



The Sharps Shooter

September 23

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Disclaimer: The articles in The Sharps Shooter are sourced from multiple sites and unaltered. The wording in these articles does not necessarily reflect our beliefs. No offence is intended.

11 World Mental Health Day

The 10th of October is World Mental Health Day. This year's theme: "Mental health is a universal human right."





Welcome

Welcome Reductioners, to the September issue of The Sharps Shooter.

This month we have a special feature on "The Psychonauts", those visionary doctors who experimented with drugs to advance science and had a bloody good time doing it.

We shake our heads at the ongoing trudge that is the Victorian Take-Home Naloxone Program; the bureaucracy that standing in the way of change, leaving us all feeling deflated, and prompting us to start reckoning the time it's taking in geological terms.

We also look at "vaccines for opioids", a possible game-changer if they work. Read on, and I hope you enjoy it.

The Editor.

sharpsshooter.com

Fentanyl And Heroin Vaccines Are Set For Human Trials Next Year

A safe and effective vaccine won't solve the opioid crisis, but it could save lives in the meantime.

Hoping to tackle the ongoing opioid crisis, scientists are hoping they'll be able to start human trials of heroin and fentanyl vaccines as early as 2024.

The vaccines are designed to protect people from accidental overdoses of heroin and its stronger, synthetic cousin, fentanyl. It works by prompting the body to produce fentanyl-specific antibodies that bind the drug in the blood and prevent it from entering the brain.

So far, it's only been tested on rats and pigs, but their results suggested the vaccines could potentially offer a "safe, long-lasting, and prophylactic treatment" to combat opioid overdoses in humans too.

"We anticipate testing our vaccines in humans in early 2024," Dr Jay Evans, study author and director of the University of Montana's Center for Translational Medicine, said in a statement.

"The human clinical trials will include a drug challenge to evaluate both safety and efficacy of the vaccines in early clinical development. We will also follow the patients to evaluate how long the antibodies against opioids will last," he said.

"We start with the lowest dose – a dose that may not be effective," Evans said. "Phase I clinical trials are focused on safety. When the first dose cohort is complete, a data safety monitoring board reviews the data and approves testing at the next dose level if the vaccine is safe. The process takes time until you reach dose levels that are both safe and effective," added Evans.

The vaccines in question will use toll-like receptors (TLR7/8) which typically play an important role in the immune response to viral infections.

"The team's vaccine also utilizes the power of an adjuvant called INI-4001, which boosts the effectiveness of vaccines.

Speaking to IFLScience, Evans explained that the vaccines could provide immunity against an overdose for a number of years, although that still needs to be determined by their human trials.

"Of course, this is speculative since the vaccine has not been previously tested in people."

Scientists have dubbed the opioid epidemic "one of the worst public health disasters" currently affecting North America. Over the past two decades, fatal overdoses have been continually rising in the US and Canada, with 106,000 drug overdose deaths reported in 2021. Opioids, such as heroin and fentanyl, were involved in 80,411 overdose deaths in 2021. There is no silver bullet for this problem. Along with complex social problems, many have argued the epidemic "represents a multi-system failure of regulation" driven by profit-hungry pharmaceutical companies.

A safe and effective vaccine won't solve the crisis, but it could save lives in the meantime.

The results of the animal trial were published in the journal NPJ Vaccines.

