



Coalition of Alcohol and Drug Educators

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Taking the '**NOVEL**' out of NPS Health Harms by Reducing Demand.

Presenter: Shane Varcoe – Executive Director, Dalgarno Institute, Australia ©

ADVOCACY

RESOURCES
D.A.R.T./Y.D.A.R.T

B·O·W·I
SPORT EDUCATION

N BRAINER
SCHOOL SEMINARS

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0#

150
YEARS
M.A.D.

BOUNCE
BACK

fence
BUILDERS

Taking the NOVEL out of NPS – Health Harms & Reducing Demand

Whilst we will examine key aspects of Harms done by New/Novel Psychoactive Substances, what we don't want to do is waste your time simply inventorying descriptive data that may or may not give you some facts about this subject matter that you don't already know.

We will attempt in this presentation to open up more proactive focus on the reducing of demand and diverting from NPS use.

Learning = 'Education that transforms'

- + *Aware* – Information (Whilst a starting point of contemplation, giving 'facts' in a vacuum has little traction in behaviour change)
- + *Move* – Education (This is where knowledge is added giving facts some context for application and a potential direction)
- + *Change* – Learning (This is where knowledge is applied in a sustained direction with purpose, under tutelage for a specific outcome – This helps create new behaviours)

Education Changes Behaviour – But What Kind of **Education**?

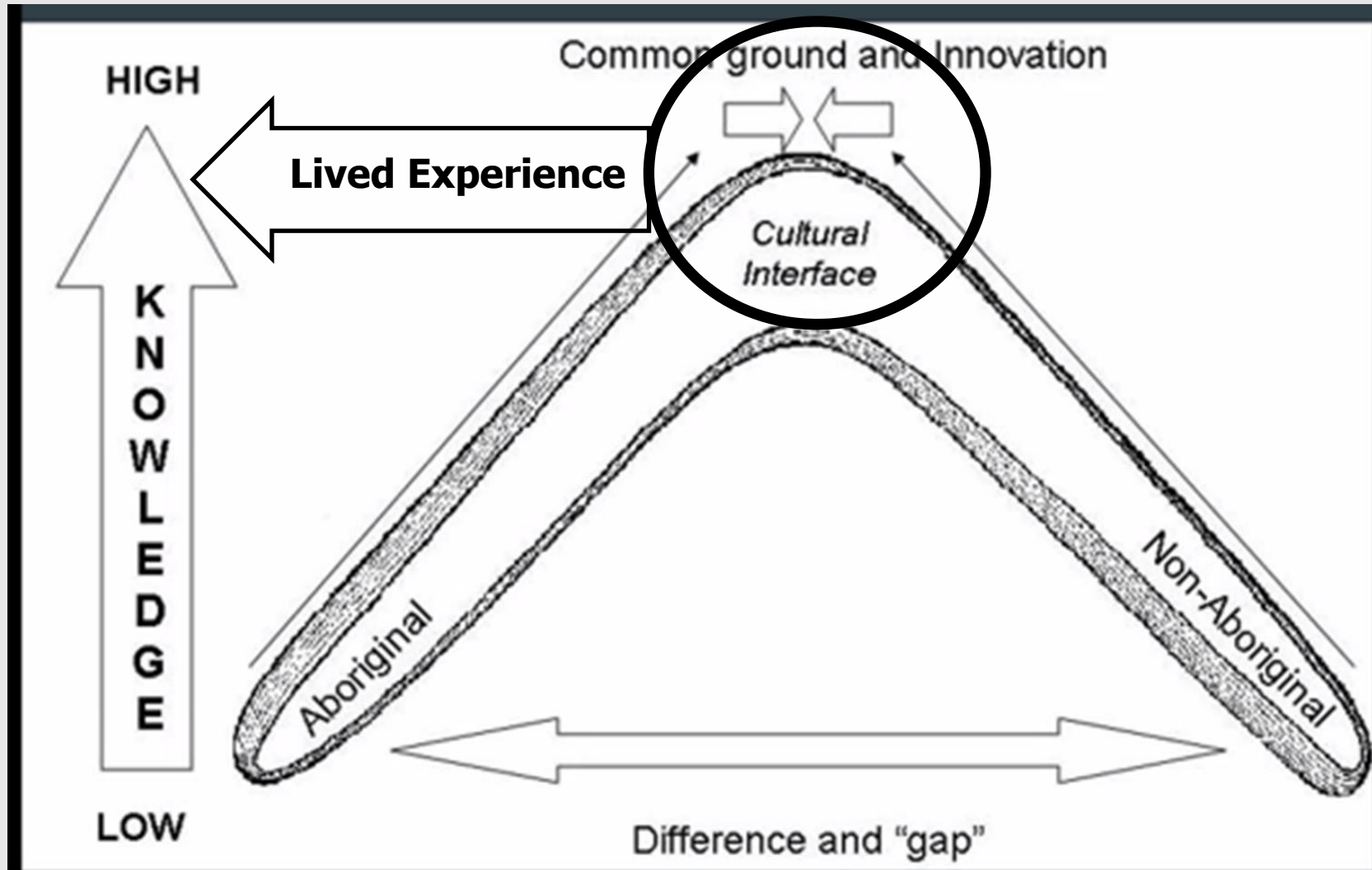
- + It is important to understand that teaching and learning mechanisms and modes have many elements and both **cognitive**, (but more specifically) **affective domain** education pedagogies are enhanced by both evidence-based practice, as well as, by practice based evidence.
- + This is no more evident than in indigenous cultural settings, and of growing importance in **sub-cultural 'tribal' settings** too.

