



MCFARLAND RADAR (Relevant Alcohol & Drug Awareness Resources) COALITION

AODA PREVENTION

NEWSLETTER

AUGUST 2022

Ketamine

Ketamine is a dissociative anesthetic used in human anesthesia and veterinary medicine. These types of dissociative drugs are hallucinogens that cause a person to feel detached from reality. Much of the Ketamine sold illegally have been diverted from veterinarians' offices. The chemical structure and mechanism of Ketamine are similar to those of PCP.

Although the numbers are relatively low, between 2019 to 2020, there was an increase in the number of adults seeking treatment for Ketamine misuse, the number went from 1,140 in 2019 to 1,444 in 2020. Recreational Ketamine use and availability of the drug have increased in recent years, but it remains an uncommon drug used by less than 1 percent of people in the US.



Why is Ketamine Used Medically?

Ketamine can provide pain relief and short-term memory loss and it is often used in surgery as an induction and maintenance agent for sedation and to provide general anesthesia. It has also been used for pain control in burn therapy, battlefield injuries, and in children who cannot use other anesthetics due to side effects or allergies. At normal doses, it is often preferred as an anesthetic in patients at risk of bronchospasm and respiratory depression

How is it Used?

Ketamine should only be given by or under the immediate supervision of a medical professional who are trained to use it. During proper medical procedures, it is administered via injection.

When it is sold illegally, Ketamine usually comes as a white or off-white powder. It can also be made into pills or dissolved in a liquid.

Streets Names for Ketamine:

- Special K
- K
- Ket
- KitKat
- Super K
- Horse Trank

History of Ketamine

Ketamine was originally developed in the 1960s by a professor of Chemistry at Wayne State University. The drug was first tested on animals in 1962 and then tested on humans in 1964. In humans, Ketamine proved to act faster and reduce toxic behavior, which made it the preferable anesthetic choice over PCP. After promising trials, the FDA approved Ketamine for medical use in the 1970s. It was first used effectively on American soldiers during the Vietnam War for battlefield surgery. While it was a highly effective anesthetic, it soon began to be illicitly abused, especially on the West Coast. As a result, psychiatric and academic research on the effects of ketamine began.



By the 1980s, Ketamine began to spread across the United States as a party drug. Around this time, new forms of the drug were popping up into the street drug market. Capsules, powders, tablets, solutions, and injectable forms of Ketamine became popular. In the mid-80s, subcultures began to adopt it more frequently, such as rave culture. Ketamine was commonly sold as “ecstasy” at this time.

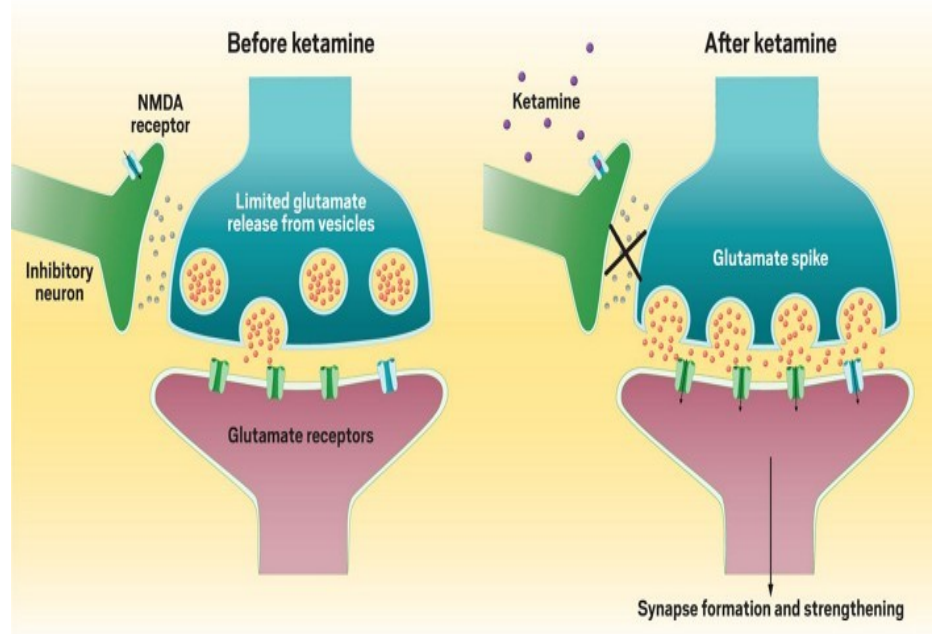
In the 1990s, Ketamine was still being used medically as an anesthetic, but it was now widely abused on the streets in the US and became popular in the city of Hong Kong (and this city still struggles with illicit ketamine abuse today). Finally, in 1999 the United States made Ketamine a federally controlled substance to stop its illicit use. By the 2000s, Ketamine stopped being widely used both medically and illicitly after it became a controlled substance. Morphine became a more popular choice as an anesthetic and other illicit drugs such as cocaine and heroin took off on the streets. However, medical professionals began noticing and studying Ketamine’s ability to rapidly alleviate depression and suicidal thoughts. The studies were done between 2000-2006, which ultimately showed Ketamine was a viable alternative treatment for depression. This led to the rise of doctors going “off label” (which means the medication is being used in a manner not specified in the FDA's approved packaging label) and thus leading Ketamine to be used to treat depression and other mental disorders.