Tom Hale

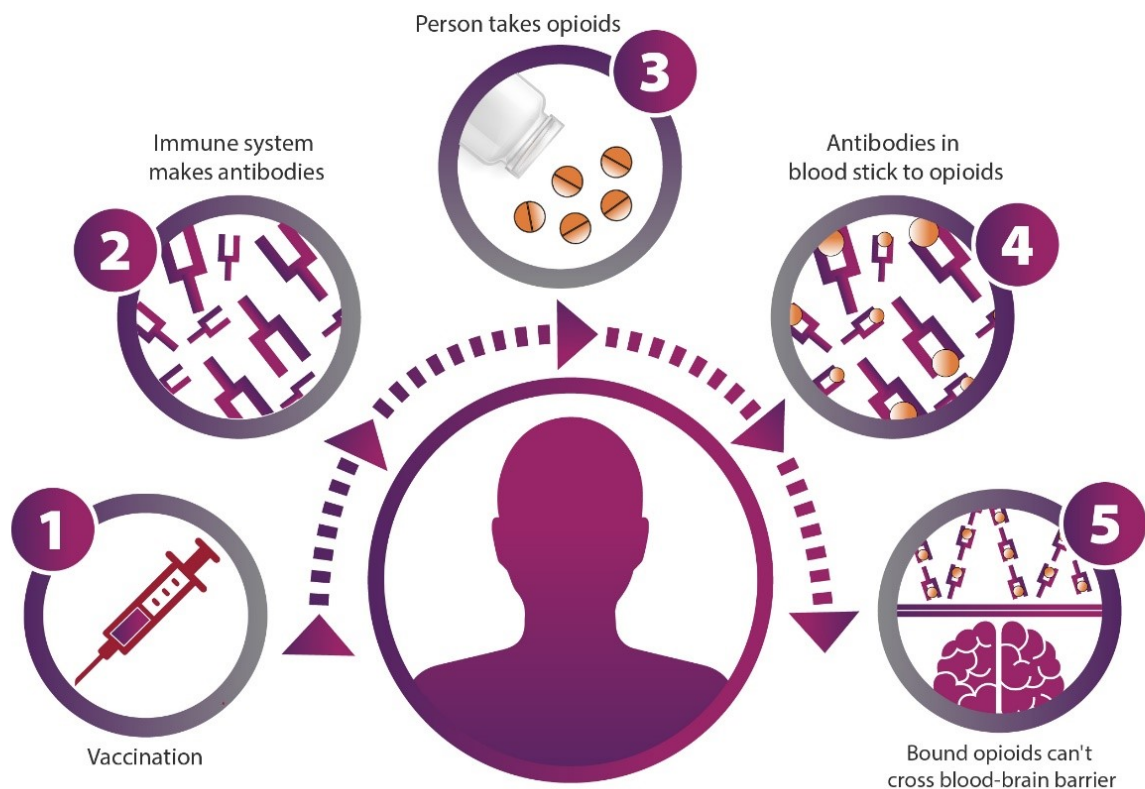
How An Opioid Vaccine Works

Study researchers will first test an oxycodone vaccine in a small number of people with opioid use disorder and who are not seeking treatment. Each participant in the study will stay in an inpatient facility in New York or New Jersey for about two months. During that time, each person will receive multiple injections of oxycodone vaccine, spaced a few weeks apart.

The main goal of this first phase of vaccine testing is to monitor safety and see if participants develop antibodies against oxycodone. Researchers will also look for preliminary signs that the vaccine is blocking the effects of oxycodone. Before the first injection, each patient will have a test to find out what dose of oxycodone it takes for them to feel pleasurable effects. After each vaccination, the test will be repeated, to see if the vaccine makes the oxycodone less effective.

A different opioid molecule will also be used to test the specificity of the vaccine response. If the vaccine works as expected, participants should have a less pleasurable response to oxycodone.

The researchers will also study how long the vaccine's protection can last, estimating for now that the vaccine might protect against oxycodone effects for a few months. Longer-acting forms of treatment like a vaccine would theoretically help this type of treatment fit into people's lives. And reducing the number of clinician visits can help people stay in treatment.



(1) A person is vaccinated against one or more opioids. 2) The immune system makes antibodies to those opioids. 3) If a person takes opioids after vaccination, 4) the antibodies in the blood stick to the opioids, and 5) those opioids can't cross from the blood into the brain.

Credit: NIH HEAL Initiative

Castles in the air!

The stalled Take-Home Naloxone program in Victoria



Opinion By Pads Mahone

Last week, I met up with a friend of mine from Berlin, and over a few steins, she tried to explain to me, those piss-yourself funny words her fellow Germans use, and for which, sadly, we have no English equivalent.