Evidence-Based Practice & Practice-Based Evidence

+ Efficacious pedagogies in the **Affective** domain education arena include imperatives such as the contextual sharing of relevant *earned resiliency* and *lived experience* with the learning audience. As the following diagram reflects

“One with lived experience is seen by the client/student as an authentic knowledge holder.”

Gemma Khodr – Indigenous Health & Alcohol CRE Forum September 2020



From 8-ways Aboriginal pedagogy, originally developed with Traditional Custodians across north western NSW

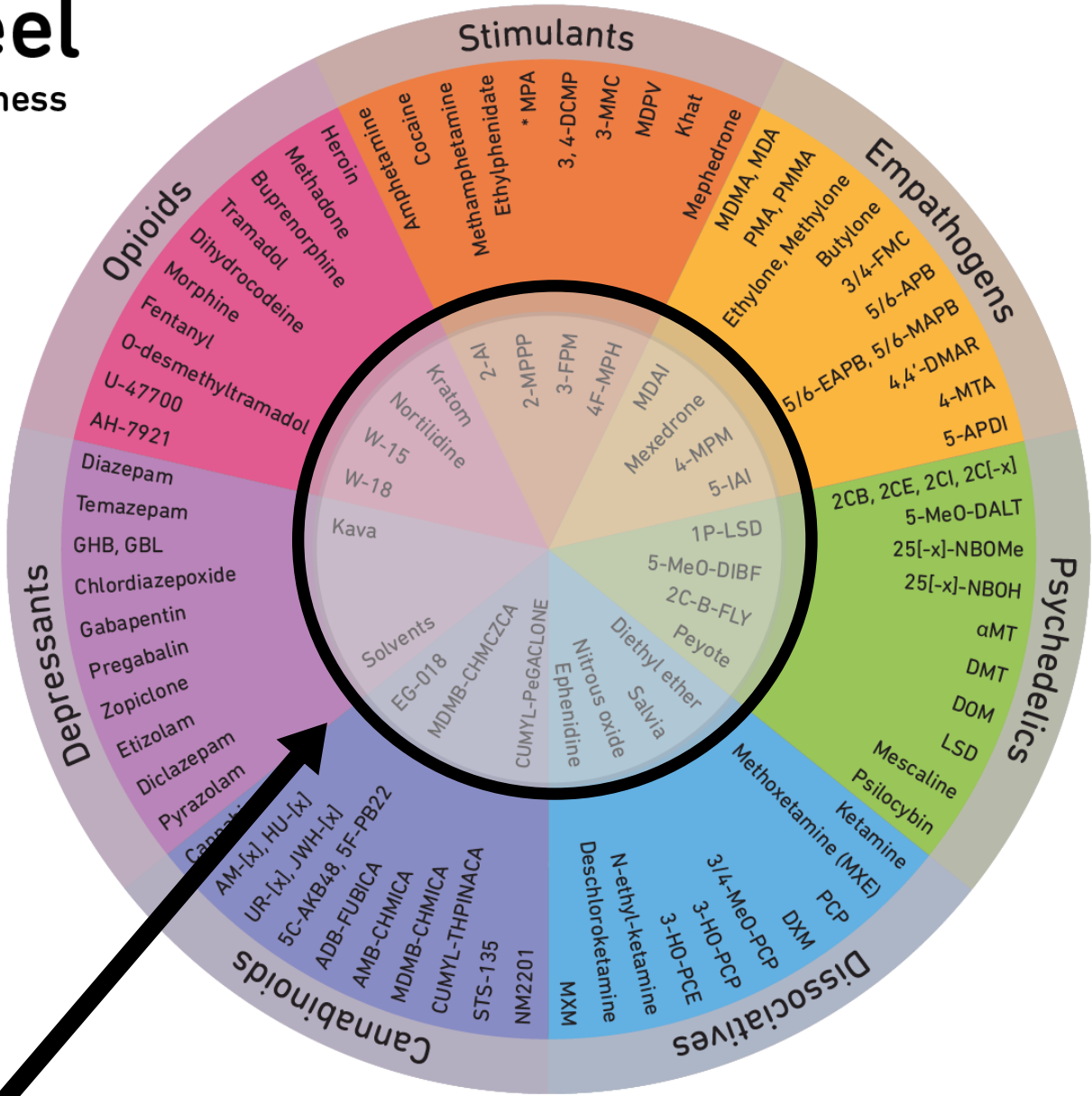
Aware =
Information



The Drugs Wheel

A new model for substance awareness

UK version 2.0.5 14/06/2017



Outer ring: Controlled under the Misuse of Drugs Act 1971 or The Human Medicines Regulations 2012

Inner ring: Controlled under the Psychoactive Substances Act 2016

* Temporary Class Drug Order

Diversion and 'Novel Use' of Pharmaceutical Opioids & Opioid Analogues

- + There is an increasing use and misuse of opioid and their derivatives in both 'recreational' and self-medication settings.
- + These often incredibly potent analogues present acute health risks.

