee, Pamela Anderson contracted hepatitis C — a liver disease caused by the hep C virus. The former Baywatch star had been relatively quiet about her diagnosis until opening up to People in August of this year. Anderson said she'd been prescribed a new FDA-approved drug regimen that could rid her of the virus in as little as a month. And yesterday on Instagram she announced she finally was. Anderson posted a revealing photo of herself in Cannes, writing that she just found out she had been cured. Sixteen years ago Anderson believed hep C was a "death sentence," she told People Magazine. She didn't suffer from any liver damage or otherwise side-effects —

 Source: www.tinyurl.com/pamela-anderson-cured | Photo courtesy of Getty Images

those with chronic hep C often develop liver cirrhosis or liver cancer — but "it really was a dark cloud that lingered over me." Now, she's hep-free and "wants to help."

The World Health Organization reports "the most common modes of [hepatitis] infection are through unsafe injection practices, inadequate sterilization of medical equipment, and the transfusion of unscreened blood and blood products." There are also some groups of people at increased risk for hep C: people who use drugs, people who have undergone invasive healthcare procedures with inadequate safety practices, and people, like Anderson, who have had tattoos and piercings. Healthcare workers are at "higher than average risk of infection," too, according to one research review.

Knowing this, the WHO and the World Hepatitis Alliance (WHA) remind people "it's up to you" to stay healthy. They remind people not to share straws, needles, and syringes; to question if a medicine can be administered without an injection; and to take action and get vaccinated for hepatitis B. The risk of becoming chronically infected with hep B is reportedly as high as 90 percent among infants who aren't vaccinated.

But perhaps the biggest push from the WHO and WHA is for the development of new curative treatments; there's currently no vaccine for hep C. Back in May, the WHO added these treatments to its essential medicines list, though the United Nations agency said "prices needed to fall to make them accessible to patients in poorer countries."

Worldwide 400 million people are reportedly living with hep B or C, with the most affected regions being Africa and Central and East Asia.

The cure rate for the virus is dependent upon several things — chief among them access to antiviral drugs.

Formally these medicines are known as direct antiviral agents, and the WHO finds they are "much more effective, safer, and better-tolerated than the older therapies." Unfortunately, though the drugs aren't expensive to make, "the initial prices are very high and likely to make access to these drugs difficult even in high-income countries." A single pill of the antiviral medication Sovaldi reportedly costs $1,000 in the United States. Not only that, but Sovaldi is often combined with other treatments, bringing the total cost to an estimated $150,000 (USD) per patient*.

"Sovaldi is the canary in the coal-mine, alerting all of us that disaster is coming unless something is done to prevent it," John Rother, president and CEO of the National Coalition on Health Caret, said in a previous statement. "Unfortunately, the problem is far bigger than one drug — we are talking about a tsunami of expensive medicines that could literally bankrupt the health care system."

The WHO and WHA, and now probably Pamela Anderson, will continue to raise awareness, promote partnerships, and mobilize resources so every patient has access to life-saving information and medication. This endeavor may get a significant boost in 2016, as several candidates have already proposed plans that would help drive down drug costs.

By Stephanie Castillo
The Grapevine

* In Australia, the Pharmaceutical Benefits Advisory Council (PBAC) has recommended to the Pharmaceutical Benefits Scheme (PBS) that these new treatments should be made available for free to all people living with hepatitis C.

STUDY SUGGESTS UNPRECEDENTED 3-WEEK HEP C CURE

Yet another stunning victory in the drug battle against the liver-damaging hepatitis C virus (HCV) may be in the offing: A small study suggests it may be possible to cure some people of their infections in as few as 3 weeks.

Fresh on the heels of recent approvals of four new combinations of HCV drugs that clear infections of many different types of the virus in about 3 months, a team led by hepatologist George Lau of the Humanity & Healthy GI and Liver Centre in Hong Kong, China, has mixed and matched various compounds to see whether they could further shorten the route to a cure. Following 3 weeks of treatment, 18 HCV infected people given three different combinations of drugs met the standard definition of being cured—at 12 weeks after treatment began, they had no signs of HCV's genetic material, RNA, in their blood on standard tests. The researchers plan to present this data publicly for the first time at a scientific conference known as The Liver Meeting in 2 weeks.