“Backpfeifengesicht” (slap face): someone who you’re certain needs a good slap in the face. “Erklärungsnot” (explanation poverty): when no excuse will get you out of the deep trouble you’ve landed yourself in.

Then she told me “Luftschloss” (air castle): an impossible or unrealistic dream -- like building a castle in the air, describing something that just cannot be achieved. And it was right there I realised that this is the way I’ve come to think of the take-home naloxone program in Victoria.

Now let me be clear, I’m not saying I’ve given up on the goal of ending accidental overdose deaths. Far from it. I’m still hopeful we can do this.

I’m talking about the take-home naloxone program, and specifically the ability of the powers that be to provide an established, TGA approved, and widely used medicine to the people that need it. A lifesaving medicine with virtually no downsides.

The suppliers are known, the bureaucrats are used to negotiating contracts, the political and community will is there. And yet the powers that be can’t seem to sort out this “Kuddelmuddel” (muddled mess).

I’ve forgotten how long ago the push to make naloxone more freely available started, but I do know that it’s been over ten years since the powers deemed the public capable enough to use this medication without first training to become a nurse, ambo, or doctor.

Even so, the hoops you had to jump through made many suspect that the powers based the legislation on a Kafka novel. Legislation more suited to radioactive uranium.

Prescriptions required, doctors that wouldn’t write those prescriptions, chemists that wouldn’t stock it, the cost, regular shortages. Minijets, no minijets. As another friend of mine once said to me, "It’s one fucking thing after another with naloxone."

I can't be the only one feeling "Lebensmüde" (life tired): beaten down and weary of the whole bloody thing.

And now, after the efforts of countless advocates working behind and before the scenes, the stage is set for one of the most significant advances in harm reduction in Australia for years; allowing a whole range of those who work with the most at risk of overdose, to put naloxone directly into their hands, without prescription, without cost, on the spot and without delay. An accord between the powers and the front line.

Credit where it's due, the legislation is passed, the agencies accredited, the workers are trained and considered "Approved" to assess, train and supply clients with naloxone.

Yet these Approved Workers, who for years have tried desperately to stem the calamity of unnecessary overdose deaths, hobbled by bureaucracy at every turn, are hobbled again.

The government gazette states that "the approved naloxone worker who possesses and supplies the naloxone does so in accordance with any guidelines issued by the Department of Health", and there lies the rub.

The guidelines set out a process where approved agencies order their naloxone through the Department of Health's ordering system, yet the Department of Health can't seem to add naloxone to that system.

It was promised in November 2022, eleven months ago. It was promised in December, January, February, and every month since then.

Fair enough, setting up one more contract for a government department that manages 1000s of contracts, might be more complicated than it sounds. But the powers seem determined to Mr Bean their approach to this problem, and the sad truth is that there is a price to pay. A price tallied in lives.

The department of Health say that they are keen to come up with a way around this barrier, and I believe them. I know many of them, and know that they're as frustrated at this as the rest of us. Yet it is they, or more accurately, the system they work within, that has erected the barrier in the first place.

More than one agency has suggested a simple solution to overcome this standstill, only to be knocked back without explanation other than "them's the rules." Round and round we go, like that guy who had the hole in his bucket.

That simple solution, while waiting for the contracts to be sorted, would be to allow Approved Workers, in Approved Agencies, to distribute naloxone they can source for themselves. All of the Approved Agencies have links with community pharmacies.

Occasional shortages aside, they can usually get naloxone, not lots, but some, and they have met all the other requirements laid out by the department. Is this impossible?

The University of Queensland, Institute for Social Science Research evaluated the Take Home Naloxone pilot program in New South Wales, South Australia, and Western Australia, and reported three lives were saved each day of the program. Imagine how many could be saved once the Victorian Department of Health sorts this mess out?

And until then, why can't they let the services do what they're trying so hard to do; save lives?

Other parts of Australia seem to be able to sort this out, leaving us here in Victoria with a sense of "Fernweh", the feeling of wanting to be somewhere else.