Source: [The Diversion of Prescription Opioid Analgesics - PMC \(nih.gov\)](#)

'Novel Use' of New Synthetic Opioids

There is an increasing use and misuse of opioid and their derivatives in both 'recreational' and self-medication settings.

These often incredibly potent analogues present acute health risks.

+ **Fentanyl**

+ **Carfentanyl**

+ **Protonitazene**

Source: [New Synthetic Opioids: Clinical Considerations and Dangers - PMC \(nih.gov\)](#)

'Novel Use' of Anaesthetics

Common place misuse of anaesthetic drugs for 'recreational' purpose has been increasing, particularly in the context of poly-drug use settings

- + **Ketamine** – whilst a more common and longer misused drug, another anaesthetic
- + **Xylazine** has been engaged and used in blending or 'lacing' other illicit drugs, not least cannabis

(Source: [Basic physiological effects of ketamine-xylazine mixture as a general anesthetic preparation for rodent surgeries - ScienceDirect](#))

'Tranq' – The New Novel 'Zombie' Drug

Tranq

- I. Causes Necrosis often leading to amputation
- II. Often mixed with other drugs – added in or 'cut' with.
- III. Opioid death reversal drugs (i.e. naloxone) don't work on it.

+ What is the 'zombie drug' that has infested US streets?

+ 'Zombie' drug xylazine found in cannabis THC vapes in UK



Deadly synthetic drugs 'now mixed with cocaine and ecstasy'.

"Synthetic drugs are the future of drug taking because they are so potent, particularly synthetic opiates, like fentanyl and carfentanil. And they are so easy to transport they are quietly revolutionising the whole scene. You can carry 10,000 doses of fentanyl in a sugar sachet."

Michael Guerin, addiction therapist - Cuan Mhuire Treatment Centre

Life on 'SPICE'

"The chronic problem of the *zombie* drug that users say is worse than heroin!"

[Wales Online August 19, 2018](#)



“Zombie” Outbreak Caused by the Synthetic Cannabinoid in New York

The potency of the synthetic cannabinoid identified in these analyses is consistent with strong depressant effects that account for the “zombielike” behavior reported in this mass intoxication. AMB-FUBINACA is an example of the emerging class of “ultrapotent” synthetic cannabinoids and poses a public health concern. Collaboration among clinical laboratory staff, health professionals, and law enforcement agencies facilitated the timely identification of the compound and allowed health authorities to take appropriate action.

“Zombie” Outbreak Caused by the Synthetic Cannabinoid in New York (continued)

Despite the potential for significant harm, increasingly potent synthetic cannabinoids have become popular with drug dealers and users because of their low cost and potential for dilution into large volumes of product.

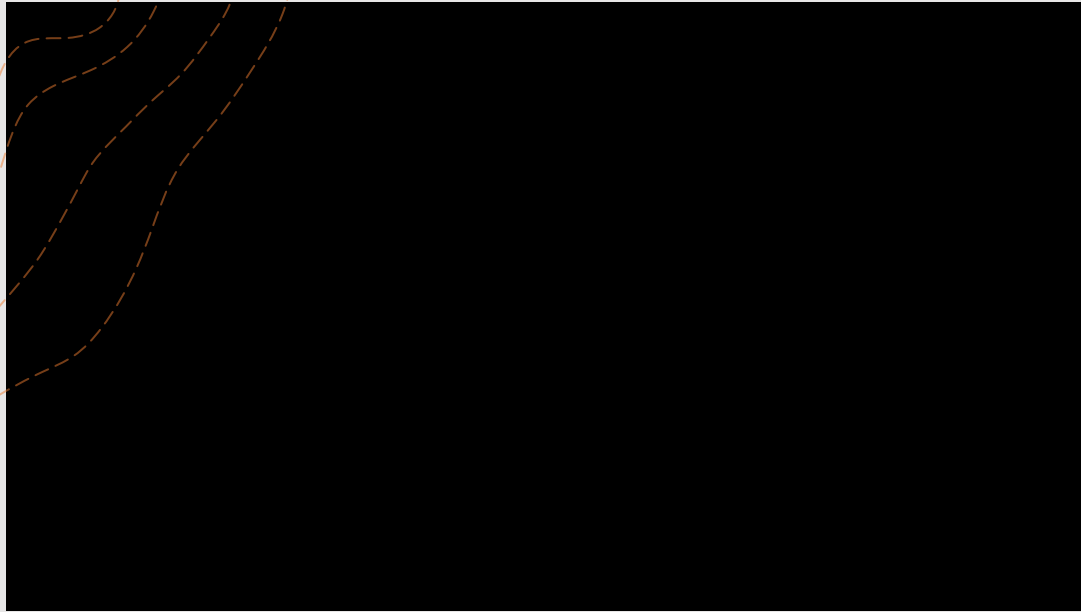
A recent Internet query for purchase of AMB-FUBINACA powder showed prices of \$1.95 to \$3.80 per gram (\$1,950 to \$3,800 per kilogram).