Until the new HCV drugs emerged, infected people required treatment for 8 months, and the therapies often failed and had severe side effects. Now, standard treatment protocol calls for taking HCV drugs for just 12 weeks. Cutting that treatment time even more dramatically is "really, really intriguing" says Shyam Kottilil, an HCV researcher at the Institute of Human Virology in Baltimore, Maryland. And if the results hold, it could slash the overall treatment cost of $100,000 required by the most popular drugs used for the 12-week treatment. Kottilil's own study of a 4-week treatment—which tested different drug combinations on a different patient population—had only a 40% cure rate in the 50 participants. (That study is in press at Annals of Internal Medicine.)

Other researchers point out several caveats to the 3-week success, most notably that the 18 people treated had several characteristics of patients who respond well to HCV drugs. "It's very interesting, but not unexpected," says David Nelson, a hepatitis researcher at the University of Florida in Gainesville.

Raymond Schinazi, a biochemist from Emory University in Atlanta who collaborated with Lau, acknowledges that this is only a pilot study and needs confirmation in a larger clinical trial. "But when you get 100%, it's always statistically significant," says Schinazi, who helped develop one of the new blockbuster HCV drugs, sofosbuvir, that was part of the combinations tried in the new study.

The rapid clearance of HCV from the body seen in the study upends mechanistic models about how treatment cures people of HCV. "Our models did not predict this at all," says another collaborator, Alan Perelson, a

Article first published on Science Mag: news.sciencemag.org on 30/10/2015.
Available at www.tinyurl.com/3-week-hep-c-cure (02 Nov 2015).

biophysicist at the Los Alamos National Laboratory in New Mexico, who has done key work on how treatment leads to clearance of both HCV and HIV. "There's some piece of basic science about viral clearance that we're still missing."

Until May 2011, the only drugs approved to cure HCV worked by murky and nonspecific antiviral and immune mechanisms, had significant side effects, and failed 40% of the time. Since then, a dozen so-called direct-acting antivirals have come to market—all of which are expensive—and many similar, promising candidates are in development.

The Hong Kong study tested three different triple combinations of the most effective direct-acting antivirals, each of which homes in on different HCV enzymes or proteins important to its replication. Sofosbuvir—created by a small biotech Schinazi started that was bought out by Gilead Sciences of Foster City, California—targets HCV's RNA polymerase and was the backbone of all three regimens. Widely considered the "first-in-class" in the HCV drug world, sofosbuvir has a relatively high potency, causes few side effects, and is rarely foiled by drug-resistance mutations. (Its initial retail sales price, $1000 per pill, triggered international controversy.) The researchers combined it with either ledipasvir or daclatasvir, which cripple a viral protein known as NS5a. To finish the cocktail, the researchers added one of two HCV protease inhibitors, simeprevir or asunaprevir."

Three different Big Pharma companies make the various drugs, and Schinazi asserts that to protect their markets, they have resisted collaborating with each other. "I want to show these companies that they should have done this study a long time ago themselves," says Schinazi, who helped pay for the drugs used in the study. "When you put the best drugs together, you get fabulous results."

To obtain those results, the researchers purposefully went for the lowest hanging fruit—and Hong Kong was an ideal test site. HCV has six different genotypes that, in turn, divide into subtypes. In China, the most prevalent is genotype 1b, which responds more readily to drug treatment than any other genotype: Earlier studies have shown that 8 weeks of sofosbuvir and ledipasvir can cure almost everyone. Large studies have also found that 84% of Chinese HCV patients have a variant of an immune gene (technically known as IL28b cc) that leads to a strong natural attack against the virus, giving them an advantage when treated with effective drugs. "So you're actually looking at [a] population that not only has the best genotype but the host may be playing a role," says Mark Sulkowski, director of the viral hepatitis center at the Johns Hopkins University School of Medicine in Baltimore, Maryland.

The investigators stacked the deck in two other ways. As is commonly done in HCV drug clinical trials, they excluded HCV-infected people who have suffered cirrhosis of the liver and thus are harder to cure. What's more, the study used an unusual study design called response-guided therapy. In all, 26 people began the treatment and the researchers checked their HCV blood levels after 2 days, selecting 18 people who had the biggest drops in viral loads for the short duration therapy and treating the others for the standard 12 weeks. These 18 participants also had lower HCV viral loads pretreatment.