The 19th century 'psychonauts' who pioneered experimental drug use for scientific research



A shocked audience witnesses experiments with laughing gas at the Royal Institution, London, as Sir Davy operates the gas-filled hydraulic bellows. 1801 (Getty: Hulton Archive)

People have long experimented with drugs.

Some of the earliest evidence of human drug use can be traced back to 8,100 BC. An [archaeological dig in Asia uncovered cannabis seeds](#) dating back to that time.

In the Western world, the experimental use of drugs for scientific purposes only gained momentum in the 19th century. Author and cultural historian Mike Jay has researched how well-known doctors and scientists, such as Sir Humphry Davy and Sigmund Freud, got high in the name of science.

He describes these scientists as "psychonauts", a term coined by German novelist Ernst Junger, who wrote a futuristic novel in the 1940s about scientists who synthesised new drugs to explore the hidden reaches of the mind.

But not all of the experiments of the real life psychonauts that Jay discusses in his new book, *Psychonauts: Drugs and the Making of the Modern Mind*, led to sound advice. Take Freud for example, who endorsed cocaine in the 1880s.

It was at a time when cocaine started to become a [popular pharmaceutical remedy](#). "It was sold in pharmacies everywhere ... as a cough medicine, as an antidepressant, as a pick-me-up sort of stimulant-like energy drink," Jay says.

"Freud was right at the beginning of this and writing papers describing what cocaine did. And he based this on his own experiments with it. Sigmund Freud took small, infrequent doses of cocaine, says Jay. "He described the kind of euphoric sensation it produced. He talked about how good it was for helping him to work, for mental energy."

These experiments led Freud to become an advocate, endorsing various companies who used cocaine in their pharmaceutical products. And while the neurologist continued to take the drug in small doses from time to time, he was oblivious to how addictive it could be.

"Freud was a pretty sober, serious person ... When he'd taken one [dose], he didn't feel like taking another one. So he was totally blindsided when people started injecting huge amounts of it and going crazy," Jay says.

"When it became obvious a few years later that cocaine in large doses was extremely bad for you, then people pointed the finger back at Freud."

Other drug-related discoveries by scientists have stood the test of time.

In 1799, celebrated chemist Sir Humphry Davy gained notoriety after working as a chemist at a gas laboratory in Bristol. This is where he began experimenting with nitrous oxide, also known as laughing gas. At the time, people believed nitrous oxide to be poisonous.

"But he inhaled a bit and discovered, not only was it not poisonous, but it produced a rather pleasant sensation," Jay says.

He carried on inhaling it and eventually had this disembodied experience where he found his mind ... floating around in this dimension he'd never encountered before."

More than 200 years later, Sir Davy's discovery is still used as a medical sedative. Then there's James Young Simpson — Queen Victoria's former physician — who also took a liking to nitrous oxide.

At the time, he was one of Britain's leading obstetric surgeons and delivered Queen Victoria's babies.

But, in the 1840s, he was also fascinated with the use of ether and nitrous oxide as anaesthetics.

"He adopted them very quickly. But he was convinced there had to be something better than ether, which is pretty rank [and] kind of petrol-smelling and very flammable," Jay says.

So in 1847, he experimented at home in Edinburgh with all kinds of different gases and solvents, including chloroform.

"They all went, 'Wow, this stuff really works,' and they just sat down to do it again."

It was while sitting around his mahogany dining room table with friends that he discovered its effect on the mind. After inhaling chloroform, one by one they fell to the floor.

There were doctors who believed that self-experimenting with drugs could help them gain insight into the troubled minds of their patients.

In the mid-19th century, Jacques-Joseph Moreau was working as a resident physician at a psychiatric hospital outside Paris.

A lot of his work involved treating people suffering from delirium and hallucinations.

He had developed a fascination with hashish after he visited Egypt, where he'd witnessed people using it. Moreau believed in walking as far as he could in his patients' shoes, which led him to recommending hashish to other doctors.