To obtain a 16-mg-per-gram product, a manufacturer could mix 1 kg of AMB-FUBINACA with 66.7 kg of plant material and produce approximately 15,625 packets, each containing 4 g of the product, with an online price averaging \$35 per packet.

“Killer Cannabinoids?”

Macquarie University researcher Shivani Sachdev has developed new tests to analyse synthetic cannabinoids and found some are up to **300 times more powerful than the cannabis plant**...a group of drugs causing hundreds of deaths and hundreds of hospitalisations around the world.

“Synthetic drugs are cheap, potent and widely available – and they have become a dangerous epidemic, literally poisoning people all over the world...People have died from just a small dose of some of these synthetic cannabinoids, which act in very different ways to the plant and which are far more potent.”



**The Irreversible
Costs of 'playing'.**

Click [HERE for YouTube Playback](#)

Researchers flush out worrying trend of designer drug use

These emerging family of drugs mimic the effects of ecstasy and amphetamines and are among 15 new psychoactive substances (NPS) found in a study of Australia's metropolitan and regional wastewaters over the past three years. Led by the University of South Australia, the study revealed a range of new stimulants gaining popularity, with N-ethylpentylone and ethylone among the most prevalent.

Australian University Researchers

Primary
Demand
Driver!

“New psychoactive substances are increasingly found at music festivals, with users attracted to the ‘novel effects’ or experiences that these drugs provide.”

UniSA analytical chemist Dr Richard Bade

University of Louisville - Case Study

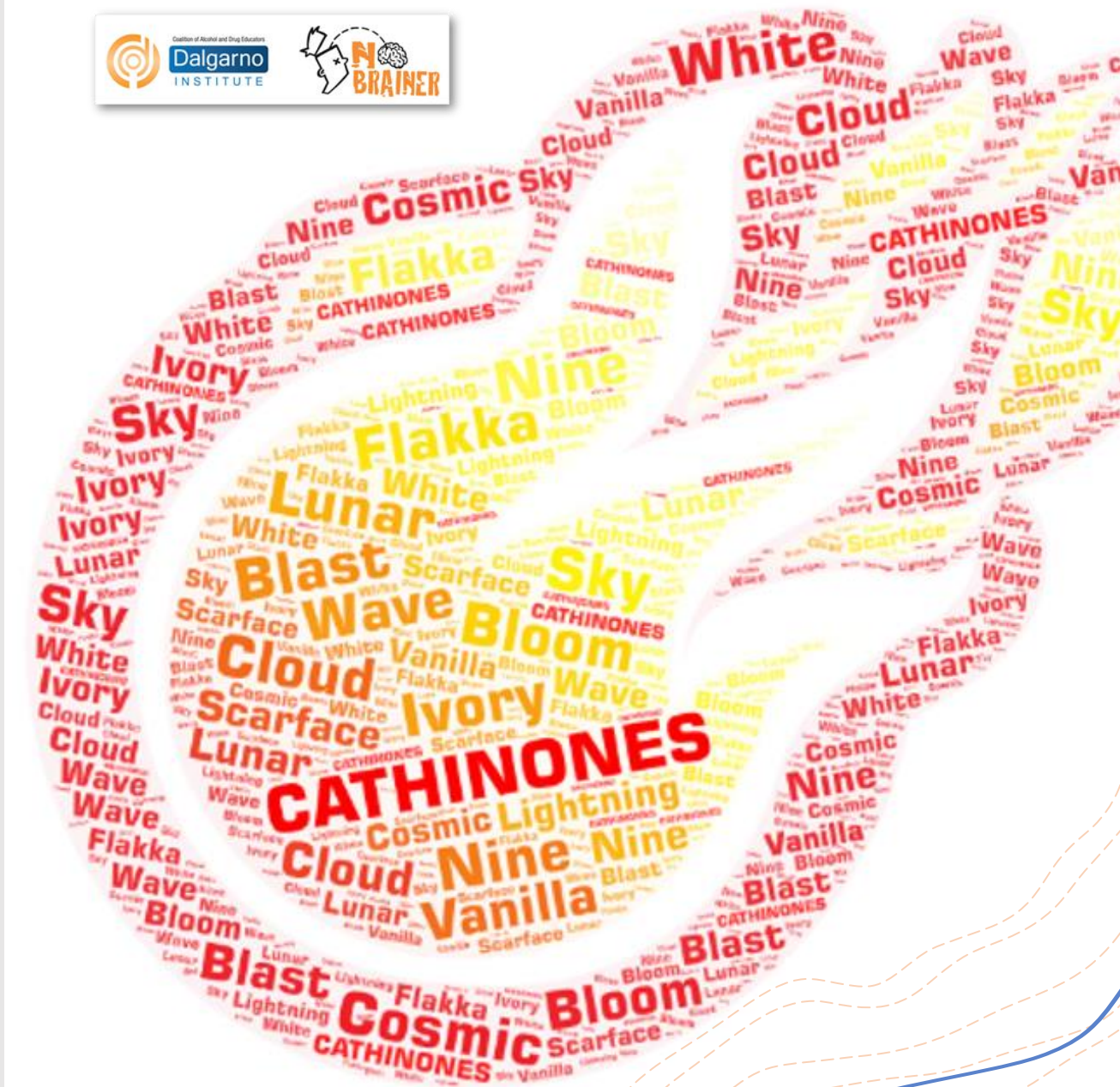
“Young people are the most frequent users owing to its recreational effects, its easy accessibility, lower cost and difficulty in being detected in the urine by routine drug screens.”