The University of Florida's David Nelson says the study "is a great proof of concept," but he questions how applicable the 3-week treatment scheme will be in the global response. Although genotype 1 accounts for an estimated 46% of all infections worldwide, the majority of Americans have the harder-to-treat 1a subtype. Some 22% of the world has genotype 3, which similarly is more difficult to cure than 1b. Ideally, says Nelson, one standard treatment protocol should work against all genotypes without the need to test initial responses and regardless of cirrhosis status.

Although Sulkowski agrees that ultrashort treatment won't be a one-size-fits-all, he counters that it may be pragmatic in some settings. "This study really opens a philosophical discussion about how to treat hepatitis C," Sulkowski says. "Maybe there's a role for a complicated strategy that shortens therapy." In the United States, for example, it may make economic sense in some health care systems to pay extra costs to test genotype 1b patients—who make up 25% of the infected population—2 days into therapy and select the responders for the 3-week treatment course. Consider that nearly 180,000 people who receive care from the Veterans Health Administration have tested positive for HCV: Estimates suggest it would cost $12 billion to treat everyone for 12 weeks even at steeply discounted rates for drugs. Shaving off 9 weeks for thousands of people could equal huge savings in drug costs.

Sulkowski says even if the ultrashort therapy scheme does not have a 100% cure rate, it may not pose great risks to patients. As he and others will reveal at The Liver Meeting, a growing body of evidence shows that patients who fail on one therapy often respond if treated again with different drugs. "If I can tell a patient I'm going to treat you for 4 weeks and if you don't respond I can rescue you with another approach, that's a reasonable strategy for a country like the U.S."

Schinazi says combinations of more potent drugs and higher doses of existing ones could reduce the time to cure even further. "I think eventually we could go to 2 weeks," he says. ■

WOMEN & HEP C

Women with hepatitis C have a number of specialised needs related to their reproductive and sexual health.

Women need accurate information to assist them to make informed decisions about their health care needs. The impact of hepatitis C on the reproductive and sexual health of women is not well understood and warrants further research.

Menstruation

Menstrual fluid contains blood and other body fluids. As hepatitis C is transmitted by blood-to-blood contact, there is in theory the possibility of transmitting hepatitis C through contact during menstruation. However, the risk of heterosexual or female-to-female sexual transmission is extremely low and there is no evidence that sex during menstruation increases risk of sexual transmission. In theory, having sex while menstruating can increase the risk of transmitting hepatitis C if your sexual partner has any open cuts, wounds or abrasions. Using dams for oral sex, and condoms with male partners will reduce the risk of blood to blood contact.

Following standard precautions for infection control will lower the risk of transmitting hepatitis C through menstruation. This includes disposing of used tampons and sanitary pads in hygienic disposal units or in leak proof plastic bags in the general rubbish.

Most women's periods do not change because they have hepatitis C, although some find they miss a period or have shorter periods. It is important to understand that any change in your menstrual cycle may not be related to having hepatitis C. Any change in a woman's menstrual cycle should be discussed with a doctor, as it may or may not be related to hepatitis C.

Birth Control

The oral contraceptive pill is fine for the vast majority of women with hepatitis C however if you have severe liver disease, you may not be able to tolerate the oestrogen hormones that are in the oral contraceptive pill or in hormone replacement therapy (HRT). This is because the liver may have problems breaking down these hormones. Please consult your doctor for further information on the use of the oral contraceptive pill or HRT.

Source: Reproduced with permission from Hepatitis Australia.
Available at www.hepatitisaustralia.com/living-with-hepatitis-c/women-and-hepatitis-c (02 November 2015)

Women with hepatitis C with severe liver damage, or who are experiencing significant symptoms, should discuss the use of the contraceptive pill with their doctor.

There are other forms of contraception that can be explored. This includes hormone injections or implants and barrier methods such as the diaphragm.

It is important that all these options are explored with a trusted doctor to find what is best for your situation.

Menopause
Just as oestrogen hormones in the oral contraceptive pill can cause problems for women with hepatitis C, hormone replacement therapy (HRT) may also not be well tolerated.