Sr Humphry Davy's experiments with nitrous oxide

"If you take a large dose of hashish, you can experience [hallucinations] yourself. And you get all these classic symptoms, the distortions of time and space, the paranoid ideation," Jay says.

"[Moreau] said, 'You know, we're trying to understand these states of mind, and we can't experience them ... we could take a large dose of hashish and get a sense of what this is like, and then come back to reality safely'."

But by the early 20th century, many of the drugs Moreau and other "psychonauts" had been experimenting with became prohibited.

"This is actually the point at which the word 'drugs' as we've been using it emerges," Jay says.

In the 19th century, 'drug' simply referred to the medicine purchased at a pharmacy, he explains.

"Around the early 20th century, people start[ed] to recognise drugs as a problem, including, of course, alcohol.

And this word 'drug' comes along and has all these negative connotations [like] dangerous drugs or addictive or often foreign drugs."

However, the use of drugs for medical benefits continues to interest doctors and scientists, particularly in Australia.

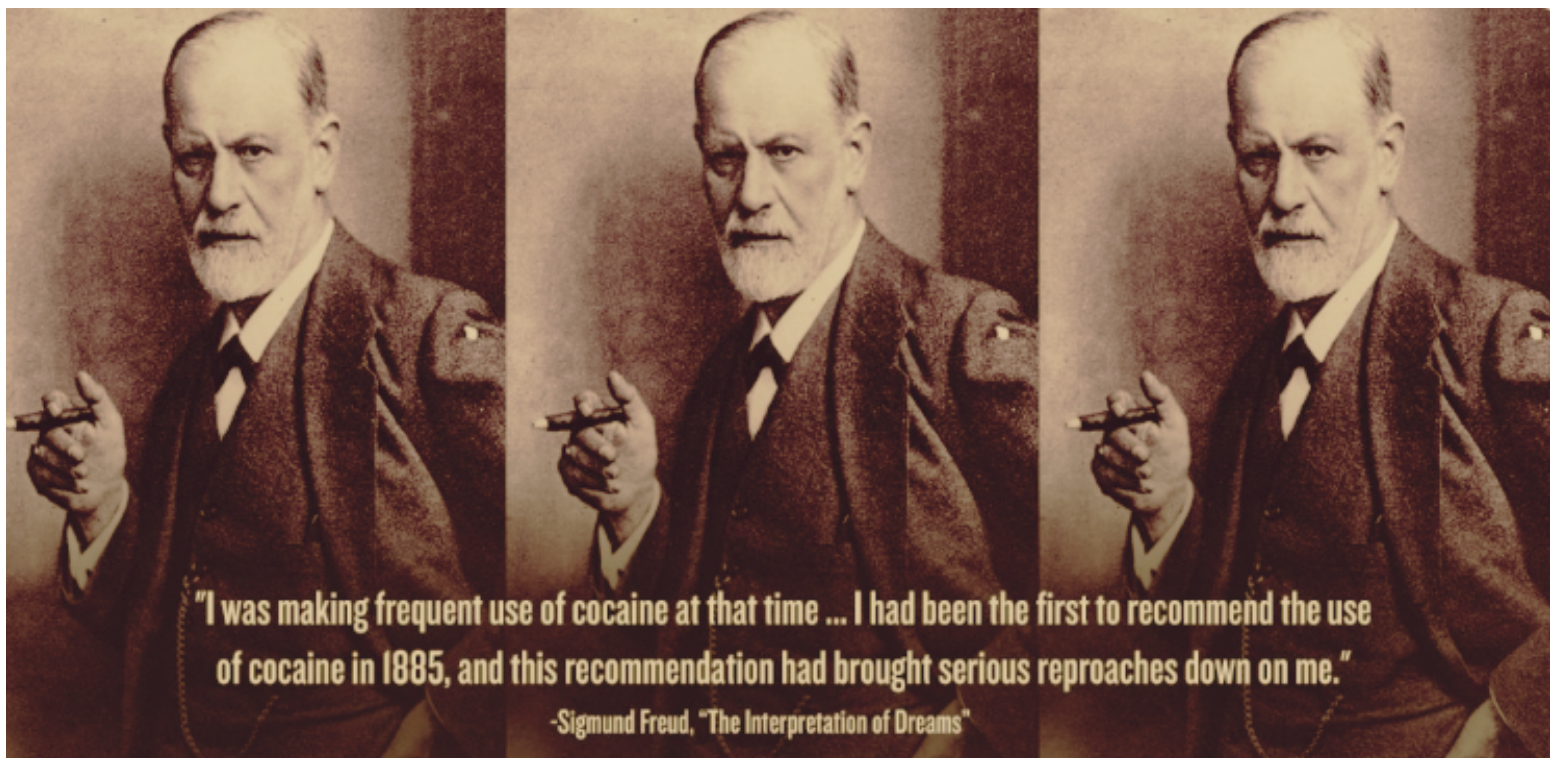
Recently the TGA approved the use of psilocybin and MDMA for treating depression and PTSD.