Demand
Driver
Confirmed!

Conclusion: Neurological Manifestations Associated with Synthetic Cannabinoid Use- A Case Series (University of Louisville July 2020)

Synthetic Cathinones

- + Bath-salts
- + Bloom
- + Cloud Nine
- + Cosmic Blast
- + Flakka
- + Ivory Wave
- + Lunar Wave
- + Scarface
- + Vanilla Sky
- + White Lightning.



“Bath Salts” the next generation of stimulant abuse.

- “Bath salts” are stimulants with high abuse potential that are known to contain agents such as 3,4 methylenedioxypropylamphetamine and 4-methylmethcathinone (mephedrone).
- They are marketed locally and through online retailers as legitimate products in order to evade legal control and facilitate widespread distribution...
- While they mimic the effects of other known stimulants, they are not detected on standard urine screens.

Reports: Miami flesh eating 'zombie' attacker may have been using 'bath salts'

A naked man who chewed off the face of another man in what is being called a zombie-like attack may have been under the influence of "bath salts," a drug referred to as the new LSD, according to reports from CNN affiliates in Miami.

The witness told CNN affiliate WSVN he saw one naked man chewing off the face of another naked man... **"The guy was like tearing him to pieces with his mouth, so I told him, 'Get off!'...You know it's like the guy just kept eating the other guy away, like ripping his skin."**

Reports: Miami flesh eating 'zombie' attacker may have been using 'bath salts'

The attacker, identified as 31-year-old Rudy Eugene, was under the influence of 'bath salts.'

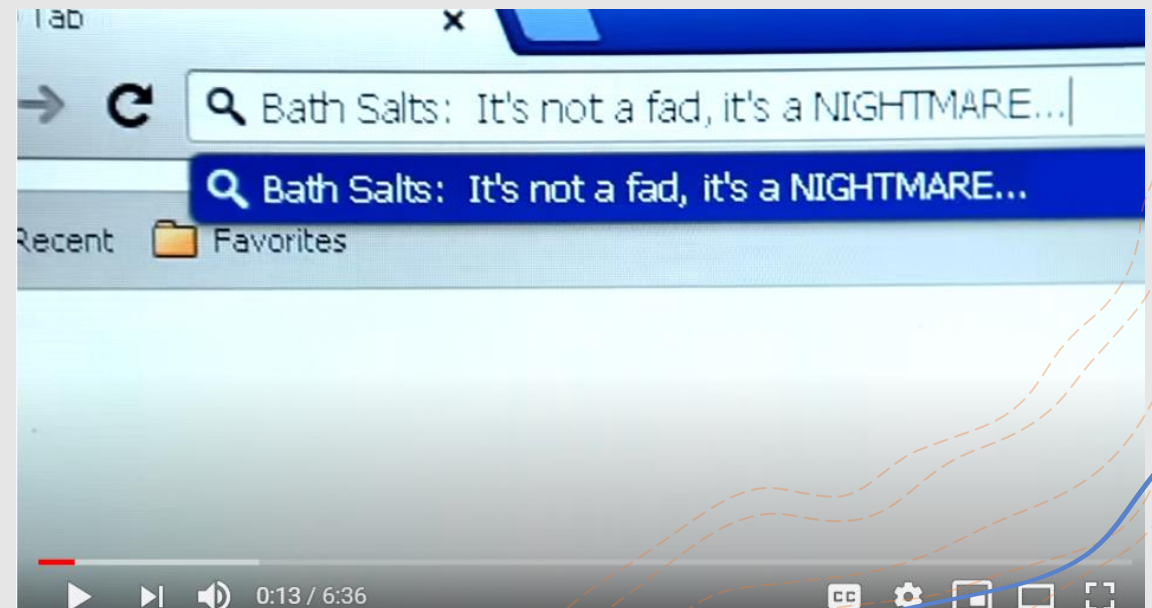
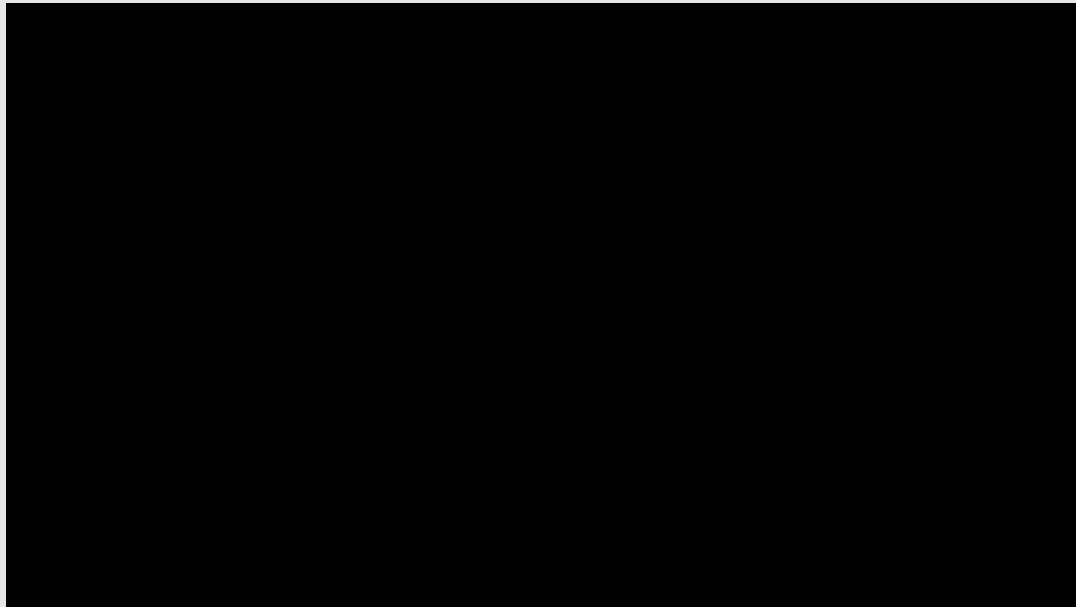
"It causes them to go completely insane and become very violent" and take off their clothes, Augilar told media.