The hormonal changes that women with hepatitis C experience as part of menopause are not all associated with the virus—seek the advice of a doctor or an endocrinologist (a hormone specialist) for any problems experienced with menopause and HRT.

Pregnancy
Hepatitis C does not reduce the likelihood of a woman becoming pregnant. The risk of hepatitis C transmission from mother to child is low, about 6%. Hepatitis C is more likely to be transmitted during birth than while the baby is inside the mother.

Women with low levels of the virus in their blood are unlikely to transmit hepatitis C to their baby. Women with high levels of the virus, those with serious liver damage or those in the acute phase of infection, have a higher risk of transmitting hepatitis C to their baby.

A baby born to a mother with hepatitis C will inherit the mother's antibodies and test antibody positive until the child is about 15–18 months of age. In most cases, the child's hepatitis C antibodies naturally disappear after 18 months. Therefore, testing a baby for hepatitis C is not recommended until the baby is older than 2 years. In saying this though, infection can be detected by PCR testing as early as 2–3 weeks. So, if parents are concerned they can ask for this to be done after 4–6 weeks, with follow-up testing if negative.

Pregnancy is also not considered to cause deterioration of liver disease in women who have hepatitis C.

Women with hepatitis C on treatment (pegylated interferon and ribavirin) are required to use two forms of contraception (one for each partner) to ensure they do not become pregnant during their treatment, and for six months following the end of treatment. This is because pegylated interferon and especially ribavirin can cause birth defects.

Breastfeeding
There are no confirmed reports of hepatitis C transmission from mother-to-baby by breast milk. Current scientific opinion remains that there is no significant evidence of HCV transmission through breast-feeding. Scientists have found traces of the virus in breast milk and colostrum (the breast fluid produced by the mother in the first few days of breastfeeding) but not enough to transmit hepatitis C. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists currently recommends that breastfeeding should not be discouraged, as no cases of hepatitis C transmission have been documented by this route.

Damage to the breast such as cracked nipples could pose a possible risk to the baby if blood-to-blood contact occurs through small tears or scratches in or around the baby's mouth. It is recommended that women with hepatitis C who are breastfeeding should express and discard their breast milk while their nipples are cracked. Treat cracked nipples so they do not bleed and seek help from a breastfeeding counsellor or nurse lactation consultant to discuss ways of preventing cracked nipples.

Breast milk supplies a balanced food supply for the baby, as well as protecting the baby from many illnesses especially in the first weeks, however, the final decision whether to breastfeed is entirely up to the mother.

TIPS TO HELP YOUR BODY SURVIVE THE FESTIVE SEASON

We all know that escaping the festivities of Christmas is truly impossible. There is no chance of sticking to a healthy diet, and overindulging in delicious treats and drinks is almost a given. Around this time of year, most of the rules for healthy living are happily abandoned, and fun and festivities prevail. Here are a few tips that may be helpful for looking after your health and minimising the impact of Christmas overindulgence.

Sleep

Late nights are certainly a feature throughout the Christmas/New Year period. Try as best you can to get adequate sleep and allow your body enough time to complete its nocturnal healing regime. Sleep-ins and siestas are highly recommended to top up on late nights.

Source: BellyBelly – Tips to Help Your Body Survive the Festive Season. Available at http://tinyurl.com/tips-festive-season (16 November 2015).

Alcohol

Now, I'm sure you've heard all this before, but alcohol really does put a massive burden on your liver (and your kidneys and so forth) and it really is worth pacing yourself when it comes to alcohol. Alternating between a beer and a glass of water or a champagne followed by an orange juice is a great plan. When you drink alcohol, your liver prioritises and attempts to breakdown and eliminate alcohol from your system BEFORE it does all of it's other jobs such as the digestion of food, manufacturing hormones, and producing enzymes etc.) Some recent studies in Australia have shown that drinking wine prior to eating interferes with the blood sugar levels, reduces available glucose to the brain, raises cortisol levels and other stress hormones in the blood-stream, can interfere with insulin levels, and possibly increase the chances of insulin resistance. It seems it is certainly worth avoiding drinking on an empty stomach! So really try to go easy on your liver this summer, ensure that you are drinking enough water.