In 2019, the FDA approved a ketamine-based antidepressant called Spravato. Since then, ketamine’s antidepressant potential has captivated researchers, pharmaceutical companies and patients alike. As the pool of clinical and real-world data continues to grow, the treatment appears to be special in more ways than one. While traditional antidepressants take weeks to kick in, even the sickest patients may begin to respond to ketamine as early as a few hours after administration.



Effects of Ketamine on the Brain:

Ketamine is known as a “Dirty Drug” which means it targets not just one system in the brain but dozens. It has a weak effect on the opiate receptors and it effects the glutamate system. Glutamate is used in the brain for neurons to communicate. At high doses, Ketamine can block glutamate, making it an effective anesthetic. But at low doses, glutamate production is enhanced. This can have a variety effects, some individuals hallucinate or feel they are losing touch with reality.



Short Term Effects of Illicit Ketamine Use:

- Hallucinations, similar to those who have schizophrenia
- Aggressive moods
- Confusion
- Anxiety and panic attacks
- Elevated blood pressure and increased heart rate
- Nausea, occasionally with vomiting

Long Term Effects of Illicit Ketamine Use:

- Memory Loss
- Paranoia
- Shortened attention span
- Mood swings

Benefits of Ketamine:

While Ketamine isn't considered a first-line therapy for chronic pain, depression or any other mental illnesses, it can be used off-label to treat severe cases of depression, anxiety, and PTSD that haven't responded to conventional medications or therapies. Because Ketamine stimulates a rapid increase in glutamate and that glutamate helps strengthen and restore vital neural connections and pathways in the regions of the brain that are most impaired by depression; these new connections help induce beneficial changes in brain circuit function. Another benefit that ketamine offers is a decreased need for narcotic painkillers. This is a great advantage, due to the increased likelihood of tolerance and complications with long-term narcotic use. If you suffer from chronic pain, ketamine may be a great alternative to traditional treatments.

Legality of Ketamine

The use of Ketamine is regulated, meaning it can only be administered or prescribed by licensed clinicians with the authority and expertise to support its effective use. When used within the context of surgical procedure or as prescribed by a licensed clinician, it is legal to administer. Any other use of this medicine outside of these guidelines, such as recreationally, is illegal and currently unregulated.



A form of ketamine, which is derived from ketamine and known as Spravato (esketamine), is a Schedule III controlled substance that was approved by FDA in 2019 as a nasal spray for treatment-resistant depression in adults and depressive symptoms in adults with major depressive disorder with acute suicidal ideation or behavior, in conjunction with an oral antidepressant. Spravato (esketamine) cannot be dispensed for use outside the certified healthcare setting.

In 2022, FDA is aware that some pharmacies compound nasal spray formulations of ketamine either alone or in combination with other ingredients, and there have been a concerning number of case reports of adverse events in recent years. Given these reports and the lack of standardized safety measures associated with the use of compounded ketamine nasal sprays, patients may be at risk of serious adverse events and potential misuse and abuse.

Wisconsin and Ketamine

Ketamine has been used in Wisconsin as a treatment option for depression since 2012. There is currently a one-third success rate among those who have been treated. Local law enforcement agencies haven't seen a presence of Ketamine on the streets, or at least not enough to raise concern within the police department.

Wisconsin has Ketamine Infusion therapy which is an innovative new treatment that is providing rapid relief for individuals who suffer from mood and pain disorders. With this therapy, patients are experiencing relief in hours versus the traditional days or weeks that some medications and other treatments can take. These facilities are located in the Milwaukee, Fox Valley and Northern parts of Wisconsin.