Dr. Paul Adams, an emergency room physician at Jackson Memorial Hospital in Miami, told CNN affiliates that the drug makes users delirious. They exhibit elevated temperatures and extreme physical strength, Adams said. "It took six security officers to restrain the individual."

Adams said users have been known to use their jaws as weapons

Ease of Access and Trauma!

Click [HERE for YouTube Playback](#)



Move =
Education



Challenging 'Novel': Changing Cultural Contagion – Who/What is Driving the Demand?

- + “A range of prescribed medications are currently being used recreationally, typically at high-/super-high dosages, as new/novel psychoactive substances (NPS). Within both online drug forum communities and social networks, there are some educated/informed users (the "psychonauts") who are keen to "test" a range of molecules, including prescription psychotropics, to achieve specific mindsets. Their information is routinely being shared online, and vulnerable subjects, including both children/adolescents and psychiatric patients, may hence be at risk of accessing these "pro-drug" data.
- + Increasing levels of access to the web over the past 15 years or so may have contributed to the current scenario of prescribed-drug misuse and abuse, with social networks having played a role in the aggressive marketing/distribution of prescription drugs from rogue websites.”
- + <https://medicalxpress.com/news/2020-10-psychotropic-medications-recreational-drugs.html>

Challenging '**Novel**': Changing Cultural Contagion – Who/What is Driving the Demand?

Enticement: (Contagion – Demand Drivers?)

+Fiscal: According to data a prominent demographic engaging these substances are of lower-social means. Some of the factors related to relative poverty and its attending issues may include boredom alleviation, no work and unable to afford the more expensive and 'natural' based high-end drug types, i.e, Cocaine or Manipulated Plant Cannabis.

+Relative 'Legality'- High Promotion: "Psychonaut" broadcasting. Earlier stages, the term 'legal highs' connoted a 'legal and thus safer product'. This myth has been busted but can still add some drive to demand.

Challenging '**Novel**': Changing Cultural Contagion – Who/What is Driving the Demand?

Enticement: (Contagion – Demand Drivers?)

+ **Relentless Pain:** Trauma, distress and psycho-social dysfunction and the attempts at Self-medication – This not really in a 'cashed up' West context, but more so in a more impoverished economy or insecure socio-political environs.

+ **Relational Poverty:** Loneliness, lack of helpful and more mature non-drug using role models and/or social isolation induce self-medication and/or distraction mechanism. Also, 'Substance Relationship Substitute' (SRS), merely a shared social experience, not connection, that often can't be remembered

Challenging '**Novel**': Changing Cultural Contagion – Who/What is Driving the Demand?

Enticement: (Contagion – Demand Drivers?)

- + **Residing Absurdity:** Meaninglessness and Purposelessness can issue from the previous three deficiencies – along with broader disengagement for sustainable meta-narratives
- + **Recalcitrant Hedonism:** This is arguably, the most significant driver with Gen Now – 'escapism, experimentation, and enhancement'. An often care-less pursuit of pleasure or altered states, just for the experience, or for 'enhancement' of other psycho-physiological mechanisms, i.e. 'chem-sex' or 'thrill-seeking', etc. (i.e. Music Festivals/Clubs)

Full Diagnosis Needed.

“Meaninglessness does not
come from being weary of pain.
Meaninglessness comes from
being weary of pleasure.”

G K Chesterton



Protective Factors

Empower Agency

“In between stimulus and response, is the greatest power you have – the power to choose!”

Steven Covey (Seven Habits of Highly Effective People)

Empowerment Focus:

(Enablers for healthier, safer and more satisfying choices)

Health Harms:

- +1) The hyper-idiosyncratic nature of NPS's and both short and long-term harms to user and their environment must be effectively harnessed to add to the demand reducing. Shared logos, ethos and pathos around these realities.
- +2) Pharmacovigilance enhancement. Continue to develop technical tools and approaches to go beyond voluntary reporting systems around potential misuse of New drugs.

Empowerment Focus:

(Enablers for healthier, safer and more satisfying choices)

+ **Security:** 1) Safer and healthier living environments 2) Work more to shut down '*Psychonaut*' activity and online promotional contagions

+ **Positive Relationships:** Counselling and mentoring – including safe, accountable, supportive and healthy connections with people of lived experience and earned resiliency within the Recovery Alumni. (New Tribe! New Context!)