Smaller Portions

Food glorious food... it is amazing to consider what we expect our bodies to digest in one day! Christmas can be an exhausting marathon for our overworked digestive systems (especially our livers). Try having slightly smaller portions, and remember to chew your food really well "this is the first stage of the digestive process, and can make things go down a whole lot easier. Pace yourself, eat slowly, and you may just have enough room left for Aunt Hilda's home made trifle...

Exercise

Keeping up an exercise routine can be really challenging over the holiday period. If possible, go for a stroll around the block or play some backyard cricket in between feasting. Even a short burst of physical activity will boost your metabolism and work off a few extra Christmas calories. Evening walks are ideal at this time of year.

HEALTH & LIFESTYLE

GLUTEN FREE · HEALTHY · EASY · SERVES 4

BROCCOLI,
FETA AND PINE NUT FRITTERS

These fritters are the perfect way to enjoy broccoli even for non broccoli fans. The fritters are creamy and soft on the inside and the toasted pine nuts give them a beautiful crunchy texture.

INGREDIENTS

1 whole head broccoli
3 garlic cloves, finely chopped
5 eggs
1 T dried parsley (or fresh if you prefer)
1 cup plain flour
80 grams of feta cheese
1/2 cup of pine nuts (or your favourite nuts), chopped
Salt and pepper to season

PREP TIME

10 mins

COOK

15 mins

METHOD

1. Chop up the broccoli finely and steam in microwave safe container for 5 minutes.

2. Beat the eggs in a bowl and add the flour, garlic, nuts, salt and pepper and parsley.

3. Chop up the feta cheese into small cubes and place into the mixture.

4. Before adding the broccoli into the mixture make sure the broccoli is finely sliced and mixed through.

5. Heat a large frying pan over moderate heat and add a dash of oil.

6. Scoop 1 large spoon of mixture into the frying pan then flatten slightly with a spatula. Cook the fritters for 2-3 minutes on each side, or until golden.

7. Place fritters onto a paper towel to soak up any excess oil.

8. Serve with a squeeze of lemon juice, garlic yoghurt and a salad.

NUTRITION (PER SERVING)

High in fibre
Good source of protein
No added sugar
Rich in antioxidants

Kcalories 343

Recipe adapted from Julia & Libby. Visit www.juliaandlibby.com/2014/01/06/broccoli-feta-and-pine-nut-fritters

hepatitiswa

Liver Healthy Life Workshop

This is a **fun** and **interactive** workshop where participants experience making **juices** and **soups** and learn about **good liver health**.

Participants will have the opportunity to gain information on the importance of knowing their **hepatitis B status**, **vaccinations for hepatitis B**, **hepatitis B transmission** and **prevention** and the importance of **monitoring their liver** if they have hepatitis B.

ALL MATERIALS FOR THE WORKSHOP ARE PROVIDED.
THERE IS A MAXIMUM OF 20 PARTICIPANTS FOR THIS WORKSHOP.
THERE IS NO CHARGE FOR THIS WORKSHOP.

FOR MORE INFO CONTACT
AMANDA on (08) 9227 9802
hepbcdo@hepatitiswa.com.au

Is your doctor screening you for liver cancer?

The longer we have hepatitis B, the higher our risk of developing liver cancer. With every decade of life, our liver cancer risk increases 2.7 times, according to a report on Viral Hepatitis in the Elderly published in the American Journal of Gastroenterology.

But current medical guidelines don't spell out exactly when liver cancer testing should begin in many hepatitis B patients who don't have liver damage (cirrhosis) or a family history of liver cancer, and are not of Asian or African descent.

Age is clearly an important factor when it comes to liver cancer"… but current guidelines only provide age-specific recommendations for (liver cancer) surveillance in hepatitis B carriers of Asian ethnicity (men over age 40 and women over age 50)," a team of University of Miami and Veterans Affairs researchers wrote in the journal article.

Current medical guidelines are clear that anyone with cirrhosis (liver scarring) should be screened twice a year or more frequently for liver cancer, using ultrasound examinations and an alpha fetoprotein (AFP) test, which is a blood test that is moderately successful at identifying cancerous tumors. There's good reason for this mandate – about 80 percent of people diagnosed with liver cancer also have cirrhosis.

The guidelines also state that patients who have a family history of liver cancer, are co-infected with HIV or hepatitis C or who are young males of African descent should also be tested for cancer at any age.