Some psychiatrists and psychologists in the field remain cautious, pushing for stricter regulations and thorough training when using drugs such as psilocybin.

But Jay says there's a current "wave of interest and fascination".

"Back in the original psychedelic era of the 1950s and 1960s, we started to introduce the idea that drug experiences might not always be bad, they might be beneficial, they might lead to personal growth, they might be therapeutic," Jay says.

"Psychedelics have detached themselves from this bigger stigmatised category of drugs and become something kind of futuristic and scientific."



"I was making frequent use of cocaine at that time ... I had been the first to recommend the use of cocaine in 1885, and this recommendation had brought serious reproaches down on me."

-Sigmund Freud, "The Interpretation of Dreams"

Cocaine, laughing gas and other drugs can be addictive and have dangerous side effects, including a risk of permanent and irreversible damage to health.



WORLD MENTAL HEALTH DAY, 10 OCTOBER 2023

“Our minds, our rights”



World Mental Health Day 2023 is an opportunity for people and communities to unite behind the theme ‘Mental health is a universal human right’[©] to improve knowledge, raise awareness and drive actions that promote and protect everyone’s mental health as a universal human right.

Mental health is a basic human right for all people. Everyone, wherever and whenever they are, has a right to the highest attainable standard of mental health. This includes the right to be protected from mental health risks, the right to available, accessible, acceptable, and good quality care, and the right to liberty, independence and inclusion in the community.

Good mental health is vital to our overall health and well-being. Yet one in eight people globally are living with mental health conditions, which can impact their physical health, their well-being, how they connect with others, and their livelihoods. Mental health conditions are also affecting an increasing number of adolescents and young people.

Having a mental health condition should never be a reason to deprive a person of their human rights or to exclude them from decisions about their own health. Yet all over the world, people with mental health conditions continue to experience a wide range of human rights violations. Many are excluded from community life and discriminated against, while many more cannot access the mental health care they need or can only access care that violates their human rights.

WHO continues to work with its partners to ensure mental health is valued, promoted, and protected, and that urgent action is taken so that everyone can exercise their human rights and access the quality mental health care they need. Join the World Mental Health Day 2023 campaign to learn more about your basic right to mental health as well as how to protect the rights of others.

More Information: [/www.who.int/campaigns/world-mental-health-day/2023](https://www.who.int/campaigns/world-mental-health-day/2023)

International Overdose Awareness Day

North Richmond Community Health



NRCH staff posters with safety messages.



Wurundjeri Elder, Uncle Tony Garvey, welcoming the audience to country.



Proactive Overdose Response Initiative coordinator, Crios O'Mahony.



Candles to remember those that are gone.



Just like we look back to the past, at the way certain groups of people were treated, and we judge our ancestors on how they acted

In the future we will be judged on the way we treat people today.

We must do our best to become good ancestors.

THE SHARPS SHOOTER

A random blog about society, drugs, and harm reduction

SHARPS SHOOTER MAGAZINE

BLOG

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