Interesting research development: **Reducing PTSD - The ability to form loving and trusting relationships with others.**

“We exist in a context. We are more than our genes...The ability to form secure attachments is one of the strongest protective factors for PTSD and *related disorders.*”

Robert H Pietrzak; associate professor of psychiatry and public health – Yale University

+ (30th September 2020, [https://www.biologicalpsychiatryjournal.com/article/S0006-3223\(20\)31947-8/fulltext](https://www.biologicalpsychiatryjournal.com/article/S0006-3223(20)31947-8/fulltext))

Empowerment Focus:

(Enablers for healthier, safer and more satisfying choices)

+ **Purpose:** Healthy and productive growth developing activities including meaningful employment; study with outcome; Cause engagement etc.

+ **Meaning:** Psyche 'anchor points' beyond the transient and often unpredictable psycho-social environments, and even purpose – Healthy Narratives that help make sense of the world and foster. **Hope = “Not only the positive expectation of good, by the reasonable grounds for it!”**

Change =
Learning



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Protective & Proactive Factors – Key Areas

Number One Protective Factor

The researchers found individual beliefs that *drug use is wrong* had twice the magnitude of impact compared to other risk and protective factors examined in the study. Thus, influencing adolescents' beliefs about drug use may be an important but relatively underemphasized key to modifying their behavior

"Tasking the National Health Strategies for Community Well-being: AOD Primer on Prevention & Demand Reduction")

Protective & Proactive Factors – Key Areas

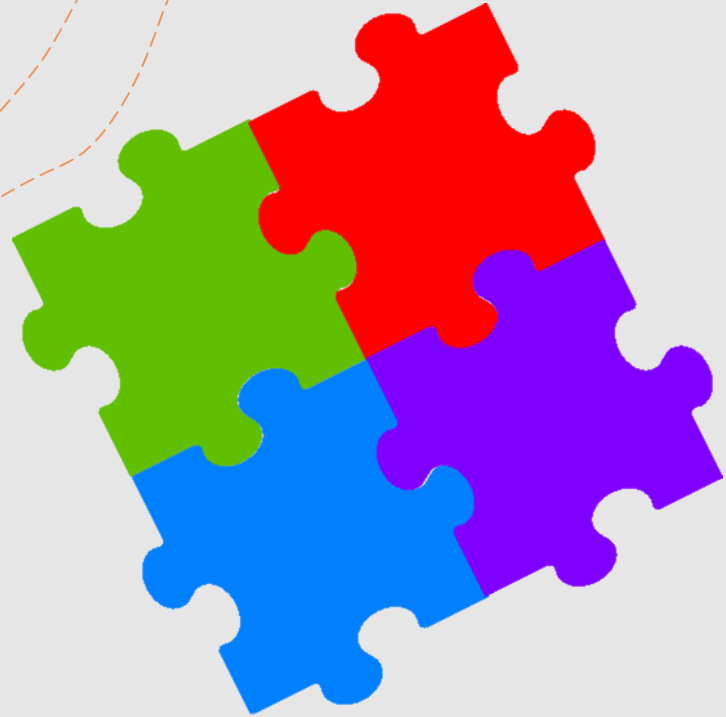
Creating/Finding Protective Environments is imperative if we are to address the key 'enticement/inducement' areas of demand – There a number of such options.

For example, in an arguably seminal work, Sociologists Bainbridge & Stark studied the potential influences of Religion on various behaviours.

They distilled protective factors down to 4 key categories that, when healthy and sustainable, had remarkable impact on the prevention or denial of harmful and destructive social behaviours.

"Religion, Deviance & Social Control" (1996)

Anthropologists tell us ...



Boredom has very little to do with a lack of entertainment and everything to do with a **lack of meaning...**