But many of us don't have those "risk factors," including cirrhosis, but we are still at risk of liver cancer because we've had hepatitis B for decades. Our liver cancer risk is much lower than if we have cirrhosis, but it's still there.

As doctors debate whether these guidelines should be changed to promote earlier screening, here are some questions to review with your doctor to determine if you should be screened for liver cancer:

How many years have you had hepatitis B? The longer you're infected, the higher your risk of liver cancer. Men of African descent are found to develop liver cancer at an earlier age than other races and should be screened starting in their 20s.

What is your gender? Men are considered at higher risk of liver cancer at an earlier age because they may be more likely to smoke, drink alcohol, have more "active" hepatitis, and higher iron stores — all of which increase cancer risk. Estrogen is believed to protect pre-menopausal women against liver cancer.

Have you had a high viral load (HBV DNA) after age 30? Having a viral load exceeding 2,000 international units per milliliter (IU/mL) is associated with a higher risk of liver cancer even if you have no other signs of liver damage.

Do you have a family history of liver cancer? If an immediate family member has had liver cancer, this greatly increases your risk.

Source: Reproduced from Hepatitis B Foundation.
Available at www.tinyurl.com/liver-cancer-screening (14 October 2015)

Are you overweight, or have you been diagnosed recently with type 2 diabetes? A fatty liver and/or diabetes increase your risk of liver cancer dramatically when you're also infected with hepatitis B.

Do you have hepatitis B virus genotype C or core/precore viral mutations? Originating in Asia, this hepatitis B strain is associated with loss of the hepatitis B e antigen (HBeAg) later in life. That means you may have had a high viral load and liver damage for a longer period than people with genotypes who clear HBeAg at a younger age. Having core or precore mutations in your HBV also increase liver cancer risk.

Talk to your doctor, even if you haven't had liver damage and have had a low viral load or undetectable viral load for many years, ask if it's time for a liver cancer test. For more information about hepatitis B and liver cancer call HepatitisWA on (08) 9328 8538. ■