International Overdose Awareness Day

August 31st is International Overdose Awareness Day

Aim of this Awareness Day:

It aims to honor the lives lost to overdose and reduce the stigma associated with a substance-related passing. Through mourning and remembrance, people can celebrate the lives of their loved ones without shame.

At the same time, it is an opportunity to educate people that overdose death is preventable and raise awareness about evidence-based practices like Overdose Education and Naloxone Distribution (OEND).

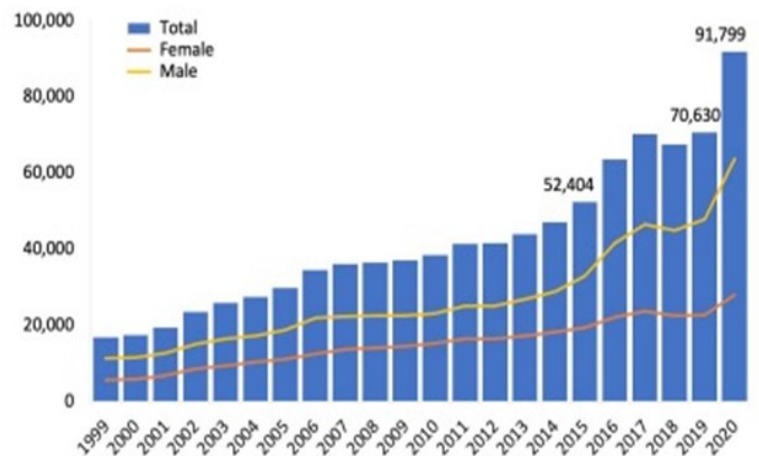
History

International Overdose Awareness Day was initiated in 2001 when Sally J. Finn suggested the idea while she was in the Salvation Army in Melbourne, Australia to her friend Peter Streker, a co-worker who was part of the Community and Health Development Program in Melbourne. According to Finn, this holiday acknowledges that, “drugs and the consequence of overdose are part of all our lives, and that there are repercussions from the death and injury of people which are felt across every socio-economic and cultural span of the world.” Since 2001, they worked together to create this holiday, and today, governments and organizations remember this holiday as a day to recognize a severe problem that needs to be solved.

Statistics:

- Opioid use accounts for 67.8% of those overdose deaths
- In 2020, 91,799 drug overdose deaths occurred in the United States.
 - The age-adjusted rate of overdose deaths increased by 31% from 2019 (21.6 per 100,000) to 2020 (28.3 per 100,000).
- The new data documents that estimated overdose deaths from opioids increased to 75,673 in the 12-month period ending in April 2021, up from 56,064 the year before.

**Figure 1. National Drug-Involved Overdose Deaths*
Number Among All Ages, by Gender, 1999-2020**



*Includes deaths with underlying causes of unintentional drug poisoning (X40-X44), suicide drug poisoning (X60-X64), homicide drug poisoning (X85), or drug poisoning of undetermined intent (Y10-Y14), as coded in the International Classification of Diseases, 10th Revision. Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2020 on CDC WONDER Online Database, released 12/2021.

McFarland is a small community south of Madison in Dane County. In January of 2017, a group of concerned citizens came together to discuss substance abuse problems in the McFarland area. The McFarland RADAR is a result of these meetings

We are comprised of local representatives from schools, businesses, churches, village administration as well as parents, and youth—all working together to promote healthy lifestyles

For more information go to: <https://www.radarmc.com/>



For time, day and place of meetings, please contact Cathy Kalina at CathyK@fsmad.org

The McFarland RADAR (RADAR stands for Relevant Alcohol & Drug Awareness Resources) Coalition works to develop, implement and support environmental strategies to reduce substance abuse.

We believe by working together, we can nurture social and environmental changes to make the McFarland area a safer and healthier place, brightening the future of our children, youth and families.

McFarland RADAR Mission Statement

“The mission of McFarland’s RADAR Coalition is to promote healthy lifestyles in the McFarland area through alcohol and drug abuse prevention and education efforts.”

HOW CAN YOU HELP?

We are asking you to give the gift of time. Make a difference in the lives of our youth and our community by

1. Working with us in providing support for planning, project management and awareness campaigns
2. Helping with coalition events, conferences, workshops, and fairs held throughout the year.
3. Being a voice for change in our community, it is time to come together and be that force for change in the McFarland area.