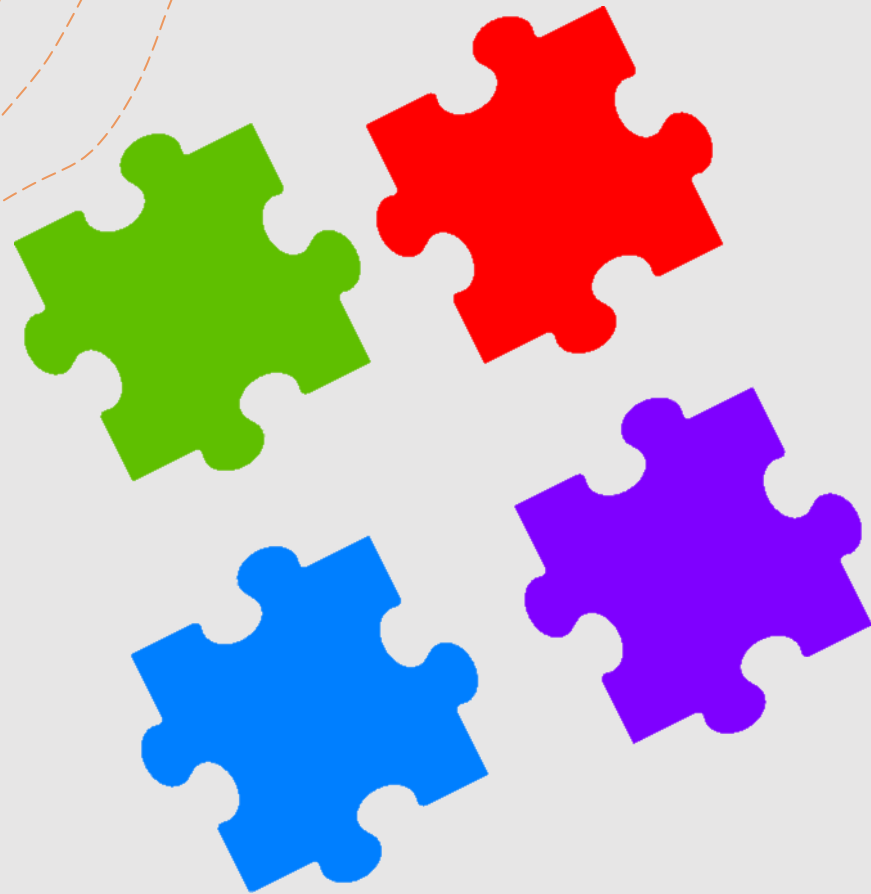


Boredom and Meaning



Sociologists tell us ...

Key Elements of Resiliency



 **Family**

 **Education**

 **Community**

 **Meaning**

Harnessing to Reduce Demand

+ Thorough **'learning'** processes,
harnessed by healthy purposes and
sustainable meaning, for civil society
benefiting change, are collectively
required.
as such....

Empowering Environments

- + **Planet Youth Model** – most are familiar with family centric models that are supported, not hindered or contradicted, by government policy. No cognitive dissonance on messaging, focus or voice. All community vehicles of education are set to denying/delaying uptake, extinguishing 'permission' models/ messaging in public square, and prioritizing best-practice health and well-being activities.
- + **Sporting Communities** – (Performance factors can negatively impact inclusion)

Empowering Environments

- + **Communities of Faith** – Provide all the key protective factors of healthy inclusive relationships, including mentors, proactive and protective settings of shared cause and values, as well as meaning.
- + **Recovery and/or Restorative Communities** – The lived experience and earned resiliency of Recovery Alumni in structured, purpose focused and productive settings authentically challenges the 'enticement' issues – Also adding value with; Relationship, mentorship, purpose and cause.



**'When the soul is satisfied, it can easily say,
"*don't need any more honeycomb.*"
But to the starving soul
even the most bitter thing is sweet.'**

3,000 year old proverb



A young child wearing a wide-brimmed hat and a colorful patterned shirt sits amidst a vast, sprawling landscape of discarded waste. The trash consists of numerous plastic bags, crumpled paper, and other debris, extending far into the background under a grey, overcast sky. The child's expression is one of concern or hunger, looking directly at the camera.

**Have you ever
been this hungry?**

WHAT YOU NEED

Your **BODY & BRAIN** needs food, good food ...

Protein, vitamins, minerals or you can feed it junk and you will wreck it.

Your **MIND** needs food, good food ...

Truth, wisdom, justice or you can fill it with tabloid trash, shallow gossip or trivia and wreck it.

Your **PSYCHE** needs food, good food ...

Meaning, Hope, significance, identity, spirituality or you can just try and fill the void with the latest chemical buzz and totally wreck it





Q & A



Check us Out

www.nobrainier.org.au

www.21bethere.org.au

www.greaterrisk.com



https://www.facebook.com/Dalgarno_sNB



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Sources Engaged (cited 28/8/20)

- + **United Nations Office on Drugs and Crime - NPS Leaflet: New Psychoactive Substances**
 - this leaflet provides a brief overview on NPS and addresses questions such as the risks, the global spread and the legal status

https://www.unodc.org/unodc/en/scientists/leaflet_new-psychoactive-substances.html
- + **DrugFacts: Synthetic Cannabinoids: What are synthetic cannabinoids?** - explains what synthetic cannabinoids are and provides basic facts about methods of use, their growing popularity, and potential health effects.

<http://www.drugabuse.gov/publications/drugfacts/synthetic-cannabinoids>
- + **DrugFacts: Synthetic Cathinones ("Bath Salts")** Describes how synthetic cathinones, or "bath salts," are abused, their effects on the brain, and other health effects.

<http://www.drugabuse.gov/publications/drugfacts/synthetic-cathinones-bath-salts>
- + <https://www.emcdda.europa.eu/system/files/publications/4540/TD0217575ENN.pdf>

Sources Engaged (cited 28/8/20)

- + **Social Determinants & Substance Use – A Perspective**
- + **Neurological Manifestations Associated with Synthetic Cannabinoid Use- A Case Series**
- + <https://adf.org.au/drug-facts/new-psychoactive-substances/>
- + <https://drugabuse.com/addiction/list-street-names-drugs/>
- + <https://www.nobrainier.org.au/>
- + <https://drugaware.com.au/getting-the-facts/drug-types/new-psychoactive-substances/#health-effects-and-risks>
- + <https://www.unodc.org/LSS/Page/NPS>
- + [Would You Like Endless Pleasure?](#)
- + **Subcultures & Sociology Psychonauts**