WASUA'S DOMAIN

THE WEST AUSTRALIA SUBSTANCE USERS ASSOCIATION

WASUA
WA's DRUG USER ORGANISATION
"if you would judge, understand" L.A. Seneca

PERTH
(08) 9321 2877
www.wasua.com.au

SOUTH WEST
Van Phone 0417 973 089
Office (08) 9791 6699

97 Spencer St, Bunbury (entry via Rose st)
Opening Hours: Monday to Friday 10am - 2pm.

Perth NSEP
Mon - Weds: 10am-5pm
Thurs - Fri: 10am-8pm
Sat & Sun: 11am-4pm

Clinic Hours
Tues & Thurs: 10am-4pm

Closed Public Holidays

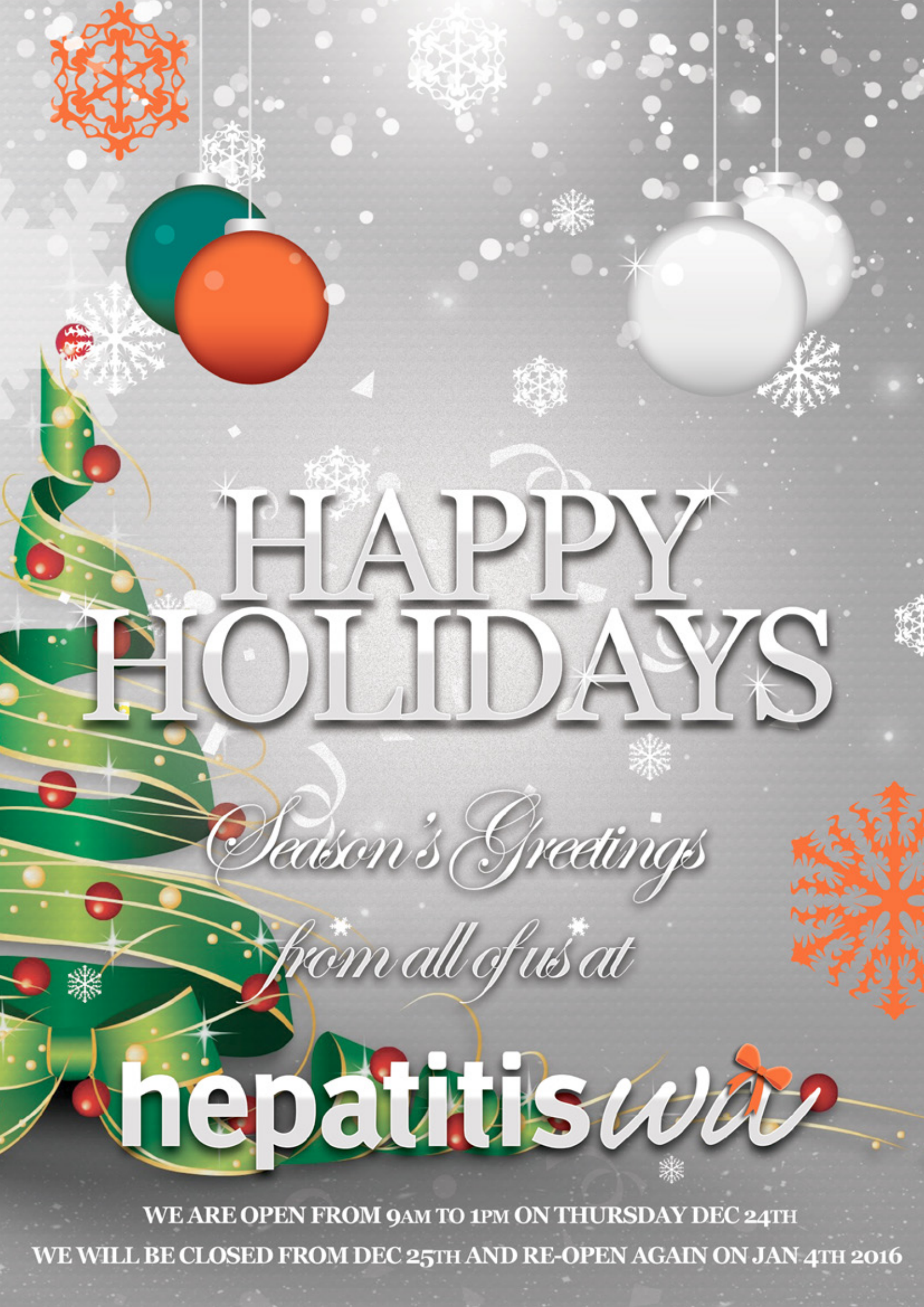
WASUA provides a number of services on premises at 519 Murray Street, West Perth, including:

- NSEP (Needle and Syringe Exchange Program)
- Free hep A and B vaccinations for hepatitis C positive people
- Free blood testing in a friendly confidential environment
- Drug treatment support and referral
- Peer education and training
- Street-based outreach
- Advocacy and support for users
- Safe injecting and safe disposal education and resources
- Hepatitis C/blood borne virus information and resources

South West Mobile provides a mobile Needle Syringe Exchange Program (NSEP) at the following locations and times:

Margaret River	Tues: 1pm-2pm	Hospital Carpark
Busselton	Tues: 5pm-7pm	Kevin Cullen Community Health
Jaycee Park, Bunbury	Wed: 4:30pm-5:30pm	Jaycee Park
Hudson Road, Bunbury	Wed: 5:45pm-6:45pm	WA Country Health Service
Bunbury Hospital	Wed: 7pm-8pm	Dental Clinic Carpark
Manjimup	Thurs: 5pm-6pm	Hospital Carpark
Harvey	Thurs: 6pm-7pm	Hospital Carpark
Donnybrook	Fri: 4pm-5pm	Hospital Carpark
Collie	Fri: 6pm-7pm	Ngalang Boodja (Corner Forrest St & Atkinson St)

A confidential delivery service is also available throughout the southwest from Monday to Friday, for people who cannot attend the site locations. Phone **0408 946 762** to arrange a suitable time.


HAPPY
HOLIDAYS
Season's Greetings
from all of us at
hepatitis win
WE ARE OPEN FROM 9AM TO 1PM ON THURSDAY DEC 24TH
WE WILL BE CLOSED FROM DEC 25TH AND RE-OPEN AGAIN ON JAN 4TH 2016